IMPORTANT NOTICE

THIS OFFERING IS AVAILABLE ONLY TO INVESTORS WHO ARE EITHER (1) "QUALIFIED INSTITUTIONAL BUYERS" ("QIBS") (AS DEFINED IN RULE 144A ("RULE 144A") UNDER THE US SECURITIES ACT OF 1933 (THE "SECURITIES ACT")), OR (2) NON-US PERSONS IN OFFSHORE TRANSACTIONS IN RELIANCE ON REGULATION S UNDER THE SECURITIES ACT ("REGULATION S").

IMPORTANT: You must read the following disclaimer before continuing. The following disclaimer applies to the attached offering circular (the "Offering Circular") following this page, whether received by e-mail or other electronic communication, and you are therefore advised to read this carefully before reading, accessing or making any other use of the Offering Circular.

In accessing the Offering Circular, you agree to be bound by the following terms and conditions, including any modifications to them any time you receive any information from Vedanta Holdings Mauritius II Limited (the "Issuer"), Vedanta Resources Limited (the "Company"), Vedanta Holdings Mauritius Limited ("Vedanta Mauritius") and Vedanta Holdings Jersey Limited ("Vedanta Jersey", and together with the Company and Vedanta Mauritius, the "Guarantors") or from us as a result of such access.

None of Barclays Bank PLC, Credit Suisse (Hong Kong) Limited, Deutsche Bank AG, Singapore Branch, J.P. Morgan Securities plc and Standard Chartered Bank as joint global coordinators, joint lead managers and joint bookrunners (collectively, the "Joint Global Coordinators, Joint Lead Managers and Joint Bookrunners") or any person who controls any of them or any of their respective affiliates, directors, officers, employees, agents, representatives or advisers accepts any liability whatsoever for any loss howsoever arising from any use of this e-mail or the Offering Circular or their respective contents or otherwise arising in connection therewith.

NOTHING IN THIS ELECTRONIC TRANSMISSION CONSTITUTES AN OFFER OF SECURITIES FOR SALE IN ANY JURISDICTION WHERE IT IS UNLAWFUL TO DO SO. THE SECURITIES HAVE NOT BEEN, AND WILL NOT BE REGISTERED UNDER THE SECURITIES ACT, OR WITH ANY OTHER SECURITIES REGULATORY AUTHORITY OF ANY STATE OR OTHER JURISDICTION AND MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND ANY APPLICABLE STATE OR LOCAL SECURITIES LAWS. THE SECURITIES MAY ONLY BE OFFERED, SOLD OR OTHERWISE TRANSFERRED IN THE UNITED STATES OR TO US PERSONS (AS DEFINED IN REGULATION S) THAT ARE QIBS IN RELIANCE ON THE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT PROVIDED BY RULE 144A. ANY INVESTMENT DECISION SHOULD BE MADE ON THE BASIS OF THE FINAL TERMS AND CONDITIONS OF THE SECURITIES AND THE INFORMATION CONTAINED IN THE FINAL OFFERING CIRCULAR. IF YOU DO NOT AGREE TO THE TERMS CONTAINED IN THIS NOTICE, YOU SHOULD NOT OPEN THE OFFERING CIRCULAR AND SHOULD DELETE THIS E-MAIL. THIS E-MAIL AND ITS ATTACHMENTS ARE PERSONAL TO YOU, ARE CONFIDENTIAL AND MAY ONLY BE READ BY THE ADDRESSEE AND MAY NOT BE REPRODUCED OR REDISTRIBUTED ELECTRONICALLY OR OTHERWISE TO ANY OTHER PERSON.

Confirmation of Your Representation: The Offering Circular is being sent at your request and by accepting the e-mail and accessing the Offering Circular, you shall be deemed to have represented to the Issuer, the Guarantors, the Joint Global Coordinators, Joint Lead Managers and Joint Bookrunners that (1) you and any customer you represent are either (a) a QIB or (b) not a US person and that the e-mail address that you have given and to which this e-mail has been delivered is not located in the United States, its territories, its possessions and other areas subject to its jurisdiction and, to the extent you purchase the securities described in the Offering Circular, you will be doing so in offshore transactions in reliance on Regulation S; and (2) you consent to delivery of the Offering Circular and any amendments or supplements thereto by electronic transmission.

The Offering Circular has been delivered to you on the basis that you are a person into whose possession the Offering Circular may be lawfully delivered in accordance with the laws of the jurisdiction in which you are located. If this is not the case, you must delete the e-mail in which the Offering Circular is attached and destroy any printed copies of the Offering Circular. You may not, nor are you authorised to, deliver or forward the Offering Circular, electronically or otherwise, or disclose the contents of the Offering Circular, to any other person.

The materials relating to the offering do not constitute, and may not be used in connection with, an offer or solicitation in any place where offers or solicitations are not permitted by law and access has been limited so that it shall not constitute a general advertisement or solicitation in the United States or elsewhere. No action has been or will be taken in any jurisdiction by the Issuer, the Guarantors or the Joint Global Coordinators, Joint Lead Managers and Joint Bookrunners that would, or is intended to, permit a public offering of the securities, or possession or distribution of the Offering Circular (in preliminary, proof or final form) or any other offering or publicity material relating to the securities, in any jurisdiction where action for that purpose is required. If a jurisdiction requires that the offering be made by a licenced broker or dealer and any of the Joint Global Coordinators, Joint Lead Managers and Joint Bookrunners or any affiliate of any of them is a licenced broker or dealer in that jurisdiction, the offering shall be deemed to be made by such Joint Global Coordinator, Joint Lead Manager and Joint Bookrunner or affiliate on behalf of the Issuer in such jurisdiction.

This communication is directed only at persons who (a) are outside the United Kingdom, or (b) have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Financial Promotion Order"), or (c) are persons falling within Article 49(2)(a) to (d) ("high net worth companies, unincorporated associations, etc.") of the Financial Promotion Order, or (d) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000 (the "FSMA")) in connection with the issue or sale of any securities may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as "relevant persons"). This communication must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which the Offering Circular relates is available only to relevant persons and will be engaged in only with relevant persons.

The Offering Circular has been sent to you in an electronic form. Documents transmitted via this medium may be altered or changed during the process of electronic transmission and consequently none of the Issuer, the Guarantors or the Joint Global Coordinators, Joint Lead Managers and Joint Bookrunners or any person who controls any of them or any director, officer, employee, agent or affiliate of any such persons accepts any liability or responsibility whatsoever in respect of any difference between the Offering Circular distributed to you in electronic format and the hard copy version available to you on request from the Joint Global Coordinators, Joint Lead Managers and Joint Bookrunners.

THE OFFERING CIRCULAR MAY NOT BE DOWNLOADED, FORWARDED OR DISTRIBUTED TO ANY OTHER PERSON AND MAY NOT BE REPRODUCED IN ANY MANNER WHATSOEVER. ANY DOWNLOADING, FORWARDING, DISTRIBUTION OR REPRODUCTION OF THIS ELECTRONIC TRANSMISSION AND THE OFFERING CIRCULAR IN WHOLE OR IN PART IS UNAUTHORISED. FAILURE TO COMPLY WITH THIS DIRECTIVE MAY RESULT IN A VIOLATION OF THE SECURITIES ACT OR THE APPLICABLE LAWS OF OTHER JURISDICTIONS. IF YOU HAVE GAINED ACCESS TO THIS TRANSMISSION CONTRARY TO ANY OF THE FOREGOING RESTRICTIONS, YOU ARE NOT AUTHORISED AND WILL NOT BE ABLE TO PURCHASE THE SECURITIES DESCRIBED IN THE OFFERING CIRCULAR.

You are responsible for protecting against viruses and other destructive items. Your use of this e-mail is at your own risk and it is your responsibility to take precautions to ensure that it is free from viruses and other items of a destructive nature.

$1,400,000,000 13.00% Guaranteed Senior Secured Bonds due 2023

Issued by

VEDANTA HOLDINGS MAURITIUS II LIMITED

(incorporated with limited liability in Mauritius)

A subsidiary of

vedanta

VEDANTA RESOURCES LIMITED

(incorporated with limited liability in England and Wales)

This is an offering of $1,400,000,000 13.00% guaranteed senior secured bonds due 2023 (the "Bonds") by Vedanta Holdings Mauritius II Limited (the "Issuer"). The Bonds will be unconditionally guaranteed (the "Guarantee") jointly and severally by Vedanta Resources Limited (the "Company" or the "Parent Guarantor"), Vedanta Holdings Mauritius Limited ("Vedanta Mauritius") and Vedanta Holdings Jersey Limited ("Vedanta Jersey", together with Vedanta Mauritius, the "Subsidiary Guarantors" and each a "Subsidiary Guarantor"). The Parent Guarantor and the Subsidiary Guarantors are collectively referred to as the "Guarantors" and each of them is a "Guarantor".

The Bonds will bear interest from the Closing Date (as defined herein) of 13.00% per annum. Interest will be payable semi-annually in arrear on 21 February and 21 August of each year, commencing on 21 February 2021. Payments on the Bonds will be made without deduction for or on account of taxes of Mauritius, the United Kingdom and Jersey to the extent described under "*Terms and Conditions of the Bonds — Taxation*".

The Bonds will mature on 21 August 2023.

On the Closing Date, the gross proceeds of this offering will be deposited into an escrow account (the "Bond Escrow Account"). The gross proceeds will be used to finance the Take Private Transaction (as defined herein) and the balance, if any, will remain kept in the Bond Escrow Account to be used to subsequently fund the tender offer of the 2021 Bonds (as defined herein) at par along with accrued interest or a repayment of the 2021 Bonds at maturity. See section entitled "*Use of Proceeds*".

If (i) Approval In Principle is not received by 5 October 2020 (being 45 days after the Closing Date) or (ii) the Parent Guarantor and/or the Issuer and/or Vedanta Mauritius, as the case may be, do not accept the final offer price (as determined as per the reverse book building mechanism as specified in the Delisting Regulations) (as defined herein) within five Working Days (as defined herein) after the closure of the RBB Period (as defined herein) or, if a counter offer has been made in accordance with the Delisting Regulations, the counter offer price has not been accepted by the Public Shareholders in accordance with the Delisting Regulations, or (iii) the Acquisition Date (as defined herein) has not occurred by 19 November 2020 (being 90 days after the Closing Date), or (iv) Vedanta Mauritius fails, having used commercially reasonable efforts, to enter into the Bridge Facility Agreement (as defined herein) and the Permitted Senior Secured Facility Agreement (as defined herein) or to satisfy the conditions to Incur Bridge Loans (as defined herein) and PSSFA Loans (as defined herein) in an amount sufficient, when taken together with the proceeds from the offering of the Bonds, to consummate the Take Private Transaction, the Issuer will, within five Business Days (as defined herein), redeem all of the Bonds then outstanding at a redemption price of 101%. of their principal amount plus accrued and unpaid interest, if any, to (but excluding) the redemption date.

At any time and from time to time prior to 21 August 2022, the Issuer may redeem the Bonds, in whole or in part, at a redemption price equal to their principal amount plus the Applicable Premium plus accrued and unpaid interest, if any, to (but excluding) the redemption date. At any time and from time to time after 21 August 2022, the Issuer may redeem the Bonds, in whole or in part, at a redemption price as set forth in Condition 5(b) of the terms and conditions of the Bonds. The Issuer may redeem the Bonds, in whole but not in part, at a redemption price equal to their principal amount plus accrued and unpaid interest, if any, to (but excluding) the redemption date, in the event of certain changes affecting taxes of Mauritius, the United Kingdom and Jersey. Upon the occurrence of a Change of Control Triggering Event (as defined herein), the Issuer must make an offer to purchase all of the Bonds outstanding at a purchase price equal to 101% of their principal amount, plus accrued and unpaid interest, if any, to (but excluding) the purchase date. See the section entitled "*Terms and Conditions of the Bonds — Redemption and Purchase*".

The Bonds will be direct, unconditional and unsubordinated obligations of the Issuer. The Guarantee will be the direct, unconditional and unsubordinated obligations of the Guarantors.

On the Closing Date, the obligations of the Issuer under the Bonds and the Guarantors under the Guarantee will be secured by a first priority pledge on the Bond Collateral (as defined herein) pursuant to the Bond Escrow Charge (as defined herein). The Bond Collateral will consist of a charge over the Issuer's rights, claims and balance with respect to the Bond Escrow Account. If the bank guarantee with respect to the Take Private Transaction is issued, the pledge over the Bond Escrow Account in favour of the Issuer under the Bonds and the Guarantors under the Guarantee shall be released and pledged in favour of the CG Issuing Bank (as defined herein) and/or its affiliates until the Bank Guarantee Release Date (as defined herein). See the sections entitled "*Description of Certain Financing Arrangements — Bond Escrow Agreement*" and "*Description of Certain Financing Arrangements — Bond Escrow Charge*".

After the Closing Date and prior to the release of the funds from the Bond Escrow Account to fund the Take Private Transaction, the obligations of the Issuer under the Bonds and the Guarantors under the Guarantee may be further secured on a *pari passu* basis by a first ranking pledge on the Common Collateral (as defined herein) pursuant to the Common Collateral Documents. The obligations of the Issuer under the Bonds and the Guarantors under the Guarantee will be secured in favor of the Common Security Agent (as defined herein) by the Collateral Documents under security arrangements more fully described in "*Terms and Conditions of the Bonds*". The Common Collateral will comprise (i) 100% of the capital stock of the Issuer and Vedanta Mauritius and (ii) the bank accounts of the Issuer and Vedanta Mauritius (other than the India Escrow Account, Bridge Escrow Account (as defined herein) and the Bond Escrow Account). See the sections entitled "*Description of Certain Financing Arrangements — Collateral Documents — Common Collateral"*.

Issue Price: 100%

The Bonds and the Guarantee have not been and will not be registered under the United States Securities Act of 1933 (the "Securities Act") and are being offered in the United States only to qualified institutional buyers ("QIBs") as defined in and in reliance on Rule 144A under the Securities Act ("Rule 144A") and to non-US persons outside the United States as defined in and in reliance on Regulation S under the Securities Act ("Regulation S"). Prospective purchasers are hereby notified that sellers of the Bonds may be relying on the exemption from the provisions of Section 5 of the Securities Act provided by Rule 144A. The Bonds which are being offered and sold outside the United States to non-US persons in reliance on Regulation S (the "Regulation S Bonds") will each be initially represented by unrestricted global certificates in registered form (the "Unrestricted Global Certificates"). The Bonds which are being offered and sold in the United States to QIBs in reliance on Rule 144A (the "Rule 144A Bonds") will bear the Securities Act Legend (as defined in the trust deed to be dated on or about the Closing Date (the "Trust Deed") and will each be initially represented by restricted global certificates in registered form (the "Restricted Global Certificates" and, together with the Unrestricted Global Certificates, the "Global Certificates"). The Unrestricted Global Certificates will be deposited with a custodian for, and registered in the name of, a nominee of Cede & Co., as nominee of The Depository Trust Company ("DTC") for the accounts of Euroclear Bank SA/NV ("Euroclear") and Clearstream Banking, S.A. ("Clearstream"), and the Restricted Global Certificates will be deposited with a custodian for, and registered in the name of, Cede & Co., as nominee of DTC, on the Closing Date. Beneficial interests in the Global Certificates will be shown on, and transfers thereof will be effected only through, records maintained by DTC and its account holders. For a description of certain further restrictions on offers, sales and transfers of the Bonds and distribution of this Offering Circular, see the sections entitled "*Plan of Distribution*" and "*Transfer Restrictions*". Delivery of the Bonds is expected to be made against payment through the facilities of DTC on or about 21August 2020 (the "Closing Date"), which is the fourth business day after the date of this Offering Circular.

Approval in-principle has been received from the Singapore Exchange Securities Trading Limited (the "**SGX-ST**") for the listing of and quotation of the Bonds on the SGX-ST. The SGX-ST assumes no responsibility for the correctness of any of the statements made or opinions expressed or information contained in this Offering Circular. Admission for the listing and quotation of the Bonds on the SGX-ST is not to be taken as an indication of the merits of the offering, the Issuer, the Guarantors, the Bonds or the Guarantee. The Bonds will be traded on the SGX-ST in a minimum board lot size of $200,000 or its equivalent for so long as the Bonds are listed on the SGX-ST. There is no public market for the Bonds.

Investing in the Bonds involves risks. For a discussion of certain factors to be considered in connection with an investment in the Bonds, see the section entitled "*Risk Factors*".

The Company has corporate credit ratings of "B1" (with a negative outlook) from Moody's Investors Service, Inc. ("Moody's") and "B-" (on "Creditwatch Developing") from S&P Global Ratings, a division of S&P Global, Inc. ("S&P"). The Bonds are expected, on the Closing Date, to be rated "B3" by Moody's and Preliminary "B" by S&P. A rating is not a recommendation to buy, sell or hold securities and may be subject to revision, suspension or withdrawal at any time by the assigning rating organisation.

Joint Global Coordinators, Joint Lead Managers and Joint Bookrunners (in alphabetical order)

Barclays Bank PLC **Credit Suisse** **Deutsche Bank AG** **J.P. Morgan** **Standard Chartered Bank**

Offering Circular dated 17 August 2020

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DIRECTOR'S STATEMENT

The directors of the Issuer, collectively and individually accept full responsibility for the accuracy or completeness of the information contained in this Offering Circular and confirm, having made all reasonable enquiries, that to the best of their knowledge and belief, this Offering Circular complies with the Securities Act 2005 and the Securities (Preferential Offer) Rules 2017, and that there are no other facts the omission of which would make any statement herein misleading.

An original signed copy of the above statement of both directors of the Issuer may be inspected by the Bondholders at the registered office of the Issuer.

NOTICE TO INVESTORS

This Offering Circular does not constitute an offer of, or an invitation by or on behalf of the Issuer, the Guarantors or Barclays Bank PLC, Credit Suisse (Hong Kong) Limited, Deutsche Bank AG, Singapore Branch, J.P. Morgan Securities plc and Standard Chartered Bank as joint global coordinators, joint lead managers and joint bookrunners (collectively, the "Joint Global Coordinators, Joint Lead Managers and Joint Bookrunners") to subscribe for or purchase, any of the Bonds. The distribution of this Offering Circular and the offering of the Bonds in certain jurisdictions may be restricted by law. Persons into whose possession this Offering Circular comes are required by the Issuer, the Guarantors and the Joint Global Coordinators, Joint Lead Managers and Joint Bookrunners to inform themselves about and observe any such restrictions. This Offering Circular does not constitute, and may not be used for or in connection with, an offer or solicitation by anyone in any jurisdiction in which such offer or solicitation is not authorised or to any person to whom it is unlawful to make such offer or solicitation.

For a description of certain further restrictions on offers and sales of the Bonds and distribution of this Offering Circular, see the sections entitled "*Plan of Distribution*" and "*Transfer Restrictions*".

No person is authorised to give any information or to make any representation not contained in this Offering Circular and any information or representation not so contained must not be relied upon as having been authorised by or on behalf of the Issuer, the Guarantors or the Joint Global Coordinators, Joint Lead Managers and Joint Bookrunners. The delivery of this Offering Circular or the offering, sale and delivery of the Bonds at any time does not imply that the information contained in this Offering Circular is correct at any time subsequent to its date.

To the fullest extent permitted by law, none of the Joint Global Coordinators, Joint Lead Managers and Joint Bookrunners, the Trustee, the Principal Agent and the Registrar (each as defined herein) accept any responsibility for the accuracy and completeness of the contents of this Offering Circular or for any statement, made or purported to be made by the Joint Global Coordinators, Joint Lead Managers and Joint Bookrunners, the Trustee, the Principal Agent or the Registrar or on its or their behalf in connection with the Issuer, the Guarantors or the issue and offering of the Bonds. The Joint Global Coordinators, Joint Lead Managers and Joint Bookrunners, the Trustee, the Principal Agent and the Registrar accordingly disclaim all and any liability whether arising in tort or contract or otherwise which it might otherwise have in respect of this Offering Circular or any such statement.

This Offering Circular should not be considered as a recommendation by the Issuer, the Guarantors, the Joint Global Coordinators, Joint Lead Managers and Joint Bookrunners, the Trustee, the Principal Agent or the Registrar that any recipient of this Offering Circular should purchase any of the Bonds. Each investor contemplating a purchase of the Bonds should make its own independent investigation of the Issuer's and the Guarantors' financial condition and affairs and its own appraisal of the Issuer's and the Guarantors' creditworthiness.

Investors may not reproduce or distribute this Offering Circular, in whole or in part, and investors may not disclose any of the contents of this Offering Circular or use any information herein for any purpose other than considering an investment in the Bonds. Investors agree to the foregoing by accepting delivery of this Offering Circular.

If a jurisdiction requires that the offering be made by a licenced broker or dealer and any of the Joint Global Coordinators, Joint Lead Managers and Joint Bookrunners or any affiliate of any of them is a licenced broker or dealer in that jurisdiction, the offering shall be deemed to be made by such Joint Global Coordinator, Joint Lead Manager and Joint Bookrunner or affiliate on behalf of the Issuer in such jurisdiction.

Singapore SFA Product Classification: In connection with Section 309B of the Securities and Futures Act (Chapter 289) of Singapore (the "SFA") and the Securities and Futures (Capital Markets Products) Regulations 2018 of Singapore (the "CMP Regulations 2018"), the Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A(1) of the SFA), that the Bonds are 'prescribed capital markets products' (as defined in the CMP Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

Market data and certain industry forecasts (where applicable) used in this Offering Circular have been obtained from internal surveys, market research, publicly available information and industry publications. Industry publications generally state that the information that they contain has been obtained from sources believed to be reliable but that the accuracy and completeness of that information is not guaranteed. Similarly, internal surveys, industry forecasts and market research, while believed to be reliable, have not been independently verified, and none of the Issuer, the Guarantors, the Joint Global Coordinators, Joint Lead Managers and Joint Bookrunners, the Trustee, the Principal Agent or the Registrar make any representation as to the accuracy of the statement.

STABILISATION

In connection with this offering, J.P. Morgan will act as the stabilising manager (the "Stabilising Manager") and it or any of its affiliates (or persons acting on behalf of the Stabilising Manager), may, to the extent permitted by applicable laws and regulations, over allot or effect transactions with a view to supporting the market price of the Bonds at a level higher than that which might otherwise prevail for a limited time after the Closing Date. However, there is no assurance that the Stabilising Manager or any of its affiliates (or persons acting on behalf of the Stabilising Manager) will undertake any stabilising action. Any stabilising action may begin on or after the date on which adequate public disclosure of the terms of the offer of the Bonds is made and, if begun, may be ended at any time, but it must end no later than the earlier of 30 days after the Closing Date and 60 days after the date of the allotment of the Bonds. Any stabilisation action must be conducted by the Stabilising Manager or any of its affiliates (or persons acting on behalf of the Stabilising Manager) in accordance with all applicable laws and rules.

NOTICE TO UK INVESTORS

This Offering Circular is for distribution only to persons who (i) are outside the United Kingdom, (ii) have professional experience in matters relating to investments falling within Article 19(5) the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "Financial Promotion Order"), (iii) are persons falling within Article 49(2)(a) to (d) ("high net worth companies, unincorporated associations etc.") of the Financial Promotion Order, or (iv) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000 (the "FSMA")) in connection with the issue or sale of any securities may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as "relevant persons"). This Offering Circular is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this document relates is available only to relevant persons and will be engaged in only with relevant persons.

MIFID II PRODUCT GOVERNANCE/PROFESSIONAL INVESTORS AND ECPS ONLY TARGET MARKET

Solely for the purposes of each manufacturer's product approval process, the target market assessment in respect of the Bonds has led to the conclusion that: (i) the target market for the Bonds is eligible counterparties and professional clients only, each as defined in Directive 2014/65/EU (as amended, "MiFID II"); and (ii) all channels for distribution of the Bonds to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Bonds (a "distributor") should take into consideration the manufacturers' target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Bonds (by either adopting or refining the manufacturers' target market assessment) and determining appropriate distribution channels.

PRIIPs REGULATION/PROHIBITION OF SALES TO EEA AND UK RETAIL INVESTORS

The Bonds are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("EEA") or the United Kingdom (the "UK"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of MiFID II; or (ii) a customer within the meaning of Directive (EU) 2016/97, where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II. Consequently, no key information document required by Regulation (EU) No 1286/2014, as amended (the "PRIIPs Regulation") for offering or selling the Bonds or otherwise making them available to retail investors in the EEA or the UK has been prepared and therefore offering or selling the Bonds or otherwise making them available to any retail investor in the EEA or the UK may be unlawful under the PRIIPs Regulation.

NOTICE TO PROSPECTIVE INVESTORS IN THE UNITED STATES

The Bonds and the Guarantee have not been and will not be registered under the Securities Act, or with any securities regulatory authority of any state or other jurisdiction in the United States, and may not be offered, sold, pledged or otherwise transferred except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and in compliance with any applicable state securities laws.

In connection with the Bonds and the Guarantee being offered in the United States to QIBs in reliance on the exemption from registration provided by Rule 144A, this Offering Circular is being furnished in the United States on a confidential basis solely for the purpose of enabling prospective investors to consider the purchase of the Bonds. Its use for any other purpose in the United States is not authorised.

The Bonds and the Guarantee have not been approved or disapproved by the United States Securities and Exchange Commission (the "SEC"), any state securities commission in the United States or any other US regulatory authority, nor have any of the foregoing authorities passed upon or endorsed the merits of this offering or the accuracy or adequacy of this Offering Circular. Any representation to the contrary is a criminal offence in the United States.

NOTICE TO MAURITIUS INVESTORS AND MAURITIUS LAW DISCLOSURES

The FSC takes no responsibility for the contents of this Offering Circular. The Bonds may not be offered or sold, directly or indirectly, to the public in Mauritius. Neither this Offering Circular, nor any offering material or information contained herein relating to the offer of Bonds and the Guarantee, may be released or issued to the public in Mauritius or used in connection with any such offer. Nothing in this Offering Circular shall be construed as, and under no circumstances shall this Offering Circular constitute, an offer to sell the Bonds to the public. The Bonds are intended be only offered or sold, by way of private placement as defined in the Mauritius Securities Act 2005. An offer of securities will be a private placement where each person subscribes or purchases for his own account, no publicity is made by the person making the offer and the total cost of subscription or purchase for each person to whom the offer is made is for an amount of at least 1 million Mauritian rupees.

ADDITIONAL INFORMATION REQUIRED UNDER THE SECURITIES (PREFERENTIAL OFFER) RULES 2017 OF MAURITIUS

Rule 7(g) of the Securities (Preferential Offer) Rules 2017 of Mauritius (the "Preferential Offer Rules") provides that where an issuer proposing to conduct a preferential offer is not required to prepare its first set of audited standalone financial statements under the Companies Act 2001 of Mauritius as at the date of the offer it may provide its unaudited standalone financial statements of the previous quarter and its projected standalone cash flow statements, profit and loss accounts and balance sheet statements for the prospective three years (the "Additional Information") for the purposes of the offer.

Solely for the purposes of complying with Rule 7(g) of Preferential Offer Rules, the Issuer has prepared the Additional Information which is deemed to be incorporated herein and may be inspected by the Bondholders at the registered office of the Issuer in Mauritius upon reasonable notice.

REQUIREMENTS OF BONDHOLDERS' REPRESENTATIVE

In order to comply with the Mauritius Companies Act 2001 (the "Companies Act 2001"), the Issuer will, on or about the closing date, appoint Abdul Aleem Ramankhan, Partner of Barnes Associates (the "Appointee") to act as the "bond representative" of the Bondholders and to act as such with respect to the Bonds pursuant to a bondholders' representative appointment agreement between the Issuer and the Appointee and as acknowledged by the Trustee and the Appointee will accept such appointment as the Bond Representative.

Under the Companies Act 2001, where a company issues or agrees to issue debentures (such as the Bonds) of the same class to more than 25 persons, or to any one or more persons with a view to the debentures or any of them being offered for sale to more than 25 persons, the company shall before issuing any of the debentures appoint a person to act as a debenture holders' representative by: (a) signing under its seal a deed of appointment; and (b) procuring the signature to the deed of appointment by a person qualified to act as a debenture holders' representative. The Companies Act 2001 also provides that no person shall be qualified to act as a debenture holders' representative unless he is: (i) a notary; (ii) a banking company;(iii) an attorney-at-law; (iv) an insurance company; (v) a qualified auditor; or (vi) an investment trust company, finance or other corporation or person approved in writing by the Minister of Finance for purpose of section 121 of the Companies Act 2001, either generally or in respect of a particular issue.

By accepting such appointment, the Bond Representative will agree to be bound by and to perform the services set out in respect of the Bond Representative in the Bonds and the Appointment Agreement.

The Bond Representative will, on written demand by the Trustee at any time after an Event of Default (as defined in the section entitled "*Terms and Conditions of the Bonds*") under the Bonds has occurred and subject to certain conditions, until notified by the Trustee to the contrary, as far as permitted by applicable law act thereafter as the Bond Representative of the Trustee and the Bonds mutatis mutandis on the terms provided in the Appointment Agreement and hold all certificates and moneys, documents and records held by them in respect of the Bonds to the order of the Trustee.

Under the Appointment Agreement, the Bond Representative may at any time resign by giving written notice of its resignation to the Issuer and the Trustee; provided that the date on which its resignation will become effective will be at least 60 days after the date on which such notice is given unless the Issuer agrees to accept shorter notice. Upon receiving such notice of resignation, the Issuer will promptly appoint a successor representative.

AVAILABLE INFORMATION

For so long as any of the Bonds and the Guarantee remain outstanding and are "restricted securities" within the meaning of Rule 144(a)(3) under the Securities Act, the Issuer will, during any period in which it is neither subject to Section 13 or Section 15(d) of the US Securities Exchange Act of 1934 (the "Exchange Act") nor exempt from reporting pursuant to Rule 12g3-2(b) thereunder, provide to any holder or beneficial owner of such restricted securities or to any prospective purchaser of such restricted securities designated by such holder or beneficial owner or to the Trustee for delivery to such holder, beneficial owner or prospective purchaser, in each case upon the request of such holder, beneficial owner, prospective purchaser or the Trustee, the information required to be provided by Rule 144A(d)(4) under the Securities Act.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Offering Circular contains "forward-looking statements" that are based on the Company's current expectations, assumptions, estimates and projections about the Company and its industry. These forward-looking statements are subject to various risks and uncertainties. Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as "anticipate", "believe", "estimate", "expect", "intend", "will", "project", "seek", "should" and similar expressions. These statements include the discussions of the Company's business strategy and expectations concerning its market position, future operations, margins, profitability, liquidity and capital resources. Such forward-looking statements involve risks and uncertainties and, although the Company believes that the assumptions on which such forward-looking statements are based are reasonable, any of those assumptions could prove to be inaccurate and, as a result, the forward-looking statements based on those assumptions could be materially incorrect. Factors which could cause these assumptions to be incorrect include:

- A decline or volatility in the prices or demand for oil and gas, zinc, copper, iron ore or aluminium or an increase in the supply of oil and gas, zinc, copper, iron ore or aluminium;
- Outbreaks of infectious diseases such as the coronavirus disease 2019 ("COVID-19") pandemic and other health concerns, including responses by governmental bodies or regulators and any additional and unforeseen effects that stem from therefrom;
- Reliance on third party contractors and providers of equipment which may not be readily available and whose costs may increase;
- Ability to successfully consummate and integrate strategic acquisitions;
- Regulatory, legislative and judicial developments and future regulatory actions and conditions in Vedanta's operating areas;
- Political or economic instability in the regions in which Vedanta operates;
- Terrorist attacks and other acts of violence, natural disasters and other environmental conditions in the regions in which Vedanta operates;
- Vedanta's ability to retain its senior management team and hire and retain sufficiently skilled labour to support its operations;
- Vedanta's dependence on obtaining and maintaining mining leases to mining sites;
- General risks related to Vedanta's commercial power business;
- The outcome of any pending or threatened litigation in which Vedanta is involved;

- The continuation of tax holidays, exemptions and deferred tax schemes currently enjoyed by Vedanta;
- Changes in tariffs, royalties, customs duties and government assistance;
- Interruptions in the availability of exploration, production or supply equipment or infrastructure and/or increased costs;
- Construction of pipelines and terminals may take longer than planned or may not work as intended and the cost of construction may be greater than forecast;
- Unavailability or increased costs of raw materials for Vedanta's products;
- Vedanta's economically recoverable lead-zinc ore, copper ore, iron ore, or bauxite reserves being lower than estimated;
- Worldwide economic and business conditions;
- Compliance with extensive environmental and health and safety regulations;
- Currency fluctuations; and
- Vedanta's ability to maintain good relations with trade unions and avoid strikes and lock-outs.

These and other factors are more fully discussed in the sections entitled "*Risk Factors*" and "*Management's Discussion and Analysis of Financial Condition and Results of Operations*" and elsewhere in this Offering Circular. In light of these and other uncertainties, you should not conclude that the Company will necessarily achieve any plans, objectives or projected results referred to in any of the forward-looking statements. Except as required by law, the Company does not undertake to release revisions of any of these forward-looking statements to reflect future events or circumstances.

PRESENTATION OF INFORMATION

Certain Conventions

The Company conducts its businesses through a consolidated group of companies that it has ownership interests in. See the section entitled "*Business — History and Development*" for more information on these companies and their relationships to the Company. Unless otherwise stated in this Offering Circular or the context otherwise requires, references in this Offering Circular to the "Company" refer to Vedanta Resources Limited and "Vedanta" or the "consolidated group of companies" or the "Group" mean Vedanta Resources Limited, its consolidated subsidiaries and its predecessors, collectively, including Konkola Copper Mines plc ("KCM") (prior to its deconsolidation on 21 May 2019), Vedanta Limited ("Vedanta Limited", and together with its subsidiaries, the "Vedanta Limited Group"), Bharat Aluminium Company Limited ("BALCO"), Monte Cello BV ("Monte Cello"), Copper Mines of Tasmania Pty Ltd ("CMT"), Thalanga Copper Mines Pty Ltd ("TCM"), Hindustan Zinc Limited ("HZL"), MALCO Energy Limited ("MEL"), Sesa Resources Limited ("SRL"), Western Cluster Limited ("WCL"), THL Zinc Namibia Holdings Limited and its subsidiaries ("Skorpion"), Vedanta Lisheen Holdings Limited and its subsidiaries ("Lisheen"), Electrosteel Steels Limited ("ESL"), Talwandi Sabo Power Limited ("TSPL") and Black Mountain Mining Pty Ltd ("Black Mountain Mining").

In this Offering Circular, references to "Executive Directors" are to Anil Agarwal and Navin Agarwal; references to "Non-Executive Directors" are to Geoffrey Green, Deepak Parekh, Ravi Rajagopal and Edward Story; and references to "Directors" are to the Executive Directors and Non-Executive Directors.

In this Offering Circular, references to "management" are to the Company's Directors, the executive officers and other significant employees of the Company, unless the context otherwise requires, on the date of this Offering Circular, and statements as to beliefs, expectations, estimates and opinions of the Company or management are those of the Company's management.

In this Offering Circular, references to "copper business" are to the business of Vedanta comprising the copper operations as further described in the section entitled "*Business — Description of the Businesses — Copper Business*"; references to "zinc business" and "zinc-lead" are to the business of Vedanta comprising the zinc operations as further described in the section entitled "*Business — Description of the Businesses — Zinc Business*"; references to "aluminium business" are to the business of Vedanta comprising the aluminium operations as further described in the section entitled "*Business — Description of the Businesses — Aluminium Business*"; references to "iron ore business" are to the business of Vedanta comprising the iron ore operations as further described in the section entitled "*Business — Description of the Businesses — Iron Ore Business*"; references to "commercial power generation business" or "power business" are to the business of Vedanta comprising the power operations as further described in the section entitled "*Business — Description of the Businesses — Commercial Power Generation Business*"; and references to "oil and gas business" are to the business of Vedanta comprising the oil and gas operations as further described in the section entitled "*Business — Description of the Businesses — Oil and Gas Business*".

In this Offering Circular, references to The London Metal Exchange Limited ("LME") price of copper, zinc or aluminium are to the average cash seller and settlement price on the LME for copper, zinc or aluminium for the period indicated. References to "primary market share" in this Offering Circular are to the market that includes sales by producers of metal from copper and zinc, as applicable, and do not include sales by producers of recycled metal or imports.

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Presentation of Financial Information

The audited consolidated financial statements of the Company as of and for Fiscal Year 2019 (the "Fiscal Year 2019 Financial Statements") and as of and for Fiscal Year 2020 (the "Fiscal Year 2020 Financial Statements" and together with the Fiscal Year 2019 Financial Statements, the "Audited Financial Statements"), included elsewhere in this Offering Circular, have been prepared in accordance with International Financial Reporting Standards ("IFRS") as adopted by the European Union ("EU"). The Audited Financial Statements have been audited by Ernst & Young LLP, independent auditors, as stated in their reports included elsewhere in this Offering Circular. Ernst & Young LLP is a member of the Institute of Chartered Accountants in England & Wales. The consolidated financial information for the Company as of and for Fiscal Years 2019 and 2020, included elsewhere in this Offering Circular has been derived from the Audited Financial Statements. The consolidated financial information as of and for Fiscal Year 2018 has been extracted from the comparative information included in Fiscal Year 2019 Financial Statements. The Audited Financial Statements should be read in conjunction and in entirety with the respective audit reports and related notes thereto.

Ernst & Young LLP have expressed a qualified opinion in relation to the inventory quantities held at 31 March 2020 within India on the Fiscal Year 2020 Financial Statements stated in the section "*Basis for qualified opinion*" in the audit report to the Fiscal Year 2020 Financial Statements. Due to the enforcement by the GOI of restrictions in response to COVID-19, Ernst & Young LLP were prevented from performing their planned procedures surrounding the observation of physical counts of inventory. Ernst & Young LLP have been unable to satisfy themselves through alternative audit procedures under UK International Standards on Auditing (UK) ("ISAs (UK)") as to the accuracy of the inventory quantities held at 31 March 2020 within India, which are included in the consolidated statement of financial position at $1,383 million of the total of $1,515 million. Consequently, Ernst & Young LLP were unable to determine whether any adjustment to this amount was necessary. Given the foregoing, such financial statements should not be relied upon by potential investors to provide the same quality of information associated with information that has been subject to an unqualified opinion. Potential investors must exercise caution when using such data to evaluate the Group's and the Company's financial condition, results of operations and results. For more details, see the audit report and the notes to the Fiscal Year 2020 Financial Statements and the section entitled "*Risk Factors — Risks Relating to Business — The Company's independent auditors qualified their opinion in relation to the inventory quantities held at 31 March 2020, within India, in their audit report on the Fiscal Year 2020 Financial Statements*".

Ernst & Young LLP's audit report on the Fiscal Year 2020 Financial Statements contains an explanatory paragraph, "*Material uncertainty relating to going concern*", which draws attention to note 1(d) to the Fiscal Year 2020 Financial Statements which indicates that the ability of the Group and the Company to continue as a going concern is subject to a number of material uncertainties that may cast significant doubt on the Company's ability to continue as a going concern. Within the 21-month going concern period (i.e. until 31 December 2021), the Group has scheduled debt repayments of approximately \$6.6 billion, of which approximately \$2.2 billion are repayments to be made by the Company. In a plausible downside case, the Company, prior to receipt of dividends, will have a funding shortfall of approximately \$2.5 billion in the period to 31 December 2021. In such a scenario the rest of the Group will not be able fully to support the Company without access to a number of mitigating actions which are described in note 1(d) to the Fiscal Year 2020 Financial Statements. In addition, the Group is subject to certain restrictive financial covenants on its loan agreements and bonds. While the Group has secured the necessary covenant waivers and relaxations to remediate breaches on a covenant at 31 March 2020 and any future potential breaches up to and including 31 March 2021, some of these waivers contain conditions and further waivers or relaxations would potentially be required for the period subsequent to 31 March 2021. The Group's ability to remain as a going concern will therefore be dependent on its ability to execute certain mitigating actions more fully described under note 1(d) of the Fiscal Year 2020 Financial Statements. Potential investors must exercise caution when using such data to evaluate the Group's and the Company's condition, results of operations and results. For more details, see the audit report and note 1(d) to the Fiscal Year 2020 Financial Statements and the section entitled "*Risk Factors — Risks Relating to Business — The Company's independent auditors have included an explanatory paragraph which draws attention to a material uncertainty relating to the Company's ability to continue as a going concern in their audit report on the Fiscal Year 2020 Financial Statements*" and "*Risk Factors — Risks Relating to Business — Vedanta is subject to covenants under its credit facilities including term loans and working capital facilities that limit its flexibility in managing its business*".

Ernst & Young LLP have highlighted certain key audit matters in respect of the Fiscal Year 2020 Financial Statements in the section "*Key Audit Matters*" in the audit report to the Fiscal Year 2020 Financial Statements which were of most significance in the conduct of the audit of the Fiscal Year 2020 Financial Statements and include the most significant assessed risks of material misstatement (whether or not due to fraud) which Ernst & Young LLP has identified. These key audit matters include amongst others: the (a) valuation of KCM, (b) production sharing contract extension in respect of the Rajasthan Block, (c) recoverability of property, plant and equipment and exploration and evaluation assets, (d) estimation of reserves and resources (Vedanta Limited Oil and Gas division), (e) management override of controls in relation to revenue recognition, (f) claims and exposures relating to taxation and litigation and (g) undisclosed related party transactions. Potential investors should read the Fiscal Year 2020 Financial Statements in conjunction with and in entirety with its respective audit report and notes thereto. For more details, see the audit report and the notes 3(e), 2(c)(viii), 6, 33 and 35 to the Fiscal Year 2020 Financial Statements and the sections entitled "*Risk Factors — Litigation*", "*Business — Litigation*" and "*Related Party Transactions*".

Following the order from the High Court of Zambia appointing a provisional liquidator to manage the operations of KCM, Vedanta deconsolidated KCM with effect from 21 May 2019. As a result, while the Fiscal Year 2020 Financial Statements present KCM as a discontinued operation (and which include restatements of the comparative consolidated financial statements as of and for Fiscal Year 2019 to reflect the deconsolidation of KCM and certain reclassifications, as described in note 1(b) thereto), the Fiscal Year 2019 Financial Statements (including the comparative consolidated financial statements as of and for Fiscal Year 2018 therein) have presented KCM as a consolidated subsidiary. Accordingly, the Fiscal Year 2020 Financial Statements and the Fiscal Year 2019 Financial Statements are not directly comparable. In addition, the financial information as of and for Fiscal Year 2019 presented elsewhere in this Offering Circular, including in the sections entitled "*Selected Consolidated Financial Information*" and "*Management's Discussion and Analysis of Financial Condition and Results of Operations*" are derived from the Fiscal Year 2019 Financial Statements rather than the comparative consolidated financial statements as of and for Fiscal Year 2019 included in the Fiscal Year 2020 Financial Statements, and thus do not reflect such restatements. Potential investors must therefore exercise caution when making comparisons to any financial figures after 1 April 2019, including the Fiscal Year 2020 Financial Statements against the Company's consolidated financial information prior to 1 April 2019 and when evaluating the Group's and the Company's financial condition, results of operations and results. For more details, see the audit report and note 3(e) to the Fiscal Year 2020 Financial Statements for further information on the treatment of the deconsolidation of KCM and the sections entitled "*Risk Factors — Risks Relating to Business — Vedanta may not be able to regain control over KCM", "Risk Factors — Risks Relating to Business — The Fiscal Year 2020 Financial Statements and the Fiscal Year 2019 Financial Statements are not directly comparable*" and "*Litigation — Proceedings related to KCM*".

The Fiscal Year 2020 Financial Statements reflect the adoption of IFRS 16 which was adopted with effect from 1 April 2019. Please refer to note 2(b) of the Fiscal Year 2020 Financial Statements for a discussion on the impact on the adoption of IFRS 16. As the Company applied the modified retrospective approach on transition with the initial application on 1 April 2019 and without restating the corresponding figures of the prior period before 1 April 2019, the Company's consolidated financial information as at and for the year ended 31 March 2020 may not be directly comparable against the Company's consolidated financial information as at and for the years ended 31 March 2018 and 2019. Potential investors must therefore exercise caution when making comparisons to any financial figures after 1 April 2019, including the Fiscal Year 2020 Financial Statements against the Company's consolidated financial information prior to 1 April 2019 and when evaluating the Group's and the Company's financial condition, results of operations and results. See the section entitled "*Risk Factors — Risks Relating to Business — The adoption of IFRS 16 with effect from 1 April 2019 renders the Company's audited consolidated financial information as at and for and for the years ended 31 March 2018 and 2019 not directly comparable with the Company's consolidated financial information after 1 April 2019.*".

The Fiscal Year 2019 Financial Statements reflect the adoption of IFRS 9 and IFRS 15 which were adopted with effect from 1 April 2018. Please refer to note 2(b) of the Fiscal Year 2019 Financial Statements for a discussion on the impact on the adoption of IFRS 9 and IFRS 15. As the Company applied the transition provisions set out in IFRS 9 (where the Company has elected to apply the limited exemptions in IFRS 9 relating to the classification, measurement and impairment requirements for financial assets) and the modified transitional approach set out in IFRS 15, each with the date of initial application on 1 April 2018 and without restating the corresponding figures of the prior period before 1 April 2018, the Company's consolidated financial information as at and for the years ended 31 March 2019 and 2020 may not be directly comparable against the Company's consolidated financial information as at and for the year ended 31 March 2018. Potential investors must therefore exercise caution when making comparisons to any financial figures after 1 April 2018, including the consolidated financial statements for the year ended 31 March 2019 included in the Fiscal Year 2019 Financial Statements and the Fiscal Year 2020 Financial Statements against the Company's consolidated financial information prior to 1 April 2018 and when evaluating the Group's and the Company's financial condition, results of operations and results. See the section entitled "*Risk Factors — Risks Relating to Business — The adoption of IFRS 9 and IFRS 15 with effect from 1 April 2018 renders the Company's audited consolidated financial information as at and for and for the year ended 31 March 2018 not directly comparable with the Company's consolidated financial information after 1 April 2018.*".

Rounding adjustments have been made in calculating some of the information included in this Offering Circular. As a result, amounts shown as totals in some tables may not be exact arithmetic aggregations of the figures that precede them.

References to a particular "Fiscal Year" are to a financial year ended or ending 31 March of that year. References to a year other than a "Fiscal Year" are to the calendar year ended 31 December.

Currencies and Conversions

In this Offering Circular, references to "US" or the "United States" are to the United States of America, its territories and its possessions. References to "UK" are to the United Kingdom; references to "India" are to the Republic of India; references to "Australia" are to the Commonwealth of Australia; references to "Zambia" are to the Republic of Zambia; references to "South Africa" are to the Republic of South Africa; references to "EU" are to the European Union as established by the Treaty on European Union; references to "$", "dollars" or "US$" or "US dollars" are to the legal currency of the United States; references to "GBP" or "£" are to the legal currency of the United Kingdom; references to "₹", "Rupee" or "Indian Rupee" are to the legal currency of India; references to "AUD", "Australian dollars" or "A$" are to the legal currency of Australia; references to "ZAR", "South African Rand" are to the legal currency of South Africa; and references to "Zambian Kwacha" or "ZMW" are to the legal currency of Zambia. References to "¢" are to US cents and references to "lb" are to the imperial pounds (mass) equivalent to 0.4536 kilograms. References to "tonnes" are to metric tonnes, a unit of mass equivalent to 1,000 kilograms or 2,204.6 lb. In respect of Vedanta Limited's iron ore operations, references to "tonnes" are to dry metric tonnes and for wet metric tonnes. References to "m^3" are to cubic metres, references to "km" are to kilometres and references to "km^2" are to square kilometres.

Unless otherwise indicated, the financial information contained in this Offering Circular has been expressed in US dollars. The exchange rate between Zambian Kwacha and US dollars are based on the spot rates provided by Bloomberg on 31 March 2020, which was ZMW17.98 per $1.00. The exchange rate between South African Rand and US dollars are based on the Noon Buying Rate on 31 March 2020 which was ZAR17.83 per $1.00. The US dollar equivalent information presented in this Offering Circular for Indian Rupee has been calculated based on the Oanda Rate on 31 March 2020 which was ₹74.81 per $1.00. The US dollar equivalent information presented in this Offering Circular for GBP has been calculated based on the rate provided by Bloomberg as of 31 March 2020, which was $1.2715 per £1. The exchange rates presented in this Offering Circular for each period may have differed from the exchange rates used in the preparation of financial statements included elsewhere in this Offering Circular.

Non-IFRS Measures

This Offering Circular includes certain measures that are not defined by IFRS, including Vedanta EBITDA, cash costs per units, and Special Items (each as defined below). These measures have been included for the reasons described below. However, these measures are not measures of financial performance or cash flows under IFRS and may not be comparable to similarly titled measures of other companies because they are not uniformly defined. These measures should not be considered in isolation or as a substitute by investors as an alternative to Vedanta's operating results, operating profit or profit on ordinary activities before taxation, or as an alternative to cash flow from operating, investing or financing activities. Vedanta's management believes this information, along with comparable IFRS measures, is useful to investors because it provides a basis for measuring Vedanta's operating performance. Vedanta's management uses these financial measures, along with the most directly comparable IFRS financial measures, in evaluating Vedanta's operating performance and value creation.

Because of these limitations, these non-IFRS measures should also not be considered as measures of discretionary cash available to Vedanta to invest in the growth of its business or as measures of cash that will be available to Vedanta to meet its obligations. Potential investors should compensate for these limitations by relying primarily on Vedanta's IFRS results and using these non-IFRS measures only to supplement the evaluation of Vedanta's performance. Please see the section entitled "*Selected Consolidated Financial Information*" and the Audited Financial Statements and the related notes included elsewhere in this Offering Circular.

Furthermore, the non-IFRS measures included in this Offering Circular would also be considered a non-GAAP financial measure in the United States.

Vedanta EBITDA

Vedanta EBITDA is a non-IFRS measure and represents earnings before special items, depreciation, amortisation, other gains and losses, finance cost, investment revenue and tax. EBITDA is widely used by securities analysts, investors and other interested parties to evaluate the profitability of companies. Vedanta EBITDA eliminates potential differences in performance caused by variations in capital structures (affecting net finance costs), tax positions (such as the availability of net operating losses against which to relieve taxable profits), the cost and age of tangible assets (affecting relative depreciation expense) and the extent to which intangible assets are identifiable (affecting relative amortisation expense).

Vedanta EBITDA based measures have important limitations as an analytical tool, and you should not consider them in isolation or as substitutes for analysis of the results of operations.

Some of these limitations are:

- They do not reflect the impact of significant interest expense or the cash requirements necessary to service interest or principal payments in respect of any borrowings, which could further increase if Vedanta incurs more debt.

- They do not reflect the impact of income tax expense on Vedanta's operating performance.

- They do not reflect the impact of depreciation of assets on Vedanta's performance. The assets of Vedanta's business that are being depreciated will have to be replaced in the future and such depreciation expense may approximate the cost to replace these assets in the future. By excluding this expense from Vedanta EBITDA-based measures, these measures do not reflect Vedanta's future cash requirements for these replacements.

- They do not reflect Vedanta's cash expenditures or future requirements for capital expenditure or contractual commitments.

- They do not reflect changes in or cash requirements for Vedanta's working capital needs.

Vedanta EBITDA, as defined by Vedanta, represents Vedanta EBITDA before additional specific items that are considered to hinder comparison of the trading performance of Vedanta's businesses either year-on-year or with other businesses. Vedanta EBITDA is the measure used by the Board to assess the trading performance of Vedanta's businesses and is therefore the measure of segment profit that is presented under IFRS. Vedanta EBITDA is also presented on a consolidated basis because management believes it is important to consider Vedanta's profitability on a basis consistent with that of Vedanta's operating segments.

Vedanta EBITDA may not be comparable to similarly titled measures reported by other companies due to potential inconsistencies in the method of calculation. Vedanta has included its Vedanta EBITDA because it believes it is an indicative measure of its operating performance and is used by investors and analysts to evaluate companies in the same industry. Vedanta EBITDA should be considered in addition to, and not as a substitute for, other measures of financial performance and liquidity reported in accordance with IFRS. Vedanta believes that the inclusion of supplementary adjustments applied in its presentation of Vedanta EBITDA are appropriate because Vedanta believes it is a more indicative measure of the its baseline performance as it excludes certain charges that Vedanta's management considers to be outside of its core operating results. In addition, Vedanta EBITDA is among the primary indicators that Vedanta's management uses as a basis for planning and forecasting of future periods.

Cash Costs per Unit

Cost of production as reported for Vedanta's metal products includes an off-set for any amounts Vedanta receives upon the sale of the by-products from the refining or smelting processes. The cost of production is divided by the daily average exchange rate for the year to calculate the US dollar cost of production per lb or tonne of metal as reported.

Special Items

Special items are those items that management considers, by virtue of their size or incidence (including but not limited to impairment charges and acquisition and restructuring related costs), should be disclosed separately to ensure that the financial information allows an understanding of the underlying performance of the business in the year, so as to facilitate comparison with prior periods.

Tax charges related to special items and certain one-time tax effects are considered special. Such items are material by nature or amount to the year's result and require separate disclosure in accordance with International Accounting Standards ("IAS") 1 paragraph 97. The determination as to which items should be disclosed separately requires a degree of judgement. Special items are disclosed in the Audited Financial Statements; please refer to Note 6 in the Audited Financial Statements.

Net Debt/Capitalisation (%)

Net Debt/Capitalisation (%) is calculated as Vedanta's Debt minus Cash and Cash Equivalents minus Liquid Investments, as a percentage of the total capitalisation of Vedanta. Total capitalisation of Vedanta is calculated as shareholder's equity including non-controlling interests and net debt.

Interest Coverage Ratio

Interest coverage ratio is calculated as the number of times Vedanta EBITDA covers the total interest expense minus investment revenue of Vedanta.

Net Debt over Vedanta EBITDA

Net Debt over Vedanta EBITDA is calculated as Debt minus Cash and Cash Equivalents minus Liquid Investments, divided by Vedanta EBITDA.

Debt/Vedanta EBITDA

Debt/Vedanta EBITDA is calculated as total borrowings divided by Vedanta EBITDA.

Adjusted Revenue

Adjusted Revenue is calculated as total revenue as per financial statements less revenue of custom smelting operations at Vedanta's copper and zinc business.

Adjusted EBITDA

Adjusted EBITDA is calculated as Vedanta EBITDA less EBITDA of custom smelting operations at Vedanta's copper and zinc business.

Adjusted Vedanta EBITDA margin

Adjusted Vedanta EBITDA margin is calculated as Adjusted EBITDA divided by Adjusted Revenue.

Return on Capital Employed (ROCE)

ROCE is calculated as operating profit before special items net of tax outflow, as a ratio of average capital employed.

Free Cash flow Post Capex (FCF)

FCF is calculated as net cash flow from operating activities, (i) less purchases of property, plant and equipment and intangibles less proceeds on disposal of property, plant and equipment, plus (ii) dividends paid and dividend distribution tax paid (iii) plus or minus other non-cash adjustments.

Capital Employed

Cash employed is calculated as net assets before Net (Debt)/Cash.

Operating Margin Before Special items

Operating margin before special items is calculated as operating profit/(loss) before special items divided by total revenue.

Basis of Presentation of Reserves and Resources

Ore Reserves and Mineral Resources

The reported reserves are defined as being either "Ore Reserves" if reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 Edition, prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (the "JORC Code"). The reported mineral resources are defined as "Mineral Resources" if reported in accordance with the JORC Code (2012).

The reported Ore Reserves of each project, and Mineral Resources for certain projects, are derived following a systematic evaluation of geological data and a series of technical and economic studies by Vedanta's geologists and engineers. The results and procedures used in the majority of these studies have been periodically reviewed by independent consultants.

- The Mineral Resources and Ore Reserves of KCM's Konkola, Nchanga and Nampundwe mines were prepared as of 31 March 2019 by SRK Consulting (UK) and are reported in accordance with the terms and definitions of the JORC Code (2012). The details of the responsible Competent Persons are included in Annex C of this Offering Circular. The Mineral Resources and Ore Reserves as reported for KCM's Konkola, Nchanga and Nampundwe mines were prepared as of 31 March 2019 are not current and are reported solely as a statement of historical fact. Accordingly, these estimates may be significantly different to that reported herein if these were assessed as at 31 March 2020.

- The Mineral Resources of CMT's copper mines are derived from management estimates as of 31 March 2020 and are reported in accordance with the terms and definitions of the JORC Code (2012). The details of the responsible Competent Persons are included in Annex C of this Offering Circular.

- The Mineral Resources and Ore Reserves of HZL's mines were audited as of 31 March 2020 by SRK Consulting (UK) Limited and are reported in accordance with the terms and definitions of the JORC Code (2012). The details of the responsible Competent Persons are included in Annex C of this Offering Circular.

- The Mineral Resources and Ore Reserves of Black Mountain Mining's Black Mountain mine were audited as of 31 March 2020 by SRK Consulting (UK) Limited and are reported in accordance with the terms and definitions of the JORC Code (2012). The details of the responsible Competent Persons are included in Annex C of this Offering Circular.

- The Mineral Resources and Ore Reserves of Black Mountain Mining's Gamsberg mines were audited as of 31 March 2020 by SRK Consulting (UK) Limited and are reported in accordance with the terms and definitions of the JORC Code (2012). The details of the responsible Competent Persons are included in Annex C of this Offering Circular.

- The Mineral Resources and Ore Reserves of Skorpion were audited as of 31 March 2020 by SRK Consulting (UK) Limited and are reported in accordance with the terms and definitions of the JORC Code (2012). The details of the responsible Competent Persons are included in Annex C of this Offering Circular.

- The Mineral Resources and Ore Reserves of BALCO's Bauxite mines were audited as of 31 March 2020 by SRK Consulting (UK) Limited and are reported in accordance with the terms and definitions of the JORC Code (2012). The details of the responsible Competent Persons are included in Annex C of this Offering Circular.

- The Mineral Resources and Ore Reserves of the iron ore mines of Vedanta Limited and its subsidiary, SRL, were audited as of 31 March 2020 by SRK Consulting (UK) Limited and are reported in accordance with the terms and definitions of the JORC Code (2012).

The estimation of the quantity and quality of the mineral occurrence is defined in two stages. In the first stage, the location, quantity, grade, geological characteristics and continuity of Mineral Resources are interpreted and estimated from specific geological evidence and knowledge. The geological evidence is gathered from exploration, sampling and testing information through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories. See Annex B — "*Mineral Resources (exclusive reporting basis)*". Furthermore, all Mineral Resources are reported on an exclusive basis where for the avoidance of doubt, the Mineral Resources exclude those Measured and Indicated Mineral Resources which have been modified to derive Ore Reserves. The definitions of the terms relied on in the JORC Code (2012) are included in the glossary to this Offering Circular. The effective date of the audits is 31 March 2020, as such all consultants confirm that they have not reviewed any additional technical information subsequent to this effective date whether with respect to material changes or otherwise.

This Offering Circular references various production expansion projections currently proposed by the Company, and in addition, associated capital expenditures. The Ore Reserve audits as completed by SRK UK or all other consultants have been assessed in the context of current production levels and as such any expansion or associated capital expenditures have not been audited by all consultants.

All Mineral Resources and Ore Reserves are reported on a 100% basis and as such do not reflect the quantum which would be attributable to the Company based on its equity interest. This Offering Circular includes technical information, which requires subsequent calculations to derive subtotals, totals and weighted averages. Such calculations may involve a degree of rounding and consequently introduce a margin of error. Where such errors occur, the Company does not consider them to be material.

The JORC Code (2012) specifies that reporting of Mineral Resources and Ore Reserves should be accompanied by certain additional supplemental information, for example as referenced in Table 1 of the JORC Code (2012). The Company intends, at a later date, to include a summary of the appropriate supplemental information on the Company's website to ensure full compliance with the relevant reporting Code.

In the second stage, the "Ore Reserve" is defined. An "Ore Reserve" is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate that at the time of reporting that extraction could reasonably be justified. Ore Reserves are sub-divided in order of increasing confidence into Probable Ore Reserves and Proved Ore Reserves.

Although the Company provides certain life of mine estimates on the basis of Ore Reserves and Mineral Resources, investors are cautioned to use the life of mine estimates based solely on Ore Reserves in Annex A — "*Life of Mines*" as the base case for any assessment of the life of a mine.

SRK UK noted that the geological information at Rampura Agucha, Sindesar Khurd, Rajpura Dariba and Kayad is modelled using commercial geological modelling software and the information at the Zawar Group mines is modelled using a combination of geological modelling software and on paper-based sections.

SRK UK noted that the geological information at the Konkola copper mine is modelled using the GEMS Software, the Nchanga open-pit copper mine is modelled on Datamine resource models, the Nchanga underground copper mines are modelled on block and computerised analysis (Dynamic Ore Reserves System II) and the Nampundwe underground pyrite mine is modelled manually on paper-based sections. The Mineral Resources and Ore Reserves as reported for KCM's Konkola, Nchanga and Nampundwe mines were prepared as of 31 March 2019 are not current and are reported solely as a statement of historical fact. Accordingly, these estimates may be significantly different to that reported herein if these were assessed as at 31 March 2020.

In addition to the Ore Reserves, the Company has identified further mineral deposits as either extensions of or additions to its existing operations that are subject to ongoing exploration and evaluation.

Cautionary Note to United States Investors Concerning Estimates of Measured, Indicated and Inferred Resources for Mining Operations

There are significant differences in the reporting regimes for reserve estimates between the JORC Code (2012) and the United States reporting regime under the requirements as adopted by the SEC in its Industry Guide 7 — Description of Property by Issuers Engaged or to be Engaged in Significant Mining Operations ("Industry Guide 7"). The principal difference is the absence under Industry Guide 7 of any provision for the reporting of estimates other than proved (measured) or probable (indicated) reserves. There is, therefore, no equivalent for "resources" or "Mineral Resources" under Industry Guide 7.

The SEC has applied the following reporting definitions to reserves under Industry Guide 7:

A "reserve" is "that part of a mineral deposit which could be economically and legally extracted or produced at the time of the reserve determination. Reserves are customarily stated in terms of "ore" when dealing with metalliferous minerals; when other materials such as coal, oil, shale, tar, sands, limestones, etc. are involved, an appropriate term such as "recoverable coal" may be substituted".

"**Proven (measured) reserves**" are "reserves for which:

(a) quantity is computed from dimensions revealed in outcrops, trenches, workings or drill holes; grade and/or quality are computed from the results of detailed sampling; and

(b) the sites for inspection, sampling and measurement are spaced so closely and the geologic character is so well defined that size, shape, depth and mineral content of reserves are well-established".

"**Probable (indicated) reserves**" are "reserves for which quantity and grade and/or quality are computed from information similar to that used for proven (measured) reserves, but the sites for inspection, sampling, and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven (measured) reserves, is high enough to assume continuity between points of observation".

This Offering Circular, including Annex A — "*Life of Mines*", uses the term "resources", which are comprised of "measured," "indicated" and "inferred" Mineral Resources. United States investors are advised that while such terms are recognised by some investors, the SEC does not recognise them. "Inferred" Mineral Resources have a great amount of uncertainty as to their existence and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an "inferred" Mineral Resource will ever be upgraded to a higher category. Under SEC rules, estimates of "inferred" Mineral Resources may not form the basis of feasibility or other economic studies. Investors should not assume that all or any part of "measured" or "indicated" resources will ever be converted into Ore Reserves. Investors are also cautioned not to assume that all or any part of an "inferred" Mineral Resource exists or is economically or legally mineable.

UNITED STATES INVESTORS ARE ADVISED THAT THE REPORTING OF MINERAL RESOURCES IN THIS OFFERING CIRCULAR IS ACCORDINGLY NOT COMPLIANT WITH INDUSTRY GUIDE 7.

Oil, Condensate and Marketable Gas Reserves and Contingent Resources

Estimates of proved, probable, and possible reserves and Contingent resources as of 31 March 2020 of Vedanta Limited have been prepared according to the Petroleum Resources Management System ("PRMS") approved in March 2007 by the Society of Petroleum Engineers, the World Petroleum Council, the American Association of Petroleum Geologists, and the Society of Petroleum Evaluation Engineers.

Estimates of proved, probable, and possible reserves and Contingent resources as of 31 March 2020 of Vedanta Limited have been prepared according to the Petroleum Resources Management System (PRMS) approved in March 2007 and revised in June 2018 by the Society of Petroleum Engineers, the World Petroleum Council, the American Association of Petroleum Geologists, the Society of Petroleum Evaluation Engineers, the Society of Exploration Geophysicists, the Society of Petrophysicists and Well Log Analysts, and the European Association of Geoscientists & Engineers.

The PRMS standard is a referenced standard in published guidance notes of the London Stock Exchange. The proved, probable, and possible oil, condensate, and marketable gas Reserves and the Contingent Resources were independently estimated by DeGolyer and MacNaughton as of 31 March 2020.

The Contingent Resources estimated herein are those volumes of oil or gas that are potentially recoverable from known accumulations but which are not currently considered to be commercially recoverable because development is either pending or is under evaluation or is currently not considered viable under existing technical/commercial conditions. Because of the uncertainty of commerciality and the lack of sufficient exploration drilling, the Resources estimated herein cannot be classified as Reserves. The Resources estimates herein are provided as a means of comparison to other resources and do not provide a means of direct comparison to Reserves.

The Company retained DeGolyer and MacNaughton to conduct independent reviews of the proved, probable, and possible oil, condensate, and marketable gas Reserves and the Contingent Resources as of 31 March 2020.

Reserves and Production

In this Offering Circular, unless expressly stated otherwise, references to reserves and production are to total reserves and total production, respectively. For example, total Ore Reserves and total production mean that part of the Ore Reserves from a mine and that part of the production at mines and operations, respectively, that subsidiaries of the Company have an interest in or rights over.

The Company does not wholly own certain of its subsidiaries and therefore total reserves and total production include reserves and production, respectively, attributable to third-party interests in controlled subsidiaries. Rounding adjustments have been made in calculating some of the reserves and production information included in this Offering Circular. As a result, numerical figures shown as totals in some tables may not be exact arithmetic aggregations of the figures that precede them.

Cautionary Note to United States Investors Concerning Estimates of Measured, Indicated and Inferred Resources for Oil and Gas Programmes

There are significant differences between the reporting regimes under the PRMS approved in March 2007 by the Society of Petroleum Engineers, the World Petroleum Council, the American Association of Petroleum Geologists, and the Society of Petroleum Evaluation and in the United States under the requirements as adopted by the SEC in its Industry Guide 4 — Prospectus Relating to Interests in Oil and Gas Programmes and Subpart 1200 of Regulation S-K (together "Industry Guide 4").

Evaluations of oil and gas reserves involve various uncertainties and require exploration and production companies to make extensive judgements as to future events based upon the information available. The crude oil and natural gas reserves data are estimates based primarily on internal technical analyses using standard industry practises. Such estimates reflect Vedanta's best judgement at the time of their preparation, based on geological and geophysical analyses and appraisal work (which are dynamic processes), and may differ from previous estimates. Reserves estimates are subject to various uncertainties, including those relating to the physical characteristics of crude oil and natural gas fields. These physical characteristics are difficult to estimate and, as a result, actual production may be materially different from current estimates of reserves. Factors affecting Vedanta's reserve estimates include: the outcome of new production or drilling activities; assumptions regarding future performance of wells and surface facilities; the results of field reviews; an ability to acquire new reserves from discoveries or extensions of existing fields; an ability to apply improved recovery techniques; and changed economic conditions.

UNITED STATES INVESTORS ARE ADVISED THAT THE REPORTING REGIMES USED IN THIS OFFERING CIRCULAR ARE ACCORDINGLY NOT COMPLIANT WITH INDUSTRY GUIDE 4.

CERTAIN ENFORCEMENT OF CIVIL LIABILITIES CONSIDERATIONS AND LIMITATIONS ON THE VALIDITY AND ENFORCEABILITY OF THE GUARANTEE AND THE COLLATERAL

Mauritius

The Issuer and Vedanta Mauritius are private limited companies incorporated under the laws of Mauritius. A judgment obtained in a foreign court may be enforced in Mauritius pursuant to a procedure known as exequatur. The Supreme Court of Mauritius (the "Supreme Court") may register and enforce, by way of exequatur under article 546 of the Code de Procédure Civile, an in personam judgment of a foreign court obtained against us without reconsideration of the merits, if (i) the judgment remains valid and capable of execution in the country where it was delivered, (ii) the Issuer and Vedanta Mauritius have been properly summoned to the proceedings leading to the judgment; and (iii) the foreign court had jurisdiction over us and the matter submitted to it. The Supreme Court can refuse to recognise and enforce a judgment obtained in a foreign court if (i) the judgment is contrary to any principle affecting public order, as such term is interpreted under Mauritian law, (ii) the judgment was obtained by fraud or in a manner contrary to the principles of natural justice, including in respect of procedure, or (iii) the judgment is for a claim that under Mauritian law would be characterised as based on a tax or as being expropriatory, penal or contrary to any other public law.

In addition, the Supreme Court has discretion to stay or decline to hear an action on the foreign judgment if the foreign judgment is under appeal or there is another subsisting judgment in any jurisdiction relating to the same cause of action as the foreign judgment.

There exists also an alternative procedure for enforcement of judgments rendered by superior courts in the United Kingdom and the enforcement of such UK judgments will be made in accordance with the Reciprocal Enforcement of Judgments Act 1923.

A foreign arbitral award may be recognised and enforced in Mauritius pursuant to the Convention on the Recognition and Enforcement of Foreign Arbitral Awards Act 2001. The recognition and enforcement of the foreign arbitral award may be refused by the Supreme Court at the request of the party against whom it is invoked on certain limited grounds. Further, the recognition and enforcement can also be refused if the Supreme Court finds that the subject-matter of the dispute is not capable of settlement by arbitration under the law of Mauritius or the recognition or enforcement of the award would be contrary to the public policy of Mauritius.

Jersey

Vedanta Jersey is incorporated in Jersey and is subject to Jersey insolvency laws which may pose particular risks for holders of the Bonds with respect to the enforcement of the Guarantee and the Collateral Documents.

Vedanta Jersey is incorporated under the laws of Jersey. Consequently, in the event of an insolvency of Vedanta Jersey insolvency proceedings may be initiated in Jersey. There are two principal regimes for corporate insolvency in Jersey: "*désastre*" and winding up (including just and equitable winding up and creditors' winding up). The principal type of insolvency procedure available to creditors under Jersey law is the application for an Act of the Royal Court of Jersey under the Bankruptcy (Désastre) (Jersey) Law 1990, as amended (the "Jersey Bankruptcy Law") declaring the property of a debtor to be "*en désastre*" (a "declaration"). On a declaration of "*désastre*", title and possession of the property of the debtor vest automatically in the Viscount, an official of the Royal Court (the "Viscount"). With effect from the date of declaration, a creditor has no other remedy against the property or person of the debtor, and may not commence or, except with the consent of the Viscount or the Royal Court, continue any legal proceedings to recover the debt.

Additionally, the shareholders of a Jersey company (but not its creditors) can instigate a winding up of an insolvent company, which is known as a "creditors' winding up" pursuant to Chapter 4 of Part 21 of the Companies (Jersey) Law 1991, as amended (the "Jersey Companies Law"). On a creditors' winding up, a liquidator is nominated by the shareholders. The creditors may approve such a liquidator or apply to appoint a different liquidator. The liquidator will stand in the shoes of the directors and administer the winding up, gather assets, make appropriate disposals of assets, settle claims and distribute assets as appropriate. After the commencement of the winding up, no action can be taken or continued against the company except with the leave of court. The shareholders must give creditors 14 days' notice of the meeting to commence the creditors' winding up. The corporate state and capacity of the company continues until the end of the winding up procedure, when the company is dissolved.

The Jersey Companies Law requires a creditor of a company (subject to appeal) to be bound by an arrangement entered into by the company and its creditors immediately before or in the course of its winding up if (among other things) three quarters in number and value of the creditors acceded to the arrangement.

Transactions at an undervalue

Under Article 17 of the Jersey Bankruptcy Law and Article 176 of the Jersey Companies Law, the court may, on the application of the Viscount (in the case of a company whose property has been declared "*en désastre*") or liquidator (in the case of a creditors' winding up, a procedure which is instigated by shareholders not creditors), set aside a transaction (including any guarantee or security interest) entered into by a company with any person (the "other party") at an undervalue. There is a five-year look-back period from the date of commencement of the winding up or declaration of "*désastre*" during which transactions are susceptible to examination pursuant to this rule (the "relevant time"). The Jersey Bankruptcy Law and Jersey Companies Law contain detailed provisions, including (without limitation) those that define what constitutes a transaction at an undervalue, the operation of the relevant time and the effect of entering into such a transaction with a person connected with the company or with an associate of the company.

Preferences

Under Article 17A of the Jersey Bankruptcy Law and Article 176A of the Jersey Companies Law, the court may, on the application of the Viscount (in the case of a company whose property has been declared "*en désastre*") or liquidator (in the case of a creditors' winding up), set aside a preference (including any guarantee or security interest) given by the company to any person (the "other party"). There is a 12-month look-back period from the date of commencement of the winding up or declaration of "*désastre*" during which transactions are susceptible to examination pursuant to this rule (the "relevant time"). The Jersey Bankruptcy Law and Jersey Companies Law contain detailed provisions, including (without limitation) those that define what constitutes a preference, the operation of the relevant time and the effect of entering into a preference with a person connected with the company or with an associate of the company.

Extortionate transactions, onerous property, disclaimer and customary law fraudulent dispositions

Under Article 17C of the Jersey Bankruptcy Law and Article 179 of the Jersey Companies Law, the court may, on the application of the Viscount (in the case of a company whose property has been declared "*en désastre*") or liquidator (in the case of a creditors' winding up), set aside a transaction providing credit to the debtor company which is or was extortionate. There is a three-year look-back period from the date of commencement of the winding up or declaration of "*désastre*" during which transactions are susceptible to examination pursuant to this rule. The Jersey Bankruptcy Law and Jersey Companies Law contain detailed provisions, including (without limitation) those that define what constitutes a transaction which is extortionate.

Under Article 15 of the Jersey Bankruptcy Law, the Viscount may within six months following the date of the declaration of "*désastre*" and under Article 171 of the Jersey Companies Law, a liquidator may within six months following the commencement of a creditors' winding up, disclaim any onerous property of the company. "Onerous property" is defined to include any moveable property, a contract lease or other immoveable property if it is situated outside of Jersey that is unsaleable or not readily saleable or is such that it might give rise to a liability to pay money or perform any other onerous act, and includes an unprofitable contract.

A disclaimer operates to determine, as of the date it is made, the rights, interests and liabilities of the company/debtor in or in respect of the property disclaimed and discharges the company/Viscount from all liability in respect of the property as of the date of the commencement of the creditors' winding up/from the date of the declaration but shall not, except so far as is necessary for the purpose of releasing the company/debtor from liability, affect the rights or liabilities of any other person. A person sustaining loss or damage as a result of a disclaimer is deemed to be a creditor of the company to the extent of the loss or damage and shall have standing as a creditor in the "*désastre*" or creditors' winding up. The Jersey Bankruptcy Law and Jersey Companies Law contain detailed provisions, including (without limitation) in relation to the power to disclaim onerous property.

In addition to the Jersey statutory provisions referred to above, there are certain principles of Jersey customary law (for example, a Pauline action) under which dispositions of assets with the intention of defeating creditors' claims may be set aside.

Enforcement of security and security in insolvency

Under the laws of Jersey, a person incorporated, resident or domiciled in Jersey is deemed to have capacity to grant security governed by foreign law over property situated outside Jersey, but to the extent that any floating charge or other security interest governed by a foreign law is expressed to apply to any asset, property and undertaking of a person incorporated, resident or domiciled in Jersey such floating charge or other security interest is not likely to be held valid and enforceable by the Jersey courts in respect of Jersey situs assets.

The Insolvency Act 1986 (either as originally enacted or as amended, including by the provisions of the Enterprise Act 2002) does not apply in Jersey and receivers, administrative receivers and administrators are not part of the laws of Jersey. Accordingly, the Jersey courts may not recognize the powers of an administrator, administrative receiver or other receiver appointed in respect of Jersey situs assets.

The Royal Court (in its inherent jurisdiction) may, however, under Article 49(1) of the Jersey Bankruptcy Law assist the courts of prescribed countries and territories and, applying general principles of comity, assist the courts in other jurisdictions, in all matters relating to the insolvency of any person to the extent that the Royal Court think fit. Further, in doing so, the Royal Court may have regard to the UNCITRAL model law, even though the model law has not been (and is unlikely to be) implemented as a separate law in Jersey.

If insolvency proceedings have been commenced in another jurisdiction in relation to the company, the nature and extent of the cooperation from Jersey is likely to depend on the nature of the requesting country's insolvency regime.

In the case of both statutory and non-statutory requests for assistance, it should be noted that the UNCITRAL provisions will not automatically be followed as this is a matter for the discretion of the Royal Court. The court's position may also not be in accordance with the EU Insolvency Regulation. Jersey does not form part of the European Community for the purposes of implementation of its directions. Accordingly, the EU Insolvency Regulation does not apply as a matter of Jersey domestic law and the automatic test of centre of main interests does not apply.

Enforcement of a security interest against a Jersey company may be further limited by bankruptcy, insolvency, liquidation, dissolution, re-organization or other laws of general application relating to or affecting the rights of creditors, and laws in relation to transactions at an undervalue, preferences, extortionate credit transactions, disclaimer of onerous property and fraudulent dispositions also apply in Jersey (as detailed above).

Scheme of arrangement

Although it is not an insolvency proceeding, under Article 125 of the Jersey Companies Law, the Royal Court of Jersey may sanction a compromise or arrangement (a "Scheme") between a Jersey company and its creditors or shareholders (or a class of either of them). The court may, on application of the company (or a creditor or shareholder, or if the company is being wound up, a liquidator), order a meeting to be called at which the Scheme will need to be agreed to by a majority in number representing:

- 75% in value of the creditors (or class of creditors); or

- 75% of the voting rights of the shareholders (or class of shareholders), as the case may be, present and voting either in person or by proxy. If the requisite majority of creditors or shareholders (or of the relevant class of either of them) agree to the Scheme and, following such agreement, the court sanctions the Scheme, the Scheme is binding on all creditors or shareholders (or on the relevant class of either of them) and on the company (or any liquidator and contributories of the company if the company is being wound up).

Service of process and enforcement of civil liabilities/judgments

Vedanta Jersey is incorporated in Jersey. Subject to the provisions of the Judgments (Reciprocal Enforcement) (Jersey) Law 1960 (the "Reciprocal Enforcement Law") and the rules under that Law, if a final and conclusive judgment under which a sum of money is payable (not being a sum payable in respect of taxes or other charges of a like nature or in respect of a fine or other penalty) were obtained in the superior courts of a country to which Part 2 of the Reciprocal Enforcement Law extends, being: (a) in England and Wales, the Supreme Court of the United Kingdom, the Court of Appeal and the High Court of Justice; (b) in Scotland, the Supreme Court of the United Kingdom, the Court of Session and the Sheriff Court; (c) in Northern Ireland, the Supreme Court of the United Kingdom and the Court of Judicature of Northern Ireland; (d) in the Isle of Man, Her Majesty's High Court of Justice of the Isle of Man (including the Staff of Government Division); and (e) in Guernsey, the Royal Court of Guernsey and the Court of Appeal of Guernsey (each a "Reciprocal Enforcement Court") against Vedanta Jersey in respect of a matter in relation to which such court had jurisdiction, such judgment would, on application to the Royal Court of Jersey, be registered without reconsidering its merits and would thereafter be enforceable.

The Reciprocal Enforcement Law contains provisions enabling an application to be made to the Royal Court of Jersey to set aside a judgment registered under the Reciprocal Enforcement Law on the following grounds: (a) the judgment is not a judgment to which Part 2 of the Reciprocal Enforcement Law applies or was registered in contravention of relevant provisions of that Law; (b) the relevant Reciprocal Enforcement Court had no jurisdiction in the circumstances of the case; (c) the judgment debtor, being the defendant in the proceedings in that Reciprocal Enforcement Court, did not (notwithstanding that process may have been duly served on the judgment debtor in accordance with the law of the country of such original court) receive notice of those proceedings in sufficient time to enable the judgment debtor to defend the proceedings and did not appear; (d) the judgment was obtained by fraud; (e) the enforcement of the judgment would be contrary to public policy in Jersey; (f) the rights under the judgment are not vested in the person by whom the application for registration was made; or (g) the matter in dispute in the proceedings in such original court had previously to the date of the judgment in such original court been the subject of a final and conclusive judgment by a court having jurisdiction in the matter.

The United States and Jersey currently do not have a treaty providing for the reciprocal recognition and enforcement of judgments (as opposed to arbitration awards) in civil and commercial matters. Consequently, a final judgment for payment rendered by any federal or state court in the United States based on civil liability, whether or not predicated solely upon US federal securities laws, would not automatically be recognized or enforceable in Jersey. In order to enforce any such US judgment in Jersey, proceedings must first be initiated before a court of competent jurisdiction in Jersey. In such an action, a Jersey court would not generally reinvestigate the merits of the original matter decided by the US court (subject to what is said below) and it would usually be possible to obtain summary judgment on such a claim (assuming that there is no good defense to it). Recognition and enforcement of a US judgment by a Jersey court in such an action is conditional upon (among other things) the following:

- the US court having had jurisdiction over the original proceedings according to Jersey conflicts of laws principles;
- the US judgment being final and conclusive on the merits in the sense of being final and unalterable in the court which pronounced it and being for a debt or definite sum of money (although there are circumstances where non-money judgments may also be recognized);
- the recognition or enforcement of the US judgment not contravening Jersey public policy;

- the US judgment not being for a sum payable in respect of taxes, or other charges of a like nature, or in respect of a penalty or fine;

- the US judgment not having been arrived at by doubling, trebling or otherwise multiplying a sum assessed as compensation for the loss or damages sustained and not being otherwise in breach of Section 5 of the United Kingdom Protection of Trading Interests Act 1980 (as extended to Jersey by the Protection of Trading Interests Act 1980 (Jersey) Order 1983);

- the US judgment not having been obtained by fraud or in breach of Jersey principles of natural justice or rights under the European Convention on Human Rights; and

- there not having been a prior inconsistent decision of a Jersey court in respect of the same matter.

Subject to the foregoing, investors may be able to enforce in Jersey judgments in civil and commercial matters that have been obtained from US federal or state courts. However, there can be no assurance that those judgments will be recognized or enforceable in Jersey. In addition, it is questionable whether a Jersey court would accept jurisdiction and impose civil liability if the original action was commenced in Jersey, instead of the United States, and predicated solely upon US federal securities laws.

SUMMARY

This summary highlights information contained elsewhere in this Offering Circular and does not contain all of the information that you should consider before investing in the Bonds. You should read this entire Offering Circular, including "Risk Factors" and the financial statements included elsewhere in this Offering Circular, before making an investment decision. This Offering Circular includes forward-looking statements that involve risks and uncertainties. See the section entitled "Special Note Regarding Forward-Looking Statements" for more information.

Business Overview

Vedanta is a globally diversified metals and mining, oil and gas and power generation company, currently contributing 1% of India's GDP (*Source: IFC report on economic and social impact (IFC is Institute for Competitiveness, the strategy arm of Harvard Business School)*). Its businesses are principally located in India. India is one of the fastest growing large economies in the world with a long term GDP growth forecast of over 6%, according to Euromonitor. Vedanta also has operations in Zambia, Namibia, South Africa, the United Arab Emirates (the "UAE"), Japan, South Korea, and Taiwan, and a workforce of over 76,000 people worldwide and approximately 20,000 of them are employees as at 31 March 2020. Vedanta is primarily engaged in oil and gas, zinc, copper, iron ore, lead, silver, steel, aluminium, commercial power generation, glass substrate, and port operation businesses. Vedanta has expanded its existing business across oil and gas, copper, zinc, aluminium and iron ore and acquired new businesses, such as, the steel business through acquisition of ESL in 2018. Vedanta believes its experience in operating and expanding its businesses in India will allow it to capitalise on attractive growth opportunities arising from India's large mineral reserves, relatively low cost of operations and large and inexpensive labour and talent pools.

For Fiscal Years 2018, 2019 and 2020, Vedanta reported total revenue of $15,294 million, $14,031 million and $11,790 million, respectively, and Vedanta EBITDA of $3,963 million, $3,393 million and $3,003 million, respectively.

Competitive Strengths

Vedanta believes it has the following competitive strengths:

- Significant presence in most attractive commodities with large market sizes and favorable supply and demand gap.
- Ideally positioned to capitalise on India's growth and natural resources potential.
- Well invested facilities with prudent capital allocation policy leading to solid returns.
- Committed to sustainability, operational excellence and highest standards to corporate governance.
- Diversified FCF generative asset well equipped to weather commodity downturn.
- Proven track record of execution.

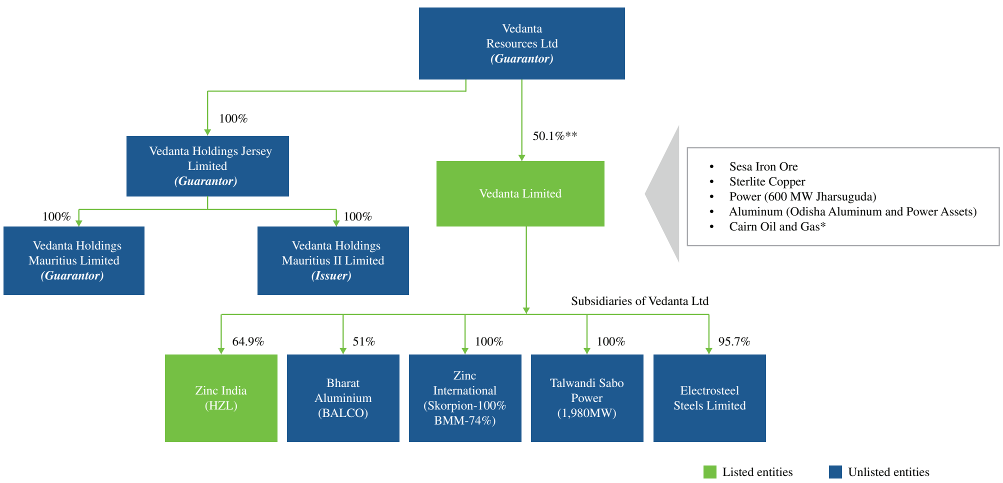
Strategy

Vedanta's strategic goal is to become one of the top diversified natural resources company in the world, and has the following key strategic priorities:

- Commitment to the larger purpose with focus on world class environmental, social and corporate governance performance.
- Augment its reserves and resources base.
- Delivering on growth opportunities.
- Optimise capital allocation and maintain strong balance sheet.
- Operational Excellence.

Group Structure

The following depicts Vedanta's corporate structure as at the date of this Offering Circular. Vedanta owns other subsidiaries that are not material and are not shown in the chart below:



* 50% of the share in the RJ Block is held by a subsidiary of Vedanta Ltd

** includes the ADS issued by Vedanta Limited

About the Issuer

The Issuer, Vedanta Holdings Mauritius II Limited, is a company incorporated in Mauritius on 29 June 2020. The registered office of the Issuer is at c/o Amicorp (Mauritius) Limited, 6^{th} Floor, Tower 1, Nexteracom Building, Ebene, Mauritius, and the telephone number is +230 4040200.

About the Company

The Company was incorporated and registered in the United Kingdom as a private company limited by shares under the name Angelchange Limited on 22 April 2003 with the registration number, 04740415. On 20 November 2003, the Company re-registered as a public limited company under the United Kingdom Companies Act 1985 and changed its name to Vedanta Resources plc. On 2 October 2018, the Company delisted from the London Stock Exchange ("LSE") and re-registered as a private limited company and changed its name to Vedanta Resources Limited. The principal legislation under which the Company operates is the Companies Act, 2006 (the "Companies Act").

The registered office of the Company is 8th floor, 20 Farringdon Street, London, United Kingdom, EC4A 4AB. The head office of the Company is at 30 Berkeley Square, London W1J 6EX, telephone number +44 (020) 7499-5900. The Company's website address is www.vedantaresources.com. **Information on the Company's website does not constitute a part of this Offering Circular.**

About the Subsidiary Guarantors

Vedanta Holdings Jersey Limited ("Vedanta Jersey")

Vedanta Jersey is a company incorporated in Jersey on 15 January 2020. The registered office of Vedanta Jersey is at 47 Esplanade, St Helier, Jersey JE1 0BD, and the telephone number is +44 1534 835743.

Vedanta Holdings Mauritius Limited ("Vedanta Mauritius")

Vedanta Mauritius is a company incorporated in Mauritius on 29 June 2020. The registered office of Vedanta Mauritius is at c/o Amicorp (Mauritius) Limited, 6th Floor, Tower 1, Nexteracom Building, Ebene, Mauritius, and the telephone number is +230 4040200.

Recent Developments

Production Releases for the three months ended 30 June 2020

On 6 August 2020, Vedanta Limited posted on the National Stock Exchange of India Limited ("NSE") and the BSE Limited ("BSE", and together with NSE, the "Indian Stock Exchanges") its production release for the three months ended 30 June 2020, which included its consolidated revenue range for the three months ended 30 June 2020 of between ₹150 billion and ₹160 billion ($2,005.1 million and to $2,138.8 million), as compared to ₹212 billion ($2,829.4 million) for the same period in the previous year and the consolidated EBITDA range of Vedanta Limited for the three months ended 30 June 2020 of between ₹40 billion and ₹42 billion ($534.7 million to $561.4 million), which includes approximately ₹3.5 billion ($46.8 million) on the account of non-cash write back of renewable power obligation), as compared to ₹52 billion ($693.6 million) for the same period in the previous year. The financial information contained in the production releases described above including in respect of revenue and EBITDA for Vedanta Limited (the "Vedanta Limited's Preliminary Financial Information") are based Vedanta Limited's preliminary estates over a range rather than for specific amounts as the financial closing procedures for Vedanta Limited for the three months ended 30 June 2020 are not yet complete. Estimates of results are inherently uncertain and subject to change, and neither Vedanta nor Vedanta Limited undertakes any obligation to update or revise the estimates described above in this Offering Circular as a result of new information, future events or otherwise, except as otherwise required by law. These estimates may differ from actual results. Actual results remain subject to the completion of Vedanta Limited's closing process for the three months ended 30 June 2020 which includes a final review by Vedanta Limited's management and its audit committee and to which additional items requiring material adjustments to Vedanta Limited's Preliminary Financial Information may be identified. In addition, Vedanta Limited's Preliminary Financial Information have not been audited or reviewed by any independent auditor, and consequently, should not be relied upon to provide the same type or quality of information associated with information that has been subject to an audit or a review by an independent auditor. There can be no assurance that, had an audit or review been conducted in respect of such information, the information presented therein would not have been materially different. Potential investors should therefore not place undue reliance on Vedanta Limited' Preliminary Financial Information and should exercise caution when using such data to evaluate the Group's, the Company's or Vedanta Limited's financial condition and results of operations. In addition, such results for any prior or interim periods are not necessarily indicative of results expected for a full fiscal year of for any future period. See also the sections entitled "*Risk factors*" and "*Special note regarding forward-looking statements*" for additional information regarding factors that could result in differences between Vedanta Limited's Preliminary Financial Information and the actual financial results which Vedanta Limited will publish in respect of the three months ended 30 June 2020 in due course.

The Company also announced its production release for the three months ended 30 June 2020. The detailed production release is included as "*Annex D*" in this Offering Circular.

COVID-19 Pandemic

Since its outbreak in December 2019, COVID-19 has spread to over 200 countries and territories resulting in the World Health Organisation ("WHO") on 11 March 2020 declaring it as a pandemic, expanding its assessment of the threat beyond the global health emergency it had announced in January 2020. The COVID-19 pandemic and preventive or protective actions that governmental authorities around the world have taken to counter the effects of the COVID-19 pandemic, including social distancing, office closures, travel restrictions and the imposition of nationwide lockdowns and quarantines, has resulted in business disruption, including prolonged disruptions to manufacturing and global supply chains as well as restrictions on business activity and the movement of people comprising a significant portion of the world's population, and a decrease in economic activity in several countries, including those in which Vedanta operates. As a result, the COVID-19 pandemic has led to uncertainty in the global economy and significant volatility in global financial markets and has directly impacted the business operations of Vedanta.

The COVID-19 pandemic has directly impacted Vedanta's business operations, requiring Vedanta to adopt precautionary measures such as practicing physical distancing in all essential workstreams, relying on early diagnosis for the workforce to prevent an outbreak and sharing knowledge and best practices across various businesses to ensure safe workplaces. Additional safety measures in terms of sanitizer fogging, social distancing measures through on ground marking, among others. are also in place to ensure minimum contact. In accordance with the Ministry of Home Affairs (India) orders dated 24 March 2020 and 25 March 2020 (Order no 40-3/2020 DM-1(A)), most of Vedanta's operations were continuing during the relevant lockdown periods on the basis of them being deemed "essential" or "continuous". Notwithstanding, Vedanta was still subject to temporary disruptions leading to production being down to 80% of the capacity during the relevant lockdown periods as applicable to the respective mines and production facilities. Production has since increased to approximately 90% of the capacity following the lifting of the relevant lockdowns. All of the sites remain open with the requisite government permissions and adherence to highest safety standards, including strict adherence to WHO standards of physical distancing, extensive cleaning and quarantine areas on sites. As a result of these restriction, temporary production disruptions were witnessed in some businesses in April and May 2020, which impacted productions. See "*Annex D*" of this Offering Circular for further information.

The COVID-19 pandemic has also severely impacted the global commodity market with weaker prices seen across oil and bulk metals in particular which has impacted the prices of the commodities Vedanta produces and sells. During the lockdown in India, owing to the constraints in the Indian domestic market, Vedanta experienced a decline in domestic demand for its products requiring it to access the export market in order to maintain its sales. Domestic demand for Vedanta's products has since improved following the lifting of the lockdown restrictions. Vedanta's focus during the COVID-19 pandemic is to (a) adopt a pro-active approach to maintain operational resilience and steady cash flows, (b) ensure that it continues to operate optimally with the lowest possible cost of production and positive free cash flows and (c) continue to evaluate its capital expenditure profile with the flexibility of adjusting spending based on global demand and cash flows.

See the section entitled "*Management's Discussion and Analysis of Financial Condition and Results of Operations — Overview — COVID-19 Pandemic*" for more information. For information on related risks, see the section entitled "*Risk Factors — Risks Relating to Business — The outbreak, or threatened outbreak, of any severe communicable disease, such as the ongoing COVID-19 pandemic, may adversely impact the Group's business, financial condition and results of operations.*".

Consent Solicitation in respect of the outstanding Company Bonds and Guaranteed Bonds

On 5 June 2020, Vedanta commenced a consent solicitation exercise (the "Consent Solicitation") in relation to the outstanding (i) $900.0 million 8.25% bonds due 2021, $1,000.0 million 6.375% bonds due 2022, $500.0 million 7.125% bonds due 2023 and $1,000.0 million 6.125% bonds due 2024 (together, the "Company Bonds"); and (ii) $400.0 million 8% bonds due 2023 and $600.0 million 9.25% bonds due 2026 (together, the "Guaranteed Bonds"), to seek approval by extraordinary resolution in respect of each such series of Company Bonds and Guaranteed Bonds to make certain amendments to the terms and conditions in respect of each such series of Company Bonds and Guaranteed Bonds. In particular, Vedanta sought, *inter alia*, to (a) amend the covenant relating to limitation on borrowings in respect of each series of Company Bonds and Guaranteed Bonds and to (b) align the negative pledge covenant for consistency across each series of Company Bonds and Guaranteed Bonds (together, the "Proposal").

The Consent Solicitation is part of Vedanta's plans to (a) increase headroom under its indebtedness covenant in order to fund and consummate the Take Private Transaction (as defined herein) in continuation of the corporate structure simplification process of Vedanta, (b) seek flexibility to refinance existing debt and use group entities where there is significant debt capacity for such purpose, incur debt for working capital purposes, and have the ability to complete strategically important capital expenditure even in the middle of a commodity downturn and (c) align for consistency the negative pledge covenant in the terms and conditions in respect of each series of Company Bonds and Guaranteed Bonds.

On 30 June 2020, the extraordinary resolutions in respect of each series of Company Bonds and Guaranteed Bonds were duly passed and the Proposal was approved at the meetings of the respective holders of the Company Bonds and Guaranteed Bonds.

Take Private Transaction

On 12 May 2020, the Company, a member of the promoter and promoter group of Vedanta Limited, sent a letter to the board of directors of Vedanta Limited wherein it expressed its intention to, either individually or along with one or more subsidiaries, acquire all fully paid up equity shares of Vedanta Limited ("Equity Shares") that are held by public shareholders of Vedanta Limited (as defined under Delisting Regulations, to be referred to as "Public Shareholders") and consequently voluntarily delist the Equity Shares in from the Indian Stock Exchanges by making an offer in accordance with the Securities and Exchange Board of India (Delisting of Equity Shares) Regulations, 2009, as amended ("Delisting Regulations") ("Take Private Transaction"). On 18 May 2020, the Company sent a letter to Vedanta Limited communicating the floor price of the Take Private Transaction to be ₹87.25 per Equity Share (determined in accordance with the Delisting Regulations). This floor price was certified by Price Waterhouse & Co. LLP pursuant to its certificate dated 18 May 2020. The board of directors of Vedanta Limited, at its meeting held on 18 May 2020, approved the Take Private Transaction and *inter alia* authorised Vedanta Limited to seek the approval of its shareholders and the Indian Stock Exchanges with respect to the Take Private Transaction in accordance with the Delisting Regulations. On 25 May 2020, Vedanta Limited dispatched a postal ballot notice along with an explanatory statement to its shareholders seeking their approval (via e-voting) in respect of the Take Private Transaction. The voting period commenced on 26 May 2020 and expired on 24 June 2020. The shareholders of Vedanta Limited approved the Take Private Transaction with the requisite majority and the voting results were announced by Vedanta Limited on 25 June 2020.

The Take Private Transaction remains subject to approval from the Indian Stock Exchanges, any other regulatory and government authority in India and/or in other jurisdictions, as may be required, and lender consents in relation to the Take Private Transaction.

If the Take Private Transaction is successful, the Company intends to delist Vedanta Limited's American Depositary Shares' ("ADS") listed on the New York Stock Exchange ("NYSE") and deregister from the SEC, subject to the requirements of the NYSE and the SEC.

For more information on the Take Private Transaction, see the sections entitled "*Bond Issuance Structure Diagram and Financing of the Take Private Transaction*", "*Risk Factors — Risks Relating to Business — The Take Private Transaction is subject to regulatory approvals and Vedanta having sufficient funding. It may not be consummated or result in the expected benefits*", "*Use of Proceeds — Financing of the Take Private Transaction*" and "*Take Private Transaction*".

Credit Ratings

On 11 August 2020, S&P assigned a preliminary "B" rating to Vedanta Resources Limited's proposed senior secured notes reflecting the company's post privatisation issuer credit rating. This is driven by S&P's expectation that privatisation will improve Vedanta Resources' liquidity and financial flexibility to refinance the debt, likely resulting in a one notch higher rating on closure of transaction. S&P also placed on "Creditwatch Developing" the "B-" long term foreign currency issuer rating on Vedanta Resources Limited's and the "B-" long term issue rating on the US dollar denominated senior unsecured notes issued or guaranteed by the company to reflect the uncertainty around the take private of Vedanta Limited.

On 28 July 2020, Moody's confirmed Vedanta Resources Limited's 'B1' Corporate Family Rating and 'B3' rating on the senior unsecured bonds and changed the outlook on the ratings to negative from ratings under review for downgrade. The confirmation of the ratings is driven by Moody's expectation of stretched credit profile in Fiscal Year 2021 in the wake of the COVID-19 pandemic and expected recovery in credit metrics appropriate for the current rating in Fiscal Year 2022. The negative outlook takes into account heightened refinancing risk in challenging market conditions.

SUMMARY OF THE OFFERING

The following is a general summary and should not be relied on as a complete description of the Terms and Conditions of the Bonds (the "Conditions"). This summary is derived from, and should be read in conjunction with, the full text of the Conditions and the Trust Deed constituting the Bonds, which prevail to the extent of any inconsistency with the terms set out in this summary. You should read this entire Offering Circular, including "Risk Factors" and the financial statements included elsewhere in this Offering Circular, before making an investment decision. Capitalised terms used herein and not otherwise defined have the respective meanings given to such terms in the Conditions.

Issuer	Vedanta Holdings Mauritius II Limited.
Parent Guarantor	Vedanta Resources Limited.
Subsidiary Guarantors	Vedanta Holdings Mauritius Limited and Vedanta Holdings Jersey Limited.
Issue	$1,400,000,000 13.00% Guaranteed Senior Secured Bonds due 2023.
Maturity Date	21 August 2023.
Guarantee	The Parent Guarantor and each Subsidiary Guarantor will unconditionally guarantee, jointly and severally, the due and punctual payment of the principal and premium, if any, and interest on, and all other amounts payable under, the Bonds.
Bond Collateral	The Issuer's rights, claims and balances with respect to an escrow account (the "Bond Escrow Account") into which the gross proceeds of this offering will be deposited on the Closing Date. See the section entitled "*Description of Certain Financing Arrangements — Bond Escrow Agreement" and "Description of Certain Financing Arrangements — Bond Escrow Charge*".
Common Collateral	(i) 100% of the capital stock of the Issuer and Vedanta Mauritius and (ii) the bank accounts of the Issuer and Vedanta Mauritius (other than the India Escrow Account, Bridge Escrow Account and the Bond Escrow Account). See the sections entitled "*Description of Certain Financing Arrangements — Collateral Documents — Common Collateral*".
Issue Price	100%.
Interest and Payment Dates . .	13.00% per annum. Interest will be payable semi-annually in arrear on 21 February and 21 August of each year, commencing on 21 February 2021.
Status of the Bonds and the Guarantee	The Bonds will constitute senior, unsubordinated, direct and unconditional obligations of the Issuer and shall at all times rank *pari passu* and without any preference among themselves. The payment obligations of the Issuer under the Bonds shall, save for such exceptions as may be provided by applicable legislation, at all times rank at least equally with all its other present and future unsubordinated obligations.

The Guarantee will constitute the senior, unsubordinated, direct and unconditional obligations of each Guarantor. The payment obligations of each Guarantor under the Guarantee shall, save for such exceptions as may be provided by applicable legislation, at all times rank at least equally with all its other present and future unsubordinated obligations.

The Guarantee will be structurally subordinated to claims of holders of indebtedness and other creditors of subsidiaries of the Parent Guarantor (other than the Issuer and the Subsidiary Guarantors).

Use of Proceeds. . . . . See the section entitled "*Use of Proceeds*".

Bond Escrow Account . . . . On the Closing Date, the gross proceeds from this offering will be deposited into the Bond Escrow Account. The release of the gross proceeds from the Bond Escrow Account is subject to the satisfaction of certain conditions, including the entry into and satisfaction of the conditions precedent to the Bridge Facility Agreement and subject to receipt of the Approval In Principle as more fully described under "*Terms and Conditions of the Bonds*" and "*Description of Certain Financing Arrangements — Bond Escrow Agreement*".

Special Mandatory Redemption . . . . If (i) Approval In Principle is not received by 5 October 2020 (being 45 days after the Closing Date) or (ii) the Parent Guarantor and/or the Issuer and/or Vedanta Holdings Mauritius Limited, as the case may be, do not accept the final offer price (as determined as per the reverse book building mechanism as specified in the Delisting Regulations) within five Working Days after the closure of the RBB Period or, if a counter offer has been made in accordance with the Delisting Regulations, the counter offer price has not been accepted by the Public Shareholders in accordance with the Delisting Regulations, or (iii) the Acquisition Date has not occurred by 19 November 2020 (being 90 days after the Closing Date), or (iv) Vedanta Holdings Mauritius Limited fails, having used commercially reasonable efforts, to enter into the Bridge Facility Agreement and the Permitted Senior Secured Facility Agreement or to satisfy the conditions to Incur Bridge Loans and PSSFA Loans in an amount sufficient, when taken together with the proceeds from the offering of the Bonds, to consummate the Take Private Transaction, the Issuer will, within five Business Days, redeem all of the Bonds then outstanding at a redemption price of 101% of their principal amount plus accrued and unpaid interest, if any, to (but excluding) the redemption date.

Optional Redemption . . . .

At any time and from time to time prior to 21 August 2022, the Bonds may be redeemed, in whole or in part, at the option of the Issuer on giving not less than 30 nor more than 60 calendar days' written notice to the Trustee and the Bondholders, at a redemption price equal to 100 per cent. of the principal amount of the Bonds being redeemed plus the Applicable Premium, plus accrued and unpaid interest, if any, to (but excluding) the redemption date. For the avoidance of doubt, none of the Agents or the Trustee have any responsibility with respect to the calculation of the Applicable Premium.

On or after 21 August 2022, the Bonds may be redeemed, in whole or in part, at the option of the Issuer on giving not less than 30 nor more than 60 calendar days' written notice to the Trustee and the Bondholders, at the redemption prices (expressed as percentages of principal amount) set forth below, plus accrued and unpaid interest, if any, to (but excluding) the applicable redemption date, if redeemed during the periods set forth below:

Period	**Percentage**
On or after 21 August 2022 to (but excluding) 21 February 2023	104.3333%
On or after 21 February 2023 to (but excluding) 21 August 2023	103.2500%

Repurchase of Bonds upon a Change of Control Triggering Event . . . .

Upon the occurrence of a Change of Control Triggering Event, the Issuer must make an offer to purchase all of the Bonds outstanding at a purchase price equal to 101% of their principal amount plus accrued and unpaid interest, if any, to (but excluding) the purchase date.

Redemption for Taxation. . . . .

The Issuer may redeem the Bonds at any time, in whole but not in part, at a redemption price equal to their principal amount plus accrued and unpaid interest, if any, to (but excluding) the redemption date and any additional amounts then due and that will become due on the redemption date in the event of certain changes affecting taxes of certain relevant tax jurisdictions or Jersey or any authority thereof or therein having power to tax.

Intercreditor Agreement . . . . .

The rights of the Bondholders and the lenders under the Bridge Facility Agreement (as defined herein) with respect to the Common Collateral will be governed by and subject to the terms of an intercreditor agreement, to be dated on or around the date of the Bridge Facility Agreement (the "Intercreditor Agreement"), by, among others, the Issuer, the Guarantors, the Trustee, and other parties named therein. See "*Description of Certain Financing Arrangements — Bridge Facility Agreement*" and "*Description of Certain Financing Arrangements — Intercreditor Agreement*" and "*Description of Certain Financing Arrangements — Intercreditor Agreement*".

Covenants	Each of the Parent Guarantor, each Subsidiary Guarantor and the Issuer has agreed to comply with certain covenants limiting its ability and the ability of certain of the Parent Guarantor's subsidiaries to, among other things, create any security interests over assets, create any restrictions on the ability of certain subsidiaries to pay dividends, incur additional borrowings, distribute proceeds from certain asset sales or sell its ownership interest in certain subsidiaries and has agreed to certain other covenants. These covenants are subject to important exceptions and qualifications. See the section entitled "*Terms and Conditions of the Bonds — Covenants*".
Selling Restrictions	There are restrictions on the offer, sale and transfer of the Bonds in certain jurisdictions. See the sections entitled "*Plan of Distribution*" and "*Transfer Restrictions*".
Form and Denomination of the Bonds.	The Bonds will be issued in registered form in the denomination of \$200,000 each and in integral multiples of \$1,000 in excess thereof. On the Closing Date, the Global Certificates will be deposited with a custodian for, and registered in the name of Cede & Co., as nominee of DTC.
Listing	Approval in-principle has been received from the SGX-ST for listing of and quotation for the Bonds on the SGX-ST.
Further Issues.	The Issuer may from time to time, without the consent of the Bondholders, create and issue further securities either having the same terms and conditions as the Bonds in all respects (or in all respects except for the first payment of interest on them) so that such further issue shall be consolidated and form a single series with the Bonds or upon such terms as the Issuer may determine at the time of their issue. See the section entitled "*Terms and Conditions of the Bonds — Further Issues*".
Governing Law	The Bonds, the Trust Deed, the Agency Agreement and the Intercreditor Agreement, and all non-contractual matters arising therefrom or connected therewith, will be governed by and construed in accordance with English law. The Security Agreements and the Bond Escrow Agreement, and all non-contractual matters arising therefrom or connected therewith, will be governed by and construed in accordance with Mauritius law.
Trustee	Citicorp International Limited.
Principal Paying Agent and Transfer Agent.	Citibank, N.A., London Branch.
Registrar	Citigroup Global Markets Europe AG.
Common Security Agent	Citicorp International Limited

Ratings	The Company has corporate credit ratings of "B1" (with a negative outlook) by Moody's, and "B-" (on "Creditwatch Developing") by S&P. The Company's long-term debt rating by Moody's is "B3" The Bonds are expected, on the Closing Date, to be rated "B3" by Moody's and Preliminary "B" by S&P. A rating is not a recommendation to buy, sell or hold securities and may be subject to revision, suspension or withdrawal at any time by the assigning rating organisation.
Withholding Tax	All payments in respect of the Bonds or the Guarantee shall be made free and clear of any withholding or deduction unless required by law. If any such withholding or deduction is required by certain relevant taxing jurisdictions, or any authority therein or thereof having power to tax, subject to certain exceptions, the Issuer, the Parent Guarantor or the Subsidiary Guarantors will be required to pay certain additional amounts in respect of such withholding or deduction. See the section entitled "*Terms and Conditions of the Bonds — Taxation*".
Bond Escrow Account Bank . .	Means an internationally recognised bank which has an Investment Grade rating with an affiliate licensed and regulated in Mauritius.
Events of Default	For a description of certain events that will permit the Bonds to become immediately due and payable at their principal amount, together with accrued interest, see the section entitled "*Terms and Conditions of the Bonds — Events of Default*".
Lock-up Agreement	Neither the Parent Guarantor, any Subsidiary Guarantor nor the Issuer, nor any person acting on their behalf, will, from the date of this Offering Circular until the date 30 days after the date of this Offering Circular, without the prior written consent of the Joint Bookrunners, issue, offer, sell, contract to sell, pledge or otherwise dispose of (or publicly announce any such issuance, offer, sale or disposal) non-equity-linked debt securities issued or guaranteed (other than guarantees in respect of Indian Rupee denominated non-equity linked debt securities) by the Parent Guarantor, any Subsidiary Guarantor or the Issuer and having a maturity of more than one year from the date of issue, subject to certain exceptions. See the section entitled "*Plan of Distribution*".
Settlement	Delivery of the Bonds is expected to be made against payment through the facilities of DTC on or about 21 August 2020, which is the fourth business day after the date of this Offering Circular. See the section entitled "*Plan of Distribution*".
Legal Entity Identifier (LEI) of the issuer	894500ANJHA7BPW5U641
CUSIP	Regulation S Bonds: V9666XAA7 Rule 144A Bonds: 92243WAA1
ISIN	Regulation S Bonds: USV9666XAA73 Rule 144A Bonds: US92243WAA18

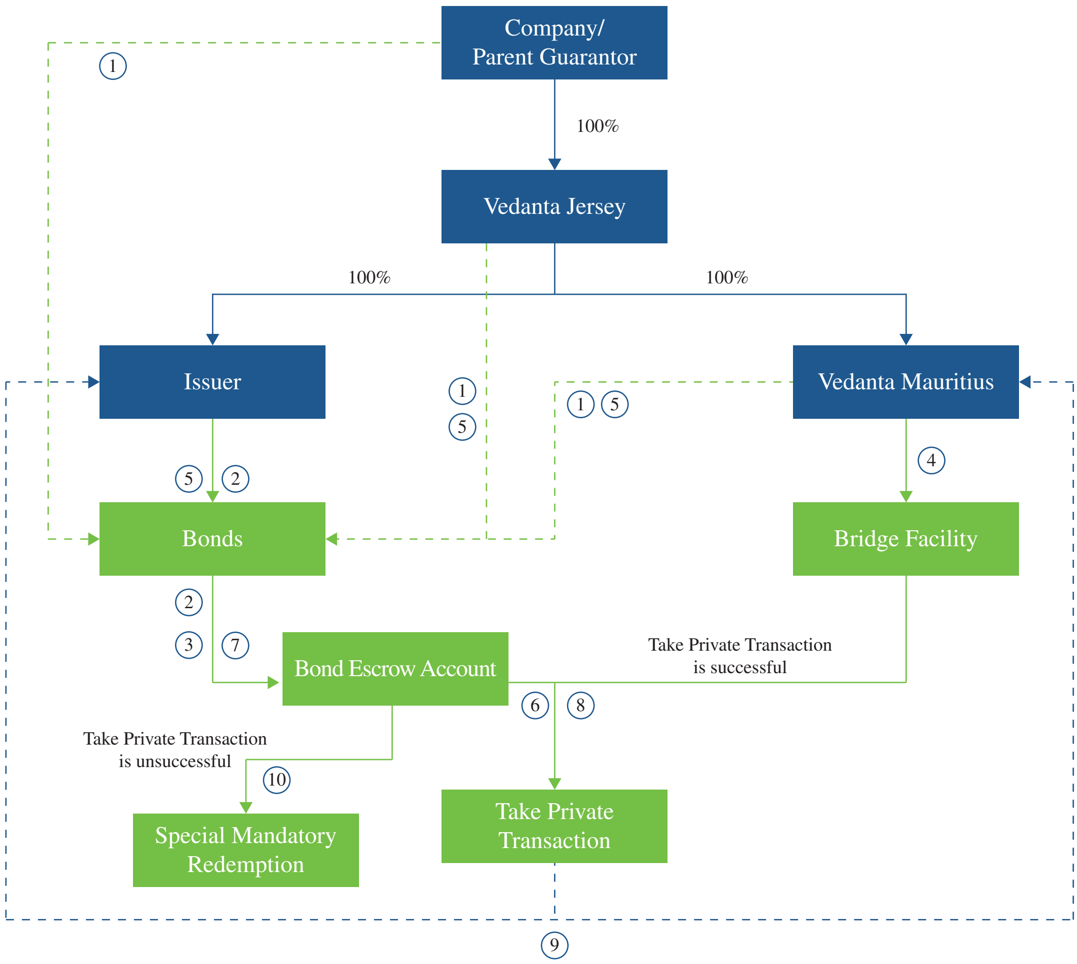
Common Code	Regulation S Bonds: 221199979 Rule 144A Bonds: 221200012

Prospective purchasers should refer to the section entitled "*Risk Factors*" for a discussion of certain risks involved in investing in the Bonds.

BOND ISSUANCE STRUCTURE DIAGRAM AND FINANCING OF THE TAKE PRIVATE TRANSACTION

This overview highlights certain information contained elsewhere in this Offering Circular with respect to the issuance structure of the Bonds and certain transactions entered or to be entered by Vedanta in relation to the Take Private Transaction. This overview is derived from, and should be read in conjunction with, the sections entitled "Take Private Transaction", "Terms and Conditions of the Bonds" and "Description of Certain Financing Arrangements" for more information. You should also read this entire document, including "Risk Factors" and the financial statements included elsewhere in this Offering Circular, before making an investment decision.

Capitalised terms used herein and not otherwise defined have the respective meanings given to such terms as define elsewhere in this Offering Circular.



The Guarantee and the Collateral

On the Closing Date:

(1) The Guarantors will, on a joint and several basis, unconditionally guarantee the due and punctual payment of the principal and premium, if any, and interest on, and all other amounts payable under, the Bonds. The Guarantee will constitute the senior, unsubordinated, direct and unconditional obligations of each Guarantor.

(2) The Bonds are issued by the Issuer. The gross proceeds of the Bonds will be deposited directly into the Bond Escrow Account. See the section entitled "*Description of Certain Financing Arrangements*

— *Escrow Agreement*" for more details. The obligations of the Issuer under the Bonds and the Guarantors under the Guarantee will be secured by a first priority pledge on the Bond Collateral (pursuant to the Bond Escrow Charge (as defined herein)).

(3) The Bond Collateral comprise of a first priority pledge over the Bond Escrow Account, subject to the terms of the Bond Escrow Charge (the "Bond Escrow Charge").

After the Closing Date and prior to release of funds from the Bond Escrow Account:

(4) Vedanta Mauritius, the Issuer, the other Guarantors and other members of the Group named therein as a guarantor will enter into the Bridge Facility Agreement. The proceeds of the loans incurred under the Bridge Facility Agreement may be deposited into the Bridge Escrow Account (as defined herein). See the section entitled "*Description of Certain Financing Arrangements — Bridge Facility Agreement*" for more details.

(5) In connection with the execution of the Bridge Facility Agreement, the Bonds will be further secured on a *pari passu* basis by a first priority security interest on the Common Collateral (pursuant to the Common Collateral Documents). The Common Collateral will comprise (i) a first-priority share pledge and floating charge by Vedanta Jersey over the entire Capital Stock issued by the Issuer and the Bridge Borrower and (ii) a first-priority bank accounts pledge by the Issuer over its operative bank accounts held in Mauritius (other than the India Escrow Account, Bridge Escrow Account and the Bond Escrow Account) and by the Bridge Borrower over its operative bank accounts held in Mauritius and the Mandatory Prepayment Account. The Common Collateral will be granted by the Issuer and the Subsidiary Guarantors, as applicable, in favour of the Common Security Agent who will hold the security on trust for the benefit of the Senior Secured Bond Creditors, Bridge Arrangers, the Bridge Lenders, the Permitted Senior Secured Facility Arrangers, the Permitted Senior Secured Facility Lenders and the Hedge Counterparties under the terms of the Intercreditor Agreement. See the sections entitled "*Description of Certain Financing Arrangements — Collateral Documents*" and "*Description of Certain Financing Arrangements — Bridge Facility Agreement*" for more details.

Funding of the India Escrow Account

Prior to the release of the Public Announcement, each of the Issuer and Vedanta Mauritius will fund the India Escrow Account by way of a cash deposit or bank guarantee or a combination of both a cash deposit and a bank guarantee.

(6) If the Issuer elects to fund the India Escrow Account through a cash deposit, subject to the receipt of a letter from the Issuer by the Trustee and the Bond Escrow Account Bank (the form of which will be mutually agreed between the Issuer and the Bond Escrow Account Bank) confirming the entry into and completion of the conditions precedents under the Bridge Facility Agreement and the in-principle approval from the Indian Stock Exchanges to delist the Equity Shares (the "Approval In Principle"), a designated amount of the proceeds from the Bonds proceeds will be transferred from the Bond Escrow Account to the India Escrow Account which can be routed through designated hedging bank(s). The Bond Collateral will secure the Bonds solely in favour of the Trustee until (i) the funds in the Bond Escrow Account have been transferred to the India Escrow Account and applied to the Take Private Transaction and any surplus (whether standing in the Bond Escrow Account or returned into the Bond Escrow Account from the India Escrow Account) thereafter has been applied to the 2021 Bonds or (ii) proceeds transferred to the India Escrow Account have been return into the Bond Escrow Account and together with any amounts standing in the Bond Escrow Account have been paid back to the Bondholders pursuant to the Special Mandatory Redemption, whichever is the earlier.

(7) If the Issuer elects to fund the India Escrow Account through a bank guarantee issued by a scheduled commercial bank in India, in its capacity as the issuing bank (the "Issuing Bank") in favour of the manager to the Take Private Transaction in accordance with the Delisting Regulations, such bank guarantee shall be secured by way of a counter bank guarantee from intermediary bank(s), which is a bank of international repute resident outside India (the "CG Issuing Bank") to which the counter bank guarantee shall be secured by the Bond Collateral via a Bond Escrow Charge, subject to the receipt of a letter from the Issuer by the Trustee and the Bond Escrow Account Bank (the form of which will be mutually agreed between the Issuer and the Bond Escrow Account Bank) confirming the entry into and completion of the conditions precedents under the Bridge Facility Agreement and the Approval In Principle. The Bond Collateral will then be granted by the Issuer in favour of the Trustee and the CG Issuing Bank as follows:

(a) in favour of the Trustee from the date of the Bond Escrow Charge until the date of issue of the in-principle approval of the Indian Stock Exchanges (the "Approval In Principle Date");

(b) in favour of the CG Issuing Bank from the Approval In Principle Date until the later of the date of (i) discharge of obligations owed to the CG Issuing Bank under the counter bank guarantee issued by the CG Issuing Bank in favour of the Issuing Bank or (ii) release of the counter bank guarantee issued by the CG Issuing Bank in favour of the Issuing Bank (the "Bank Guarantee Release Date"); and

(c) in favour of the Trustee from the Bank Guarantee Release Date until the funds in the Bond Escrow Account have been transferred to the India Escrow Account which can be routed through designated hedging bank(s) and applied to the Take Private Transaction and any surplus thereafter has been applied to the 2021 Bonds or proceeds have been paid back to the Bondholders under the Special Mandatory Redemption, whichever is the earlier.

Notwithstanding the Bond Escrow Charge, the transfer of proceeds from the Bond Escrow Account to the India Escrow Account for the purpose of the Take Private Transaction, shall be subject to the terms of the Bond Escrow Agreement. For avoidance of doubt, no charge shall be created over the India Escrow Account or the deposits lying therein.

See the sections entitled "*Description of Certain Financing Arrangements — Collateral Documents*" and "*Description of Certain Financing Arrangements — Escrow Agreement*" for more details.

Financing of the Take Private Transaction

(8) Upon closure of the RBB Period, the Company, the Issuer and Vedanta Mauritius (collectively, the "Acquirers") will be required to make a post-offer public announcement within five Working Days from the closure of the RBB Period either regarding the success of the Take Private Transaction along with the final offer price (determined as per the reverse book building mechanism as specified in the Delisting Regulations) or the failure of the Take Private Transaction. If the Acquirers reject the final offer price (determined as per the reverse book building mechanism as specified in the Delisting Regulations), the Acquirers will have an option to make a counter offer in accordance with the Delisting Regulations. If the Acquirers opt to make a counter offer, they will be required to publish a counter offer public announcement within 2 Working Days from the date of closure of the RBB Period and dispatch the counter offer letter of offer within 4 Working Days from the date of closure of the RBB Period. The counter offer bidding period is required to commence not later than 7 Working Days from the date of publication of the counter offer public announcement. The counter offer bidding period is for five Working Days. Upon closure of the counter offer bidding period, the Acquirers would be required to make a post offer public announcement regarding success or failure of the counter offer within five Working Days from the closure of the counter offer bidding period.

In terms of the Delisting Regulations, prior to initiation of the Take Private Transaction (i.e., making of the Public Announcement), the Acquirers will open an escrow account in India ("India Escrow Account") and deposit the total estimated amount of consideration calculated on the basis of floor price (determined as per Delisting Regulations) and the number of Equity Shares held by the Public Shareholders. The floor price for the Take Private Transaction, determined in accordance with the Delisting Regulations, is ₹87.25. Prior to the release of the Public Announcement, the Acquirers will fund the India Escrow Account by way of a cash deposit or bank guarantee issued by the Issuing Bank in favour of the manager to the Take Private Transaction, in accordance with the Delisting Regulations or a combination of both a cash deposit and a bank guarantee.

If the final offer price (i.e., either the price determined as per the reverse book building mechanism or, if a counter offer has been made, the counter offer price) is accepted in accordance with the Delisting Regulations (a) to the extent not already done so, Vedanta Mauritius will draw the amount under the Bridge Facility Agreement and arrange for such proceeds to also be transferred to the India Escrow Account. In addition, Vedanta Mauritius also has further flexibility to enter into a second term loan facility agreement which would consist of a facility available to be drawn by way of term loan and bank guarantee (as may be required) and if such facility is availed, Vedanta Mauritius will draw the amount and arrange to transfer the same to the India Escrow Account, if required; and (b) to the extent not already done so, the Issuer will then transfer proceeds from the offering of the Bonds in the Bond Escrow Account into the India Escrow Account, in each case, as may be required, to pay the Public Shareholders in accordance with the Delisting Regulations. The Acquirers would be required to pay the consideration to the Public Shareholders whose bids have been accepted within ten Working Days of the closure of the RBB Period (or a counter offer bidding period, as the case may be). For a period of one year from the date of delisting of Vedanta Limited, those Public Shareholders who continue to hold Equity Shares have the option to tender their Equity Shares to the Acquirers at the final offer price (i.e., either the price determined pursuant to the reverse book building mechanism or a counter offer price, as the case may be). The Acquirers are obligated to accept such Equity Shares.

In addition, pursuant to the delisting of Vedanta Limited, the 'permitted to trade' status given to Equity Shares by the Metropolitan Stock Exchanges of India Limited would be withdrawn.

(9) After payment of consideration for the Equity Shares tendered, the Acquirers (along with persons acting in concert with them) will hold at least 90% of the total issued and paid-up equity share capital of Vedanta Limited, excluding the Equity Shares which are then held by a custodian and against which ADS have been issued. Subsequently, Vedanta Limited would make the final application to the Indian Stock Exchanges for delisting of the Equity Shares from the Indian Stock Exchanges. Upon receipt of their approval, the Equity Shares will be delisted from the Indian Stock Exchanges.

For more information on the Take Private Transaction, see the sections entitled "*Bond Issuance Structure Diagram and Financing of the Take Private Transaction*", "*Risk Factors — Risks Relating to Business — The Take Private Transaction is subject to regulatory approvals and Vedanta having sufficient funding. It may not be consummated or result in the expected benefits*.", "*Use of Proceeds — Financing of the Take Private Transaction*" and "*Take Private Transaction*".

Special Mandatory Redemption of the Bonds:

(10) If (i) Approval In Principle is not received by 5 October 2020 (being 45 days after the Closing Date) or (ii) the Parent Guarantor and/or the Issuer and/or Vedanta Holdings Mauritius Limited, as the case may be, do not accept the final offer price (as determined as per the reverse book building mechanism as specified in the Delisting Regulations) within five Working Days after the closure of the RBB Period or, if a counter offer has been made in accordance with the Delisting Regulations, the counter offer price has not been accepted by the Public Shareholders in accordance with the Delisting Regulations, or (iii) the Acquisition Date has not occurred by 19 November 2020 (being 90 days after the Closing Date), or (iv) Vedanta Holdings Mauritius Limited fails, having used commercially reasonable efforts, to enter into the Bridge Facility Agreement and the Permitted Senior Secured Facility Agreement or to satisfy the conditions to Incur Bridge Loans and PSSFA Loans in an amount sufficient, when taken together with the proceeds from the offering of the Bonds, to consummate the Take Private Transaction, the Issuer will, within five Business Days, redeem all of the Bonds then outstanding at a redemption price of 101% of their principal amount plus accrued and unpaid interest, if any, to (but excluding) the redemption date. See the section entitled "*Terms and Conditions of the Bonds — Redemption and Purchase — Special Mandatory Redemption*".

RISK FACTORS

This Offering Circular contains forward-looking statements that involve risks and uncertainties. Vedanta's actual results could differ materially from those anticipated in these forward-looking statements as a result of a number of factors, including those described in the following risk factors and elsewhere in this Offering Circular. You should consider the following risk factors carefully in evaluating Vedanta and its business before investing in the Bonds. If any of the following risks actually occur, Vedanta's business, financial condition and results of operations could suffer, the trading price of the Bonds could decline and you may lose all or part of your investment.

An investment in the Bonds involves some degree of risk and should be made only after consulting with independent, qualified sources of investment, legal, tax, accounting and other advice.

The list of risk factors does not purport to be a complete explanation of the risks involved in this offering. Potential investors must read the entire prospectus before determining to invest in the Bonds. All potential investors must obtain professional guidance from their advisors in evaluating all of the implications and risks involved in investing in the Bonds.

Risks Relating to Business

Vedanta has experienced a significant decline in profitability in recent years, including a net loss in Fiscal Year 2020, and may not be able to maintain or regain its profitability and/or liquidity.

In recent years, Vedanta has experienced a significant decline in its profitability. For Fiscal Years 2018, 2019 and 2020, Vedanta's revenue decreased from $15,294 million in Fiscal 2018 to $14,031 million in Fiscal Year 2019 and to $11,790 million in Fiscal Year 2020. These decreases were mainly driven by shutdown of Tuticorin smelter, discontinuity of operations at KCM, subdued commodity prices, lower volume at Zinc India and lower volume at Vedanta oil & gas but was partially offset by an increase in aluminium volumes, additional volumes from Gamsberg operations and an increase in sales at Iron Ore Karnataka and the steel business. Vedanta EBITDA also decreased from $3,963 million in Fiscal Year 2018 to $3,393 million in Fiscal Year 2019 and decreased further to $3,003 million in Fiscal Year 2020.

In addition, Vedanta expects to experience a material decline in its profitability for the three months ended 30 June 2020 (as compared to the same period in the previous year) in light of the corresponding decreases in consolidated revenue and consolidated EBITDA of Vedanta Limited for the three months ended 30 June 2020 (as compared to the same period in the previous year). See also the section entitled "*Recent Developments — Production Releases for the three months ended 30 June 2020*" for more information.

Vedanta's ability to maintain or regain its profitability and/or liquidity depends on various factors, which are more fully discussed elsewhere in this "*Risk Factors*" section and the section entitled "*Management's Discussion and Analysis of Financial Condition and Results of Operations*", and there can be no assurance that Vedanta will regain its profitability and/or liquidity or that the negative trends in Vedanta's financial condition and results of operations such as those outlined above will not continue.

Commodity prices may be volatile, which may have a material adverse effect on Vedanta's revenue, results of operations and financial condition.

Historically, the international commodity prices for oil and gas, zinc, copper, iron ore and aluminium, and the prevailing market treatment and refinery charges or TcRc rate for copper have been volatile and subject to wide fluctuations in response to relatively minor changes in the supply of, and demand for, such commodities, market uncertainties, the overall performance of world or regional economies, actions taken by governments and international organisations, government policies and regulations such as those relating to taxation, royalties, allowable production, import and export restrictions and environmental protection, the related cyclicality in industries Vedanta directly serves, major public health issues such as the COVID-19 pandemic and a variety of other factors beyond the control of Vedanta. Commodity prices and the market TcRc rate for copper may continue to be volatile and subject to wide fluctuations in the future for a variety of reasons.

For example, between Fiscal Years 2019 and 2020, the average prices of zinc, lead, copper, dated brent iron ore and aluminium decreased by 12%, 8%, 8%, 13%, 19% and 14%, respectively, and silver prices increased by 7%. Historically, international prices for crude oil and natural gas have fluctuated as a result of many macro-economic, geo-political and regional factors.

The units of power generated by Vedanta's commercial power generation business are also subject to price volatility. A decline in the prices Vedanta receives for its oil, gas, zinc lead, copper, iron ores or aluminium, or for its power, or in the market TcRc rate for copper would adversely affect Vedanta's revenue and results of operations, and a sustained drop would have a material adverse effect on its revenue, results of operations and financial condition.

Similarly, for the portion of Vedanta's alumina requirements sourced internally, Vedanta's profitability is dependent upon the LME price of aluminium, less the cost of production, which includes the cost of mining bauxite, the refining of bauxite into alumina, transportation of bauxite and alumina and smelting of alumina into aluminium. Further, the units of power generated by Vedanta's commercial power generation business are also subject to price volatility.

Moreover, the prices Vedanta receives for its sales of crude oil are generally linked to international price levels for crude oil. For example, for the public-sector undertaking ("PSU") buyers at Rajasthan and all buyers at Ravva and Cambay blocks, the crude oil is benchmarked to Bonny Light, an international low sulphur crude oil published in Platt's Crude Oil Market Wire on a daily basis. The pricing formula for PSU buyers also adjusts for differences in yield and quality. From Fiscal Year 2021, the private buyers at Block RJ-ON-90/1 (the "Rajasthan Block") are linked to Dated Brent. Any change in the prices of international crude benchmarks Brent and Bonny Light would impact the revenue from Vedanta's oil and gas business.

The implied price realisation of crude oil generally lies within the stated guidance of 2.0% to 4.0% discount to Dated Brent for Rajasthan, 3.0% to 5.0% to Dated Brent for Cambay and 1% to 4% to Dated Brent for Ravva, due to the prevailing oil market conditions. Movements in discount affect Vedanta's revenue realisation and any increase in quality differentials may adversely impact Vedanta's revenues and profits. The current uncertainty in the market due to COVID-19 pandemic in the coming quarters may have an adverse impact on Vedanta's crude oil net sales realisation and revenue. Crude oil price averaged $60.9 per barrel in Fiscal Year 2020, compared to $70.4 per barrel in Fiscal Year 2019. The year started with production cuts led by the Organization of the Petroleum Exporting Countries ("OPEC"), countered by the US President's request to OPEC for a production increase to bring down fuel costs. Tensions were heightened at various points in the year in the Middle East with attacks on oil tankers off the coast of the UAE, and several drones strikes against Saudi Arabian oil facilities, leading to concerns over oil supply disruptions. Trade tensions between the United States and China further raised geopolitical tensions, but eventually the US-China trade deal and planned OPEC production cuts in 2020 led to a steady rally in crude prices. However, in March 2020, in order to limit the impact of economic contraction caused by the COVID-19 pandemic on oil demand, the OPEC and its allies (also known as "OPEC+") failed to reach an agreement to cut oil supply and on 7 March 2020, Saudi Arabia slashed its oil prices to gain market share. As a result, oil prices fell to approximately $17 per barrel towards the end of the year, the lowest level since 2002. The oil prices have recovered since then to an average of $43.4 per barrel in the month of July. The recent decline and volatility in oil prices, if sustained, may have a material and adverse impact on Vedanta's revenues and financial condition.

Additionally, Vedanta's profitability in the steel business is largely dependent on the prices of imported coking coal and movement in iron ore prices in the domestic market which is volatile. Coking coal and iron ore together constitute approximately 65.0% of the cost of production for the steel business. Any adverse movement in prices will have a direct impact on costs and resultant margins. Iron and steel products are largely sold in the domestic market and prices of the products are subject to demand and supply factors and macro-economic factors. Any adverse movement in prices will have a direct impact on realisation and resultant margins.

The demand and prices for Vedanta's products and, in turn, Vedanta's financial performance for Fiscal Year 2020 and future periods, was and continues to be affected by the COVID-19 pandemic. The decline in prices for the products which Vedanta sells may significantly and adversely impact the value of its profitability. The COVID-19 pandemic situation remains volatile rendering the future impact on Vedanta's operations difficult to assess. There can be no assurance that commodity or crude oil prices will not continue to decrease and a prolonged or significant decline in the prices for Vedanta's products may materially and adversely affect the business, financial condition and results of operations of Vedanta.

The outbreak, or threatened outbreak, of any severe communicable disease, such as the ongoing COVID-19 pandemic, may adversely impact Vedanta's business, financial condition and results of operations.

The outbreak, or continued or threatened outbreak, of any severe communicable disease, such as COVID-19, Severe Acute Respiratory Syndrome ("SARS"), Middle East Respiratory Syndrome-Corona virus, avian influenza (commonly known as bird flu), H1N1 or any another similar disease could materially and adversely affect overall business sentiment and environment, particularly if such outbreak is inadequately controlled.

More recently, the outbreak or continued outbreak of COVID-19, which has been declared a global pandemic by WHO in the first quarter of 2020, has severely affected and continues to seriously affect the global economy. Several nations and territories, including areas where Vedanta operates, have imposed strict quarantine measures, social distancing rules, closure of work sites and non-essential services, and even complete lock-downs of certain populations or areas. These measures have inadvertently resulted in a period of business disruption, including prolonged disruptions to manufacturing and global supply chains as well as restrictions on business activity and the movement of people comprising a significant portion of the world's population, and a decrease in economic activity in several countries. Although many governments have introduced stimulus packages to mitigate the effect of the outbreak of the COVID-19 pandemic on their respective economies, there is no assurance that such packages are sufficient or that such measures will successfully improve business sentiments in the affected economies in the short term. As a result, the COVID-19 pandemic has led to uncertainty in the global economy and significant volatility in global financial markets, which may have a negative impact on global economic conditions and lead to significant declines in the demand for and prices of the commodities Vedanta produces and sells. In particular, a number of governments and organizations have revised GDP growth forecasts for 2020 downward in response to the economic slowdown caused by the spread of the COVID-19 pandemic, and it is possible that the COVID-19 pandemic will cause a prolonged global economic crisis or recession.

The COVID-19 pandemic has directly impacted Vedanta's business operations, requiring Vedanta to adopt precautionary measures such as practicing physical distancing in all essential workstreams, relying on early diagnosis for the workforce to prevent an outbreak and sharing knowledge and best practices across various businesses to ensure safe workplaces. Additional safety measures in terms of sanitizer fogging, social distancing measures through on ground marking, among others are also in place to ensure minimum contact. In accordance with the Ministry of Home Affairs (India) orders dated 24 March 2020 and 25 March 2020 (Order no 40-3/2020 DM-1(A)), most of Vedanta's operations were continuing during the relevant lockdown periods on the basis of them being deemed as "essential" or "continuous" in nature. Notwithstanding, Vedanta was still subject to temporary disruptions leading to production being down to 80% of the capacity during the relevant lockdown periods as applicable to the respective mines and production facilities. Production has since increased to approximately 90% of the capacity following the lifting of the relevant lockdowns. As a result of these restriction, temporary production disruptions were witnessed in some businesses in April and May 2020, which impacted productions. See "*Annex D*" of this Offering Circular for further information.

There is no assurance that Vedanta will not be required in the future to suspend or shut down operations at some or all of its mines or facilities as a result of the COVID-19 pandemic. In such event, Vedanta's business, financial condition and results of operations may be materially and adversely affected.

While Vedanta has not experienced any major disruption to its supply chain in light of the COVID-19 pandemic and the relevant lockdown periods as applicable, there can be no assurance that the COVID-19 pandemic may not, in the future, affect Vedanta's ability to continue doing business with its suppliers, third-party contractors and other parties that Vedanta conducts business with or that operate within Vedanta's supply chains for Vedanta's various businesses. The COVID-19 pandemic may also result in a decrease in demand for Vedanta's products. During the lockdown in India, owing to the constrains in the Indian domestic market, Vedanta experienced a decline in domestic demand for its products requiring it to access the export market in order to maintain its sales. While domestic demand for Vedanta's products have improved following the lifting of the lockdown restrictions, there can be no assurance that there will not be future lockdown restrictions imposed if the COVID-19 pandemic worsens which in turn could have an adverse impact on the demand for Vedanta's products.

The COVID-19 pandemic has also severely impacted the global commodity market with weaker prices seen across oil and bulk metals in particular which has impacted the prices of the commodities Vedanta produces and sells. A decline in prices for the products which Vedanta sells may significantly and adversely impact the value of its inventories and its profitability. For example, average LME prices of zinc and aluminium and Brent price decreased by 19%, 9% and 50% respectively between January and March. In addition, while Vedanta strives to fulfil its obligations with respect to all its existing contractual agreements and does not foresee any material impact arising from the non-fulfilment of such contractual obligations by other counterparties, there can be no assurance that the COVID-19 pandemic will not affect Vedanta's or the counterparties' ability to meet their respective obligations whether due to restrictions placed on business activities and movements in the places which Vedanta operates in or for other reasons stemming from the COVID-19 pandemic.

The COVID-19 pandemic situation remains volatile, rendering the future impact on Vedanta's operations difficult to assess. There can be no assurance that the COVID-19 pandemic will not continue to have an adverse impact on Vedanta's capital and financial resources, profitability or liquidity position in Fiscal Year 2021. While Vedanta continues to pay close attention to the development of the COVID-19 pandemic and adopt relevant measures to assess the impact of the COVID-19 pandemic on its business operations and financial situation, there can be no assurance that Vedanta will be able to make such timely and/or accurate assessments thereof. The extent to which the COVID-19 pandemic will impact Vedanta's operations and revenues will depend on future developments, which are highly uncertain and cannot be predicted with confidence, including the scope, severity and duration of the pandemic, new information concerning the severity of the COVID-19 pandemic, the actions taken to contain the COVID-19 pandemic or mitigate its impact, and the direct and indirect economic effects of the illness and containment measures, among others. Any intensification of the COVID-19 pandemic or any other severe communicable disease in the jurisdictions where Vedanta operates may adversely affect its business, financial condition and results of operations. Further, to the extent the outbreak of any infectious disease, it may also have the effect of exacerbating many of the other risks described in this "*Risk Factors*" section. See also the section entitled "*Management's Discussion and Analysis of Financial Condition and Results of Operations — Overview — COVID-19 Pandemic*" for more information.

The Company's independent auditors qualified their opinion in relation to the inventory quantities held at 31 March 2020, within India, in their audit report on the Fiscal Year 2020 Financial Statements.

The auditors have expressed a qualified opinion in relation to the inventory quantities held at 31 March 2020 within India on the Fiscal Year 2020 Financial Statements stated in the section "*Basis for qualified opinion*" in the audit report to the Fiscal Year 2020 Financial Statements. Due to the enforcement by the GOI of restrictions in response to COVID-19, the auditors were prevented from performing their planned procedures surrounding the observation of physical counts of inventory. The auditors have been unable to satisfy themselves through alternative audit procedures under UK International Standards on

Auditing (UK) ("ISAs (UK)") as to the accuracy of the inventory quantities held at 31 March 2020 within India, which are included in the consolidated statement of financial position at $1,383 million of the total of $1,515 million. Consequently, the auditors were unable to determine whether any adjustment to this amount was necessary. In addition, were any adjustment to the inventory balance to be required, the strategic report would also require amendment. Given the foregoing, such financial statements should not be relied upon by potential investors to provide the same quality of information associated with information that has been subject to an unqualified opinion. Potential investors must exercise caution when using such data to evaluate the Group's and the Company's financial condition, results of operations and results.

Additionally, the qualified opinion in relation to the inventory quantities held at 31 March 2020 within India by the Company's auditors in the audit report on the Fiscal Year 2020 Financial Statements could trigger an event of default under a number of the Company's financing agreements, in case the relevant lenders consider such audit qualification as materially adverse.

The Company's independent auditors have included an explanatory paragraph which draws attention to a material uncertainty relating to the Company's ability to continue as a going concern in their audit report on the Fiscal Year 2020 Financial Statements.

The auditors' audit report on the Fiscal Year 2020 Financial Statements contains an explanatory paragraph, "*Material uncertainty relating to going concern*", which draws attention to note 1(d) to the Fiscal Year 2020 Financial Statements which indicates that the ability of the Group and the Company to continue as a going concern is subject to a number of material uncertainties that may cast significant doubt on the Company's ability to continue as a going concern.

Within the 21-month going concern period (i.e. until 31 December 2021), the Group has scheduled debt repayments of approximately $6.6 billion, of which approximately $2.2 billion are repayments to be made by the Company. In a plausible downside case, the Company, prior to receipt of dividends, will have a funding shortfall of approximately $2.5 billion in the period to 31 December 2021. In such a scenario the rest of the Group will not be able fully to support the Company without access to a number of mitigating actions which are described in note 1(d) to the Fiscal Year 2020 Financial Statements. In addition, the Group is subject to certain restrictive financial covenants on its loan agreements and bonds. While the Group has secured the necessary covenant waivers and relaxations to remediate breaches on a covenant at 31 March 2020 and any future potential breaches up to and including 31 March 2021, some of these waivers contain conditions and further waivers or relaxations would potentially be required for the period subsequent to 31 March 2021. See also the section entitled "*Risk Factors — Risks Relating to Business — Vedanta is subject to covenants under its credit facilities including term loans and working capital facilities that limit its flexibility in managing its business*".

The Group's and the Company's ability to remain as a going concern will therefore be dependent on its ability successfully to execute a number of mitigating actions as further described in the explanatory paragraph, "*Material uncertainty relating to going concern*", in the audit report and note 1(d) to the Fiscal Year 2020 Financial Statements.

While the Group and the Company remain confident in their ability to successful execute the mitigation actions stated above and meet their respective commitments as they fall due over the going concern period, these remain subject to material uncertainty and there can be no assurance that such mitigation actions will indeed be successfully executed or even if successfully executed, will be on terms expected and favourable to the Group and the Company. Given the foregoing, potential investors must exercise caution when using such data to evaluate the Group's and the Company's condition, results of operations and results. For more details, see the audit report and note 1(d) to the Fiscal Year 2020 Financial Statements.

The Fiscal Year 2020 Financial Statements and the Fiscal Year 2019 Financial Statements are not directly comparable.

Following the order from the High Court of Zambia appointing a provisional liquidator to manage the operations of KCM, Vedanta deconsolidated KCM with effect from 21 May 2019. As a result of the deconsolidation, while the Fiscal Year 2020 Financial Statements present KCM as a discontinued operation (and which include restatements of the comparative consolidated financial statements as of and for Fiscal Year 2019 to reflect the deconsolidation of KCM and certain reclassifications, as described in note 1(b) thereto), the Fiscal Year 2019 Financial Statements (including the comparative consolidated financial statements as of and for Fiscal Year 2018 therein) have presented KCM as a consolidated subsidiary. Accordingly, the Fiscal Year 2020 Financial Statements and the Fiscal Year 2019 Financial Statements are not directly comparable. In addition, the financial information as of and for Fiscal Year 2019 presented elsewhere in this Offering Circular, including in the sections entitled "*Selected Consolidated Financial Information*" and "*Management's Discussion and Analysis of Financial Condition and Results of Operations*" are derived from the Fiscal Year 2019 Financial Statements rather than the comparative consolidated financial statements as of and for Fiscal Year 2019 included in the Fiscal Year 2020 Financial Statements, and thus do not reflect such restatements. Potential investors must therefore exercise caution when making comparisons to any financial figures after 1 April 2019, including the Fiscal Year 2020 Financial Statements against the Company's consolidated financial information prior to 1 April 2019 and when evaluating the Group's and the Company's financial condition, results of operations and results. For more details, see the audit report and note 3(e) to the Fiscal Year 2020 Financial Statements for further information on the treatment of the deconsolidation of KCM.

The adoption of IFRS 16 with effect from 1 April 2019 renders the Company's consolidated financial information as at and for the years ended 31 March 2018 and 2019 not directly comparable with the Company's consolidated financial information after 1 April 2019.

The Fiscal Year 2020 Financial Statements reflect the adoption of IFRS 16 which was adopted with effect from 1 April 2019. Please refer to note 2(b) of the Fiscal Year 2020 Financial Statements for a discussion on the impact on the adoption of IFRS 16. As the Company applied the modified retrospective approach on transition with the initial application on 1 April 2019 and without restating the corresponding figures of the prior period before 1 April 2019, the Company's consolidated financial information as at and for the year ended 31 March 2020 may not be directly comparable against the Company's consolidated financial information as at and for the years ended 31 March 2018 and 2019. Potential investors must therefore exercise caution when making comparisons to any financial figures after 1 April 2019, including the Fiscal Year 2020 Financial Statements against the Company's consolidated financial information prior to 1 April 2019 and when evaluating the Group's and the Company's financial condition, results of operations and results.

The adoption of IFRS 9 and IFRS 15 with effect from 1 April 2018 renders the Company's audited consolidated financial information as at and for and for the year ended 31 March 2018 not directly comparable with the Company's consolidated financial information after 1 April 2018.

The Fiscal Year 2019 Financial Statements reflect the adoption of IFRS 9 and IFRS 15 which were adopted with effect from 1 April 2018. Please refer to note 2(b) of the Fiscal Year 2019 Financial Statements for a discussion on the impact on the adoption of IFRS 9 and IFRS 15. As the Company applied the transition provisions set out in IFRS 9 (where the Company has elected to apply the limited exemptions in IFRS 9 relating to the classification, measurement and impairment requirements for financial assets) and the modified transitional approach set out in IFRS 15, each with the date of initial application on 1 April 2018 and without restating the corresponding figures of the prior period before 1 April 2018, the Company's consolidated financial information as at and for the years ended 31 March 2019 and 2020 may not be directly comparable against the Company's consolidated financial information as at and for the year ended 31 March 2018. Potential investors must therefore exercise caution when making comparisons to any financial figures after 1 April 2018, including the consolidated financial statements for the year ended 31 March 2019 included in the Fiscal Year 2019 Financial Statements and the Fiscal Year 2020 Financial Statements against the Company's consolidated financial information prior to 1 April 2018 and when evaluating the Group's and the Company's financial condition, results of operations and results.

Vedanta may not be able to regain control over KCM.

In May 2019, ZCCM, a company majority owned by the Government of Zambia, which owns 20.6% of the shares in KCM, filed a petition in the High Court of Zambia to wind up KCM on "just and equitable" grounds. ZCCM also obtained an ex parte order from the High Court of Zambia appointing a provisional liquidator of KCM pending the hearing of the Petition. On 11 June 2019, without any prior notice, ZCCM amended the petition to include an additional ground for winding up KCM based on allegations that KCM is unable to pay its debts. Since all the significant decision making powers, including carrying on the business of KCM and taking control over all the assets of KCM, rests with the provisional liquidator, Vedanta believes that the appointment of the provisional liquidator has caused the loss of its control over KCM. Accordingly, Vedanta deconsolidated KCM with effect from 21 May 2019 and has presented the same in the Fiscal Year 2020 Financial Statements as a discontinued operation. This has also resulted in derecognition of non-controlling interests in KCM of $86 million. The loss with respect to KCM operations along with the loss on fair valuation of the Group's interest in KCM has been presented as a special item in the income statement. Vedanta has total exposure of $1,952 million to KCM in the form of loans, receivables, investments and amounts relating to the guarantees issued by Vedanta, which have been accounted for at fair value on initial recognition and disclosed under non-current assets in the consolidated statement of financial position in the Fiscal Year 2020 Financial Statements.

While Vedanta believes that based on the legal advice it has obtained, that it is probable that it will succeed with its appeal to the Zambian Court of Appeal, there is no assurance that Vedanta will be able to win this appeal on favourable terms or if it will be able to regain control over KCM. Vedanta may also face legal, financial and reputational risks for KCM.

As a holding company, the Company's financial condition is entirely dependent on the financial condition, including cash available for distribution, and operating results of its subsidiaries.

The Company's results of operations and financial condition are entirely dependent on the financial condition and operating results of its subsidiaries. The Company has significant indebtedness and its ability to service its debt and other obligations will depend upon the level of distributions, interest payments and loan repayments, if any, received from its operating subsidiaries and associated undertakings, any amounts received on asset disposals and the level of cash balances. Certain of the Company's operating subsidiaries and associated undertakings are and may, from time to time, be subject to restrictions on their ability to make distributions and loans including as a result of restrictive covenants in loan agreements, foreign exchange and other regulatory restrictions, as more specifically indicated in the section entitled "*Business — Indian Regulatory Matters — Payment of dividends*" and agreements with the other shareholders of such subsidiaries or associated undertakings. The Company's net leverage ratios described in this Offering Circular, including net debt/capitalisation and net debt over Vedanta EBITDA, are reported on a consolidated basis and do not take into account such restrictions on the Company's ability to access cash at its subsidiaries or the Company's economic percentage holding in its subsidiaries and should therefore not be exclusively relied upon as measures of the Company's ability to repay debt. See the section entitled "*Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources*" for more information.

From 1 April 2020, the concept of dividend distribution tax ("DDT") has been abolished and instead, dividends distributed by an India company shall be taxable in the hands of the recipient shareholders as follows:

(a) Tax rates for resident shareholders — applicable rates. The Indian company would deduct tax at source at the rate of 10%. However, as per a press release issued by the GOI in light of the COVID-19 pandemic, tax is to be deducted at source at a reduced rate of 7.5% for the period up to 31 March 2021, although a legislative amendment to enact such reduced rate of tax deduction at source is awaited.

(b) Tax rates for non-resident shareholders — 20% (plus surcharge and cess) or at such beneficial rates as provided under the tax treaties. The Indian company would withhold tax at source, at applicable rates. NR investors will now be eligible to claim a credit in their home jurisdiction for the tax paid on dividends.

With respect to inter-corporate dividends, to avoid the cascading effect/multi-level taxation of the same dividend, it has also been proposed that dividends received by an Indian company and up-streamed to its shareholders will not be taxable in the hands of the Indian company. This relief is subject to the condition that the Indian company up-streams the dividend on or before one month prior to the due date for filing its income-tax return. Under the DDT regime, the relief from cascading effect/multi-level DDT was available only if *inter alia* (i) the dividend which was up-streamed by the Indian company was received by it from its "subsidiary company" as defined under the IT Act, and (ii) up-streaming by the Indian company happened in the same Fiscal Year in which it itself received the dividend from its subsidiary.

Further, from 1 April 2020 onwards, that the person receiving dividends will be eligible to claim deduction of interest expense of up to 20% of the dividend income, subject to certain restrictions.

Vedanta's businesses depend upon third party suppliers for a substantial portion of its raw material requirements and their segment results and segment margins depend upon the market prices for such raw materials.

Vedanta sources a majority of its copper concentrate and a substantial proportion of its alumina requirements for its copper and aluminium businesses, respectively, from third parties. During Fiscal Year 2020, Vedanta sourced 62% of its alumina requirements from third parties and, due to the closure of the smelter at Tuticorin, sourced all of its copper anodes and blisters from external sources for production of copper cathodes at the Silvassa refinery. For the portion of Vedanta's aluminium business where the required alumina is sourced internally, profitability is dependent upon the LME price of aluminium less the cost of production, which includes the costs of bauxite mining at BALCO's mines, the refining of bauxite into alumina at Vedanta Limited's refinery and the smelting of alumina into aluminium. For the portion of Vedanta's alumina requirements sourced from third parties, its profitability is dependent upon the LME price of aluminium, less the cost of the sourced alumina and the cost of smelting. During Fiscal Year 2020, 74% of BALCO's alumina requirement and 42% of Vedanta Limited's alumina requirement came from third parties.

As a result, Vedanta EBITDA and segment margins of Vedanta's copper and aluminium businesses depend upon its ability to obtain the required copper concentrate and alumina at prices that are low relative to the market prices of the copper and aluminium products that it sells. The market prices of the copper concentrate and alumina that Vedanta purchases from third parties and the market prices of the copper and aluminium metals that it sells have experienced volatility in the past, and any increases in the market price of the raw material relative to the market prices of the metal that Vedanta sells would adversely affect the segment results and segment margins of Vedanta's copper and aluminium businesses, which could have a material and adverse effect on its business, financial condition, results of operations and prospects.

The primary raw material for Vedanta's commercial power operations is coal, which is subject to the GOI's coal allocation policies. Vedanta also relies on imported sources to meet part of its coal requirements. Vedanta could experience a shortfall in the quantity of coal in relation to its requirement or receive lower quality coal, which can result in increased costs.

Further, in common with many exploration and production companies, Vedanta and the operators of assets often contract or lease services and equipment from third party providers. Such services and equipment can be scarce and may not be readily available at the times and places required. In addition, the costs of third-party services and equipment have increased significantly over recent years and may continue to rise. Scarcity of services and equipment and increased prices may in particular result from any significant increase in regional exploration and development activities, which in turn may be the consequence of increased or continued high hydrocarbon or mineral prices. The scarcity of such services and equipment, as well as their potentially high costs, could delay, restrict or lower the profitability and viability of projects which may have a material adverse effect on Vedanta's businesses, prospects, financial condition or results of operations.

There is no certainty that the PSC relating to the participating interest of Vedanta's oil and gas business in the Rajasthan Block will be renewed or that any renewal will be on favourable terms, which could have a material adverse effect on Vedanta's businesses, operating results and financial condition.

Vedanta's current reserves and production are significantly dependent on the Rajasthan Block in India. The production sharing contract for the block was valid until May 2020. In 2018, under the Pre-New Exploration Licencing Policy ("Pre-NELP") and the New Exploration Licencing Policy ("NELP"), the GOI approved a ten-year extension of the production sharing contract for the Rajasthan Block. However, the applicability of the Pre-NELP Extension Policy to the Rajasthan Block is under litigation. The matter is currently pending and the GOI has proposed that they would not seek the incremental profit on the petroleum reserves until the matter is finally argued. The next hearing for this matter is scheduled for 20 August 2020. An adverse order against Vedanta Limited could result in a substantial loss of value and could have a material adverse effect on Vedanta's results of operations and financial condition.

Vedanta Limited has filed a writ petition before the High Court of Delhi against the MoPNG, the DGH and ONGC regarding the extension of the tenure for the Rajasthan Block PSC for the Rajasthan Block. As of the date of this Offering Circular, the Rajasthan Block PSC addendum for extension of the tenure of the Rajasthan Block has not been executed. See the section entitled "*Business — Litigation — Writ petition filed in the Delhi High Court by Vedanta Limited relating to extension of tenure of the Rajasthan Block PSC*." for more information.

Vedanta Limited's oil and gas PSCs do not permit it to export crude oil, which could restrict its ability to monetise its reserves, and the sale of crude oil by Vedanta Limited is subject to risks that arise from various arrangements with third parties which could have a material adverse effect on Vedanta's business, operating results and financial condition.

The majority of Vedanta Limited's oil and gas production is sourced from its interests in a limited number of production sharing contracts or concessions. Disputes or interruption in any production sharing contract or concession could have a material adverse impact upon its businesses and financial condition. Particularly, under the terms of the production sharing contracts, Vedanta Limited is obliged to sell its entitlement to crude oil in the domestic market until such time as the total availability of the crude oil and condensate from all domestic petroleum production activities meets the total national demand and India achieves self-sufficiency and Vedanta Limited is not permitted to export crude oil under the production sharing contracts until such time. There is currently a mismatch between the demand and supply of crude oil in India, with demand outweighing the domestic production of crude oil. This mismatch is expected to continue in the long term. Further, if Vedanta Limited's Indian blocks yield crude oil that is not suitable for processing by refineries in India, it may be difficult for Vedanta to monetise such domestic crude oil reserves. This could have a material adverse effect on Vedanta Limited's business as a whole, financial condition and results of operations. Vedanta Limited's application for exporting crude oil was denied by the GOI and Vedanta Limited challenged this decision before the High Court of Delhi, which is still pending in appeal before the division bench of the High Court of Delhi. See the section entitled "*Business — Litigation — Writ petition filed in the Delhi High Court by Vedanta Limited relating to export of crude oil from the Rajasthan Block*." for more information.

Vedanta is subject to the risk of delayed off-takes or payment for delivered production volumes or counterparty default. Stoppage of off-take or supply could result if the buyers fail to take delivery of volumes anticipated by these sales agreements. Additionally, two private buyers accounted for 58% of the total sales of the oil and gas business in Rajasthan in Fiscal Year 2020. Any unforeseen disruption at these buyer's facilities would adversely affect sales volume and therefore revenue generation. Any of these could have a material adverse effect on Vedanta Limited's business, operating results, financial condition and/or prospects.

Vedanta Limited has entered into agreements with a number of other contractual counterparties in relation to the sale and supply of their respective hydrocarbon production volumes and is, therefore, subject to the risk of delayed off takes or payment for delivered production volumes or counterparty default. In certain cases, the relevant counterparty, either legally or as a result of geographic, infrastructure or other constraints or factors, is in practise the sole potential purchaser of the relevant production output. This is particularly the case for sales of gas which rely upon the availability or construction of transmission and other infrastructure facilities, enabling the supply of gas produced to be supplied to end users. The absence of competitors for the transmission or purchase of gas produced by Vedanta may expose it to off-take and production delays, adverse pricing or other contractual terms or may restrict the availability of transmission or other necessary infrastructure. Such delays or defaults or adverse pricing or other contractual terms or restricted infrastructure availability could have a material adverse effect on Vedanta's respective businesses, prospects, financial condition or results of operations.

Vedanta is subject to covenants under its credit facilities including term loans and working capital facilities that limit its flexibility in managing its business.

Vedanta's financing agreements contain certain restrictive covenants and events of default that limit its ability to undertake certain types of transactions or ability to expand, any of which could adversely affect its business. These covenants require Vedanta to maintain certain financial ratios, and in certain cases, obtain the prior consent of its lenders for various activities, including, among others:

- any change in its capital structure,
- issue of equity, preferential capital or debentures,
- raising any loans and deposits from the public,
- undertaking any new project,
- effecting any scheme of acquisition, merger, amalgamation or reconstitution, and
- implementing a new scheme of expansion or creation of a subsidiary.

Vedanta's future borrowings may also contain similar restrictive provisions. For example, low commodity prices may adversely impact Vedanta's profitability and therefore its ability to meet the financial covenants and ratios. Although Vedanta has, in the past, successfully obtained similar covenant revisions and/or waivers for its material indebtedness (for example, the Consent Solicitation), there can be no guarantee that at such time that Vedanta would be able to obtain waivers/relaxations from existing and future lenders commensurate with the then prevailing commodity pricing environment or financial condition of Vedanta. If Vedanta fails to meet its debt service obligations or covenants (or receive approvals from its lenders to undertake certain transactions) provided under the financing agreements, the relevant lenders could declare Vedanta to be in default under the terms of its agreements accelerate the maturity of its obligations or take over the financed project or other security made available to the lenders. However, no consent is required for this offering. Vedanta cannot assure you that, in the event of any such acceleration, it will have sufficient resources to repay borrowings. In such an event, Vedanta may be forced to renegotiate its financing agreements with its lenders on terms that may not be favourable to Vedanta.

In particular, one of the financial covenants (Net Debt/EBITDA) in the Group's existing financing arrangements was not complied with in respect of the testing period ending 31 March 2020 as a result of the impact of COVID-19 on the business. The Group has obtained a waiver from the requisite creditors of all such financing arrangements, subject to, *inter alia*, formal documentation. As of the date of this

Offering Circular, the formal documentation is in the process of being finalised and signed. The Group has also agreed with its creditors either full waivers or amendment to the levels of the relevant financial covenant to be tested in September 2020, March 2021 and (only in respect of some but not all the financing arrangements) September 2021 giving it additional comfort under those financing arrangements. For the financing arrangements which waivers or amendments to the levels of the financial covenants to be tested do not extend to September 2021, the relevant financial covenant would need to be tested on 30 September 2021. Notwithstanding such amendments, no assurance can be given that any financial covenant will be complied with in the future as that depends on the performance of the operations of the Group in the relevant testing periods. Notwithstanding such amendments, no assurance can be given that any financial covenant will be complied with in the future as that depends on the performance of the operations of the Group in the relevant testing periods.

As a result of the amendments, compliance by the Group with the amended terms of the existing financing arrangements could exacerbate some of the other risks described elsewhere in this section entitled "*Risk Factors*" as a result of these terms imposing additional costs on the Group and/or reducing the Group's financial and operational flexibility. Upon the occurrence of an event of default under any of the Group's facility agreements (including as a result of a financial covenant not being satisfied), if the lenders under that facility accelerate repayment for an amount outstanding of at least $100,000,000 (or its equivalent in other currencies), this would trigger the respective cross default provisions of the terms and conditions of the proposed Bonds, the Company Bonds and the Guaranteed Bonds.

Vedanta depends on the experience and management skill of certain of its key employees. In addition, certain key employees may have claims pending against them from prior employment which, if adversely determined, may adversely impact Vedanta's reputation.

Vedanta's efforts to continue its growth will place significant demands on its management and other resources, and Vedanta will be required to continue to improve operational, financial and other internal controls, both in and outside India across all locations. Vedanta's ability to maintain and grow its existing business and integrate new businesses will depend on its ability to maintain the necessary management resources and on its ability to attract, train and retain personnel with skills that enable it to keep pace with growing demands and evolving industry standards. Vedanta is in particular dependent to a large degree on the continued service and performance of the senior management team of Vedanta and other key team members in its business units. These key personnel possess technical and business capabilities that are difficult to replace. The loss or diminution in the services of Vedanta's executive management or other key team members, or its failure otherwise to maintain the necessary management and other resources and grow its business, could have a material adverse effect on its business, results of operations, financial condition and prospects. In addition, as Vedanta's business develops and expands, Vedanta believes that its future success will depend on its ability to attract and retain highly skilled and qualified personnel, which is not guaranteed.

Mining, metal refining, metal smelting and fabrication operations and oil and gas extraction require a skilled and experienced labour force. If Vedanta experiences a shortage of skilled and experienced labour, its labour productivity could decrease and costs could increase, Vedanta's operations may be interrupted or it may be unable to maintain its current production or increase its production as otherwise planned, which could have a material adverse effect on Vedanta's results of operations, financial condition and business prospects.

In addition, certain key employees of Vedanta may have claims pending against them from their prior employment. None of these claims relate to any activity by any of these employees in their engagement with Vedanta. While these claims have no impact on Vedanta, an adverse outcome of these claims against any of the key employees may adversely impact Vedanta's reputation.

Vedanta's business operations are exposed to uncertainty as a result of the United Kingdom's withdrawal from the European Union.

Following the United Kingdom's exit from the EU ("Brexit") on 31 January 2020, the United Kingdom entered an implementation period that will remain in place until 31 December 2020 (subject to any extension which may be agreed between the United Kingdom and the EU) (the "Implementation Period"). If the United Kingdom and the EU fail to agree on a post Brexit trade framework for the financial services sector by the end of the Implementation Period, a 'hard' Brexit will occur effective from 1 January 2021 unless an alternative approach is agreed, or the Implementation Period is extended. Brexit could have implications on the economic outlook for the Eurozone and the United Kingdom which might in turn have global implications because of changes in policy direction. The uncertainties linked to Brexit negotiations could delay corporate investment decisions until there is more clarity.

Heightened uncertainty around the economies of the United Kingdom and the EU may have a negative impact on consumer confidence. Lack of clarity about future United Kingdom laws and regulations, including financial laws and regulations, tax and free trade agreements, intellectual property rights, environmental laws, health and safety laws, immigration laws and employment laws, could increase Vedanta's costs, depress economic activity and restrict access to capital. Arrangements between the United Kingdom and the EU could lead to greater restrictions on the free movement of goods, services, people and capital between the United Kingdom and the EU and increased regulatory complexities, which could adversely impact Vedanta's business and the jurisdictions in which Vedanta operates. The effects of Brexit could also lead to legal uncertainty and potentially divergent national laws and regulations which may, directly or indirectly, increase compliance and operating costs for Vedanta and may have a material adverse effect on Vedanta's tax position, business, results of operations and financial condition.

Material changes in the regulations that govern Vedanta and its businesses, or the interpretation of recent legislation, could have a material adverse effect on its business, financial condition and result of operations.

Mining is subject to a complex and comprehensive set of laws and regulatory requirements. See the section entitled "*Business — Indian Regulatory Matters — Mining Laws*" for more information. These laws and regulatory requirements are subject to change. The Mines and Minerals (Development and Regulation) Amendment Act, 2016 received presidential assent on 6 May 2016 and amended the Mines and Minerals (Development and Regulation) Act, 1957. The amendments permit the transfer of captive mine leases (granted before 12 January 2015) without having to go through an auction process and also allow the dumping of waste outside of the mining area by including dumping sites within the definition of lease area. The Mineral Laws (Amendment) Act dated 13 March 2020 ("MLAA") brought forth amendments in the MMDR Act. The MLAA has (i) liberalised the eligibility requirement to participate in coal auctions; (ii) removed the requirement for State Governments to obtain prior approval of Central Government to grant mining concessions; and (iii) enabled the transfer of approvals (other than coal, lignite and atomic minerals), whereby a successful bidder is now deemed to acquire all rights, approvals, clearances and licences vested with the previous lessee for a period of two years within which, the allottee is required to obtain the same. Further, the National Mineral Policy of 2019, which replaced the erstwhile National Mineral Policy 2008, introduces incentives to enhance mergers and acquisitions in the mining sector. If Vedanta is affected, directly or indirectly, by the application or interpretation of any such statute, as and when notified, including any enforcement proceedings initiated under it and any adverse publicity that may be generated due to prosecution, it may have a material adverse effect on its business, financial condition and result of operations.

In addition, Vedanta Limited is subject to complex and comprehensive oil and gas regulations in India. New or changed regulations could require changes to the manner in which Vedanta Limited conducts its business, and result in an increase in compliance costs, which could have a material adverse effect on Vedanta's business, financial condition and results of operation.

For example, upon the expiry of oil and gas licences, contractors are generally required, under the terms of relevant licences or local law, to dismantle and remove equipment, cap or seal wells and generally make good production sites. There can, however, be no assurance that Vedanta will not in the future incur decommissioning charges in excess of those currently provided for, since local or national governments may require decommissioning to be carried out in circumstances where there is no express obligation to do so, particularly in case of future oil and gas licence renewals.

Goods and Service Tax ("GST") has been implemented with effect from 1 July 2017 and has replaced the indirect taxes on supply of goods (other than petroleum products) and services such as central excise duty, service tax, central sales tax, state value added tax ("VAT"), luxury tax and entertainment tax, which were being collected by the central and state governments. With GST, complexity in tax compliance caused by differing tax liabilities from state and central governments has been reduced since all tax returns and filing are done through a single platform. However, GST is an evolving tax framework in India and any significant future amendments under GST may affect the overall tax efficiency, and may result in significant additional taxes becoming payable.

The provisions of Chapter X-A (sections 95 to 102) of the Income Tax Act, 1961, relating to General Anti-Avoidance Rules ("GAAR") are applicable and came into effect on 1 April 2017. The GAAR provisions propose to identify any arrangement the main purposes of which is to obtain a tax benefit, and satisfies at least one of the following tests (i) creates rights, or obligations, which are not ordinarily created between persons dealing at arm's length; (ii) results, directly or indirectly, in misuse, or abuse, of the provisions of the Income Tax Act, 1961; (iii) lacks commercial substance or is deemed to lack commercial substance, in whole or in part; or (iv) is entered into, or carried out, by means, or in a manner, that is not ordinarily engaged for bona fide purposes. If GAAR provisions are invoked, the tax authorities have wide powers, including denial of tax benefit or a benefit under a tax treaty. In the absence of any precedents on the subject, the impact of the application of these provisions is uncertain.

While interest payments made by Vedanta to its non-resident "associated enterprises" are eligible to be deducted as an expense when used by it for its business purpose subject to deduction and deposit of applicable withholding taxes, such payments are required to be in compliance with thin capitalisation norms as introduced by the Finance Act, 2017, in terms of which, Vedanta would not be permitted a deduction of interest exceeding 30% of the earnings before interest, taxes, depreciation and amortisation if the total amount of such interest exceeds ₹10 million per year. Such thin capitalisation norms would apply even where the debt is issued by an independent third party lender, but an "associated enterprise" either provides an implicit or explicit guarantee to such lender or deposits a corresponding and matching amount of funds with the lender. The thin capitalisation norms would not apply in case where the interest is paid in respect of a debt issued by a lender which is a permanent establishment of a non-resident engaged in the business of banking.

If the interest is not eligible for deduction in a particular year, the same can be carried forward for eight years and the same shall be allowed to the extent of maximum allowable interest expenditure for the relevant year.

The costs, liabilities and requirements associated with complying with existing and future laws and regulations, within India or in other jurisdictions may also be substantial and time-consuming and may delay the commencement or continuation of exploration, oil and gas, mining or production activities, which could also have a material adverse effect on Vedanta's results of operation and financial condition.

Vedanta's operations are subject to extensive governmental, health and safety and environmental regulations, which require it to obtain and comply with the terms of various approvals, licences and permits. Any failure to obtain, renew or comply with the terms of such approvals, licences and permits in a timely manner may have a material adverse effect on its results of operations and financial condition.

Numerous governmental permits, approvals and leases are required for Vedanta's operations as the industries in which it operates and seeks to operate are subject to numerous laws and extensive regulation by national, state and local authorities in jurisdictions including India, Zambia, Namibia, South Africa and the UAE and any other jurisdictions where Vedanta may operate in the future. Vedanta's operations are also subject to laws and regulations relating to employment, the protection of the health and safety of employees as well as the environment, including conservation and climate change. For instance, Vedanta is required to obtain various environmental and labour-related approvals in connection with its operations in India, including clearances from the Ministry of Environment and Forest (the "MoEF"), GOI and from the relevant Pollution Control Boards in the various states in India in which Vedanta operates, and registration under the Factories Act, 1948 of India (the "Factories Act") in order to establish and operate its facilities. Certain of such approvals are valid for stipulated periods of time and require periodic renewals. See the section entitled "*Business — Indian Regulatory Matters*" for more information.

Further, Vedanta's exploration, oil and gas and mining activities depend on the grant, renewal or continuance in force of various exploration and production licences and contracts and other regulatory approvals that are valid for a specific period of time. In addition, such licences and contracts contain various obligations and restrictions, including restrictions on assignment or any other form of transfer of a mining lease or on the employment of a person who is not an Indian national. For instance, in connection with Vedanta's mining operations in India, mining leases are typically granted for a period of 20 to 30 years and stipulate conditions including approved limits on extraction. Similarly, in connection with Vedanta's oil and natural gas operations in India, Vedanta Limited is required to enter into a PSC and obtain an exploration licence, which typically extends seven or eight years, following the award of a block before it can commence exploration activities, and, if exploration is successful, Vedanta Limited is then required to procure a petroleum mining lease from the relevant government authority, which typically extends for 20 years, in order to conduct extraction operations for oil and natural gas.

However, the leases and licencing period for current operating mines and oil blocks is valid. Moreover, Vedanta has signed exploration contracts for 10 new oil blocks and was awarded a coal block in Fiscal Year 2020.

Government approval is also required, generally, for the continuation of mining as well as oil and gas exploration and production activities in India and other jurisdictions, and such approval can be revoked for a variety of circumstances by the GOI, Indian courts or other authorities. Any general suspension of mining activities by the government of a jurisdiction containing mining operations of Vedanta could have the effect of closing or limiting production from its operations. For example, Vedanta's total iron ore production declined from 13.8 mmt in Fiscal Year 2012 to 0.6 mmt in Fiscal Year 2015 due to the suspension of mining activities in Goa. The suspension orders were withdrawn by the State Government of Goa in January 2015 and operations recommenced. However, the Supreme Court of India in 2018 set aside the State Government of Goa's orders and directed all lease holders operating under a second renewal to stop all mining operations with effect from 16 March 2018 until new mining leases and new environmental clearances are granted. Vedanta's mines in Goa were impacted as a result of this judgement of the Supreme Court of India. Vedanta recognised an impairment of assets in Fiscal Year 2018 (primarily with respect to mining reserves) as a result of these closures in an amount equal to $534 million net of tax ($759 million pre-tax).Vedanta's operations in Goa represent only a small portion of its consolidated revenue and represented approximately 1% of its revenue for Fiscal Year 2018. Further, the closure of mines in Goa will not impact operations at Vedanta's value-added business and in Karnataka. See the section entitled "*Business — Litigation — Vedanta is involved in proceedings related to mining operations in the State of Goa*." for more information.

Even if Vedanta Limited does receive appropriate orders for continuation of mining operations in Goa, Vedanta's iron ore business will remain largely dependent on export sales of iron ore to China. In Fiscal Year 2017, 100% of sales to external customers for Goa was from exports to customers in China. In Fiscal Year 2019 and Fiscal Year 2020 however, no iron ore were mined from Goa pursuant to the Supreme Court's order. As a result, the performance and growth of Vedanta's iron ore business is necessarily dependent on the health of the Chinese economy, which may be materially and adversely affected by political instability or regional conflicts, economic slowdown elsewhere in the world or otherwise. In addition, any worsening of international relations between India and China, any negative changes in Chinese regulatory or trade policies relating to the import of iron ore or other limitations, restrictions or negative changes in Vedanta's ability to export iron ore to China, could have a material adverse effect on its business, financial condition, results of operations and prospects. See the section entitled "*Business — Description of the Business — Iron Ore Business*" for more information.

Furthermore, regulation of greenhouse gas emissions in the jurisdictions of Vedanta's major customers and in relation to international shipping could also have an adverse effect on the demand for Vedanta's products. Vedanta's smelting and mineral processing operations are energy intensive and depend heavily on fossil fuels. Increasing regulation of climate change issues such as greenhouse gas emissions, including the progressive introduction of carbon emissions trading mechanisms and tighter emission reduction targets, may raise energy costs and costs of production.

Vedanta's global presence exposes it to a number of jurisdictions in which regulations or laws have been or are being considered to limit or reduce emissions. These changes can result in increased cost of fossil fuels, imposition of levies for emissions in excess of certain permitted levels and increased administrative costs for monitoring and reporting. Increasing regulation of greenhouse gas emissions, including the progressive introduction of carbon emissions trading mechanisms and tighter emission reduction targets, can result in increased costs and reduced demand growth.

Failure by Vedanta to comply with applicable laws, regulations or recognised international standards, or to obtain or renew the necessary permits, approvals and leases may result in the loss of the right to operate its facilities or continue its operations, the imposition of significant administrative liabilities, or costly compliance procedures, or other enforcement measures that could have the effect of closing or limiting production from its operations. For example, Vedanta's operations at Tuticorin, India are currently suspended due to ongoing litigation regarding the renewal of the consent to operate. See the section entitled "*Business — Litigation — Proceedings related to the existing copper smelting operations and the proposed expansion at the Tuticorin plant*" for more information. Prolonged shutdown of Vedanta's copper smelter at Tuticorin could be credit negative and marginally increase its leverage.

In addition, if Vedanta were to fail to meet environmental requirements or to have a major accident or disaster, it may also be subject to administrative, civil and criminal proceedings by governmental authorities, as well as civil proceedings by environmental groups and other individuals, which could result in substantial fines, penalties and damages against it as well as orders that could limit or halt or even cause closure of its operations, any of which could have a material adverse effect on its business, results of operations and financial condition. See the section entitled "*Business — Litigation — Writ petitions filed against Vedanta Limited alleging violation of certain air, water and hazardous waste management regulations at Vedanta's Tuticorin plant*." for more information. Similarly, ESL's consent to operate the steel plant at Bokaro is subject to the decision of the Jharkhand High Court against the orders issued by the Jharkhand State Pollution Control Board ("JSPCB") rejecting ESL's application for the renewal of its consent to operate, which expired in December 2017. The Jharkhand High Court has granted a stay against the orders of the MoEF and JSPCB and allowed the plant operations to continue till the next date of hearing which was originally scheduled for 26 February 2020. However, owing to the nation-wide lockdown situation in India, the Jharkhand High Court hearing has since been postponed and the next scheduled hearing date is on 4 September 2020.

In addition, in 2015, Zambian villagers filed a class action suit against KCM in Zambia, for alleged release of pollutants and causing environmental damage. See the section entitled "*Business — Litigation — Class actions against KCM on behalf of Zambian nationals*." for more information. Furthermore, in 2017 the thermal power plant at Talwandi Sabo was fined ₹500,000 as a result of blowing ash that damaged nearby cotton crops. The plant was also directed to compensate farmers who had suffered losses and to submit a surety amount of ₹3 million as an assurance against future pollution. The compensation was duly paid to the farmers and there has been no further directions have been received from the Punjab Pollution Control Board. TSPL has taken measures to prevent such incidents in the future such as installation of additional ash disposal pump, maintenance of ash level in silo of 5 m out of 14 m, an auto alarm system in silo when silo level reaches 8 m and ash conveying stops at 10 m as well as an installation sparkling system at silo.

Vedanta experienced an ash pond rupture in Odisha in September 2017, resulting in 4,224,000 tonnes of ash being spilled into the Bhenden River. As a result, relevant authorities shut five out of the 11 thermal power plants. As a result, Vedanta had to purchase 200 MW power from the state electricity grid and incurred a cost of $0.9 million as of 31 December 2017.

Vedanta is exposed to the political, legal, regulatory and social risks of the countries in which it operates.

Vedanta has operations in India, Zambia, Namibia, South Africa, the UAE, Japan, South Korea, and Taiwan. Vedanta is exposed to the political, economic, legal, regulatory and social risks of the countries in which it operates or intends to operate. These risks potentially include expropriation (including "creeping" expropriation) and nationalisation of property, instability in political, economic or financial systems, uncertainty arising from underdeveloped legal and regulatory systems, corruption, civil strife or labour unrest, acts of war, armed conflict, terrorism, outbreaks of infectious diseases, prohibitions, limitations or price controls on hydrocarbon exports and limitations or the imposition of tariffs or duties on imports of certain goods.

For example, in consideration of the suspension of exploration in Liberia, low iron ore prices, geopolitical factors and no plans for any substantive expenditure resulting in continued uncertainty in the project, Vedanta recognised an impairment charge in Fiscal Year 2016.

Countries in which Vedanta has operations or intends to have operations have transportation, telecommunications and financial services infrastructures that may present logistical challenges not associated with doing business in more developed locales. Furthermore, Vedanta may have difficulty ascertaining its legal obligations and enforcing any rights it may have. Political, legal and commercial instability or community disputes in the countries and territories in which Vedanta operates could affect the viability of its operations. Some of Vedanta's current and potential operations are located in or near communities that may regard such operations as having a detrimental effect on their environmental, economic or social circumstances.

The consequences of community reaction, including on social media, could also have a material adverse impact on the cost, profitability, ability to finance or even the viability of an operation. Such events could lead to disputes with national or local governments or with local communities and give rise to material reputational damage. For instance, community protests were organised to protest the expansion of Vedanta's copper plant in Tamil Nadu in 2018, and there is no certainty regarding the potential impact of such protests. Vedanta's Lanjigarh refinery has also faced protests from local communities demanding employment, resulting in two fatalities. If Vedanta's operations are delayed or shut down as a result of political and community instability, its revenue growth may be constrained and the long-term value of its business could be adversely impacted.

Social unrest in the countries and communities in which Vedanta operates make Vedanta vulnerable to community opposition and protests, which could lead to material fines, delays and the revocation of an operation's licence to operate. Although Vedanta engages in enhancing its community engagement systems and grievance mechanisms, any failure to maintain these systems could result in their inability to manage civil unrest in and around its operations.

Once Vedanta has established operations in a particular country, it may be expensive and logistically burdensome to discontinue such operations should economic, political, physical or other conditions subsequently deteriorate. All of these factors could have a material adverse effect on Vedanta's businesses, results of operations, financial condition or prospects.

Vedanta may face numerous protective trade restrictions, including anti-dumping laws, countervailing duties and tariffs, which could adversely affect its financial condition and results of operations.

Protectionist measures, including anti-dumping laws, countervailing duties and tariffs and government subsidisation adopted or currently contemplated by governments in some of Vedanta's export markets could adversely affect Vedanta's sales. Anti-dumping duty proceedings or any resulting penalties or any other form of import restrictions in other countries may limit Vedanta's access to export markets for its products, and in the future additional markets could be closed to Vedanta as a result of similar proceedings, thereby adversely impacting its sales and/or limiting its opportunities for growth.

In addition, Vedanta is subject to the general risk of doing business overseas and may therefore be affected by global trade wars. For example, there is global economic uncertainty following the recent announcement by the United States to levy certain import tariffs on certain Chinese goods.

Further, the recent skirmishes and face-offs between China and India and the developing strain on the diplomatic relations between India and China may impact Vedanta's operations. The aluminium and power division of Vedanta Limited procures several spares and consumables, carbon-related commodities and relining material, alloys and other smaller items from China. While these items are available globally, they were procured from China due to competitive pricings. Alternative sourcing for commodities, alloying, relining, etc. may result in a slight cost increase on these products. On capital projects, Chinese vendors are working on some projects such as the Lanjigarh volume debottlenecking and flue-gas desulfurization for Vedanta's power plants. They also provide the various technology for Vedanta's refinery, smelters and power plants. Whilst Vedanta is actively monitoring these developments and any other indirect impact that may arise across its operations and dynamically evaluating all opportunities and risks to ensure business continuity, there can be no assurance that any of the above circumstances would not adversely affect Vedanta's results of operation and financial condition.

If Vedanta's planned expansions and new projects are delayed, Vedanta's results of operation and financial condition may be materially and adversely affected.

Vedanta has, over the past few years, initiated expansion plans for its existing operations and planned greenfield projects, which may involve significant capital expenditure. Although several of these initiatives have been completed, substantial work remains. Vedanta's planned expansions and new projects are subject to a number of risks that may adversely affect the prospects and profitability of such projects, including the following:

- unfavorable results from feasibility studies;
- failure to obtain, or experience delays or higher than expected costs in obtaining, the required agreements, authorizations, licenses and permits to develop a project, including the prior consultation procedure and agreements with local communities;
- permits, authorizations or rights granted to third parties that could conflict with, and require Vedanta to alter its expansion or new project plans;

- delays or higher than expected costs in obtaining the necessary equipment, machinery, materials, supplies, labor or services and in implementing new technologies to develop and operate a project;

- conflicts with local communities and/or strikes or other labor disputes may delay the implementation or the development of projects;

- accidents, natural disasters and equipment failures, as well as major public health issues such as the COVID-19 pandemic, could result in delays, cost overruns, or the suspension or cancelation of projects; and

- changes in market conditions or regulations may make a project less profitable than expected at the time Vedanta initiated work on it.

For example, Vedanta does not currently have all of the leases, licences, permits, consents and approvals that are or will be required for its planned expansions and new projects. There can be no assurance that Vedanta or its subsidiaries will be able to obtain or renew all necessary leases, licences, permits, consents and approvals in a timely manner or at all. For example, in 2008, Vedanta Limited planned to expand the refining capacity of Lanjigarh alumina refinery to 6 mtpa and construct an associated 210 MW captive power plant. The environmental clearance for the proposed expansion plans of the Lanjigarh alumina refinery have however been challenged before the National Green Tribunal ("NGT") and the matter remains pending before NGT Kolkata where the NGT Kolkata has not stayed the grant of the environmental clearance. See the section entitled "*Business — Litigation — Challenge relating to the environmental clearance granted for the expansion plans of refinery in Lanjigarh*." for more information. In addition, MoEF rejected Vedanta's forest clearance application in 2010 and 2014 and mining operations in Niyamgiri Hills have been suspended. Vedanta has started getting supplies under the linkage policy of the State Government of Orissa from Orissa Mining Corporation and is currently in discussions with government authorities to have higher quantum linkages for bauxite.

Similarly, Vedanta is currently undertaking exploration programmes in its Rajasthan and other oil blocks and any delays in these exploration programmes or shortfall in achieving the necessary output levels could materially and adversely affect Vedanta's operations and financial condition. In Fiscal Year 2013, HZL announced an expansion of zinc-lead mine capacity to 1.2 mtpa, which involved the sinking of underground shafts and developing underground mines. Benefits from these growth projects started in Fiscal Year 2016, and all major projects to build capacity of 1.2 mtpa of mined metal were completed during Fiscal Year 2020. Any delays in the execution of the expansion plans or any shortfall in achievement of the expansion objectives may adversely affect Vedanta's business, financial condition and results of operations. See the section entitled "*Business — Zinc Business*" for more information.

Furthermore, the GOI is contemplating a proposal to demarcate certain forest areas in India, based on the permissibility of using such land for mining purposes. The identification of designated areas where mining activities will, or will not, be permitted will be based on mapping forest and coal reserves as well as field-level studies. While this proposal remains in discussion, the MoEF has denied the grant of environmental and forest diversion clearances applied for in certain areas identified as restricted areas. If the proposal is implemented, Vedanta's current and any future mining activities and related expansion plans and new projects may be affected, which could adversely affect Vedanta's business prospects and results of operations.

Any delay in completing planned expansions, revocation of existing clearances, failure to obtain or renew regulatory approvals, non-compliance with applicable regulations or conditions stipulated in the approvals obtained, suspension of current projects, or cost overruns or operational difficulties once the projects are commissioned may have a material adverse effect on Vedanta's business, results of operations and financial condition. Any delay in completing planned expansions could have a material adverse effect on Vedanta's credit ratings, which may increase its borrowing costs.

Vedanta's future expansions and acquisitions and its ability to refinance its existing indebtedness are dependent upon its ability to obtain funding.

Vedanta will require capital, in the form of debt or equity for, among other purposes, refinancing its existing indebtedness, expanding its operations, making acquisitions, managing acquired assets, acquiring new equipment, maintaining the condition of its existing equipment and maintaining compliance with environmental laws and regulations. To the extent that cash generated internally and cash available under Vedanta's existing credit facilities may not be sufficient to fund Vedanta's capital requirements, Vedanta may have to obtain other banking facilities or require access to other forms of debt or equity financing. There is no certainty as to the availability of such financing facilities or that Vedanta would be able to obtain such additional funding on favourable terms, if at all, and further interest charged on these financing facilities may have a material adverse effect on Vedanta's business, results of operations and financial conditions.

Factors that may affect Vedanta's access to funding or increase its funding costs include (a) the financial and regulatory environments, which have impacted global financial markets and credit institutions since 2008 and are presently in flux due to the COVID-19 pandemic and varying responses thereto by governments, central banks and regulators; (b) adverse changes in Vedanta's operating results, financial condition or cash flows; (c) deterioration of Vedanta's creditworthiness; (d) currency movements, interest rate increases or volatility or other potential market disruptions; (e) a decrease in bank appetite for risk as a result of tightened lending standards, regulatory capital requirements or otherwise; and (f) downgrade in India's sovereign ratings.

Vedanta evaluates acquisition opportunities in the course of its business and such acquisitions could be of a material nature. More generally, future debt financing, if available, may result in increased finance charges, increased financial leverage, decreased income available to fund further acquisitions and expansions and the imposition of restrictive covenants on Vedanta's businesses and operations.

Recently, the COVID-19 pandemic has led to significant disruptions and volatility in the global capital markets. Although the US Federal Reserve, the European Central Bank and other central banks have lowered policy rates and/or adopted stimulus measures, which have lowered interest rates on government bonds, widespread uncertainty in the global financial markets has widened corporate bond spreads. As a result, the cost of capital of issuers accessing the international debt markets has trended substantially upwards.

The reorganisation exercise in 2013 has been challenged before the courts in India and Vedanta may not be able to benefit from it.

At the time of announcing the reorganisation in 2013, Vedanta estimated tax efficiencies arising from the transaction. The expected efficiencies may not be realised or may be materially lower than estimated and the extent to which any of the other benefits will actually be achieved, if at all, or the timing of any such benefits, cannot be predicted with certainty. If Vedanta Limited is prevented from taking advantage of the anticipated tax efficiencies, there could be a material adverse effect on Vedanta's business, financial condition or results of operations. Further, subsequent to the effectiveness of the Amalgamation and Reorganisation Scheme, a special leave petition challenging the orders of the High Court of Bombay at Goa was filed before the Supreme Court of India by the Commissioner of Income Tax, Goa and the Ministry of Corporate Affairs in July 2013 and April 2014, respectively. Further, a creditor and a shareholder challenged the Amalgamation and Reorganisation Scheme in the High Court of Madras in September 2013. The Supreme Court of India has admitted the special leave petitions and the matter is currently pending for hearing. See the section entitled "*Business — Litigation — The Amalgamation and Reorganisation Scheme has been challenged by the Indian tax authorities and others*." for more information.

There is no assurance that the special leave petitions will be determined in Vedanta Limited's favour, and accordingly, there is no assurance that the Courts will negate the effectiveness of the reorganisation. In such circumstance, Vedanta may not be able to achieve financial, operational, strategic and other potential benefits from the consolidation pursuant to the reorganisation.

The Take Private Transaction remains subject to regulatory approvals and lender consents and Vedanta having sufficient funding. It may not be consummated or result in the expected benefits.

The Take Private Transaction remains subject to approval from the Indian Stock Exchanges, any other regulatory and government authority in India and/or other jurisdictions, as may be required, and lender consents in relation to the Take Private Transaction. See the section entitled "*Take Private Transaction*" for more information. There is no assurance that the Acquirers and/or Vedanta Limited, as the case may be, will be able to obtain the relevant approvals from the Indian Stock Exchanges and any such other regulatory and government authority and, accordingly, there is no assurance that the Take Private Transaction will be consummated.

The consummation of the Take Private Transaction is also dependant on the final offer price (i.e., either the price determined as per the reverse book building mechanism or, if a counter offer has been made, the counter offer price) being accepted in accordance with the Delisting Regulations. There are risks that the Take Private Transaction will not be consummated if such final offer price goes beyond Vedanta's expectation and is therefore not accepted or if Vedanta fails to raise funds for such amount to finance the Take Private Transaction. See the section entitled "*Description of Certain Financing Arrangements — Bridge Facility Agreement*" for more information.

If the Take Private Transaction is not consummated, Vedanta may not be able to achieve financial, operational, strategic and other potential benefits from the consolidation pursuant to the Take Private Transaction. The Take Private Transaction is intended to be a continuation of Vedanta's corporate structure simplification process to achieve enhanced operational and financial flexibility in a capital-intensive business. The Take Private Transaction will align Vedanta's capital and operational structure, streamline the process of servicing Vedanta's financial obligations and significantly improve a range of important credit metrics. In addition, if the Company's ownership of Vedanta Limited increases to at least 90%, the Take Private Transaction may enable the Company to achieve an increase in attributable EBITDA, a reduction in attributable net debt and a significant increase (up to 80%) in access to cash flow by the Company. Negative publicity related to the failure to consummate the Take Private Transaction could negatively affect the reputation of Vedanta and/or the trading prices of the securities of any of the Company's subsidiaries that have publicly traded securities. Furthermore, if the Acquirers do not accept the final offer price (determined as per reverse book building process as specified under the Delisting Regulations) within five Working Days after the closure of the RBB Period or, if a counter offer has been made in accordance with the Delisting Regulations, the counter offer price has not been accepted by the Public Shareholders, Issuer will be required to redeem the Bonds. See the sections entitled "*Risk Factors — Risks Relating to the Bonds, the Guarantee and the Collateral — The Take Private Transaction is subject to many conditions, uncertainties and risks and, if it is not consummated, the Issuer will be required to redeem the Bonds*." and "*Terms and Conditions of the Bonds — Redemption and Purchase — Special Mandatory Redemption*" for more information.

Even if the Take Private Transaction is consummated, there is also a risk that the increase in attributable EBITDA, reduction in attributable net debt or increase in access to cash flow which Vedanta expects to achieve through the privatisation of Vedanta Limited may not be realised or may be materially lower than estimated and the extent to which any of the other benefits will actually be achieved, if at all, or the timing of any such benefits, cannot be predicted with certainty. If Vedanta is unable to realise this accelerated debt reduction, there could be a material adverse effect on Vedanta's financial conditions, including Vedanta's ability to meet the financial covenants and ratios. See the section entitled "*Risk Factors — Risks Relating to Business — Vedanta is subject to covenants under its credit facilities including term loans and working capital facilities that limit its flexibility in managing its business*." for more information.

Furthermore, the Bridge Facility Agreement would increase Vedanta's short-term debts, given the facility have a maturity of three months. Additionally, any further indebtedness that Company may raise to fund the Take Private Transaction (including completion of all payment obligations as specified under the Delisting Regulations) may also result in increasing debts. There can be no assurance that any such repayment obligation will not have an impact on Vedanta's cash flows and its ability to distribute existing cash and, in turn, Vedanta's liquidity, cash position and financial position.

Third party interests in Vedanta's subsidiaries and restrictions due to stock exchange listings of Vedanta's subsidiaries will restrict Vedanta's ability to deal freely with its subsidiaries which may have a material adverse effect on its results of operations and financial condition.

Vedanta does not wholly own any of its operating subsidiaries, although it holds majority stakes in all of its subsidiary businesses. Although Vedanta has direct or indirect management control of Vedanta Limited, BALCO, HZL, KCM and Black Mountain Mining, each of these companies has other shareholders who, in some cases, hold substantial interests. As a result of the non-controlling interests in Vedanta's subsidiaries and affiliates and the Indian stock exchanges and/or NYSE listings of Vedanta Limited and HZL, these subsidiaries may be subject to additional legal or regulatory requirements, or Vedanta may be prevented from taking certain courses of action without the prior approval of a particular or a specified percentage of shareholders and/or regulatory bodies (under shareholders' agreements, relationship agreements or by operation of law). The existence of minority or other interests in, and stock exchange listings of, Vedanta's subsidiaries may limit its ability to increase its equity interests in these subsidiaries, combine similar operations, utilise synergies that may exist between the operations of different subsidiaries, move funds among the different parts of its businesses or reorganise the structure of Vedanta's business in a tax efficient manner, which may have a material adverse effect on its results of operations and financial condition.

ONGC amongst others is Vedanta's joint venture partner with respect to all operating assets of Vedanta's oil and gas business, and Vedanta Limited operates all of its oil and gas assets except KGONN-2003/1. Accordingly, any mismanagement of an oil and gas asset by Vedanta Limited may give rise to liabilities to its joint operation partners in respect of such asset. There is also a risk that other parties with interests in Vedanta's assets may elect not to participate in certain activities relating to those assets which require such party's consent. In such circumstances, it may not be possible for such activities to be undertaken by Vedanta alone or in conjunction with other participants at the desired time or at all. In addition, other joint operation partners may default in their obligations to fund capital or other funding obligations in relation to the assets. In certain circumstances, Vedanta may be required under the terms of the relevant operating agreement to contribute all or part of any such funding shortfall, which could adversely impact Vedanta's business, financial condition or results of operations.

Vedanta is exposed to competitive pressures in the various businesses in which it operates.

The mines and minerals, commercial power generation, and oil and gas industries are highly competitive. Vedanta will continue to compete with other industry participants in the search for and acquisition of mineral and oil and gas assets and licences. Competitors include companies with, in many cases, greater financial resources, local contacts, staff and facilities than those of Vedanta.

Competition for exploration and production licences as well as for other investment or acquisition opportunities may increase in the future. This may lead to increased costs in the carrying out of Vedanta's activities, reduced available growth opportunities and may have a material adverse effect on its businesses, financial condition, results of operations and prospects.

Currency fluctuations among the Indian Rupee, other currencies and the US dollar could have a material adverse effect on Vedanta's results of operations.

Although substantially all of Vedanta's revenue is tied to commodity prices that are typically priced by reference to the US dollar, most of its expenses are incurred and paid in Indian Rupee and, to a lesser extent, in South African Rand, Zambian Kwacha, Namibian dollar and Liberian dollar. In addition, in Fiscal Year 2020, 64.9% of Vedanta's revenue was derived from commodities that were sold to customers within India. The exchange rates between the Indian Rupee and the US dollar and between other currencies and the US dollar have changed substantially in recent years and may fluctuate substantially in the future. See the section entitled "*Management's Discussion and Analysis of Financial Condition and Results of Operations — Exchange Rate Risk*" for more information. Vedanta's results of operations and financial condition could be adversely affected if the US dollar depreciates against the Indian Rupee or other currencies. Vedanta seeks to mitigate the impact of short-term movements in currency on its businesses by hedging its short-term exposures progressively based on their maturity. However, large or prolonged movements in exchange rates may have a material adverse effect on Vedanta's results of operations and financial condition.

Any business acquisitions by Vedanta entails significant risks.

Vedanta may continue to pursue acquisitions to expand its business. There can be no assurance that Vedanta will be able to identify suitable acquisition, strategic investment or joint venture opportunities, obtain the financing necessary to complete and support such acquisitions, investments or joint ventures, integrate such businesses, investments or joint ventures or that any business acquired will be profitable. If Vedanta's Indian subsidiaries attempt to acquire non-Indian companies, they may not be able to satisfy certain Indian regulatory requirements for such acquisitions and may need to obtain prior approval of the RBI, which they may not be able to obtain. The funding of such acquisitions by Vedanta may require certain approvals from regulatory authorities in India.

In addition, acquisitions and investments involve a number of risks, including possible adverse effects on Vedanta's operating results, diversion of management's attention, loss of goodwill on account of change in ownership, failure to retain key personnel, risks associated with unanticipated events or liabilities, including environmental liabilities, and difficulties in the assimilation of the operations, technologies, systems, services and products of the acquired businesses or investments. Any failure to achieve successful integration of such acquisitions or investments could have a material adverse effect on Vedanta's business, results of operations and financial condition.

Vedanta's insurance coverage may prove inadequate to satisfy future claims against it.

Vedanta maintains insurance which it believes is typical in the respective industries in which it operates and in amounts which it believes to be commercially appropriate. Nevertheless, Vedanta may become subject to liabilities, including liabilities for pollution or other hazards, against which it has not insured adequately or at all, or cannot insure. Vedanta's insurance policies contain certain customary exclusions and limitations on coverage which may result in its claims not being honoured to the full extent of the losses or damages it has suffered. In addition, Vedanta's operating entities in India can only seek insurance from domestic insurance companies or foreign insurance companies operating in joint ventures with Indian companies and these insurance policies may not continue to be available at economically acceptable premiums. The occurrence of a significant adverse event, the risks of which are not fully covered or honoured by such insurers, could have a material adverse effect on Vedanta's results of operations and financial condition.

Defects in title or loss of any leasehold interests in Vedanta's properties could limit its ability to conduct operations on such properties or result in significant unanticipated costs.

Vedanta's ability to mine the land on which it has been granted mining lease rights and to make use of its other industrial and office premises is dependent on its acquisition of surface rights. Surface rights and title to land are required to be negotiated separately with landowners, although there is no guarantee that these rights will be granted. Any delay outside of the ordinary course of business in obtaining or inability to obtain or any challenge to its title or leasehold rights to surface rights could negatively affect its financial condition and results of operations.

In addition, there may be certain irregularities in title in relation to some of Vedanta's owned and leased properties. For example, some of the agreements for such arrangements may not have been duly executed and/or adequately stamped or registered in the land records of the local authorities or the lease deeds may have expired and not yet been renewed. Since registration of land title in India is not centralised and has not been fully computerised, the title to land may be defective as a result of a failure on Vedanta's part, or on the part of a prior transferee, to obtain the consent of all such persons or duly complete stamping and registration requirements. The uncertainty of title to land may impede the processes of acquisition, independent verification and transfer of title, and any disputes in respect of land title that Vedanta may become party to may take several years and considerable expense to resolve if they become the subject of court proceedings. Further, certain of these properties may not have been constructed or developed in accordance with local planning and building laws and other statutory requirements, or it may be alleged that such irregularities exist in the construction and development of the built up properties. For example, BALCO has 1,804.67 acres of government land out of which 1,751 acres is situated in forest land which was given on lease by the state government. The lease deed has not been executed as on date as a petition was filed in the Supreme Court of India against BALCO in relation to the alleged encroachment of land on which the Korba smelter is situated. Any such dispute, proceedings or irregularities may have an adverse impact on the operations of Vedanta. See the section entitled "*Business — Litigation — BALCO is involved in litigation in relation to the illegal felling of trees situated on forest land*." for more information.

Vedanta could be subject to weaknesses, disruptions, failures or infiltrations of, or inadequacies in, its information technology systems.

Vedanta is dependent on the capacity and reliability of the communications, information and technology systems supporting its operations. Vedanta is exposed to operational risks, such as data entry or operational errors or interruptions of its financial, accounting, compliance and other data processing systems, whether caused by the failure to prevent or mitigate data losses and other security breaches, or other cyber security threats or attacks, fire or other disaster and power or telecommunications failure, which could result in a disruption of its business, liability to third parties, regulatory intervention, or reputational damage, and thus have a material adverse effect on its business.

Although Vedanta has back-up systems and cyber security measures in place, its back-up procedures, cyber defences and capabilities in the event of a failure, interruption, or breach of security may not be adequate. Insurance and other safeguards Vedanta use may not be available or may only partially reimburse it for losses related to operational failures or cyber-attacks.

As Vedanta grows and its reliance on information technology and systems increases, protecting systems from cyber security attacks and threats may become increasingly challenging and costly. Vedanta may be unable to prevent or address any disruption to the operation of its information technology systems in a timely manner, or upgrade its information technology or communications systems. Any such failure could result in its inability to perform, or result in prolonged delays in the performance of, critical business and operational functions, the loss of key business information and data, or a failure to comply with regulatory requirements.

The equity shares of the Issuer and the Company are not listed and therefore the Issuer and the Company are not subject to the disclosure and corporate governance requirements that listed companies are required to comply with.

The equity shares of the Issuer and the Company are not listed or traded on any stock exchange. Whilst the Company has other listed debt instrument which may require disclosure of certain information from the Company, Bondholders will not have the benefit of the disclosure and corporate governance requirements that are imposed on companies that have publicly listed equity shares.

Furthermore, if the Take Private Transaction is successful and Vedanta Limited is no longer listed, certain rules on disclosure and corporate governance imposed by the Indian Stock Exchanges or the NYSE (such as rules for interested or related party transactions) will no longer apply to Vedanta Limited and its affiliates, including the Company. There can be no assurance that, once Vedanta Limited has successfully been delisted, Vedanta will continue to uphold its current corporate governance measures and policies, including in relation to interested or related party transactions.

Third party statistical and financial data in this Offering Circular may be incomplete or unreliable.

Information regarding market position, growth rates and other industry data pertaining to Vedanta's businesses contained in this Offering Circular consists of estimates based on data reports compiled by professional organisations and analysts, data from other external sources and Vedanta's knowledge of the markets in which Vedanta competes. The Company has not independently verified data obtained from industry publications and other sources referred to in this Offering Circular and, therefore, while the Company believe them to be true, the Company cannot assure you that they are complete or reliable. Such data may also be produced on different bases from those used in other industry publications. Therefore, discussions of matters relating to the economy and the industries in which Vedanta operates in this Offering Circular are subject to the caveat that the statistical and other external data upon which such discussions are based may be incomplete or unreliable. In many cases, there is no readily available external information (whether from trade or industry associations, government bodies or other organisations) to validate market-related analyses and estimates, so the Company relies on internally developed estimates. Similarly, while the Company believes its internal estimates to be reasonable, such estimates have not been verified by any independent sources and the Company cannot assure potential investors as to their accuracy.

A downgrade in Vedanta's credit ratings or the ratings assigned to the Bonds may adversely affect Vedanta's ability to access capital.

On 24 March 2020, S&P lowered its long-term foreign currency issuer credit rating for Vedanta and its long-term issue rating on Vedanta's existing issued or guaranteed bonds to 'B-' from 'B' due to weakened liquidity and increased refinancing risk due to lower commodity prices and recent volatility in capital markets. On 11 August 2020, S&P also assigned a preliminary ″B″ rating to Vedanta Resources Limited's proposed senior secured notes reflecting the company's post privatisation issuer credit rating. This is driven by S&P's expectation that privatisation will improve Vedanta Resources' liquidity and financial flexibility to refinance the debt, likely resulting in a one notch higher rating on closure of transaction. S&P also placed on "Creditwatch Developing" the "B-" long term foreign currency issuer rating on Vedanta Resources Limited's and the "B-" long term issue rating on the US dollar denominated senior unsecured notes issued or guaranteed by the company to reflect the uncertainty around the take private of Vedanta Limited.

On 4 March 2020, Moody's lowered Vedanta's corporate family ratings to 'B1' from 'Ba3' and lowered the ratings on Vedanta's existing issued or guaranteed bonds to 'B3' from 'B2'. On 28 July 2020, Moody's confirmed the Company's 'B1' Corporate Family Rating and 'B3' rating on the senior unsecured bonds and changed the outlook on the ratings to negative from ratings under review for downgrade. The confirmation of the ratings is driven by Moody's expectation of stretched credit profile in Fiscal Year 2021 in the wake of the COVID-19 pandemic and expected recovery in credit metrics appropriate for the current rating in Fiscal Year 2022. The negative outlook takes into account heightened refinancing risk in challenging market conditions.

In addition, the Bonds are expected, on the Closing Date, to be rated 'B3' by Moody's and preliminary 'B' by S&P. These ratings of the Bonds may be reviewed and changed at any time by one or more of these agencies, and they may be lowered or withdrawn entirely in the future. A suspension, reduction or withdrawal at any time of the ratings assigned to the Bonds may adversely affect the market price of the Bonds.

Operating Risks

Vedanta's oil and gas business is substantially dependent upon its Rajasthan oil and gas fields, and any interruption in the operations at those fields could have a material adverse effect on Vedanta's results of operations and financial condition.

Vedanta's results of operations have been and are expected to continue to be substantially dependent on the reserves, production and cost of production of the Rajasthan Block, and any interruption in the operations or exploration and development activities at those oil and gas fields for any reason could have a material adverse effect on Vedanta's results of operations and financial condition. The Rajasthan Block produced 91.4% of Vedanta's average daily net operated production from the oil and gas business in Fiscal Year 2020, and oil and gas from the Rajasthan Block constituted 94.0% of Vedanta's net aggregate proved plus probable oil and gas reserves and 2C resources on a barrel of oil equivalent basis as of 31 March 2020. Vedanta's ongoing capital expenditure programme has focused on development and exploration activities across all the assets with approximately 85.0% of the capital expenditure for Fiscal Year 2020 having been invested in the Rajasthan Block.

See also the section entitled "*Business — Litigation — Writ petition filed in the Delhi High Court by Vedanta Limited relating to extension of tenure of the Rajasthan Block PSC*" for more information.

Vedanta's oil and gas business involves joint venture partnerships under the PSC framework. Differences of opinion between partners and regulators may occur on cost recovery and other PSC provisions which may adversely impact the financial position of the Company.

The operating blocks of Vedanta's oil and gas business operates under the Production Sharing Contract (PSC) regime. These operating blocks have joint venture partners.

Pursuant to the provisions of the joint operating agreement, ONGC in Rajasthan has an obligation to pay the cash calls raised for the smooth functioning of the petroleum operations. However, ONGC has withheld payment of certain cash calls. In addition, the cash call payments are being settled at exchange rates per ONGC's own benefit.

The GOI issued an office memorandum on 1 February 2013 which prescribes the guidelines for exploration of oil and gas and prescribes the procedure for recovering exploration costs. Through another memorandum on 24 October 2019, the GOI clarified that all approved costs incurred on exploration activities, both successful and unsuccessful, are recoverable in the manner prescribed in the office memorandum. While Vedanta believes that the cost recovery mechanism prescribed in the memorandum is not applicable between joint venture parties, there is no assurance that ONGC will take the same view.

Apart from the above, the issue of cost oil finalisation was listed as one of the conditions of the PSC extension. ONGC has been taking positions which are contrary to Vedanta's application and interpretation of the joint operating agreement, the PSC and certain office memorandum/notifications issued by the GOI. The GOI, in a recent communication in December 2019, removed the condition of cost oil finalisation from the grant of the PSC extension.

Separately, Vedanta filed a Notice of Arbitration dated 1 March 2019 against ONGC with respect to the issue of cost oil finalisation. ONGC filed its response on 12 April 2019 and the Arbitral Tribunal stands constituted. A Statement of Claim was filed by Vedanta on 31 January 2020, in accordance with the procedural timetable. In parallel, on 10 May 2019, ONGC filed an interim application before the High Court of Delhi under Section 9 of the (Indian) Arbitration Act in respect of their claims. No order has been passed in the matter and the matter is now pending for next date of hearing.

The Director General of Hydrocarbons (the "DGH") has objected to certain costs being claimed by Vedanta as part of its cost oil computation and has thus demanded an additional sum of $808 million on account of the government's share of profit oil for earlier years.

Thereafter, the DGH notified the audit exceptions for the audit conducted during Fiscal Year 2018 on 29 January 2020, wherein the original demand of $808 million as at 31 March 2017 was revised to $942 million as at 31 March 2018. Also, the DGH raised the demand of $530 million on account of ongoing cost oil settlement with ONGC which is subject to arbitration. Henceforth, the DGH has raised a total gross demand of $1,472.56 million up to 31 March 2018 and also levied interest thereon of $257.5 million.

Vedanta has disputed the same together with all the other audit exceptions for the said year and for the subsequent year, notified as of date, as in Vedanta's view the audit notings are not in accordance with the PSC and are entirely unsustainable and as per PSC provisions, having been disputed, the notings do not prevail and accordingly do not result the in the creation of any liability. Vedanta has reasonable grounds to defend itself which are supported by independent legal opinions. Vedanta's oil and gas business proposed issues relating to audit observations to be referred for expert determination in accordance with the provisions of the PSC. On 14 May 2020, Vedanta has also invoked the PSC process for resolution of disputed exceptions and has issued notice for arbitration. The response from the GOI is awaited.

Vedanta's oil and gas operations may be subject to operating risks which may have a material adverse effect on the financial condition and results of operations of Vedanta.

Vedanta has operating and maintenance procedures to maintain the integrity of its production facilities but there is a risk that unplanned events, inadequate application of these procedures or higher levels of corrosion than expected could disrupt to production, which would have an adverse impact on oil sales, which ultimately could materially and adversely affect the financial condition and operating results of Vedanta.

The waxy nature of crude oil requires Vedanta to use hot water injection as the recovery technique at these fields and ensure that the crude oil is transported through the main 24 inch insulated oil pipeline which maintains the required temperature of the crude oil. If the temperature of the injection water is not maintained at the required level, the required injection rate may not be able to be maintained, therefore the overall field production rate and ultimate recovery may be adversely impacted. Similarly, if the specialised heating system does not perform as expected and/or there are problems associated with the performance of the heating stations and/or there are problems supplying fuel to the power generation systems at these heating stations, the temperature of the crude oil may not be maintained at the required temperature, which would have an adverse impact on the rates at which oil can be transported through the pipeline network. Any reduction in its crude oil production and/or estimates of ultimate recovery may have a material adverse effect on Vedanta's business, results of operations and financial condition.

Currently, the power generation and heating requirements are being supplied by a power plant that has been installed and commissioned at the Mangala processing terminal ("MPT"). The power plant has been designed to use associated natural gas from the Mangala field supplemented as required by natural gas from the Raageshwari Deep gas field which is located in the Rajasthan Block approximately 80 km from the MPT. Further, this has been augmented by an alternative energy source in the form of grid power supply of 14 MW capacity. Sustained failure of power systems due to unavailability of fuel supply and/or grid power availability could lead to operations disruption, having a material adverse effect on Vedanta's results of operations and financial condition.

Vedanta is using hot water injection to maintain reservoir pressure and to optimise crude oil recovery at the Mangala, Bhagyam and Aishwariya fields. The source water for these fields is being, and will continue to be, provided from water production wells drilled in the Thumbli saline aquifer in the Barmer basin and connected to the MPT.

Extraction of saline water also requires the approval of the relevant authorities. There can be no assurance that the estimated impact of the expected water extraction from the Thumbli groundwater flow is accurate. A failure to extract and transport the required amount of water during the production life of the existing and currently planned developments, or an inaccurate prediction of the impact on the groundwater flow of Vedanta's activities, or revocation of the authorities' approval to extract saline water, may require Vedanta to access alternative water sources resulting in increased capital expenditure.

In addition, there can be no assurance that the local community will not seek to hold Vedanta Limited responsible for any invasion of the fresh water supply by saline groundwater from the aquifer. Although the appropriate authority has given its consent for the extraction of saline groundwater from Thumbli, it is possible that will be perceived by the local Barmer community to be directly or indirectly responsible for any shortage of fresh water or deterioration in water quality. In such an event, local authorities, who have given permission to use the saline groundwater, may require Vedanta to access alternative water sources, which could impose additional cost and logistical/operational challenges, thereby having a material adverse effect on Vedanta's business, operating results and financial condition.

The field development plans for the Northern Fields assume, or are expected to assume, the use of enhanced oil recovery or enhanced oil recovery techniques to extract an additional incremental percentage of the estimated oil in place in the reservoirs. Enhanced oil recovery screening studies of the Northern Fields have concluded that polymer flooding or alkaline surfactant polymer, or ASP, flooding, two common enhanced oil recovery techniques, are the preferred enhanced oil recovery options. Risks associated with the project include inadequate processing of produced fluids thereby impacting performance of surface facilities and continuous sourcing of polymer for ongoing operations. Further, if the polymer is not maintained at the correct temperature in the reservoir and the desired viscosity, then it may degrade and not function correctly, thereby reducing the incremental amount of crude oil that is expected to be recovered. There is also a risk that the polymer handling facilities at the surface may perform at lower efficiency than designed, which may lead to degradation of the polymer and ultimately its higher consumption. All of these factors could have a material adverse effect on Vedanta's business, results of operations, financial condition and prospects.

The MPT facilities, which are designed to separate oil, gas and water in the produced fluid, may not function as designed over the producing life of the fields whose production is processed at the MPT facilities. This may result in the crude oil not meeting pipeline export specifications, which may mean that any such crude oil either cannot be sold or will be sold at a significant discount to the agreed crude oil sales price, which could have a material adverse effect on Vedanta's business, operating results and financial condition.

Future production from Vedanta's assets may vary from the forecast.

Vedanta estimates the annual metal production and the mine life through a detailed mine plan for both open pit and underground mines and the oil and gas production rates and field life through the field development plans. These mine plans and field development plans are prepared based on Vedanta's estimates of future mine and field performance. Future performance is subject to a number of risks including geological conditions being more complex than originally predicted, ore grade being different from estimates, future producer or injector well performance, plant operating efficiencies being less than originally forecast, inadequate power, water or utility supplies, and other constraints. Vedanta's zinc and lead mining operations in India are currently transitioning from open pit mining operations to underground mining operations. Difficulties in managing this transition may result in challenges in achieving stated business milestones. Any material fall in production from the current production level or from the estimates due to some or all of the risks detailed above may adversely impact Vedanta's business, financial condition and results of operations.

Plateau production rates from the Rajasthan fields may be less than forecast. The estimates of production rates and field life contained in the field development plans for the Mangala, Bhagyam, Aishwariya, Raageshwari, Saraswati, NI and NE fields which were submitted to, and approved by, the Rajasthan Block PSC management committee are based on Vedanta's estimates of future field performance. Where any estimates of future production rates are in excess of the existing approved field plateau production rates, the consent of the joint venture partner, the appropriate regulatory authorities and the GOI will be required before any of the fields can be produced at these enhanced estimates of future production rates. If consent of the joint venture partner is delayed or not obtained, production would be limited to the rate set out in the field development plan, which would have a detrimental impact on Vedanta's operating results. Future field performance is subject to a number of risks that are beyond the control of Vedanta. See the section entitled "*Risk Factors — Risks Relating to Business — There are uncertainties inherent in estimating Vedanta's Ore Reserves and Mineral Resources and oil, condensate and sales-gas reserves, and if the actual amounts of such reserves and resources are less than estimated, its results of operations and financial condition may be materially and adversely affected.*" for more information.

Vedanta's zinc business is substantially dependent upon its Rampura Agucha lead-zinc mine, and any interruption in the operations at that mine could have a material adverse effect on Vedanta's results of operations and financial condition.

The Rampura Agucha lead-zinc mine produced 52.8% of HZL's total mined zinc metal in concentrate produced in Fiscal Year 2020 and constituted 34.1% of Vedanta's total Proved and Probable zinc Ore Reserves as of 31 March 2020. Vedanta's India zinc business provided 41.0% of Vedanta EBITDA in Fiscal Year 2020. Vedanta's results of operations have been and are expected to continue to be substantially dependent on the Ore Reserves and low cost of production of the Rampura Agucha mine, and any interruption in the operations at that mine for any reason could have a material adverse effect on Vedanta's results of operations and financial condition.

There are uncertainties inherent in estimating Vedanta's Ore Reserves and Mineral Resources and oil, condensate and sales-gas reserves, and if the actual amounts of such reserves and resources are less than estimated, its results of operations and financial condition may be materially and adversely affected.

There are uncertainties inherent in estimating the quantity of Ore Reserves and Mineral Resources and in projecting future rates of production, including factors beyond the control of Vedanta. Estimating the amount of Ore Reserves and Mineral Resources is a subjective process, and the accuracy of any estimate is a function of the quality of available data and engineering and geological interpretation and judgement. Estimates of different Competent Persons/Experts may vary, and results of exploration, mining and production subsequent to the date of an estimate may lead to revision of estimates. For example, fluctuations in the market price of ore and other commodities, reduced recovery rates or increased production costs due to inflation or other factors may render Proved and Probable Ore Reserves containing relatively lower grades of mineralisation uneconomic to exploit and may ultimately result in a restatement of Ore Reserves. If the assumptions upon which estimates of Ore Reserves or Resources have been based prove to be incorrect, or if Ore Reserve estimates differ materially from mineral quantities or grades that Vedanta may actually recover, estimates of mine or field life may prove inaccurate and market price fluctuations and changes in operating and capital costs may render certain Ore Reserves, mineral deposits or oil and gas deposits uneconomical to extract.

For example, there are differences between Vedanta Limited's estimates of its reserves and contingent resources and the estimates of DeGolyer and MacNaughton, independent petroleum engineering consultants, due to their different methodologies. Please see the section entitled "*Business — Description of the Businesses — Oil and Gas Business — DeGolyer and MacNaughton's Estimates of Reserves*" for more information.

This Offering Circular, including Annex A — "*Life of Mines*" and Annex B — "*Mineral Resources (exclusive reporting basis)*", uses the term "resources," which are comprised of "measured," "indicated" and "inferred" Mineral Resources. See Annex B — "*Mineral Resources (exclusive reporting basis)*". United States investors are advised that while such terms are recognised by some investors, the SEC does not recognise them. There is a great amount of uncertainty as to the existence of "inferred" Mineral Resources and uncertainty as to their technical, economic and legal feasibility. It cannot be assumed that all or any part of an "inferred" Mineral Resource will ever be upgraded to a higher category. Under SEC rules, estimates of "inferred" Mineral Resources may not form the basis of feasibility or other economic studies. Investors should not assume that all or any part of "measured" or "indicated" Mineral Resources will ever be converted into Ore Reserves and are also cautioned not to assume that all or any part of an "inferred" Mineral Resource exists or is economically or legally mineable. See the section entitled "*Presentation of Information — Basis of Presentation of Reserves and Resources — Cautionary Note to United States Investors Concerning Estimates of Measured, Indicated and Inferred Resources for Mining Operations*" for more information.

As a result, the Ore Reserves and Mineral Resources data contained in this Offering Circular are subject to material assumptions and uncertainties. If any of these assumptions and estimates turns out to be incorrect, Vedanta may need to revise its estimates downwards and this may adversely affect its business plans and the total value of its asset base, which could increase its costs and decrease profitability. If this occurs, Vedanta's results of operations and financial condition may be materially and adversely affected.

In addition, Annex B — "*Mineral Resources (exclusive reporting basis)*" contains management's life of mine estimates based on Mineral Resource plus Ore Reserves and current production rates. The reporting methodology for Mineral Resources differs from that of Ore Reserves under international reporting codes as certain factors (termed "Modifying Factors", such as mining losses and dilution) are included in the reporting of Ore Reserves, whereas Mineral Resources are reported on an in-situ basis. Accordingly, the two numbers are not added together under international reporting codes such as JORC (2012). Consequently, considerable caution should be exercised when considering life of mine estimates based on Mineral Resource plus Ore Reserves. Life of mine estimates which include Mineral Resources have been undertaken by Vedanta and have not been subject to review by the Independent Consultants named in this Offering Circular. See the section entitled "*Presentation of Information — Basis of Presentation of Reserves and Resources — Cautionary Note to United States Investors Concerning Estimates of Measured, Indicated and Inferred Resources for Mining Operations*" for more information.

Although Vedanta provides certain life of mine estimates on the basis of Ore Reserves and Mineral Resources, investors are cautioned to use the life of mine estimates based solely on Ore Reserves in Annex A — "*Life of Mines*" as the base case for any assessment of the life of a mine.

Litigation

In addition to the risks discussed in this section, please see the section entitled "*Business — Litigation*" for more information regarding litigation matters involving Vedanta.

Vedanta is involved in several litigation matters, both civil and criminal in nature, which could have a material adverse effect on its business, results of operations, financial condition and prospects.

Vedanta is involved in several legal and regulatory proceedings, including criminal matters, property disputes, labour disputes, alleged violations of environmental and tax laws, alleged violation of the provisions of the SEBI (Substantial Acquisition of Shares and Takeovers) Regulations, 2011 (the "Indian Takeover Code"), and alleged price manipulation of Vedanta Limited's equity shares on the Indian stock exchanges. Claims because of disputes concerning income tax, amounted to $841 million, of which $26 million was recorded as current liabilities, as of 31 March 2020. Other claims relating to matters such as sales tax, excise tax and electricity duty and third-party claimants amounted to $972 million as of 31 March 2020.

Further, certain subsidiaries of Vedanta are eligible for certain tax exemptions, incentives and benefits under local tax legislations due to the nature of their business operations. Whilst a subsidiary of Vedanta claim for such tax benefits, incentives and exemptions, as applicable, the tax authorities in several cases dispute and disallow such claims, which typically leads to tax litigation between that subsidiary and the tax authorities. Vedanta cannot assure that it will able to successfully defend such disputes, and any disallowance of claim amount in the final outcome of a dispute may adversely affect Vedanta's financial condition and results of operations.

Vedanta Limited has received a tax demand from the Indian tax authorities for not withholding tax on payments made while acquiring a subsidiary which, if payable, could have a material adverse effect on Vedanta Limited's businesses, operating results, financial condition and/or prospects.

In March 2015, Vedanta Limited received a notice from the tax authorities alleging failure by Vedanta Limited to withhold tax on the consideration paid to Cairn UK Holdings Limited ("CUHL"), its then holding company, in Fiscal Year 2007 in connection with a purchase of shares. The relevant purchase of shares relates to the acquisition of the shares of Cairn India Holdings Limited ("CIHL"), a 100% subsidiary of Vedanta Limited, from CUHL during Fiscal Year 2007, which was part of a group reorganisation by the then ultimate parent company, Cairn Energy plc ("Cairn Energy").

Based upon the retrospective amendment(s) made in 2012 by inserting explanation 5 of section 9(1)(i) of the Income Tax Act 1961 of India (the "Income Tax Act"), the tax authorities, by an order dated 11 March 2015, have raised a demand of approximately ₹204,947 million ($2,740 million) (comprising tax of approximately ₹102,474 million ($1,370 million) and interest of an equivalent amount) for not withholding tax on the consideration paid to CUHL in connection with the acquisition of shares of CIHL. The tax authorities have stated in the order that a short term capital gain of ₹245,035 million ($3,275 million) accrued to CUHL on the transfer of the shares of CIHL to Vedanta Limited in Fiscal Year 2007, on which tax should have been withheld by Vedanta Limited.

Vedanta understands that a tax demand has also been raised by the tax authorities on CUHL with respect to taxability of alleged capital gain earned by CUHL on whom the primary liability of tax lies. CUHL received an order from the Income Tax Appellate Tribunal (the "ITAT") on 9 March 2017 holding that the disposal of shares of CIHL is taxable in view of the clarification made in the Income Tax Act but also acknowledged that being a retrospective transaction, interest would not be levied, thereby affirming a demand of ₹102,480 million ($1,370 million) excluding the interest portion that had previously been claimed. The Indian Tax Department has appealed this order before the Delhi High Court. As a result of the above order from the ITAT, Vedanta now considers the risk in respect of the interest portion of claim to be remote. Further, as per the recent recovery notice dated 12 October 2018 received from the Tax Recovery Officer (the "TRO") appointed for CUHL, the outstanding tax demand of CUHL is approximately ₹49,960 million ($668 million) together with interests accrued. Further, in the said recovery notice, the Indian Tax Department has also instructed to remit the preference shares redemption amount including dividend payable thereon to the TRO. An amount aggregating to ₹6,070 million ($81 million) has been paid to the TRO on 26 October 2018 thus reducing the liability to ₹43,890 million ($587 million). Vedanta has also paid interim dividend of ₹40 million ($0.53 million) for Fiscal Year 2019 and ₹10 million ($0.13 million) for Fiscal Year 2020 to the TRO. Accordingly, Vedanta has revised the contingent liability to ₹43,840 million ($586 million) as of 31 March 2020.

On 27 March 2015, Vedanta filed a notice of claim against the GOI under the UK-India bilateral investment treaty (the "BIT") in order to protect its legal position and shareholder interests. Vedanta is of the opinion that it has a good case to defend as per provisions of the BIT, the benefit of which would ultimately accrue to Vedanta Limited. Vedanta filed its Statement of Claim on 22 June 2016 under the BIT. The International Arbitration Tribunal passed a favourable order on matters pertaining to jurisdiction and transparency. In May 2019, the International Arbitration Tribunal completed the hearing of merits of the case from the respective parties and will render an order to be passed in due course. The GOI challenged the jurisdiction and transparency orders of the Arbitration Tribunal before the High Court of Singapore where the High Court of Singapore heard the matter on 24 February 2020 and passed an order in favour of Vedanta on the same day. The GOI has appealed the decision and the matter is pending before the Singapore Supreme Court. In respect of the matter relating to jurisdiction, the High Court of Singapore held that it will take up the jurisdiction issue after receiving the International Arbitration Tribunal's award on the merits.

In the opinion of Vedanta, there should be no liability on Vedanta Limited on account of not withholding the taxes in Fiscal Year 2007 based on provisions of law prevailing at the time of transaction as the aforesaid retrospective amendment has cast an obligation on Vedanta Limited to deduct tax by having to predict and anticipate that the retrospective amendment will be made by the legislature on a future date. Vedanta Limited has approached the Delhi High Court against the order referred to above and has also filed an appeal before the Commissioner of Income Tax (Appeals) to defend its position. Relief was not granted by order of the Commission of Income Tax (Appeals) and Vedanta Limited filed an appeal against such order of the ITAT. The writ petition filed before Delhi High Court is listed for hearing on 28 September 2020. See the section entitled "*Business — Litigation — Vedanta Limited received a show cause notice from the Indian tax authorities for not withholding tax on payments made while acquiring a subsidiary*" for more information.

The GOI has disputed Vedanta Limited's exercise of the call option to purchase its remaining 29.5% ownership interest in HZL.

Arbitration is ongoing in relation to a dispute between the GOI and Vedanta Limited, with respect to Vedanta Limited's exercise of its second call option to acquire the remaining shares in HZL held by the GOI, pursuant to the shareholders' agreement between the parties. The GOI has refused to act upon the second call option, stating that Vedanta Limited's second call option violates the provisions of the Indian Companies Act, 1956, by restricting the right of the GOI to transfer its shares. In a related proceeding, the Supreme Court of India on 19 January 2016 ordered the status quo be maintained with respect to the proposed disinvestment of the government's interest in HZL until further orders are passed by the Supreme Court of India. On 9 January 2020, Vedanta Limited filed an early hearing application in the Supreme Court of India. On 13 August 2020, the Supreme Court passed an order removing the status quo order in place and has allowed the arbitration proceedings to continue. The matter will now be listed before the Supreme Court in 4 weeks' time. See the section entitled "*Business — Litigation*" for more information. Separately, Vedanta Limited has commenced proceedings against the GOI, which has disputed Vedanta Limited's exercise of the call option to purchase its remaining 29.5% ownership interest in HZL.

The arbitral proceedings might not result in a favourable outcome for Vedanta Limited. In such an event, Vedanta Limited may be delayed in its purchase of, or may be unable to purchase, the GOI's remaining 29.5% interest in HZL or may be required to pay a purchase price in excess of the market value or fair value of those shares, which may have a material adverse effect on Vedanta's operational flexibility, results of operations and financial condition.

The GOI has disputed Vedanta Limited's exercise of the call option to purchase its remaining 49.0% ownership interest in BALCO.

Certain proceedings are currently ongoing with respect to Vedanta Limited's exercise of its call option to acquire the remaining shares of BALCO held by the GOI, in accordance with the terms of the shareholders' agreement between the GOI and Vedanta Limited. The amount claimed under this proceeding is presently unquantifiable. On 25 January 2011, the arbitration tribunal formed under the directions of the High Court of Delhi declared an award rejecting Vedanta Limited's claim regarding the exercise of its second call option. According to the award, certain clauses of the shareholders' agreement including the clauses relating to the call option, the right of first refusal, the "tag-along" rights and the restriction on the transfer of shares were held to be void, ineffective and inoperative as being in violation of the provisions of the Indian Companies Act, 1956. In April 2011, Vedanta Limited filed an application under section 34 of the Arbitration and Conciliation Act, 1996 in the High Court of Delhi to set aside the award dated 25 January 2011 to the extent that it holds these clauses ineffective and inoperative. The GOI also filed an application before the High Court of Delhi to partially set aside the arbitral award dated 25 January 2011 in respect of certain matters involving valuation. The High Court of Delhi passed an order dated 10 August 2011 directing Vedanta Limited's application and the application by the GOI to be heard together as they arise from a common arbitral award. The matter is currently pending before the High Court of Delhi and the next date of hearing is scheduled for 11 August 2020. See the section entitled "*Business — Litigation — Vedanta Limited has commenced proceedings against the GOI, which the GOI has disputed Vedanta Limited's exercise of the call option to purchase its remaining 49.0% ownership interest in BALCO.*" for more information.

There is no assurance that the outcome of the challenge of the award will be in the favour of Vedanta Limited. In such an event, Vedanta Limited may be unable to purchase the GOI's remaining 49.0% interest in BALCO or may be required to pay a higher purchase price, should it decide to consummate such purchase, which may have a material adverse effect on Vedanta's business, financial condition and results of operations.

The Securities and Exchange Board of India ("SEBI") has brought proceedings alleging that Vedanta has violated regulations prohibiting fraudulent and unfair trading practises.

In 2001, SEBI brought certain proceedings relating to alleged violations by Sterlite (now Vedanta Limited) of regulations prohibiting fraudulent and unfair trading practises. See the section entitled "*Business — Litigation — Appeal proceedings in the High Court of Bombay brought by SEBI to overrule a decision by the Securities Appellate Tribunal of India that Vedanta Limited has not violated regulations prohibiting fraudulent and unfair trading practises*." for more information.

In addition to the civil proceedings, SEBI also initiated criminal proceedings in 2001 before the Court of the Metropolitan Magistrate, Mumbai, against Sterlite (now Vedanta Limited), Vedanta's Executive Chairman, Mr. Anil Agarwal, Sterlite's Director of Finance, Mr. Tarun Jain, and the chief financial officer of MEL at the time of the alleged price manipulation. When SEBI's order was overturned in October 2001, Vedanta Limited filed a petition before the High Court of Bombay to defend those criminal proceedings on the grounds that the Securities Appellate Tribunal of India had overruled SEBI's order on price manipulation. An order was passed by the High Court of Bombay on 2 December 2005 in Sterlite's (now Vedanta Limited's) favour, granting an interim stay of the criminal proceedings. The next date of hearing has not been fixed.

If any of the above matters are held against Vedanta Limited, it may be prohibited from accessing the Indian capital market for a specified period of time and/or may become liable to pay penalties. If Vedanta Limited and the individuals named in the criminal proceedings do not prevail, Vedanta's business and operations may be materially and adversely affected.

The GOI may allege a breach of a covenant by Vedanta and seek to exercise a put or call right with respect to shares of HZL, which may result in substantial litigation and serious financial harm to Vedanta's business, results of operations, financial condition and prospects.

Under the terms of the shareholders' agreement between the GOI and Sterlite, Vedanta Limited agreed that it would ensure that HZL would implement one mmtpa greenfield zinc smelter plant at Kapasan in the state of Rajasthan (the "Kapasan Project"), within five years from 11 April 2002.

In 2003, HZL notified the GOI that the Kapasan Project would not be undertaken and that a report of an independent expert may not be required. While Vedanta Limited has not received any notice of breach under the provisions of the abovementioned shareholders' agreement with respect to HZL, the GOI may claim that Vedanta Limited has breached the covenant related to the Kapasan Project as mentioned in the shareholders' agreement triggering an event of default. The GOI, under the terms of the shareholders' agreement, may become entitled to the right, which is exercisable at any time within 90 days from the day it became aware of such event of default, to either sell any or all of the shares of HZL held by the GOI to Vedanta Limited at a price equivalent to 150.0% of the market value of such shares, or purchase any or all of the shares of HZL held by Vedanta at a price equivalent to 50.0% of the market value of such shares.

If the GOI were to assert that an event of default occurred under the shareholders' agreement and seek to exercise a put or call right with respect to shares of HZL, Vedanta Limited may face expensive and time-consuming litigation over the matter, uncertainty as to the future of Vedanta Limited's zinc business, an inability to enforce Vedanta's call option to acquire the GOI's remaining 29.5% ownership interest in HZL and the possibility of serious financial harm if HZL were unsuccessful in litigation, any of which may have a material adverse effect on Vedanta's business, results of operations, financial condition and prospects. See the section entitled "*Material Contracts — HZL call options*" for more information.

Tax Risks

Vedanta may be liable for additional taxes if the tax holidays, exemptions and tax deferral schemes which it currently benefits from, expire without renewal, or if tax laws change.

Vedanta currently benefits from significant tax holidays, exemptions and tax deferral schemes, which apply for limited periods. For example, HZL's captive power plants at Dariba, Chanderiya, and Zawar benefit from tax exemptions on the profits generated from transfers of power to HZL's other units, which are expected to generate substantial savings. Vedanta Limited also has wind mills located in states such as Gujarat, Karnataka, Tamil Nadu, Maharashtra and Rajasthan and melting and casting plants at Pantnagar which are also eligible for tax exemption.

There can be no assurance that these and other tax holidays or exemptions will be renewed when they expire or that any application Vedanta makes for new tax holidays or exemptions will be successful. The expiry or loss of existing tax holidays, exemptions and tax deferral schemes or the failure to obtain new tax holidays, exemptions or tax deferral schemes will likely increase Vedanta's tax obligations, which could have a material adverse effect on its results of operation and financial condition.

In addition, Vedanta Limited is subject to a Minimum Alternate Tax ("MAT") which sets a minimum amount of tax that must be paid each year based on Vedanta Limited's book profits. Up to Fiscal Year 2019, the effective MAT rate was 21.5%, after applying surcharge and education cess. The Taxation Laws Amendment Act, 2019 reduced the MAT rate from 18.5% to 15% which along with the maximum surcharge of 12% and cess of 4% results into an effective MAT rate of 17.47% for Fiscal Year 2020. The MAT prevents Vedanta Limited from taking full advantage of any tax holidays, exemptions or tax deferral schemes that may be available to Vedanta Limited.

The Taxation Laws Amendment Act, 2019 has also introduced concessional tax regime for Indian companies pursuant to which (a) Indian companies incorporated on or after 1 October 2019 commencing manufacturing on or before 31 March 2023, can opt to offer the income to tax at an effective tax rate 17.16% subject to certain prescribed conditions and (b) other Indian companies can opt to offer the income to tax at the effective rate of 25.17% subject to a rate of certificate produced by the resident shareholders and certain prescribed conditions and after foregoing certain benefits/exemptions. In both these cases, the provisions of MAT would not be applicable. Under this new enactment, the Company can choose to opt for the new tax rates in the Fiscal Year 2020 (i.e. assessment year 2020-2021) or in any other financial year in the future. When the Company exercises this option, the chosen provision will apply for all subsequent years.

Considering the provisions under Section 115BAA and based on the expected timing of exercising the option by the respective Indian entities, Vedanta has re-measured its deferred tax balances as at 31 March 2020 and accordingly a deferred tax credit of $233 million has been recognised as at 31 March 2020.

Vedanta's other non-Indian subsidiaries could be considered as Indian tax residents and may be taxable in India on their global profits if their 'place of effective management' is in India in the relevant year.

Changes in tax laws could also result in additional taxes payable by Vedanta. Vedanta pays royalties and cess in relation to Vedanta's oil and gas business, to the state governments and the central government in India at rates determined by the respective governments, linked to the volume or value of oil that Vedanta produces. Any adverse changes in these fiscal terms may have an adverse effect on Vedanta's costs, results of operations and financial condition. Cess earlier being levied on volume was adversely affecting the net realisation in a declining oil price scenario. Since Fiscal Year 2016, levy of cess was made ad valorem basis which will have an adverse impact on Vedanta with increase in prices.

Industry Risks

If Vedanta cannot secure additional Reserves of oil and gas, copper, zinc, bauxite and iron ore that can be mined at competitive costs or cannot mine ore existing Ore Reserves at competitive costs, its profitability and operating margins could decline.

If Vedanta's existing copper, zinc and bauxite Ore Reserves cannot be mined at competitive costs or if Vedanta cannot secure additional reserves that can be mined at competitive costs, Vedanta may become more dependent upon third parties for copper concentrate, zinc concentrate and alumina. If Vedanta's existing iron Ore Reserves cannot be mined at competitive costs, Vedanta's iron ore business may become unprofitable. Because Vedanta's Ore Reserves decline as it mines the ore, Vedanta's future segment results and segment margins depend upon its ability to access Ore Reserves with geological characteristics that allow mining at competitive costs. Replacement reserves may not be available when required or, if available, may not be of a quality capable of being mined at costs comparable to the existing or exhausted mines.

Vedanta may not be able to accurately assess the geological characteristics of any Ore Reserves that it acquires, which may adversely affect its results of operations and financial condition. Because the value of Ore Reserves depends on that part of its mineral deposits that are economically and legally exploitable at the time of the reserve calculation, a decrease in metal prices may result in a reduction in the value of Ore Reserves that Vedanta obtains as less of the mineral deposits contained therein would be economically exploitable at the lower prices. Exhaustion of reserves at particular mines may also have an adverse effect on Vedanta's operating results that is disproportionate to the percentage of overall production represented by such mines. Further, with the depletion of reserves, Vedanta may face higher unit extraction costs per mine.

Vedanta's ability to obtain additional reserves in the future could be limited by restrictions under Vedanta's existing or future debt agreements, competition from its competitors, lack of suitable acquisition candidates, government regulatory and licencing restrictions, difficulties in obtaining mining leases and surface rights or the inability to acquire such properties on commercially reasonable terms, or at all. In addition, Vedanta is subject to various government limitations on its ability to mine. To increase production from Vedanta's existing copper, bauxite, lead-zinc and iron ore mines, it must apply for governmental approvals which it may not be able to obtain in a timely manner, or at all.

Changes in tariffs, royalties, customs duties and government assistance may reduce the domestic premium that Vedanta receives, which would adversely affect its profitability and results of operations.

Copper, zinc and aluminium are sold in the Indian market at a premium to the international market prices of these metals due to tariffs payable on the import of such metals. Between March 2003 and February 2011, basic customs duties on imported copper, zinc, lead and aluminium decreased cumulatively from 25.0% to 5.0%, and have remained at 5.0% since February 2011. With effect from 1 March 2016 basic customs duty on imported aluminium increased to 7.5%. The GOI may reduce customs duties further in the future, although the timing and extent of such reductions cannot be predicted. As Vedanta sells the majority of the commodities it produces in India, any further reduction in Indian tariffs on imports will decrease the premiums it receives in respect of those sales. Vedanta's profitability depends in part on the continuation of import duties, any reduction of which could have a material adverse effect on its results of operations and financial condition.

Vedanta pays royalties to the state governments of Chhattisgarh, Rajasthan, Goa and Karnataka based on the extraction of bauxite, lead-zinc and Iron ore. Most significant of these is the royalty that HZL is required to pay to the State Government of Rajasthan, where all of HZL's mines are located, at a rate of 10.0% of the zinc LME price payable on the zinc metal contained in the concentrate produced, 14.5% of the lead LME price payable on the lead metal contained in the concentrate produced and at a rate of 7.0% of silver LME price chargeable on silver-metal produced. Any upward revision to the royalty rates being charged currently may adversely affect Vedanta Limited's profitability. Additionally, the Department of Mines and Geology of the State of Rajasthan has raised additional demands for payment through several show cause notices to HZL for mining minerals associated with lead and zinc such as cadmium and silver. See the section entitled "*Business — Litigation — Proceedings relating to demands against HZL by the Department of Mines and Geology of the State of Rajasthan*." for more information.

Similarly, Vedanta Limited pays royalties and cess to the state governments and the Central government in India at rates determined by the respective governments, linked to the volume or value of oil produced. Any adverse changes in these fiscal terms may adversely affect its profitability. Cess earlier being levied on volume was adversely affecting the net realisation in a declining oil price scenario. Since Fiscal Year 2016, levy of cess was made on an ad valorem basis. Vedanta also pays royalties to the government from Vedanta's Zinc International business. In Vedanta's iron ore business in Karnataka, royalty/Special Purpose Vehicle contribution at 15% is borne by the buyer. Changes in tax laws could also result in additional taxes payable by Vedanta. See also the section entitled "*Risk Factors — Risk Relating to Business — Commodity prices may be volatile, which may have a material adverse effect on Vedanta's revenue, results of operations and financial condition*" for more information.

Towards the end of Fiscal Year 2015, the MMDR Act was notified which brought greater transparency in the granting of mineral concessions through an e-auction process. It also removed certain uncertainties relating to automatic renewals of mine leases for future periods. However, for existing mining leases, it notifies an amount not exceeding royalty, to be contributed to the District Mineral Foundation, or DMF, for the benefit of people affected by mining and an additional amount equivalent to 2% of royalty to the National Mineral Exploration Trust. The DMF contribution was notified at 30% of the base royalty rate in September 2015. Indian exports of copper, alumina, aluminium and zinc receive assistance premiums from the GOI, which have been reduced since Fiscal Year 2002 and may be further reduced in the future. Any reduction in these premiums will decrease the revenue Vedanta receives from export sales and may have a material adverse effect on its results of operations and financial condition.

Further, the GOI has enacted the GST regime with effect from 1 July 2017, which is a unified taxation system, intended to integrate the Indian economy into a single unified market. The GST regime replaces the prior indirect tax regime consisting of central excise law and Service Tax law at the central level and respective state value added tax law, entry tax law and luxury tax law at the state level. Pursuant to the GST regime, the central government enacted and notified in the Official Gazette, the Central Goods and Service Tax Act, 2017, the Integrated Goods and Service Tax Act, 2017, the Goods and Service Tax (Compensation to Sates) Act, 2017 and notifications, clarifications, orders and press releases under the aforementioned laws. Further, the state governments also enacted and notified the respective state goods and service tax laws including the notifications, clarifications, orders, and press releases under these laws. The enactment of the GST regime and consequent enactments passed by the central and state governments have necessitated changes and alignment in other laws such as the Legal Metrology Act, foreign trade policies and tariff rates under the Customs Act. However, GST is an evolving tax framework in India and any significant future amendments under GST may affect the overall tax efficiency, and may result in significant additional taxes becoming payable. Global protectionist measures, including anti-dumping laws, countervailing duties and tariffs and government subsidisation adopted or currently contemplated by governments in some of Vedanta's export markets could adversely affect its sales. Anti-dumping duty proceedings or any resulting penalties or any other form of import restrictions in other countries may limit Vedanta's access to export markets for its products, and in the future additional markets could be closed to Vedanta Limited as a result of similar proceedings, thereby adversely impacting its sales and/or limiting its opportunities for growth.

In addition, Vedanta is subject to the general risk of doing business overseas and may therefore be adversely affected by global trade wars. For example, there is global economic uncertainty following the recent announcement by the United States to levy certain import tariffs on certain Chinese goods.

There are general risks relating to the operation of Vedanta's commercial power generation business.

Vedanta has been building and managing captive power plants in India since 1997, some of which sell their surplus power on the market to third parties. In addition to these captive power plants, Vedanta also owns and operates several commercial power plants, the largest of which is Vedanta Limited's 2,400 MW thermal coal-based power plant in Jharsuguda.

Operating power plants on a stand-alone basis involves many operational risks which are unique to the commercial power generation business as compared to Vedanta's other businesses, including the following:

Dependence on third parties. Third parties must be hired for the construction, delivery and commissioning of power facilities, the supply and testing of equipment and transmission and the distribution of any electricity Vedanta generates and there are associated risks. For instance, contractors hired may not be able to complete construction and installation on time, within budget, or to the specifications in the contracts with them, or such contractors may otherwise cause delays in meeting project milestones or achieving commercial operation by the scheduled completion date, which could in turn cause forecast budgets to be exceeded or result in delayed payment by customers, invoke liquidated damages or penalty clauses or performance guarantees or result in termination of contracts. In addition, as a result of increased industrial development in India in recent years, the demand for contractors with specialist design, engineering and project management skills and services has increased, resulting in a shortage of and increasing costs of services of such contractors. There can be no assurance that such skilled and experienced contractors will continue to be available at reasonable rates, and Vedanta may be exposed to risks relating to the cost and quality of their services, equipment and supplies.

Dependence on coal. Vedanta may not receive the coal block allocations that it expects or, may not be allowed to use such allocations for its commercial power generation business. Any coal block allocations that Vedanta receives may not be sufficient for its planned operations and Vedanta may not be successful in procuring sufficient supply of coal at economically attractive prices, or at all. Moreover, the coal block allocation letters contain certain restrictive covenants which Vedanta is subject to, including specified end use and submission of mining plans within a certain specified period. Vedanta also could experience a shortfall in the quantity of coal against its requirement or receive lower quality coal, which can result in increased costs.

Power purchase agreements. The power purchase agreements ("PPAs") and other agreements that Vedanta has entered into, or may enter into, may require it to guarantee certain minimum performance standards, such as plant availability and generation capacity, to the power purchasers. If Vedanta's facilities do not meet the required performance standards, the power purchasers may not reimburse Vedanta for any increased costs arising as a result of its plants' failure to operate within the agreed norms, which may in turn have a material adverse effect on Vedanta's results of operations and financial condition.

Regulatory compliance. Power generation in India is a comprehensively regulated industry. See the section entitled "*Business — Indian Regulatory Matters — Power Sector*" for more information. In particular, national and state regulatory bodies and other statutory and government mandated authorities may from time to time impose minimum performance standards upon Indian power generation facilities (including Vedanta's facilities). Failure to meet these requirements could expose facility operators to the risk of financial penalties, the quantum of which will depend on the severity of non-compliance and, in severe cases of non-compliance, involve plant shut downs. For example, the MoEF on 7 December 2015 prescribed norms to reduce pollution from thermal power plants through flue gas desulphurization

("FGD") and alterations to stack height. This requires additional capital expenditure towards complying with these revised pollution guidelines without improving the cost efficiencies.

Any of the above results could have a material and adverse effect on Vedanta's business, financial condition and results of operations.

Vedanta's metals and mining operations are subject to operating risks common to the industries in which they operate that could result in decreased production, increased cost of production and increased cost of or disruptions in transportation, which could adversely affect its business, results of operations and financial condition.

The success of each of Vedanta's businesses is subject to operating conditions and events common to the industry in which it operates which are beyond its control that could, among other things, increase its mining, transportation or production costs, disrupt or halt operations at its mines and production facilities permanently or for varying lengths of time, or interrupt the transportation of Vedanta's products to its customers. These conditions and events include:

Disruptions in mining, drilling and production due to equipment failures, unexpected maintenance problems and other interruptions. All of Vedanta's operations are vulnerable to disruptions. Metal processing plants are especially vulnerable to interruptions, particularly where an event causes a stoppage which necessitates a shut down in operations. Stoppages in certain types of Vedanta's smelters, even if lasting only a few hours, can cause the contents of furnaces or cells to solidify, resulting in a plant closure for a significant period and necessitating expensive repairs, any of which could materially and adversely affect its results of operations and financial condition. For example, Vedanta aluminium smelters suffered due to a pot failure incident during Fiscal Year 2017 resulting in part stoppage of smelter and cost of repairs. Drilling may involve unprofitable efforts, not only with respect to dry wells, but also with respect to wells that are productive but do not produce sufficient net revenues to return a profit after drilling, operating and other costs.

Availability of raw materials for energy requirements. Any shortage of or increase in the prices of the raw materials needed to satisfy Vedanta's energy requirements may interrupt its operations or increase its cost of production. Vedanta is particularly dependent on coal which is used in many of its captive power plants. Vedanta's aluminium business, which has high energy consumption due to the energy intensive nature of aluminium smelting, is significantly dependent on receiving allocations from Coal India, the government owned coal monopoly in India.

Availability of water. The mining operations of Vedanta's zinc and aluminium businesses and its captive power plants depend upon the supply of a significant amount of water. There is no assurance that the water required for these operations will continue to be available for Vedanta in sufficient quantities or that the cost of water will not increase.

Disruptions to or increased costs of transport services. Vedanta depends upon seaborne freight, inland water transport, rail, trucking, overland conveyor and other systems to transport bauxite, alumina, zinc concentrate, copper concentrate, iron ore, oil, natural gas, metallurgical coke, pig iron, coking coal and other supplies to its operations and to deliver its products to customers. Any disruption to or increase in the cost of these transport services, including as a result of fuel cost increases, interruptions that decrease the availability of these transport services or increases in demand for transport services from Vedanta's competitors or from other businesses, or any failure of these transport services to be expanded in a timely manner to support an expansion of Vedanta's operations, could have a material adverse effect on its business, results of operations and financial condition.

Accidents at mines, smelters, refineries, cargo terminals and related facilities, including as a result of the occurrence of natural disasters. Any accidents or explosions, including as a result of the occurrence of natural disasters, causing personal injury, property damage or environmental damage at or to Vedanta's mines, smelters, refineries, cargo terminals and related facilities may result in significant losses, expensive litigation, imposition of penalties and sanctions or suspension or revocation of permits and licences. Risks associated with open-pit mining operations include flooding of the open-pit and collapses of the open-pit wall. Risks associated with underground mining operations include underground fires and explosions (including those caused by flammable gas), cave-ins or ground falls, discharges of gases or toxic chemicals, flooding, sinkhole formation and ground subsidence. Injuries to and deaths of workers at Vedanta's mines and facilities have occurred in the past and may occur in the future.

Strikes and industrial actions or disputes. The majority of Vedanta's workforce is unionised. Strikes and industrial actions or disputes have occurred in the past and may occur in the future, which may lead to business interruptions and halts in production for Vedanta.

Additionally, while Vedanta has in place operating and maintenance procedures to maintain the integrity of its production facilities, unplanned events, such as theft and industrial damage, could adversely affect operations.

Tailings dam failure. A release of waste material from tailings dams of any of Vedanta's production facilities may lead to loss of life, injuries, environmental damage, reputational damage, financial costs and production impacts. Tailings dam failure is considered to be a catastrophic risk, which is a very high severity but very low frequency event that must be treated with the highest priority. The occurrence of any of these conditions or events could have a material adverse effect on Vedanta's business, results of operations and financial condition.

Oil and gas exploration and production operations by Vedanta Limited or operators of assets in which it has an interest involve risks normally incidental to such activities, such as natural disasters and geological uncertainties, over which Vedanta has no control.

Oil and gas exploration and production operations by Vedanta Limited or operators of assets in which it has an interest involve risks normally incidental to such activities, including blow-outs, oil spills, gas leaks, explosions, fires, equipment damage or failure, natural disasters, unexploded ordinance, geological uncertainties, unusual or unexpected rock formations and abnormal pressures. Offshore operations are also subject to natural disasters as well as to hazards inherent in marine operations and damage to pipelines, platforms, facilities and sub-sea facilities from trawlers, anchors and vessels. Vedanta Limited's producing fields are located in areas that can be subject to extreme weather conditions, flooding, earthquake and other natural disasters.

Additionally, Vedanta Limited or the operators of assets in which it has an interest may face interruptions or delays in the availability of equipment or infrastructure, including seismic survey vessels, rigs, pipelines and storage tanks, on which oil and gas exploration and production activities are dependent. Such interruptions or delays could result in disruptions to exploration activities, production, oil and gas off-take arrangements, increased costs, and may have a material adverse effect on Vedanta's businesses, prospects, financial condition and results of operations.

The occurrence of any of these events could result in environmental damage, injury to persons and loss of life, production delays, failure to produce oil or gas in commercial quantities or an inability to exploit fully discovered reserves.

Consequent delays to seismic, drilling or production activities and declines from normal field operating conditions can be expected to lead to increased costs or adversely affect revenue and cash flow levels to varying degrees. The majority of Vedanta Limited's oil and gas production is sourced from its interests in a limited number of PSCs or concessions. Problems in any PSC or concession could have a material adverse impact upon Vedanta's businesses and financial condition.

Oil and gas exploration activities are capital intensive and inherently uncertain in their outcome.

Oil and gas exploration activities are capital intensive and inherently uncertain in their outcome. There is a risk that Vedanta or the operators of assets in which it has an interest will undertake exploration activities and incur significant costs in so doing with no assurance that such expenditure will result in the discovery of hydrocarbons, whether or not in commercially viable quantities.

There are particular risks and hazards associated with underground mining.

Hazards associated with Vedanta's underground mining operations include underground fires and explosions, including those caused by flammable gas, cave-ins or ground falls, discharges of gases and toxic chemicals, flooding, sinkhole formation and ground subsidence and other accidents and conditions resulting from drilling and removing and processing material from an underground mine. If any of these hazards or accidents result in significant injury to employees and damage to equipment or other property, Vedanta may experience unexpected production delays, increased production costs, and increased capital expenditures to repair or replace equipment or property, as well as claims from affected employees and environmental and other authorities for any alleged breaches of applicable laws or regulations. Disruptions to mining, delays and costs on account of such hazards or accidents could have a material adverse effect on Vedanta's business, financial condition and results of operations.

The results of appraising discoveries and estimating Ore Reserves are uncertain.

The results of appraising discoveries are uncertain, which may result in reductions in projected reserves and production declines and may involve unprofitable efforts, not only from dry wells, but also from wells that are productive but uneconomic to develop. Furthermore, as Vedanta's Ore Reserves decline as it mines the ore, Vedanta's future segment results and segment margins depend upon its ability to access Ore Reserves with geological characteristics that allow mining at competitive costs and replacement reserves may not be available when required. Appraisal and development activities may be subject to delays in obtaining governmental approvals or consents, shut-ins of connected wells, insufficient storage or transportation capacity or exhaustion and depletion of reserves or other geological and mechanical conditions all of which may result in a material increase of Vedanta's costs of operations or delay anticipated revenues.

Adverse changes in general economic, political and market conditions in the Middle East and North Africa may affect global conditions.

Wars, acts of terrorism and uncertain political or economic prospects or instability in the Middle East and North Africa or MENA may adversely impact global financial markets and an increase in the price of crude oil. Protests in North Africa and the Middle East may continue and broaden across the MENA region and lead to significant political uncertainties in a number of countries.

Vedanta may incur significant costs or loss of reputation in case of leakage of business sensitive information.

Like many other global organisations, Vedanta's reliance on computers and network technology is increasing. These systems could be subject to security breaches resulting in theft, disclosure or corruption of key/strategic information. Any significant breach or failure of Company's digital infrastructure and/or cyber security attacks due to negligence or IT security failure or any other reason could result in misappropriation of funds, loss or misuse of data or sensitive information, disruption to business, damage to assets, legal or regulatory breaches and potentially legal liability. A cyber security breach could result in significant costs and/or reputational consequences.

Risks Relating to Investments in India

A substantial portion of Vedanta's assets and operations are located in India and Vedanta is subject to regulatory, economic, social and political uncertainties in India.

A substantial portion of Vedanta's assets and employees are located in India, and Vedanta intends to continue to develop and expand its facilities in India. Consequently, Vedanta's financial performance will be affected by changes in exchange rates and controls, interest rates, commodity prices, subsidies and controls, changes in government policies, including taxation policies, the outbreak of infectious diseases, including the COVID-19 pandemic, social and civil unrest and other political, social and economic developments in or affecting India.

While the Indian economy has grown significantly in recent years, it has experienced economic slowdowns in the past. The Indian economy could be adversely impacted by inflationary pressures, currency depreciation, the poor performance of its large agricultural and manufacturing sectors, trade deficits, recent initiatives by the Indian government towards demonetisation of certain Indian currency and other factors. The Indian economy may also be materially and adversely affected by political instability or regional conflicts; a general rise in interest rates; inflation; exchange rate fluctuations; changes in tax, trade, and monetary policies; occurrence of natural or man-made disasters; and downgrade in India's debt rating. In particular, the Indian economy continues to be disrupted by the COVID-19 pandemic where given the rapidly changing implications of the spread of the COVID-19 pandemic, it is difficult to assess the full nature and extent of the impact that the outbreak will have on the Indian economy. These developments, or the perception that any of them could occur, have had and may continue to have a material adverse effect on economic conditions and the stability of financial markets in India, and may significantly reduce market liquidity, restrict the ability of key market participants to operate in certain financial markets or restrict Vedanta's access to capital. This could have a material adverse effect on Vedanta's business, financial condition, cash flows and results of operations.

A slowdown in economic conditions may also result in a decrease in transaction volumes and adversely affect Vedanta's revenue. It is difficult to predict the effects of the uncertainty in the Indian economy. If economic conditions worsen in India, Vedanta's growth plans, business, financial condition, cash flows and results of operations could be adversely impacted.

As the domestic Indian market constitutes a significant source of Vedanta's revenue, a downturn in the rate of economic growth in India will be detrimental to Vedanta's results of operations.

In Fiscal Year 2020, 64.9% of Vedanta's revenue was derived from commodities that were sold within India. The performance and growth of Vedanta's businesses are necessarily dependent on the health of the Indian economy which may be materially and adversely affected by political instability or regional conflicts or economic slowdown elsewhere in the world. The Indian economy also remains largely driven by the performance of the agriculture sector which depends on the quality of the monsoon which is difficult to predict. The Indian economy has grown significantly over the past few years. Past slowdowns in the Indian economy have harmed manufacturing industries, including companies engaged in the copper, zinc, aluminium and iron ore sectors, as well as customers of manufacturing industries due to a reduction in demand for industrial production. Any slowdown in the Indian economy could have a material adverse effect on demand for the commodities that Vedanta produces and, as a result, on its financial condition and results of operations.

Terrorist attacks and other acts of violence involving India or neighbouring countries could adversely affect Vedanta's operations directly, or may result in a more general loss of customer confidence and reduced investment in these countries that reduces demand for Vedanta's products, which would have a material adverse effect on Vedanta's business, results of operations, financial condition and cash flows.

Terrorist attacks and other acts of violence or war involving India or neighbouring countries may adversely affect the Indian markets and the worldwide financial markets. The occurrence of any of these events may result in a loss of business confidence, which could potentially lead to economic recession and generally have a material adverse effect on Vedanta's businesses, results of operations, financial condition and cash flows. In addition, any deterioration in international relations may result in investor concern regarding regional stability which could adversely affect the price of the Bonds.

South Asia has also experienced instances of civil unrest and hostilities among neighbouring countries from time to time, especially between India and Pakistan. Present relations between India and Pakistan continue to be fragile on the issues of terrorism, armament and Kashmir. India has also experienced terrorist attacks in some parts of the country. These hostilities, attacks and tensions could lead to political or economic instability in India and a possible adverse effect on the Company's business and its future financial performance. For example, the attack on the Central Reserve Police Force personnel in Pulwama in Kashmir has led to retaliation by India and escalated hostilities between India and Pakistan. The two countries' continuing hostilities could exacerbate these regional hostilities and tensions. Military activity or terrorist attacks in the future could influence the Indian economy by disrupting communications and making travel more difficult and such political tensions could create a greater perception that investments in Indian companies involve higher degrees of risk. More recently in May 2020, military troops from India and China reportedly engaged in several skirmishes and face-offs in Galwan Valley of the Ladakh region, which eventually led to casualties (including deaths) on both sides. This incident has caused tension and hostilities in the Sino-India border. Whilst both countries have now expressed their efforts to ease tensions, there can be no assurance that such skirmishes would not happen in the future nor any diplomatic efforts would continue to be successful.

Events of this nature in the future, as well as social and civil unrest within other countries in Asia, could adversely influence the Indian economy and could have a material adverse effect on the market for securities of Indian companies, including the Bonds. Such activity or terrorist attacks could adversely affect the Indian economy by disrupting communications and making travel more difficult. Resulting political tensions could create a greater perception that investments in Indian companies involve a high degree of risk. Furthermore, if India were to become engaged in armed hostilities, particularly hostilities that were protracted or involved the threat or use of nuclear weapons, Vedanta might not be able to continue its operations.

If natural disasters or environmental conditions in India, including floods and earthquakes, affect Vedanta's mining and production facilities, its revenues could decline.

Vedanta's mines and production facilities are spread across India, and Vedanta's sales force is spread throughout the country. Natural calamities such as floods, rains, heavy downpours (such as heavy downpours in Tuticorin in 2008 which caused the closure of Vedanta's Tuticorin facilities for two to three days, as well as the rains in Mumbai and other parts of the State of Maharashtra in 2005 and other states in 2006) and earthquakes could disrupt Vedanta's mining and production activities and distribution chains and damage Vedanta's storage facilities. Unusually heavy rains during the monsoon season in 2006 and 2013 in the states of Rajasthan and Gujarat triggered floods and caused destruction in these states. The area in which the Mangala field is located experienced flooding which directly affected existing well-sites and roads. Other regions in India have also experienced floods, earthquakes, cyclones, tsunamis and droughts in recent years.

Substantially all of Vedanta's facilities and employees are located in India and could be affected by natural disasters. For example, the pipeline to transport crude oil from the northern fields of the Rajasthan Block to Salaya, and thereafter to the Bhogat terminal in Gujarat, passes near Bhuj, which was the epicentre of an earthquake measuring 6.9 on the Richter scale in 2001 and that resulted in the deaths of approximately 30,000 people as well as damage to the infrastructure in the region. Although Vedanta's Rajasthan Block crude oil production plans assume that the proposed pipeline will withstand damage from fire, earthquakes, floods, storms and similar events, the pipeline might not withstand damage from such events. In addition, if there were a drought or general water shortage in India or any part of India where Vedanta's operations are located, the GOI or local, state or other authorities may restrict water supplies to Vedanta and other industrial operations in order to maintain water supplies for drinking and other public necessities, which would cause Vedanta to reduce or cease operations. Vedanta's business and operating activities could be disrupted if it does not respond, or are perceived not to respond, in an appropriate manner to any major crisis or if it is not able to restore or replace critical operational capacity.

In addition, all three units at TSPL were closed for 65 days during the first quarter of Fiscal Year 2018 due to fire in the coal conveyor; operations were resumed in June 2017. The Jharsuguda-I smelter suffered a pot outage incident in April 2017 which impacted 228 pots out of a total 608 pots. This smelter is now fully ramped up. Any such incidents or outages in the future could have a material adverse effect on the Company's operations and financial condition.

If India's inflation worsens or the prices of coal, oil or other raw materials rises, Vedanta may not be able to pass the resulting increased costs to its customers and this may have a material adverse effect on Vedanta's profitability or cause Vedanta to suffer operating losses.

India has experienced significant price inflation in the past. In addition, international prices of crude oil and natural gas have recently experienced significant volatility. Inflation, increased transportation costs and an increase in energy prices generally, which may be caused by a rise in the price of oil, or an increase in the price of thermal coking coal in particular, could cause Vedanta's costs for raw material inputs required for production of Vedanta's products to increase, which may have a material adverse effect on its results of operations and financial condition if Vedanta cannot pass these added costs on to customers.

Labour laws in India may adversely affect Vedanta's profitability.

India has stringent labour legislation that protects the interests of workers, including legislation that sets forth detailed procedures for industrial dispute resolution and employee compensation for injury or death sustained in the course of employment, and imposes financial obligations on employers upon employee layoffs. This may make it difficult for Vedanta to maintain flexible human resource policies, discharge employees or downsize, which may have a material adverse effect on Vedanta's business, financial condition and results of operations.

Restrictions on foreign investment in India may prevent Vedanta from making future acquisitions or investments in India, which may have a material adverse effect on Vedanta's results of operations, financial condition and cash flows.

India regulates ownership of Indian companies by foreigners, as well as external commercial borrowing by Indian companies, although restrictions on foreign investment and external commercial borrowing have been relaxed significantly in recent years. These regulations and restrictions may apply to acquisitions by Vedanta, or other members of Vedanta who are not resident in India, of shares in Indian companies or the provision of funding by Vedanta or any other non-Indian resident entity to Indian companies. There can be no assurance that Vedanta will be able to obtain any required approvals for future acquisitions or investments in India, or that Vedanta will be able to obtain such approvals on satisfactory terms.

A slowdown in economic growth in India and other countries in which Vedanta operates could cause its business to suffer.

The Indian securities market and the Indian economy are influenced by economic and market conditions in other countries. Although economic conditions are different in each country, investors' reactions to developments in one country can have adverse effect on the securities of companies in other countries, including India. A loss of investor confidence in the financial systems of other emerging markets may cause volatility in Indian financial markets and, indirectly, in the Indian economy in general. Any worldwide financial instability could also have a negative impact on the Indian economy, including the movement of exchange rates and interest rates in India. Any slowdown in the Indian economy, or future volatility in global commodity prices, could adversely affect the growth of Vedanta's India business.

The Indian economy and financial markets are also significantly influenced by worldwide economic, financial and market conditions. Any financial turmoil, especially in the United States, United Kingdom, Europe or China, may have a negative impact on the Indian economy. Although economic conditions differ in each country, investors' reactions to any significant developments in one country can have adverse effects on the financial and market conditions in other countries. A loss in investor confidence in the financial systems, particularly in other emerging markets, may cause increased volatility in Indian financial markets.

Economic downturn and adverse credit market conditions, whether in response to the COVID-19 pandemic, Brexit, global trade wars or other factors, may negatively impact Vedanta as well as its customers and suppliers. In addition, Vedanta's and its customers' and suppliers' access to capital and funding sources, cost of capital and ability to meet liquidity needs could be adversely affected in a prolonged economic downturn or deterioration in the global economies, which in turn could have a material adverse impact on Vedanta's business, financial condition and results of operations.

Vedanta may be affected by competition law in India and any adverse application or interpretation of the Competition Act could adversely affect its business.

The Competition Act, 2002, as amended (the "Competition Act"), regulates practises having an appreciable adverse effect on competition in the relevant market in India. Under the Competition Act, any formal or informal arrangement, understanding or action in concert, which causes or is likely to cause an appreciable adverse effect on competition is considered void and results in the imposition of substantial monetary penalties. Further, any agreement among competitors which, directly or indirectly, involves the determination of purchase or sale prices, limits or controls production, supply, markets, technical development, investment or provision of services, shares the market or source of production or provision of services by way of allocation of geographical area, type of goods or services or number of clients in the relevant market or, directly or indirectly, results in bid-rigging or collusive bidding is presumed to have an appreciable adverse effect on competition. The Competition Act also prohibits abuse of a dominant position by any enterprise. The Competition Commission of India (the "CCI"), has extra-territorial powers and can investigate any agreements, abusive conduct or combination occurring outside India if such agreement, conduct or combination has an appreciable adverse effect on competition in India. The Indian operations of Vedanta are currently not subject to any outstanding proceedings under the Competition Act. However, if the Indian operation of Vedanta is affected, directly or indirectly, by the application or interpretation of any provision of the Competition Act, or any enforcement proceedings initiated by the CCI, or any adverse publicity that may be generated due to scrutiny or prosecution by the CCI or if any prohibition or substantial penalties are levied under the Competition Act, it would adversely affect Vedanta's business, cash flows and results of operation.

The filing of an insolvency petition under the new bankruptcy code in India by the creditors of the Indian subsidiaries of Vedanta may adversely affect the Company's revenues and financial condition.

The Insolvency and Bankruptcy Code, 2016, as amended ("Bankruptcy Code") was notified on 5 August 2016. The Bankruptcy Code encompassing all companies, partnerships and individuals (other than financial firms) allows creditors to assess the viability of a debtor as a business decision and agree upon a plan for its revival or a speedy time bound liquidation. The Bankruptcy Code creates a new institutional framework, consisting of a regulator, insolvency professionals, information utilities and adjudicatory mechanisms, which will facilitate a formal and quicker insolvency resolution and liquidation process. Under the Bankruptcy Code, any financial or operational creditor as well as the Company may approach the National Company Law Tribunal ("NCLT") to initiate a corporate insolvency resolution process against a debtor upon default in repayment of at least ₹100,000 equivalent to approximately $1,337. On receipt of an application from a creditor, the NCLT is required to either admit or reject the application within a period of 14 days from the date of the application. If the application is admitted, an interim resolution professional is appointed for managing the affairs of the debtor and a moratorium is declared for a period of 180 days which can further be extended by 90 days prohibiting, *inter alia*, institution/continuation of suits against the debtor and transfer/disposal of assets of the debtor. The committee of creditors formed by the interim resolution professional is required to formulate a resolution plan to be approved by the NCLT. If no resolution plan is agreed by the creditors or if the NCLT rejects the resolution plan, liquidation proceedings are commenced against the debtor. If the Bankruptcy Code provisions are invoked against any of the Company's material subsidiaries by any of its creditors, it may adversely and materially affect the Company's revenues and financial conditions.

Any downgrading of India's sovereign rating by a credit rating agency could have a negative impact on Vedanta's business.

In June 2020, S&P retained India's sovereign ratings at 'BBB-' with the "stable" outlook. S&P, however, pointed out that India's fiscal position remains precarious, with elevated fiscal deficits and net government indebtedness. On 1 June 2020, Moody's downgraded India's sovereign foreign currency and local currency long term issuer ratings to 'Baa3' from 'Baa2' while maintaining the "negative outlook" due to relatively weak implementation of reforms since 2017, sustained period of relatively low growth, significant deterioration in the fiscal position of the government and the rising stress in the financial sector. Going forward, the sovereign ratings outlook will remain dependent on whether the GOI is able to transition the economy out of a low-growth and high inflation environment, as well as exercise adequate fiscal restraint. There is no assurance that India's credit ratings will not be downgraded in the future.

Any adverse revisions of India's sovereign credit ratings for domestic and international debt by credit rating agencies may adversely impact Vedanta's ability to raise additional financing and the interest rates and other commercial terms at which such additional financing is available. This could have a material adverse effect on Vedanta's business and financial performance and its ability to obtain financing for capital expenditures.

Risks Relating to Mauritius

The Issuer may become subject to unanticipated tax liabilities that may have a material adverse effect on its results of operations.

The Issuer is entitled to apply for tax residence certificates issued by the Mauritius Revenue Authority. These certificates are required for the avoidance of double taxation under the Agreements for the Avoidance of Double Taxation ("DTAs") signed between Mauritius and other jurisdictions, including India, Jersey and the United Kingdom.

On this basis, the Issuer is entitled to certain relief from foreign tax subject to continuance of the current terms of such DTAs. The Issuer cannot guarantee that such DTAs will continue to remain into force or will not be renegotiated in future thereby impacting on the tax treatment of income of the Issuer.

The comments set out above and in the remainder of this Offering Circular regarding the incidence of taxation are based on the relevant law and practice (where applicable) as at the date of this Offering Circular. However, neither the Issuer nor its advisers in any way warrant the tax position outlined above, which in any event is subject to changes in the relevant legislation and interpretation and application thereof.

Prospective investors should consult their own counsel regarding tax laws and regulations of any other jurisdiction which may be applicable to them. Accordingly, prospective investors must consult their tax advisers in the countries of their citizenship, residence and domicile to determine the possible tax or other consequences of purchasing, holding and redeeming securities under the laws of their respective jurisdictions before subscribing for Interests.

All exchange control regulations have been suspended in Mauritius. The Issuer cannot guarantee that such regulations will not be re-introduced. Investors are also advised to inform themselves as to any Exchange Control regulations applicable in their country of residence to their buying, selling, holding or redeeming the Bonds.

Risks Relating to the Bonds, the Guarantee and the Collateral

The Take Private Transaction is subject to many conditions, uncertainties and risks and, if it is not consummated, the Issuer will be required to redeem the Bonds.

If (i) Approval In Principle is not received by 5 October 2020 (being 45 days after the Closing Date) or (ii) the Parent Guarantor and/or the Issuer and/or Vedanta Holdings Mauritius Limited, as the case may be, do not accept the final offer price (as determined as per the reverse book building mechanism as specified in the Delisting Regulations) within five Working Days after the closure of the RBB Period or, if a counter offer has been made in accordance with the Delisting Regulations, the counter offer price has not been accepted by the Public Shareholders in accordance with the Delisting Regulations, or (iii) the Acquisition Date has not occurred by 19 November 2020 (being 90 days after the Closing Date), or (iv) Vedanta Holdings Mauritius Limited fails, having used commercially reasonable efforts, to enter into the Bridge Facility Agreement and the Permitted Senior Secured Facility Agreement or to satisfy the conditions to Incur Bridge Loans and PSSFA Loans in an amount sufficient, when taken together with the proceeds from the offering of the Bonds, to consummate the Take Private Transaction, the Issuer will, within five Business Days, redeem all of the Bonds then outstanding at a redemption price of 101% of their principal amount plus accrued and unpaid interest, if any, to (but excluding) the redemption date.

The gross proceeds from the offering of the Bonds will be deposited into the Bond Escrow Account on the Closing Date. If the Issuer is required to conduct a Special Mandatory Redemption, the Issuer may not have sufficient funds to pay the Special Mandatory Redemption Price. If the Take Private Transaction is not consummated, the Issuer is not expected to have any material assets other than the funds in the Bond Escrow Account. As the funds in the Bond Escrow Account will likely not be sufficient to pay the Special Mandatory Redemption Price, the Issuer would likely need external financing to do so. The Issuer may not have access to external financing at that time. Even if the Issuer is able to pay the Special Mandatory Redemption Price, Bondholders may not obtain the return they expected to receive on the Bonds.

The Bonds and the Guarantee will be structurally subordinated to the debt of the Company's non-Guarantor subsidiaries.

The Issuer is a wholly-owned indirect subsidiary of the Parent Guarantor formed for the principal purpose of issuing the Bonds. The Issuer is not expected to have any material assets other than shares of Vedanta Limited (if the Take Private Transaction is successful). Accordingly, the Issuer's ability to make payments under the Bonds will depend on Vedanta Limited having sufficient distributable profits and timely declaring and paying dividends in sufficient amounts to the Issuer. If Vedanta Limited does not have sufficient distributable profits or does not timely declare and pay dividends in sufficient amounts to the Issuer, the Issuer's may not have sufficient funds to make payments under the Bonds.

The Guarantors' operations are principally conducted through the Parent Guarantor's subsidiaries. Accordingly, the Guarantors are, and after the issuance of the Guarantee will continue to be, dependent on the operations and cash flows of the Parent Guarantors' subsidiaries to service their indebtedness, including the Guarantee. The Guarantee will be structurally subordinated to the claims of all holders of debt and other creditors, including trade creditors, of the Guarantors' subsidiaries (other than the Issuer and the Subsidiary Guarantors), and to all of the Guarantors' secured creditors (other than the Bondholders, the lenders under the Bridge Facility and certain other *pari passu* secured indebtedness of the Issuer and Vedanta Mauritius). In the event of an insolvency, bankruptcy, liquidation, reorganisation, dissolution or winding-up of any subsidiary of the Parent Guarantor, creditors of such subsidiary will generally have the right to be paid in full before any distribution is made to the Guarantors. In particular, the Guarantee will be structurally subordinated to all of the debt and liabilities of Twin Star Holdings Limited, Welter Trading Limited, Westglobe Limited and Finsider International Company Limited which are members of the Group and do not guarantee the Bonds but where such members of the Group are expected to guarantee the Bridge Facility, the Permitted Senior Secured Facility and certain pari passu secured hedging.

Some of the Parent Guarantor's subsidiaries, including Vedanta Limited, BALCO, HZL, TSPL, CIHL, VGCB and FGF, have significant amounts of debt which is repayable during the term of the Bonds. Moreover, some of this debt is secured by assets of the respective subsidiaries, which may adversely affect the ability of the Issuer and the Guarantors to pay the Bondholders. As of 31 March 2020, Vedanta had total debt of $15,095 million, of which $7,746 million existed at the Parent Guarantor's subsidiaries.

The Issuer may not be able to repurchase the Bonds upon a Change of Control Triggering Event.

The Issuer must offer to purchase the Bonds upon the occurrence of a Change of Control Triggering Event at a purchase price equal to 101% of their principal amount plus accrued and unpaid interest.

The source of funds for any such purchase would be the Issuer's or, as the case may be, the Guarantors' available cash or third-party financing. However, the Issuer, or as the case may be, the Guarantors may not have enough available funds at the time a Change of Control Triggering Event occurs to purchase the Bonds. The Issuer's, or as the case may be, the Guarantors' failure to make the offer to purchase or purchase the Bonds would constitute an Event of Default. The Event of Default may, in turn, constitute an event of default under other debt, which could cause such debt to be accelerated. If the Issuer's or the Guarantors' other debt were to be accelerated, the Issuer and the Guarantors may not have sufficient funds to purchase the Bonds and repay such other debt.

There is no existing market for the Bonds.

There can be no assurance regarding the future development of a market for the Bonds, or the ability of Bondholders to sell their Bonds, or the price at which Bondholders may be able to sell their Bonds. If a market for the Bonds were to develop, the Bonds could trade at prices that are lower than the issue price depending on many factors, including prevailing interest rates, the Group's operating results, the market for similar securities, and the rating of the Bonds or the Company given by rating agencies.

The Bonds will be a new issue of securities with no existing trading market. Approval in-principle has been received from the SGX-ST for listing of and quotation for the Bonds on the SGX-ST. However, the Bonds might not be or remain listed on the SGX-ST and a liquid trading market might not develop for the Bonds.

The market price of the Bonds may be volatile.

The market price of the Bonds could be subject to wide fluctuations in response to numerous factors, many of which are beyond the control of the Guarantors and the Issuer. These factors include actual or anticipated variations in operating results, earnings releases by the Company and its competitors, changes in financial estimates by securities analysts, market conditions in the industry and the general state of the securities markets, governmental legislation or regulation, currency and exchange rate fluctuations, interest rates, the rating of the Bonds or the Company by rating agencies, as well as general economic and market conditions.

The Bonds are not be a suitable investment for all investors.

Each potential investor in the Bonds must determine the suitability of that investment in light of its own circumstances. In particular, each potential investor should:

- have sufficient knowledge and experience to make a meaningful evaluation of the Bonds, the merits and risks of investing in the Bonds and the information contained in this Offering Circular;

- have access to, and knowledge of, appropriate analytical tools to evaluate, in the context of its particular financial situation, an investment in the Bonds and the impact such investment will have on its overall investment portfolio;

- have sufficient financial resources and liquidity to bear all of the risk of an investment in the Bonds, including where the currency for principal or interest payments is different from the potential investor's currency;

- understand thoroughly the terms of the Bonds and be familiar with the behaviour of any relevant financial markets; and

- be able to evaluate (either alone or with the help of a financial adviser) possible scenarios for economic, interest rate and other factors that may affect its investment and its ability to bear the applicable risks.

A potential investor should not invest in the Bonds, which are complex financial instruments, unless it has the expertise (either alone or with a financial adviser) to evaluate how the Bonds will perform under changing conditions, the resulting effects on the value of the Bonds and the impact this investment will have on the potential investor's overall investment portfolio.

Early redemption may adversely affect the Bondholders' return on the Bonds.

The Bonds may be redeemed in whole or in part, at the option of the Issuer at any time. This feature of the Bonds may limit their market value. The market value of the Bonds generally will not rise substantially above the price at which they can be redeemed. The Issuer may be expected to exercise its option to redeem the Bonds when its cost of borrowing is lower than the interest rate on the Bonds.

Further, if the Issuer or the Guarantors become obliged to pay additional amounts in respect of any Bonds due to any withholding or deduction for or on account of any present or future taxes, duties, assessments or governmental charges of whatever nature imposed, levied, collected, withheld or assessed by or on behalf of Mauritius, the United Kingdom, Jersey or any authority therein or thereof having power to tax, the Issuer may redeem in whole, but not in part, the Bonds in accordance with the Terms and Conditions of the Bonds. In either of these circumstances, an investor may not be able to reinvest the redemption proceeds in a comparable security with an effective rate equal to that of the Bonds.

Bondholders will be subject to risks relating to change of law.

The Trust Deed, the Bonds and the Intercreditor Agreement will be governed by English law and the Security Documents and the Bond Escrow Agreement will be governed by Mauritius law. No assurance can be given as to the impact of any judicial decision or change to English law or Mauritius law or the interpretation or administrative practice thereof after the date of this Offering Circular.

Developments in other markets may adversely affect the market price of the Bonds.

The market price of the Bonds may be adversely affected by declines in the international financial markets and world economic conditions. Global financial markets, to varying degrees, are influenced by economic and market conditions in other markets. Although economic conditions are different in each country, investors' reactions to developments in one country can affect the securities markets and the securities of issuers in other countries. If adverse developments occur in the international financial markets in the future, the market price of the Bonds could be adversely affected.

Bondholders will not be entitled to attend or vote at shareholders meetings.

Bondholders will not have any right to attend or vote at shareholders' meetings of the Guarantors or the Issuer. Consequently, Bondholders cannot influence any decisions by the Board or any decisions by shareholders concerning the Guarantors' or the Issuer's capital structure, including the declaration of dividends in respect of the Guarantors' or the Issuer's capital stock.

Bondholders will be bound by decisions of defined majorities in respect of any modification, waivers and substitution.

The Terms and Conditions of the Bonds contain provisions for calling meetings of Bondholders to consider matters affecting their interests generally. These provisions permit defined majorities to bind all Bondholders, including Bondholders who do not attend and vote at the relevant meeting and Bondholders who vote in a manner contrary to the majority.

The Bonds will be subject to interest rate risks.

The Bonds are fixed interest rate securities. Changes in market interest rates may adversely affect the value of the Bonds. In particular, a rise in market interest rates will likely adversely affect the value of fixed rate instruments like the Bonds.

The ratings of the Bonds may not reflect all risks and may be lowered or withdrawn at any time.

On the Closing Date, the Bonds are expected to be rated "B3" by Moody's and Preliminary "B" by S&P. The ratings may not reflect all risks that may affect the value of the Bonds. A credit rating is not a recommendation to buy, sell or hold the Bonds and may be suspended, lowered or withdrawn by the rating agency at any time. Any suspension, reduction or withdrawal of a rating assigned to the Bonds may adversely affect the market price of the Bonds.

The Trustee and the Common Security Agent may not take action on behalf of the Bondholders.

The Terms and Conditions of the Bonds and the Trust Deed, the Intercreditor Agreement, the Security Documents and the Bond Escrow Agreement provide that, in certain circumstances, the Trustee and the Common Security Agent may take action on behalf of the Bondholders, but only if the Trustee and the Common Security Agent are indemnified, secured and/or prefunded to their satisfaction. It may not, depending on the particular circumstances at the relevant time, be possible for the Trustee and the Common Security Agent to take certain actions in relation to the Bonds and the Collateral and, accordingly, in such circumstances, the Trustee and the Common Security Agent will be unable to take such actions, notwithstanding the provision for an indemnity, security and/or prefunding to them. As a result, it will be up to the Bondholders to take such action directly.

Holders of Bonds held through DTC, Euroclear and Clearstream, Luxembourg must rely on the procedures of those clearing systems to effect transfers of Bonds, receive payments in respect of Bonds and vote at meetings of Bondholders.

Bonds will be represented on issue by Global Certificates that will be deposited with a nominee for DTC. Except in the limited circumstances described in the Global Certificates, investors will not be entitled to receive Bonds in definitive form. DTC, Euroclear and Clearstream, Luxembourg and their respective direct and indirect participants will maintain records of the beneficial interests in each Global Certificate held through it. While the Bonds are represented by Global Certificates, investors will be able to trade their beneficial interests only through the relevant clearing systems and their respective participants.

While the Bonds are represented by Global Certificates, the Guarantors and the Issuer will discharge their payment obligation under the Bonds by making payments through the relevant clearing systems. A holder of a beneficial interest in a Global Certificate must rely on the procedures of the relevant clearing system and its participants to receive payments under the Bonds. The Guarantors and the Issuer have no responsibility or liability for the records relating to, or payments made in respect of, beneficial interests in any Global Certificate. Holders of beneficial interests in a Global Certificate will not have a direct right to vote in respect of the Bonds so represented. Instead, such holders will be permitted to act only to the extent that they are enabled by the relevant clearing system and its participants to appoint appropriate proxies.

The Bonds will be subject to restrictions on resales and transfers, which may adversely affect their liquidity and the price at which they may be sold.

The Bonds have not been and will not be registered under the Securities Act or any U.S. state securities laws or the securities laws of any other jurisdiction and are being issued and sold in reliance upon exemptions from registration provided by such laws. As a result, investors may not resell or transfer the Bonds unless such sale or transfer is exempt from the registration requirements of the Securities Act and applicable state securities laws.

Holdings of less than the minimum denomination of the Bonds may be illiquid.

The denomination of the Bonds is $200,000 and integral multiples of $1,000 in excess thereof. If a Bondholder holds a principal amount of less than $200,000, such holder might not be able to trade its Bonds and will not receive a definitive certificate in respect of such holding (should definitive certificates be issued).

The Issuer will be required to follow the corporate disclosure standards for debt securities listed on the SGX-ST, which standards may differ from those applicable to companies with securities listed on other stock exchanges.

The Issuer will be subject to reporting obligations of the SGX-ST if and for so long as the Bonds are listed on the SGX-ST. The corporate disclosure standards imposed by the SGX-ST may differ from those imposed by securities exchanges in other countries or regions such as the United States or the United Kingdom. As a result, the level of information that is available to Bondholders may not correspond to the level to which investors are accustomed.

Bondholders may suffer erosion in the return on their investment in the Bonds due to inflation.

Bondholders may suffer erosion in the return on their investment in the Bonds due to inflation. Bondholders have an anticipated rate of return based on expected inflation rates when they purchase Bonds. An unexpected rise in inflation could reduce the actual returns to Bondholders.

Bondholders may be subject to foreign exchange risks.

The Bonds are denominated and payable in US dollars. If an investor measures its investment returns by reference to a currency other than US dollars, an investment in the Bonds entails foreign exchange-related risks, including possible significant changes in the value of the US dollar relative to the currency by reference to which an investor measures its investment returns, because of, among other things, economic, political and other factors over which Vedanta has no control. Depreciation of the US dollar against such currency could cause a decrease in the effective yield of the Bonds below their stated coupon rate and could result in a loss when the return on the Bonds is translated into such currency. In addition, there may be adverse tax consequences for investors as a result of any foreign exchange gains resulting from any investment in or sale of the Bonds.

The enforceability of the Guarantee will be subject to the laws of the jurisdictions in which the Guarantors are incorporated.

The laws of the jurisdictions in which the Guarantors are incorporated may limit (i) the ability of these entities to guarantee debt of the Issuer, and/or (ii) any obligations other than such entities' direct obligations or the obligations of such entities' subsidiaries and/or impose a time limit pursuant to which a claim must be made under a guarantee. These limitations arise under various provisions or principles of corporate and tax law which include provisions requiring a Guarantor to receive adequate corporate benefit from the financing, financial assistance rules, rules governing preservation of share capital and fraudulent transfer principles. Accordingly, if Bondholders were to try to enforce the Guarantee in these jurisdictions, their claims may be limited. If these limitations were not observed, the Guarantee could be subject to legal challenge. Furthermore, a third party creditor may challenge the Guarantee and prevail in court.

Any enforcement of the Guarantee after an insolvency event of any of the Guarantors will be subject to the insolvency and administrative laws of such Guarantor's jurisdiction of incorporation, or the insolvency laws of the country where the center of main interests of such Guarantor is situated. The insolvency, administrative and other laws of these jurisdictions may materially differ from, or conflict with, each other, including in the areas of rights of creditors, priority of governmental and other creditors, ability to obtain post-petition interest and duration of the proceeding. The application of these laws, or any conflict among them, could call into question whether any particular jurisdiction's law should apply, adversely affect the Bondholder's ability to enforce their rights under the Guarantee or limit any amounts that they may receive.

Bondholders may be unable to enforce their rights under UK bankruptcy law; and the insolvency laws of Mauritius may differ from UK bankruptcy law or those of another jurisdiction.

The Issuer is incorporated under the laws of Mauritius, and the Guarantors are incorporated under the laws of the UK, Jersey and Mauritius. Under UK bankruptcy law, courts typically have jurisdiction over a debtor's property, wherever located, including property situated in other countries. However, courts outside of the UK may not recognize the UK bankruptcy court's jurisdiction. Accordingly, difficulties may arise in administering a UK bankruptcy case with property located outside the UK, and any orders or judgments of a bankruptcy court in the UK may not be enforceable outside of the UK.

Because the Issuer and the Guarantors are incorporated under the laws of Mauritius, the UK and Jersey an insolvency proceeding relating to the Issuer or the Guarantors, even if brought in the UK, would likely involve insolvency laws under the laws of Mauritius, the UK or Jersey (as the case may be), the procedural and substantive provisions of which may differ from comparable provisions of UK bankruptcy law the laws of other jurisdictions with which the Bondholders may be familiar.

If the Bank Guarantee with respect to the Take Private Transaction is created, the security over the Bond Collateral may be for the benefit of the CG Issuing Bank, and not the Bondholders, for a period of time.

The Bond Collateral will comprise the Issuer's rights and interest in the Bond Escrow Account into which the gross proceeds from the offering of the Bonds will be deposited on the Closing Date. On the Closing Date, the Issuer will create a security interest over the Bond Collateral and designate the Trustee as the beneficiary of the security interest. However, in the event where the Issuer elects to fund the India Escrow Account through a bank guarantee issued by the Issuing Bank in favour of the manager to the Take Private Transaction in accordance with the Delisting Regulations, such bank guarantee shall be secued by way of a counter bank guarantee from the CG Issuing Bank to which the counter bank guarantee shall be secured by the Bond Collateral via a Bond Escrow Charge from the Approval In Principle Date until the Bank Guarantee Release Date, and the CG Issuing Bank will become the sole beneficiary of the security interest over the Bond Collateral. On and after the Bank Guarantee Release Date, the beneficiary of the security over the Bond Collateral will once again be the Trustee. During the time when the beneficiary is the CG Issuing Bank, the Trustee and the Bondholders will only have an unsecured claim against the Bond Collateral.

No security shall be created over the India Escrow Account.

Proceeds transferred from the Bond Escrow Account to the India Escrow Account for the purpose of the Take Private Transaction, will not be secured as no charge can be created over the India Escrow Account or the deposits lying therein.

The Security over the Common Collateral will not be created on the Closing Date.

The Issuer and the other Security Providers will not be required to provide the Common Collateral to secure their obligations under the Bonds and the Guarantee on the Closing Date. As a result, the only security for the Bonds on the Closing Date will be the Bond Collateral. The Issuer and the other Security Providers will only be required to provide the Common Collateral if and when Vedanta Mauritius enters into the Bridge Facility, which will be some time after the Closing Date. As a result, Bondholders will not benefit from a security interest over the Common Collateral until that time.

The value of the Common Collateral may not be sufficient to repay the Bonds, the loans under the Bridge Facility and relating hedging obligations, and any other pari passu secured indebtedness.

The Common Collateral will comprise the capital stock of the Issuer and Vedanta Mauritius and the respective bank accounts of the Issuer and Vedanta Mauritius (other than the India Escrow Account, Bridge Escrow Account and the Bond Escrow Account).

The Common Collateral will be shared on *a pari passu* basis by the Bondholders, the Bridge Arrangers, the Bridge Lenders, the Permitted Senior Secured Facility Arrangers, the Permitted Senior Secured Facility Lenders and the Hedge Counterparties. Accordingly, in the event of a default under the Bonds or the Bridge Facility and a foreclosure of the Common Collateral, any foreclosure proceeds would be shared by the Bondholders and the creditors under the Bridge Facility in proportion to the outstanding amounts of each class of secured indebtedness.

By its nature, the Common Collateral may be illiquid and have no readily ascertainable market value. In the event of a foreclosure, liquidation, bankruptcy or similar proceeding, the proceeds from any sale or liquidation of the Common Collateral may not be sufficient to pay the Issuer's obligations under the Bonds.

The value of the Share Collateral may fluctuate depending on the market and other economic conditions, including the availability of suitable buyers for the collateral at the time of enforcement.

Enforcement of the security over the Accounts Pledge Document or under the Bond Escrow Charge may be subject to additional formalities imposed by the account bank (such as "know your customer" or confirmation of event of default) which may delay the access to the money standing to the credit of the relevant accounts.

Some bank accounts under the Accounts Pledge Document are not blocked or subject to payment monitoring secured during the security period, as a result the sum which may be recovered from the realization of this Common Collateral will only be known at the time of enforcement.

If the bank guarantee is created with respect to the Take Private Transaction, the Bond Collateral will benefit exclusively the CG Issuing Bank for the period starting from the date of the Approval In Principle until the Bank Guarantee Release Date. The Trustee will therefore not have security rights over the Bond Collateral during that period.

The proceeds realizable from the Collateral may not be sufficient to satisfy the Issuer's obligations under the Bonds. The Common Collateral will also be pledged to secure the obligations of Vedanta Mauritius under the Bridge Facilities Documents which will be paid on a pro rata basis and ranking *pari passu* with the Bonds and the value of the Common Collateral may not be sufficient to repay the Bonds in full and other *pari passu* secured indebtedness.

In the event of a liquidation or a similar proceeding of the Issuer or Vedanta Mauritius, the distribution of the proceeds from any sale or liquidation of the Collateral will be subject to the statutory distribution waterfall provided under the Insolvency Act 2009.

Security over the Collateral will not be granted directly to the holders of the Bonds.

Security over the Common Collateral will not be granted directly to the Bondholders but will be granted only in favour of the Common Security Agent (in the case of the Common Collateral) and, for certain time periods (as discussed under the sections entitled "*Description of Certain Financing Arrangements — Collateral Documents — Common Collateral*"), the Trustee (in respect of the Bonds Collateral). Accordingly, the Bondholders will not have direct security and will not be entitled to take enforcement action in respect of the security for the Bonds, except through the Common Security Agent and the Trustee, as applicable.

The Issuer and the other Security Providers will have control over the Collateral and the sale of assets could reduce the value of the Collateral.

The Security Documents will allow the Issuer and the other Security Providers to remain in possession of, retain exclusive control over, freely operate, and collect, invest and dispose of any income from the Collateral to the extent that it relates to their assets. So long as no acceleration event has occurred and subject to certain conditions, the Issuer and the other Security Providers may, among other things, without any release or consent by the Common Security Agent or the Trustee, conduct ordinary course activities with respect to the Collateral, such as selling, factoring, abandoning or otherwise disposing of the Collateral and making ordinary course cash payments, including repayments of indebtedness.

The Collateral may be voidable.

The Collateral may be voidable under insolvency, bankruptcy, fraudulent transfer or similar laws of Mauritius. In particular, the Collateral may be voidable under Mauritius law if the security has been created up to two years from the commencement date of the winding-up of the entity providing the Collateral. If the Collateral is voided for any reason, Bondholders would have only an unsecured claim against the Issuer and the Guarantors.

Any enforcement action outside India may be subject to certain enforcement considerations in India, including on the contracts executed by Vedanta Limited.

If the Issuer, Vedanta Mauritius, Vedanta Jersey or the Bridge Guarantors are referred to an insolvency or administration process, the implication of the same on the shareholding of the Issuer or Vedanta Mauritius in Vedanta Limited (if the Take Private Transaction is successful) will be governed entirely under their respective domestic laws, as applicable on insolvency/administration and not under the Indian Insolvency and Bankruptcy Code, 2016. However, the enforcement action outside India will trigger a change in control of Vedanta Limited or its parent and shall also trigger other consent requirements under various mining leases and contracts, and other customary approvals like from the Competition Commission of India (the "CCI"). Prior approval from the CCI would be required even for a minority stake sale. A GOI consent would also be required if the shares of Vedanta Limited are sold to an entity which belongs to a country sharing its boundaries with India.

Vedanta Limited has entered into shareholders agreements with the GOI for two of its subsidiaries, HZL and BALCO. Under the HZL shareholder agreement and the BALCO shareholder agreement, any bankruptcy event of the principal (i.e. the person who controls Vedanta Limited) will trigger a right of the GOI to purchase the shares held by Vedanta Limited in HZL and BALCO, (as applicable) at market value.

Additionally, a default under the HZL shareholders agreement will likely trigger a "Material Adverse Effect" default under the onshore financing documents of Vedanta Limited (considering that HZL is a material subsidiary of Vedanta Limited) and thus would also trigger cross default in other financings of Vedanta Limited, off-shore bonds and bank loans in the Group.

Based on the timing of enforcement, i.e. if prior to delisting of Vedanta Limited, any person acquires 25% or more of shareholding in Vedanta Limited and/or acquires control over Vedanta Limited, such person will be required to provide an opportunity to the public shareholders of Vedanta Limited to exit by making an open offer for at least 26% share capital of the company in accordance with the provisions of the Indian Takeover Code. Additionally, any change of control of Vedanta Limited (either prior to or after delisting), will require an open offer to be made to the shareholders of HZL.

Bondholder may not control certain decisions regarding the Common Collateral.

The Intercreditor Agreement provides that the Common Security Agent will only enforce the Common Collateral as provided for in the Intercreditor Agreement.

The Common Security Agent is not required to take enforcement action unless instructed to do so by an instructing group that consists of either (i) those lenders under the Bridge Facility, the lenders under Permitted Senior Secured Facility and *pari passu* secured hedging whose senior credit participations at that time aggregate more than $66^2/_3$% of the total senior credit participations at that time (the "Majority Senior Creditors") or (ii) or the Bondholders (acting through the Trustee in accordance with the Trust Deed) whose outstanding Bonds at that time aggregate more than 50% of the total outstanding Bonds at that time (the "Majority Senior Secured Bondholders") provided that, if both the Majority Senior Creditors and the Majority Senior Secured Bondholders provide instructions to the Common Security Agent to enforce Common Collateral, the instructing group for the purposes of enforcing the Common Collateral under the Intercreditor Agreement will be the Majority Senior Creditors and the Majority Senior Secured Bondholders (the "Majority Senior Secured Creditors"). It is therefore possible, pursuant to the terms of the Intercreditor Agreement, that the Bondholders may not control the enforcement of the Common Collateral in the event the Majority Senior Secured Bondholders have not provided instructions to enforce the Common Collateral prior to the Majority Senior Creditors (although the Intercreditor Agreement is expected to permitted the Bondholders to take the same enforcement action in relation to the Common Collateral as the Majority Senior Creditors notwithstanding the Majority Senior Secured Bondholders not providing instructions to the Common Collateral Agent).

The Security Agent may only refrain from enforcing the Common Collateral if instructed by the Majority Senior Secured Bondholders.

Delays in enforcement could decrease or eliminate recovery values. In addition, the Bondholders will not have any independent power to enforce, or have recourse to, any of the Common Collateral or to exercise any rights or powers arising under the Common Collateral, except through the Common Security Agent as provided in the Intercreditor Agreement. By accepting the Bonds, you will be deemed to have agreed to these restrictions. As a result of these restrictions, Bondholders will have limited remedies and recourse against the Issuer and the Guarantors in the event of a default.

Rights in the Common Collateral may be adversely affected by the failure to perfect security interests in the Common Collateral.

Under applicable law, a security interest in certain tangible and intangible assets can only be properly perfected, and its priority retained, through certain actions undertaken by the secured party or the grantor of the security, as applicable. The liens on the Common Collateral securing the Bonds may not be perfected with respect to the claims under the Bonds, if we fail or are unable to take the actions necessary to perfect any of these liens. Any failure to perfect any security interest in the Common Collateral may result in the invalidity of the relevant security interest or adversely affect the priority of such security interest in favour of the Bonds against third-parties, including a trustee in bankruptcy and other creditors who claim a security interest in the same Common Collateral. The Trustee and the Common Security Agent will not be under any obligation or responsibility to take any steps or action to perfect, or ensure the perfection of, any such liens.

It is not possible to conduct lien searches in jurisdictions in which certain of the Guarantors are located.

It is not possible to conduct comprehensive lien searches in all of the jurisdictions in which the Issuer and the Guarantors are organised. As a result, no assurance can be given that there does not exist one or more liens securing significant obligations having priority on certain of the Common Collateral, which liens may prevent or inhibit the Common Security Agent from foreclosing on the liens securing the Bonds and may impair the value of the Common Collateral.

USE OF PROCEEDS

On the Closing Date, the gross proceeds of the offering of the Bonds will be deposited directly into the Bond Escrow Account. Amounts in the Bond Escrow Account may not be withdrawn unless certain conditions have been satisfied, including but not limited to conditions relating to the Take Private Transaction, as more fully described in the section entitled "*Description of Certain Financing Arrangements — Bond Escrow Agreement*". The proceeds from this offering shall be used in accordance with applicable laws.

Priority of utilisation

The Issuer intends to use the gross proceeds in the following order of priority:

(a) (A) to finance the Take Private Transaction (together with the proposed amounts to be drawn under the Bridge Facility Agreement). See the section entitled *"Take Private Transaction" and "Bond Issuance Structure Diagram and Financing of the Take Private Transaction"* for more information; and (B) subject to and following the completion of the Take Private Transaction (including completion of all payment obligations as required under the Delisting Regulations), the balance of the proceeds that was not utilised to finance the Take Private Transaction shall be remain kept in the Bond Escrow Account to be used to subsequently fund either (x) a proposed tender offer of the 2021 Bonds at par along with accrued interest or (y) a repayment of the 2021 Bonds at maturity; or

(b) if the Take Private Transaction is not successful, the gross proceeds shall be used to finance the redemption of the Bonds pursuant to the Special Mandatory Redemption.

Financing of the Take Private Transaction

Upon closure of the RBB Period, the Acquirers will be required to make a post-offer public announcement within five Working Days from the closure of the RBB Period either regarding the success of the Take Private Transaction along with the final offer price (determined as per the reverse book building mechanism as specified in the Delisting Regulations) or the failure of the Take Private Transaction. If the Acquirers reject the final offer price (determined as per the reverse book building mechanism as specified in the Delisting Regulations), the Acquirers will have an option to make a counter offer in accordance with the Delisting Regulations. If the Acquirers opt to make a counter offer, they will be required to publish a counter offer public announcement within 2 Working Days from the date of closure of the RBB Period and dispatch the counter offer letter of offer within 4 Working Days from the date of closure of the RBB Period. The counter offer bidding period is required to commence not later than 7 Working Days from the date of publication of the counter offer public announcement. The counter offer bidding period is for five Working Days. Upon closure of the counter offer bidding period, the Acquirers would be required to make a post offer public announcement regarding success or failure of the counter offer within five Working Days from the closure of the counter offer bidding period.

In terms of the Delisting Regulations, prior to initiation of the Take Private Transaction (i.e., making of the Public Announcement), the Acquirers will open the India Escrow Account and deposit the total estimated amount of consideration calculated on the basis of floor price (determined as per Delisting Regulations) and the number of Equity Shares held by the Public Shareholders. The floor price for the Take Private Transaction, determined in accordance with the Delisting Regulations, is ₹87.25. Prior to the release of the Public Announcement, the Acquirers will fund the India Escrow Account by way of a cash deposit or bank guarantee issued by the Issuing Bank in favour of the manager to the Take Private Transaction, in accordance with the Delisting Regulations or a combination of both a cash deposit and a bank guarantee.

If the final offer price (i.e., either the price determined as per the reverse book building mechanism or, if a counter offer has been made, the counter offer price) is accepted in accordance with the Delisting

Regulations: (a) to the extent not already done so, Vedanta Mauritius will draw the amount under the Bridge Facility Agreement and arrange for such proceeds to also be transferred to the India Escrow Account. In addition, Vedanta Mauritius also has further flexibility to enter into a second term loan facility agreement which would consist of a facility available to be drawn by way of term loan and bank guarantee (as may be required) and if such facility is availed, Vedanta Mauritius will draw the amount and arrange to transfer the same to the India Escrow Account, if required; and (b) to the extent not already done so, the Issuer will then transfer proceeds from the offering of the Bonds in the Bond Escrow Account into the India Escrow Account, in each case, as may be required, to pay the Public Shareholders in accordance with the Delisting Regulations. The Acquirers would be required to pay the consideration to the Public Shareholders whose bids have been accepted within ten Working Days of the closure of the RBB Period (or a counter offer bidding period, as the case may be). For a period of one year from the date of delisting of Vedanta Limited, those Public Shareholders who continue to hold Equity Shares have the option to tender their Equity Shares to the Acquirers at the final offer price (i.e., either the price determined pursuant to the reverse book building mechanism or a counter offer price, as the case may be). The Acquirers are obligated to accept such Equity Shares.

Special Mandatory Redemption of the Bonds

If (i) Approval In Principle is not received by 5 October 2020 (being 45 days after the Closing Date) or (ii) the Parent Guarantor and/or the Issuer and/or Vedanta Holdings Mauritius Limited, as the case may be, do not accept the final offer price (as determined as per the reverse book building mechanism as specified in the Delisting Regulations) within five Working Days after the closure of the RBB Period or, if a counter offer has been made in accordance with the Delisting Regulations, the counter offer price has not been accepted by the Public Shareholders in accordance with the Delisting Regulations, or (iii) the Acquisition Date has not occurred by 19 November 2020 (being 90 days after the Closing Date), or (iv) Vedanta Holdings Mauritius Limited fails, having used commercially reasonable efforts, to enter into the Bridge Facility Agreement and the Permitted Senior Secured Facility Agreement or to satisfy the conditions to Incur Bridge Loans and PSSFA Loans in an amount sufficient, when taken together with the proceeds from the offering of the Bonds, to consummate the Take Private Transaction, the Issuer will, within five Business Days, redeem all of the Bonds then outstanding at a redemption price of 101% of their principal amount plus accrued and unpaid interest, if any, to (but excluding) the redemption date. See the sections entitled "*Terms and Conditions of the Bonds — Redemption and Purchase — Special Mandatory Redemption*" and "*Risk Factors — Risks Relating to the Bonds, the Guarantee and the Collateral — The Take Private Transaction is subject to many conditions, uncertainties and risks and, if it is not consummated, the Issuer will be required to redeem the Bonds.*" for more information.

Certain of the Joint Bookrunners and/or their affiliates have and will continue to have additional relationships with the Company as described in the section entitled "*Plan of Distribution*".

CAPITALISATION AND INDEBTEDNESS

The following table sets out the consolidated cash and cash equivalents and liquid investments, capitalisation and indebtedness of the Company as of 31 March 2020:

- on a historical basis; and
- as adjusted to give effect to the issuance of the Bonds.

This table should be read in conjunction with the sections entitled "*Management's Discussion and Analysis of Financial Condition and Results of Operations*", "*Use of Proceeds*" and the Fiscal Year 2020 Financial Statements, the related notes and other financial information contained elsewhere in this Offering Circular.

	As of 31 March 2020	
	Actual	**As adjusted**[1]
	($ million)	
Cash and Cash Equivalents and Liquid Investments[2]	**5,090**	**5,090**
Share capital	29	29
Share premium	202	202
Hedging reserve	(95)	(95)
Other reserves	(331)	(331)
Retained earnings	(3,068)	(3,068)
Equity attributable to equity holders of the parent	(3,263)	(3,263)
Non-controlling interests	5,536	5,536
Total Equity	**2,273**	**2,273**
Term loans — secured — (repayable < 1 year)	825	825
Term loans — unsecured — (repayable < 1 year)	3,229	3,229
Term loans — secured — (repayable > 1 year)	3,155	3,155
Term loans — unsecured — (repayable > 1 year)	9	9
Other borrowings and indebtedness — secured — (repayable < 1 year)	724	724
Other borrowings and indebtedness — unsecured — (repayable < 1 year)	5,408	5,408
Other borrowings and indebtedness — secured — (repayable > 1 year)	1,717	1,717
Other borrowings and indebtedness — unsecured — (repayable > 1 year)	28	28
Bonds offered hereby	—	1,400
Total Indebtedness	**15,095**	**16,495**
Total Capitalisation[3]	**17,368**	**18,768**

(1) The 'as adjusted' column does not give effect to the use of proceeds. Please also see the section entitled "*Use of Proceeds*" for more information in respect of the utilisation of the proceeds of the Bonds.

(2) Post 31 March 2020, HZL has declared and made interim dividend payments of ₹69.72 billion ($932.0 million).

(3) Total capitalisation equals total equity plus total indebtedness.

Except as disclosed in this Offering Circular (including the section entitled "*Recent Developments*"), there has been no material changes to the Company's capitalisation since 31 March 2020.

TSPL's long term loan from Power Finance Corporation

In June 2020, TSPL entered into a ₹50 billion loan agreement with Power Finance Corporation with an interest rate of 10.5%. This loan has a tenor of 16 years and will be used to refinance TSPL's short term and/or maturing debts. As of the date of this Offering Circular, ₹22,285 million ($297.8 million) has been drawn from the loan.

SELECTED CONSOLIDATED FINANCIAL INFORMATION

The following tables present the selected historical consolidated financial information for the Company for the periods ended and at the dates indicated below. The selected historical consolidated financial information as of and for Fiscal Years ended 2018, 2019 and 2020 has been derived from the Audited Financial Statements included elsewhere in this Offering Circular. The financial information as of and for Fiscal Year 2018 has been extracted from the comparative information included in Fiscal Year 2019 Financial Statements. The Audited Financial Statements should be read in conjunction and in entirety with the respective audit reports and related notes thereto. The Audited Financial Statements have been audited by Ernst & Young LLP, independent auditors, as stated in their reports included elsewhere in this Offering Circular.

Ernst & Young LLP, have expressed a qualified opinion in relation to the inventory quantities held at 31 March 2020 within India on the Fiscal Year 2020 Financial Statements stated in the section "Basis for qualified opinion" in the audit report to the Fiscal Year 2020 Financial Statements due to the enforcement by the GOI of restrictions in response to COVID-19 to which Ernst & Young LLP were prevented from performing their planned procedures surrounding the observation of physical counts of inventory and were unable to determine whether any adjustment to the inventory quantities held at 31 March 2020 within India, which are included in the consolidated statement of financial position at $1,383 million of the total of $1,515 million was necessary. See the audit report and the notes to the Fiscal Year 2020 Financial Statements and the sections entitled "Presentation of Financial Information" and "Risk Factors — Risks Relating to Business — The Company's independent auditors qualified their opinion in relation to the inventory quantities held at 31 March 2020, within India, in their audit report on the Fiscal Year 2020 Financial Statements" for more details.

Ernst & Young LLP's audit report on the Fiscal Year 2020 Financial Statements contains an explanatory paragraph, "Material uncertainty relating to going concern", which draws attention to note 1(d) to the Fiscal Year 2020 Financial Statements which indicates that the ability of the Group and the Company to continue as a going concern is subject to a number of material uncertainties including liquidity and covenant compliance matters that may cast significant doubt on the Company's ability to continue as a going concern. For more details, see the audit report and note 2(a) to the Fiscal Year 2020 Financial Statements and the sections entitled "Presentation of Financial Information", "Risk Factors — Risks Relating to Business — The Company's independent auditors have included an explanatory paragraph which draws attention to a material uncertainty relating to the Company's ability to continue as a going concern in their audit report on the Fiscal Year 2020 Financial Statements" and "Risk Factors — Risks Relating to Business — Vedanta is subject to covenants under its credit facilities including term loans and working capital facilities that limit its flexibility in managing its business".

Ernst & Young LLP have highlighted certain key audit matters in respect of the Fiscal Year 2020 Financial Statements in the section "Key Audit Matters" in the audit report to the Fiscal Year 2020 Financial Statements which were of most significance in the conduct of the audit of the Fiscal Year 2020 Financial Statements and include the most significant assessed risks of material misstatement (whether or not due to fraud) which Ernst & Young LLP has identified. For more details, see the audit report and the notes to the Fiscal Year 2020 Financial Statements and the section entitled "Presentation of Financial Information".

Following the deconsolidation of KCM with effect from 21 May 2019, the Fiscal Year 2020 Financial Statements present KCM as a discontinued operation. However, the Audited Financial Statements present KCM as a consolidated subsidiary. Fiscal Year 2019 Financial Statements (including the comparative consolidated financial statements as of and for Fiscal Year 2018 therein) have presented KCM as a consolidated subsidiary. Accordingly, the Fiscal Year 2020 Financial Statements and the Fiscal Year 2019 Financial Statements are not directly comparable. In addition, the financial information as of and for Fiscal Year 2018 and 2019 presented elsewhere in this Offering Circular including this section "Management's Discussion and Analysis of Financial Condition and Results of Operations" are derived from the Fiscal Year 2019 Financial Statements. For more details, see the audit report and note 3(e) to the Fiscal Year 2020 Financial Statements for further information on the treatment of the deconsolidation of KCM and the sections entitled "Presentation of Financial Information", "Risk Factors — Risks Relating to Business — Vedanta may not be able to regain control over KCM", "Risk Factors — The Fiscal Year 2020 Financial Statements and the Fiscal Year 2019 Financial Statements are not directly comparable" and "Litigation — Proceedings related to KCM".

The Fiscal Year 2020 Financial Statements reflect the adoption of IFRS 16 which was adopted with effect from 1 April 2019. As the Company applied the modified retrospective approach on transition with the initial application on 1 April 2019 and without restating the corresponding figures of the prior period before 1 April 2019, the Company's consolidated financial information as at and for the year ended 31 March 2020 may not be directly comparable against the Company's consolidated financial information as at and for the years ended 31 March 2018 and 2019. For more details, see note 2(b) of the Fiscal Year 2020 Financial Statements and the sections entitled "Presentation of Financial Information" and "Risk Factors — Risks Relating to Business — The adoption of IFRS 16 with effect from 1 April 2019 renders the Company's audited consolidated financial information as at and for and for the years ended 31 March 2018 and 2019 not directly comparable with the Company's consolidated financial information after 1 April 2019".

The Fiscal Year 2019 Financial Statements reflect the adoption of IFRS 9 and IFRS 15 which were adopted with effect from 1 April 2018. As the Company applied the transition provisions set out in IFRS 9 (where the Company has elected to apply the limited exemptions in IFRS 9 relating to the classification, measurement and impairment requirements for financial assets) and the modified transitional approach set out in IFRS 15, each with the date of initial application on 1 April 2018 and without restating the corresponding figures of the prior period before 1 April 2018, the Company's consolidated financial information as at and for the years ended 31 March 2019 and 2020 may not be directly comparable against the Company's consolidated financial information as at and for the year ended 31 March 2018. For more details, see note note 2(b) of the Fiscal Year 2019 Financial Statements and the sections entitled "Presentation of Financial Information" and "Risk Factors — Risks Relating to Business — The adoption of IFRS 9 and IFRS 15 with effect from 1 April 2018 renders the Company's audited consolidated financial information as at and for and for the year ended 31 March 2018 not directly comparable with the Company's consolidated financial information after 1 April 2018".

You should read the following information in conjunction with the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the Audited Financial Statements and their respective audit reports and related notes thereto included elsewhere in this Offering Circular.

Consolidated Income Statement

	Fiscal Year		
	2018	**2019**	**2020**
		($ million)	
Continuing operations			
Revenue	15,294	14,031	11,790
Cost of sales	(12,029)	(11,532)	(9,587)
Gross profit	**3,265**	**2,499**	**2,203**
Other operating income	154	229	142
Distribution costs	(277)	(276)	(257)
Administrative expenses	(417)	(541)	(490)
Impairment reversal/(charge) [net], loss on PP&E	650	38	(2,072)
Operating (loss)/profit	**3,375**	**1,949**	**(474)**
Investment revenues	465	480	394
Finance costs	(1,347)	(1,258)	(1,179)
Other (losses)/gains (net)	(5)	(75)	(87)
(Loss)/Profit before taxation	**2,488**	**1,096**	**(1,346)**
Tax credit/(charge) – special items	(338)	(16)	781
Tax expense – others	(675)	(656)	(411)
(Loss)/Profit for the year	**1,475**	**424**	**(976)**
Profit/(loss) after tax for the year from discontinued operations and gain on deconsolidation	–	–	(771)
Profit/(Loss) for the year	**1,475**	**424**	**(1,747)**
Attributable to:			
Equity holders of the parent	239	(237)	(1,568)
Non-controlling interests	1,236	661	(179)
(Loss)/Profit for the year	**1,475**	**424**	**(1,747)**

Consolidated Balance Sheet

	As of 31 March		
	2018	2019	2020
	($ million)		
ASSETS			
NON-CURRENT ASSETS			
Goodwill	12	12	12
Intangible assets	123	108	100
Property, plant and equipment	15,401	17,322	13,005
Exploration and evaluation assets	2,326	404	240
Leasehold land	57	63	0
Financial asset investments	25	707	12
Non-current tax assets	521	504	354
Other non-current assets	659	1,010	1,548
Deferred tax assets	917	778	1,114
	20,041	**20,908**	**16,385**
CURRENT ASSETS			
Inventories	2,038	2,060	1,515
Trade and other receivable	1,527	1,504	1,102
Financial instruments (derivatives)	24	11	93
Current tax assets	2	1	1
Short-term investments	4,808	4,164	4,385
Cash and cash equivalents	798	1,133	705
	9,197	**8,873**	**7,801**
TOTAL ASSETS	**29,238**	**29,781**	**24,186**
LIABILITIES			
CURRENT LIABILITIES			
Short term borrowings	5,460	5,456	10,186
Trade and other payables	6,078	6,878	5,719
Financial instruments (derivatives)	22	66	13
Retirement benefits	18	17	15
Provisions	22	38	32
Current tax liabilities	54	61	26
	11,654	**12,516**	**15,991**
NET CURRENT ASSETS/(LIABILITIES)	**(2,457)**	**(3,643)**	**(8,190)**
NON-CURRENT LIABILITIES			
Medium and long term borrowings	9,734	10,524	4,909
Trade and other payables	118	244	232
Financial instruments (derivatives)	18	14	6
Deferred tax liabilities	749	776	397
Retirement benefits	62	71	22
Provisions	351	371	356
Non-equity non-controlling interests	12	12	–
	11,044	**12,012**	**5,922**
TOTAL LIABILITIES	**22,698**	**24,528**	**21,913**
NET ASSETS	**6,540**	**5,253**	**2,273**
EQUITY			
Share capital	30	29	29
Share premium	202	202	202
Treasury shares	(558)	–	–
Share based payment reserve	13	–	–
Hedging reserve	(93)	(98)	(95)
Other reserves	155	(97)	(331)
Retained earnings	(79)	(964)	(3,068)
Equity attributable to equity holders of the parent	(330)	(928)	(3,263)
Non-controlling interests	6,870	6,181	5,536
TOTAL EQUITY	**6,540**	**5,253**	**2,273**

Consolidated Cash Flow Statement

	Fiscal Year		
	2018	2019	2020
		($ million)	
Cash flows from operating activities			
(Loss)/Profit before taxation from continuing operations	2,488	1,096	(1,346)
Adjustments for:			
Depreciation and amortisation	1,271	1,482	1,412
Investment revenues	(465)	(480)	(394)
Finance costs	1,347	1,258	1,179
Other (gains) and losses (net)	5	75	87
Loss/(Profit) on disposal of property plant and equipment	(1)	9	8
Write-off of unsuccessful exploration costs	–	7	–
Share based payment charge	19	18	10
Impairment charge/(reversal)	(650)	(38)	2,072
Other Special items	–	–	(7)
Other non-cash items	10	–	–
Operating cash flows before movements in working capital	**4,024**	**3,427**	**3,021**
(Increase)/Decrease in inventories	(355)	(10)	292
Decrease/(Increase) in receivables	(607)	(335)	(713)
Increase/(Decrease) in payables	247	577	352
Cash generated from operations	**3,309**	**3,659**	**2,952**
Dividends received	4	6	2
Interest income received	224	159	130
Interest paid	(1,312)	(1,278)	(1,136)
Income taxes paid (net of refunds)	(567)	(547)	(165)
Dividends paid	(164)	(113)	(536)
Cash Flows from operating activities (Continuing activities)	**1,494**	**1,886**	**1,247**
Cash flows from operating activities (Discontinued operations)	–	–	3
Total cash inflow from operating activities	**1,494**	**1,886**	**1,250**
Cash flows from investing activities			
Purchases of property, plant, equipment, intangibles, evaluation and exploration assets	(1,104)	(1,327)	(1,104)
Proceeds on disposal of property, plant, equipment, intangibles, evaluation and exploration assets	10	18	21
Proceeds from redemption of short-term investments	16,863	12,588	15,178
Purchase of short-term investments	(13,422)	(11,949)	(15,460)
Proceeds from sale of financial asset investments	–	–	428
Payments towards financial asset investments	–	(254)	(63)
Consideration paid for business acquisition (net of cash and cash equivalents acquired)	(134)	(752)	(5)
Amount paid against guarantees issued on behalf of KCM	–	–	(251)
Reduction in cash and cash equivalents on discontinued operations	–	–	(1)
Cash Flows from investing activities (Continuing activities)	**2,213**	**(1,676)**	**(1,257)**
Cash flows from investing activities (Discontinued operations)	–	–	(4)
Total cash from/(used in) investing activities	**2,213**	**(1,676)**	**(1,261)**
Cash flows from financing activities			
Issue of ordinary shares	0	1	–
Purchase of shares under DSBP scheme	(2)	–	(15)
Dividends paid to non-controlling interests of subsidiaries	(1,414)	(1,028)	(101)
Share purchase by subsidiary	(31)	(21)	–
Sale of treasury shares	–	19	–
Exercise of stock options in subsidiary	5	1	–
Repayment of working capital loan (net)	(612)	(90)	(1,604)
Proceeds from other short-term borrowings	1,115	1,324	317
Repayment of other short-term borrowings	(4,362)	(2,433)	(551)
Buyback of non-convertible bond	(1,129)	–	–
Proceeds from medium and long-term borrowings	3,640	2,855	4,294
Repayment of medium and long-term borrowings	(1,817)	(461)	(2,650)
Buyback of convertible bond	–	–	(45)
Cash Flows from financing activities (Continuing activities)	**(4,607)**	**167**	**(355)**
Cash flows from financing activities (Discontinued operations)	–	–	–
Total cash (used in)/from financing activities	**(4,607)**	**167**	**(355)**
Net increase/(decrease) in cash and cash equivalents	**(900)**	**377**	**(366)**
Effect of foreign exchange rate changes	16	(42)	(62)
Cash and cash equivalents at beginning of year	**1,682**	**798**	**1,133**
Cash and cash equivalents at end of year	**798**	**1,133**	**705**

* Proceeds from redemption/purchase of liquid investments as well as proceeds from and repayment of short term borrowings have been presented on a net basis.

Consolidated Business Segments Data

	Fiscal Year		
	2018	2019	2020
		($ million)	
External revenues:			
Oil and gas	1,480	1,892	1,787
Zinc			
– India	3,354	2,955	2,563
– International	535	392	441
Copper			
– India/Australia	3,828	1,537	1,277
– Zambia	1,181	1,025	–
Iron ore	481	415	487
Aluminium	3,541	4,180	3,746
Power	854	924	827
Others	40	711	662
Total	**15,294**	**14,031**	**11,790**
Vedanta EBITDA[(1)]			
Oil and gas	849	1,100	1,032
Zinc			
– India	1,902	1,516	1,230
– International	220	100	54
Copper			
– India/Australia	162	(36)	(40)
– Zambia	73	(63)	–
Iron ore	48	90	117
Aluminium	414	316	281
Power	258	219	232
Others	37	151	97
Total	**3,963**	**3,393**	**3,003**
Other Data and Ratios			
Net Debt/Capitalisation (%)	59.4%	66.2%	81.5%
Interest Coverage Ratio (Times)	4.5	4.4	3.8
Net Debt/Vedanta EBITDA[(1)] (Times)	2.4	3.0	3.3
Debt/Vedanta EBITDA[(1)] (Time)	3.8	4.7	5.0

(1) Vedanta EBITDA is a non-IFRS measure and represents Earnings before special items, depreciation, amortisation, other gains and losses, finance cost, investment revenue and tax. Vedanta EBITDA may not be comparable to similarly titled measures reported by other companies due to potential inconsistencies in the method of calculation. The Company has included its Vedanta EBITDA because the Company believes it is an indicative measure of the Company's operating performance and is used by investors and analysts to evaluate companies in the same industry. Vedanta EBITDA should be considered in addition to, and not as a substitute for, other measures of financial performance and liquidity reported in accordance with IFRS. The Company believes that the inclusion of supplementary adjustments applied in the Company's presentation of Vedanta EBITDA are appropriate because the Company believes it is a more indicative measure of the Company's baseline performance as it excludes certain charges that the Company's management considers to be outside of its core operating results. In addition, the Company's Vedanta EBITDA is among the primary indicators that the Company's management uses as a basis for planning and forecasting of future periods.

The following table reconciles profit/loss for the year to Vedanta EBITDA.

	Fiscal Year		
	2018	**2019**	**2020**
		($ million)	
(Loss)/Profit for the year from continuing operations	1,475	424	(976)
Adjusted for:			
Net tax (credit)/expense	1,013	672	(370)
Other gains and losses (net)	5	75	87
Finance costs	1,347	1,258	1,179
Investment revenues	(465)	(480)	(394)
Special Items[1]	(683)	(38)	2,065
Depreciation and amortisation	1,271	1,482	1,412
VEDANTA EBITDA	**3,963**	**3,393**	**3,003**

(1) Special Items are defined in Notes to the Audited Financial Statements. Special items include non cash impairment charges relating to the oil and gas, iron ore assets, glass substrate business, copper capital work-in-progress, capital advances, among others.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion of the financial condition and results of operations of Vedanta should be read in conjunction with the Audited Financial Statements (including the respective audit reports and related notes thereto) and with the information relating to the business of Vedanta included elsewhere in this Offering Circular. This discussion involves forward-looking statements that reflect the current view of management and involve risks and uncertainties. The actual results of Vedanta could differ materially from those contained in any forward-looking statements as a result of factors discussed below and elsewhere in this Offering Circular, particularly in "Risk Factors". Investors should read the whole of this Offering Circular and not rely just on summarised information.

Ernst & Young LLP, have expressed a qualified opinion in relation to the inventory quantities held at 31 March 2020 within India on the Fiscal Year 2020 Financial Statements stated in the section "Basis for qualified opinion" in the audit report to the Fiscal Year 2020 Financial Statements due to the enforcement by the GOI of restrictions in response to COVID-19 to which Ernst & Young LLP were prevented from performing their planned procedures surrounding the observation of physical counts of inventory and were unable to determine whether any adjustment to the inventory quantities held at 31 March 2020 within India, which are included in the consolidated statement of financial position at $1,383 million of the total of $1,515 million was necessary. See the audit report and the notes to the Fiscal Year 2020 Financial Statements and the sections entitled "Presentation of Financial Information" and "Risk Factors — Risks Relating to Business — The Company's independent auditors qualified their opinion in relation to the inventory quantities held at 31 March 2020, within India, in their audit report on the Fiscal Year 2020 Financial Statements" for more details.

Ernst & Young LLP's audit report on the Fiscal Year 2020 Financial Statements contains an explanatory paragraph, "Material uncertainty relating to going concern", which draws attention to note 1(d) to the Fiscal Year 2020 Financial Statements which indicates that the ability of the Group and the Company to continue as a going concern is subject to a number of material uncertainties including liquidity and covenant compliance matters that may cast significant doubt on the Company's ability to continue as a going concern. For more details, see the audit report and note 2(a) to the Fiscal Year 2020 Financial Statements and the sections entitled "Presentation of Financial Information", "Risk Factors — Risks Relating to Business — The Company's independent auditors have included an explanatory paragraph which draws attention to a material uncertainty relating to the Company's ability to continue as a going concern in their audit report on the Fiscal Year 2020 Financial Statements" and "Risk Factors — Risks Relating to Business — Vedanta is subject to covenants under its credit facilities including term loans and working capital facilities that limit its flexibility in managing its business".

Ernst & Young LLP have highlighted certain key audit matters in respect of the Fiscal Year 2020 Financial Statements in the section "Key Audit Matters" in the audit report to the Fiscal Year 2020 Financial Statements which were of most significance in the conduct of the audit of the Fiscal Year 2020 Financial Statements and include the most significant assessed risks of material misstatement (whether or not due to fraud) which Ernst & Young LLP has identified. For more details, see the audit report and the notes to the Fiscal Year 2020 Financial Statements and the section entitled "Presentation of Financial Information".

Following the deconsolidation of KCM with effect from 21 May 2019, the Fiscal Year 2020 Financial Statements present KCM as a discontinued operation. However, the Audited Financial Statements present KCM as a consolidated subsidiary. Fiscal Year 2019 Financial Statements (including the comparative consolidated financial statements as of and for Fiscal Year 2018 therein) have presented KCM as a consolidated subsidiary. Accordingly, the Fiscal Year 2020 Financial Statements and the Fiscal Year 2019 Financial Statements are not directly comparable. In addition, the financial information as of and for Fiscal Year 2018 and 2019 presented elsewhere in this Offering Circular including this section "Management's Discussion and Analysis of Financial Condition and Results of Operations" are derived from the Fiscal Year 2019 Financial Statements. For more details, see the audit report and note 3(e) to the Fiscal Year 2020 Financial Statements for further information on the treatment of the deconsolidation of KCM and the sections entitled "Presentation of Financial Information", "Risk Factors — Risks Relating to Business — Vedanta may not be able to regain control over KCM", "Risk Factors — The Fiscal Year 2020 Financial Statements and the Fiscal Year 2019 Financial Statements are not directly comparable" and "Litigation — Proceedings related to KCM".

Introduction

Overview

Vedanta is a globally diversified metals and mining, oil and gas and power generation company, currently contributing 1% of India's GDP *(Source: IFC report on economic and social impact (IFC is Institute for Competitiveness, the strategy arm of Harvard Business School))*. Its businesses are principally located in India. India is one of the fastest growing large economies in the world with a long term GDP growth forecast of over 6%, according to Euromonitor. Vedanta also has operations in Zambia, Namibia, South Africa, the United Arab Emirates (the "UAE"), Japan, South Korea, and Taiwan, and a workforce of over 76,000 people worldwide and approximately 20,000 of them are employees as at 31 March 2020. Vedanta is primarily engaged in oil and gas, zinc, copper, iron ore, lead, silver, steel, aluminium, commercial power generation, glass substrate, and port operation businesses. Vedanta has expanded its existing business across oil and gas, copper, zinc, aluminium and iron ore and acquired new businesses, such as, the steel business through acquisition of ESL in 2018. Vedanta believes its experience in operating and expanding its businesses in India will allow it to capitalise on attractive growth opportunities arising from India's large mineral reserves, relatively low cost of operations and large and inexpensive labour and talent pools.

Vedanta's operating loss was $474 million in Fiscal Year 2020 compared to an operating profit of $1,949 million in Fiscal Year 2019, primarily due to net impairment charge of $2,072 million in Fiscal Year 2020. Revenue and operating profit before special items decreased from $14,031 million and $1,911 million, respectively, in Fiscal Year 2019, to $11,790 million and $1,591 million, respectively, in Fiscal Year 2020. The decrease in revenue was mainly driven by a combination of factors including reduced commodity prices, discontinuity of operations at KCM, decrease in volume at Zinc India, decrease in volume in the oil and gas business and a decrease in power sales at TSPL. This was partially offset by an increase in aluminium volumes, additional volumes from Gamsberg operations and an increase in sales at Iron Ore Karnataka and the steel business.

Vedanta EBITDA decreased from $3,963 million in Fiscal Year 2018 to $3,393 million in Fiscal Year 2019 and decreased further to $3,003 million in Fiscal Year 2020. The following table sets out Vedanta EBITDA for each of Vedanta's business segments.

	Fiscal Year		
	2018	2019	2020
		($ million)	
Vedanta EBITDA[(1)]			
Oil and gas business	849	1,100	1,032
Zinc			
– India	1,902	1,516	1,230
– International	220	100	54
Copper			
– India and Australia	162	(36)	(40)
– Zambia	73	(63)	–
Iron ore	48	90	117
Aluminium	414	316	281
Commercial power generation	258	219	232
Others	37	151	97
Total	**3,963**	**3,393**	**3,003**

(1) Vedanta EBITDA is a non-IFRS measure and represents earnings before special items, depreciation, amortisation, other gains and losses, finance cost, investment revenue and tax. Vedanta EBITDA may not be comparable to similarly titled measures reported by other companies due to potential inconsistencies in the method of calculation. The Company has included Vedanta EBITDA because the Company believes it is an indicative measure of the Group's operating performance and is used by investors and analysts to evaluate companies in the same industry. Vedanta EBITDA should be considered in addition to, and not as a substitute for, other measures of financial performance and liquidity reported in accordance with IFRS. The Company believes that the inclusion of supplementary adjustments applied in the Company's presentation of Vedanta EBITDA are appropriate because the Company believes it is a more indicative measure of the Group's baseline performance as it excludes certain charges that the Company's management considers to be outside of its core operating results. In addition, the Vedanta EBITDA is among the primary indicators that the Company's management uses as a basis for planning and forecasting of future periods.

The following table reconciles profit/loss for the year to Vedanta EBITDA.

	Fiscal Year		
	2018	2019	2020
		($ million)	
Profit for the year	1,475	424	(1,747)
Adjusted for:			
Tax expense	1,013	672	(370)
Other gains and losses (net)	5	75	87
Finance costs	1,347	1,258	1,179
Investment revenue	(465)	(480)	(382)
Special Items[(1)]	(683)	(38)	2,053
Depreciation and amortisation	1,271	1,482	1,412
Loss after tax for the year from discontinued operations	–	–	771
Vedanta EBITDA	**3,963**	**3,393**	**3,003**

(1) Special Items are defined in notes to the Audited Financial Statements. Special items include non cash impairment charges relating to the oil and gas and iron ore assets, the iron ore business relating to the Liberian assets, Bellary assets in the iron ore business, the copper mine of Tasmania, voluntary retirement schemes across the Group, reversal of provision of District Mineral Fund, charges pursuant to adverse arbitration orders and acquisition expenses.

Oil and gas

Vedanta's oil and gas business is primarily owned and operated by Vedanta Limited and its subsidiary, Cairn India Holdings Limited. The oil and gas business segment has a diversified asset base with 58 blocks in India. The blocks are primarily located across the Indian basins in Barmer, Krishna-Godavari, Cambay, Assam, Gujarat Kutch and Cauvery. Vedanta Limited's oil and gas business along with joint venture partner Petro SA, filed closure application with Petroleum Agency SA on 19 September 2018 to exit from South Africa operations. The application was accepted and the closure certificate was granted by Petroleum Agency SA on 20 September 2019.

Vedanta's oil and gas business continues to contribute significantly to India's domestic crude oil production. Vedanta Limited operates approximately 25.0% of India's domestic crude oil production and has opened four frontier basins with numerous discoveries.

Revenue from Vedanta's oil and gas business decreased from $1,892 million in Fiscal Year 2019 to $1,787 million in Fiscal Year 2020, primarily due to a fall in oil price realisation and lower volumes which was partially offset by a one-time recovery of exploration costs of $180 million. Gross oil and gas production were 67.7 mmboe, 68.9 mmboe and 63.3 mmboe and working interest production were 43.3 mmboe and 43.7 mmboe and 40.4 mmboe in Fiscal Years 2018, 2019 and 2020, respectively. The production volumes increased in Fiscal Year 2019 due to gains accruing from new wells brought from Mangala, Bhagyam and Aishwariya EOR. Production volumes decreased in Fiscal Year 2020 due to natural reservoir decline and maintenance shutdown of Mangala Processing Terminal, which was partially offset by gains accruing from a ramp up of gas facilities and new wells brought online.

Zinc

Vedanta's zinc business is divided into two segments, (i) the fully integrated India zinc business, comprising HZL's mining and production operations, and (ii) the international zinc business, also referred to as "Zinc International," comprising mainly mining operations in Namibia and South Africa.

Vedanta's total refined zinc and lead metal production decreased from 1,110,143 tonnes in Fiscal Year 2019 to 1,042,109 tonnes in Fiscal Year 2020. Revenue of Vedanta's zinc business decreased from $3,347 million in Fiscal Year 2019 to $3,004 million in Fiscal Year 2020. This decrease was primarily driven by the reduced commodity prices of zinc and lead. The LME price for zinc decreased from $ 2,743 per tonne in Fiscal Year 2019 to $2,402 per tonne in Fiscal Year 2020, and the LME price for lead decreased from $2,121 per tonne in Fiscal Year 2019 to $1,952 per tonne in Fiscal Year 2020.

India Zinc Business

Vedanta's fully integrated India zinc business is owned and operated by HZL. As of 31 March 2020, Vedanta controls HZL through its 50.1% ownership interest in Vedanta Limited, which owns 64.9% of the share capital in HZL. The GOI and institutional and public shareholders hold the remaining 29.5% and 5.6% of HZL's share capital, respectively. HZL's business includes five zinc-lead mines, one rock phosphate mine, four hydro metallurgical zinc smelters, two lead smelters, one pyrometallurgical zinc-lead smelter, eight sulphuric acid plants, one silver refinery and six captive power plants in Rajasthan, India. Additionally, HZL has processing and refining facilities for zinc in Haridwar and for zinc, lead and silver at Pantnagar, both in the State of Uttarakhand, India.

Vedanta's India zinc business total metal production decreased from 894,121 tonnes in Fiscal Year 2019 to 869,656 tonnes in Fiscal Year 2020 due to lower lead production in the second and third quarter of Fiscal Year 2020 caused by a temporary technical disruption, at the Dariba Lead Smelter and various restrictions and lockdowns imposed due to the COVID-19 pandemic in the fourth quarter of Fiscal Year 2020. Revenue of Vedanta's India zinc business decreased from $2,955 million in Fiscal Year 2019 to $2,563 million in Fiscal Year 2020. This decrease was primarily driven by lower metal prices and lower sales volumes which was partly offset by higher silver prices and a depreciation of the Indian Rupee.

International Zinc Business

As of 31 March 2020, Vedanta's international zinc business comprises (i) 100% ownership by Vedanta Limited of Skorpion, which owns the Skorpion mine and refinery in Namibia, (ii) 74% stake ownership by Vedanta Limited in Black Mountain Mining, which owns the Black Mountain mine and the Gamsberg project in South Africa and (iii) 100% ownership by Vedanta Limited of Lisheen, which owns the Lisheen mine in Ireland. The mine in Ireland is no longer in operation due to its closure in December 2015 and expects to receive the closure certificate by December 2020.

Vedanta's international zinc total metal production increased from 147,988 tonnes in Fiscal Year 2019 to 240,487 tonnes in Fiscal Year 2020 primarily due to the ramp up of the first phase of the Gamsberg expansion. Revenue from the international zinc business increased to $441 million in Fiscal Year 2020 from $392 million in Fiscal Year 2019 mainly due to higher volumes which was partially offset by lower price realisations.

Copper

Overview

Vedanta's copper business is principally one of custom smelters. Its assets include a smelter, a refinery, a phosphoric acid plant, a sulphuric acid plant, a copper rod plant and three captive power plants at Tuticorin in Southern India, a refinery and a copper rod plant, and three anode casting plants in western India, a precious metal refinery that produces gold and silver, and a doré anode plant and a copper rod plant at Fujairah in the UAE. Vedanta's operations at Tuticorin, India are currently suspended due to ongoing litigation regarding the renewal of the consent to operate. Vedanta owns the Mt. Lyell copper mine in Tasmania, Australia. The operation of Mt Lyell mine was suspended in January 2014, following a mud slide incident. Subsequently, the operations at Mt. Lyell copper mine was further suspended for care and maintenance since 9 July 2014 following a rock falling on the ventilation shaft in June 2014.

Vedanta's total copper cathode production decreased from 266,552 tonnes in Fiscal Year 2019 to 77,490 tonnes in Fiscal Year 2020, and its total copper rod production decreased from 111,197 tonnes in Fiscal Year 2019 to 100,219 tonnes in Fiscal Year 2020. Revenue of Vedanta's total copper business decreased from $2,622 million in Fiscal Year 2019 to $1,277 million in Fiscal Year 2020, due to lower metal prices and a reduction in custom sales volumes, and the shutdown of the Tuticorin copper smelter due to the ongoing litigation regarding the renewal of the consent to operate.

India and Australia Copper Business

Vedanta Limited's copper operations include a smelter, refinery, phosphoric acid plant, sulphuric acid plant, copper rod plant and three captive power plants at Tuticorin in southern India, a refinery and a copper rod plant, and three anode casting plants at Silvassa in western India, a precious metal refinery that produces gold and silver, a doré anode plant, and a copper rod plant at Fujairah, the UAE.

Vedanta Limited's operations at Tuticorin, India are currently suspended due to ongoing litigation regarding the renewal of the consent to operate. See the section entitled "*Business — Litigation — Proceedings related to the existing copper smelting operations and the proposed expansion at the Tuticorin plant.*" for more information.

Vedanta Limited's wholly-owned subsidiary, CMT, owns a copper mine in Tasmania, Australia, which is suspended for care and maintenance since July 2014.

Zambia Copper Business

In May 2019, ZCCM, a company majority owned by the Government of Zambia, which owns 20.6% of the shares in KCM, filed a petition in the High Court of Zambia to wind up KCM on "just and equitable" grounds. ZCCM also obtained an ex-parte order from the High Court of Zambia appointing a provisional liquidator of KCM pending the hearing of the Petition. On 11 June 2019, without any prior notice, ZCCM amended the petition to include an additional ground for winding up KCM based on allegations that KCM is unable to pay its debts. Since all the significant decision-making powers, including carrying on the business of KCM and taking control over all the assets of KCM, rests with the provisional liquidator, Vedanta believes that the appointment of the provisional liquidator has caused the loss of its control over KCM. Accordingly, Vedanta deconsolidated KCM with effect from 21 May 2019 and has presented the same in the income statement for Fiscal Year 2020 as a discontinued operation.

See the sections entitled "*Risk Factors — Risks Relating to Business — Vedanta may not be able to regain control over KCM.*", "*Risk Factors — The Fiscal Year 2020 Financial Statements and the Fiscal Year 2019 Financial Statements are not directly comparable.*" and "*Business — Litigation — Proceedings related to KCM.*" for more information and the audit report and note 3(e) to the Fiscal Year 2020 Financial Statements.

Iron Ore

Vedanta's iron ore business is owned and operated by Vedanta Limited. Vedanta is engaged in the exploration, mining and processing of iron ore in India. In addition, it manufactures pig iron and metallurgical coke, and operates two waste heat recovery plants of 30 MW each in Goa. Vedanta acquired a met coke plant having production capacity of 120,000 tonnes per annum at Sindhudurg, Maharashtra which became operational on 9 September 2019. Vedanta Limited's mining operations are carried out in Goa and Karnataka, India. On 7 February 2018 the Supreme Court of India passed a final order setting aside the second renewal of the mining leases granted by the State of Goa. The Supreme Court of India directed that all lease holders operating under a second renewal to stop all mining operations with effect from 16 March 2018 until fresh mining leases (not fresh renewals or other renewals) and fresh environment clearances are granted under the Mines and Minerals (Development and Regulation) ("MMDR") Act. Vedanta's mines in the state of Goa were impacted as a result of this order and operations at the mines in Goa are suspended.

Vedanta's total saleable iron ore production was 7.1 million dmt in Fiscal Year 2018, 4.4 million dmt in Fiscal Year 2019 and 4.4 million dmt in Fiscal Year 2020. Revenue increased from $416 million in Fiscal Year 2019 to $489 million in Fiscal Year 2020 due to an increase in sales volume in Karnataka which was partially offset by lower pig iron prices during the year.

Steel

Vedanta operates the steel business through ESL in which Vedanta has 90.0% ownership interest. ESL owns and operates an integrated steel manufacturing facility near Bokaro, Jharkhand which has a current capacity of 1.5 mtpa and the potential to increase to 2.5 mtpa. It primarily consists of one sinter plant, a vertical coke oven plant, two blast furnaces, an oxygen plant, a lime calcination plant, a steel melting shop, a wire rod mill, a bar mill, a captive power plant and a ductile iron pipe plant. ESL is selling primarily TMT bars, wire rods, DI pipes, pig iron and steel billets in open market and has established its presence in the domestic market.

Aluminium

Vedanta's aluminium business is in Chhattisgarh and Odisha. Vedanta operates the business in the state of Chhattisgarh through BALCO, and aluminium operations in Odisha is a division of Vedanta Limited. Vedanta's primary products in this business segment are aluminium ingots, wire rods, billet and rolled products.

BALCO's operations include two bauxite mines, the Chotia coal block, a 1,710 MW captive power plants, an alumina refinery (operations of which had been suspended since September 2009), a 245,000 tpa aluminium smelter, and a 325,000 tpa aluminium smelter and fabrication facility, all of which are located in Korba in the State of Chhattisgarh in central India. Vedanta Limited's operations include a 2.0 million tpa alumina refinery at Lanjigarh, with an associated 90 MW captive power plant.

Vedanta Limited also has another 1.25 mtpa aluminium smelter in Jharsuguda, which is the SEZ unit, with an associated 1,800 MW (three units of 600 MW) coal-based captive power plant. This facility initially commenced production on 1 December 2015. The first line of pots was commissioned by the end of July 2016 and the level of operating power on pots was 1,416 pots as on 31 March 2020. Currently, this facility is in the process of being ramped up to increase the total capacity to 1.75 mtpa.

Vedanta's total aluminium production decreased from 1,959,015 tonnes in Fiscal Year 2019 to 1,903,981 tonnes of aluminium in Fiscal Year 2020. Revenues from Vedanta's aluminium business decreased from $4,183 million in Fiscal Year 2019 to $3,751 million in Fiscal Year 2020, primarily due to lower LME aluminium prices.

Commercial Power Generation

Vedanta's commercial power generation business in India is comprised of the operations of Vedanta Limited, TSPL, BALCO, MEL and wind power plants operated by HZL.

Vedanta owns and operates several commercial power plants, namely Vedanta Limited's 600 MW coal-based thermal power plant in Jharsuguda, MEL's 106.5 MW coal-based thermal power plant in Mettur Dam, HZL's wind power plants in Gujarat, Karnataka, Maharashtra, Tamil Nadu and Rajasthan aggregating 274.2 MW, BALCO's 300 MW captive power plant ("CPP") and TSPL's 1,980 MW coal-based thermal power plant at Talwandi Sabo.

The three units of 600 MW each of coal-based thermal power plants in Jharsuguda have been converted from commercial power plants to CPPs from 1 April 2016 and is now part of the aluminium business. Similarly, BALCO received an order dated 1 January 2019 from CSERC for the conversion of 300 MW capacity from an independent power plant ("IPP") to a CPP. Operations in MEL has been suspended for care and maintenance since May 2017 due to lower demand in southern India. TSPL has entered into a PPA with Punjab State Electricity Board ("PSEB") for the sale of electricity generated at the TSPL power plants and TSPL receives a tariff based on the plant's availability.

Sales of units of power decreased from 13,515 million units of power in Fiscal Year 2019 to 11,162 million units of power in Fiscal Year 2020. Revenue from Vedanta's commercial power generation business decreased from $934 million in Fiscal Year 2019 to $827 million in Fiscal Year 2020 mainly due to lower power sales from TSPL as compared to Fiscal Year 2019.

Factors Affecting Vedanta's Results of Operations

Vedanta's results of operations are primarily affected by commodity prices, costs of production and efficiency, production output and mix, government policy in India, South Africa and Zambia and exchange rates. Each of these key factors is discussed below.

Generally, the metals Vedanta sells in India are sold at a premium to the LME market price due to a number of factors, including the customs duties levied on imports by the GOI, the costs to transport metals to India and regional market conditions. See the section entitled "*Management's Discussion and Analysis of Financial Condition and Results of Operations — Indian Government Policy*" for more information. As a result, Vedanta endeavours to sell as large a quantity of its products as possible in India.

Vedanta has historically engaged in hedging strategies to a limited extent to partially mitigate its exposure to fluctuations in commodity prices, as further described in the section entitled "*Management's Discussion and Analysis of Financial Condition and Results of Operations — Market Risk Disclosure — Commodity Price Risk*".

Commodity Prices

Vedanta's results of operations are significantly affected by the commodity prices of the natural resources that Vedanta produces, which are based on LME prices of metals produced, benchmark prices of oil, gas and iron ore and by the TcRc of Vedanta's copper business. While natural resource producers are unable to influence the commodity or benchmark prices directly, events such as changes in copper smelting or commodity production capacities, temporary price reductions or other attempts to capture market share by individual natural resources producers, including Vedanta, may affect market prices.

Moreover, the prices realised by Vedanta can, to some extent, be affected by the particular terms Vedanta is able to negotiate for the contractual arrangements it enters into with buyers. Price variations and market cycles have historically influenced, and are expected to continue to influence, Vedanta's financial performance. During Fiscal Year 2019, weaker commodity prices negatively impacted revenue and operating profit of Vedanta. This situation was further aggravated in Fiscal Year 2020, with an extended downturn in commodity prices across businesses which was partially offset by input commodity deflation (mostly in alumina, thermal coal and carbon prices) and favourable currency movement.

Crude oil and natural gas

Vedanta saw a year marked by supply-demand fluctuations in Fiscal Year 2020, leading to higher volatility in the oil and gas market. Crude oil price averaged $60.9 per barrel in Fiscal Year 2020 compared to $70.4 per barrel in Fiscal Year 2019 as multiple factors drove the world from a 'supply disruption' era to a 'supply plenty' era. The year started with OPEC-led production cuts, countered by the US President's request to OPEC for a production increase to bring down fuel costs. Tensions were heightened at various points in the year in the Middle East with attacks on oil tankers off the coast of the UAE, and several drones strikes against Saudi Arabian oil facilities, leading to concerns over oil supply disruptions. The trade tensions between the United States and China further raised geopolitical tensions, but eventually the US-China trade deal and the planned OPEC production cuts in 2020 led to a steady rally in crude prices. However, in March 2020, in order to limit the impact of economic contraction caused by the COVID-19 pandemic on oil demand, the OPEC+ failed to reach an agreement to cut oil supply and on 7 March 2020, Saudi Arabia slashed its oil prices to gain market share. As a result, oil prices fell to approximately $17 per barrel towards the end of the year, the lowest level since 2002.

The following table sets out the price of Dated Brent, an international benchmark oil blend, according to Platts, McGraw Hill Financial ("Platts"), for Fiscal Years 2018, 2019 and 2020.

	Fiscal Year		
	2018	**2019**	**2020**
		($ per barrel)	
Dated Brent	57.5	70.4	60.9

Zinc

The revenue of Vedanta's zinc business fluctuates based on the volume of sales and the LME price of zinc and lead and London Bullion Metal Association ("LBMA") price for silver. Vedanta's India zinc business is fully integrated, so its profitability is dependent upon the difference between the LME price of zinc, lead and silver and the cost of production, which includes the costs of mining and smelting.

The following table sets out the daily average zinc, lead and silver LME prices for Fiscal Years 2018, 2019 and 2020:

	Fiscal Year		
	2018	2019	2020
	($ per tonne, except for silver which is $/ounce)		
Zinc LME	3,057	2,743	2,402
Lead LME	2,379	2,121	1,952
Silver LBMA	16.9	15.4	16.5

Copper

The revenue of the copper India business fluctuates based on the volume of sales and the LME price of copper. Vedanta's copper India business is custom smelting and refining. As a result, Vedanta Limited's profitability is significantly dependent upon the market rate of the TcRc. Vedanta Limited purchases copper concentrate at an LME-linked copper price for the relevant quotation period less a TcRc that it negotiates with its suppliers, but which is influenced by the prevailing market rate for the TcRc. The market rate for the TcRc is significantly dependent upon the availability of copper concentrate, worldwide copper smelting capacity and transportation costs. The TcRc that Vedanta Limited is able to negotiate is also substantially influenced by the TcRc terms established by certain large Japanese custom smelters. The profitability of Vedanta's copper India business as to the portion of its copper business where it sources copper concentrate from third parties, which accounted for almost 100% of its copper concentrate requirement, is thus dependent upon the amount by which the TcRc Vedanta Limited is able to negotiate exceeds its smelting and refining costs. The profitability of Vedanta's copper India operations is also affected by the prices it receives upon the sale of by-products, such as sulphuric acid and precious metals, which are generated during the copper smelting and refining process. The prices Vedanta receives for by-products can vary significantly, including as a result of changes in supply and demand and local market factors in the location the by-product is produced. See the section entitled "*Risk Factors — Risks Relating to Business — Vedanta's businesses depend upon third party suppliers for a substantial portion of its raw material requirements and their segment results and segment margins depend upon the market prices for such raw materials.*" for more information.

The following table sets out the average TcRc that Vedanta's copper India business realised for Fiscal Years 2018, 2019 and 2020:

	Fiscal Year		
	2018	2019	2020
	(US cents per lb)		
Copper TcRc	21.3	6.0	3.8

The following table sets out the daily average copper LME price for Fiscal Years 2018, 2019 and 2020:

	Fiscal Year		
	2018	2019	2020
	($ per tonne)		
Copper LME	6,451	6,337	5,885

Aluminium

The revenue of Vedanta's aluminium business fluctuates based on the volume of sales and the LME price of aluminium. In Fiscal Year 2020, 74% of BALCO's alumina requirement and 42% of Vedanta's Odisha aluminium business' alumina requirement were imported from third parties, with the rest supplied by Vedanta's Lanjigarh alumina refinery. For the portion of Vedanta's aluminium business where the required alumina is sourced internally, profitability is dependent upon the LME price of aluminium less the cost of production, which includes the costs of bauxite mining at BALCO's mines or cost of bauxite received from Odisha Mining Cooperation, the refining of bauxite into alumina at Vedanta's aluminium refinery and the smelting of alumina into aluminium. For the portion of the aluminium business where alumina is sourced from third parties, profitability is dependent upon the LME price of aluminium less the cost of the sourced alumina and the cost of smelting. See the section entitled "*Risk Factors — Risks Relating to Business — Vedanta's businesses depend upon third party suppliers for a substantial portion of its raw material requirements and their segment results and segment margins depend upon the market prices for such raw materials.*" for more information.

The following table sets out the daily average aluminium LME prices for Fiscal Years 2018, 2019 and 2020:

	Fiscal Year		
	2018	**2019**	**2020**
		($ per tonne)	
Aluminium LME	2,046	2,035	1,749

Iron ore

The revenue of the iron ore business fluctuates based on the volume of sales and the market price of iron ore. The prices for iron ore are significantly dependent on the global and regional imbalances between the demand and supply of iron ore, worldwide steel-making capacity and transportation costs. Spot prices fluctuate based on short-term imbalances between demand and supply.

Production Costs and Efficiency

The results of operations of Vedanta are, to a significant degree, dependent upon its ability to efficiently run its operations and maintain low costs of production. Efficiencies relating to recovery of metal from ore, process improvements, by-product management and increasing productivity help drive costs down. Costs associated with mining and metal production include energy costs, ore extraction and processing costs at the captive mines, labour costs and other manufacturing expenses.

The cost of production also includes the cost of alumina for Vedanta's aluminium business. It does not include the cost of copper concentrate for Vedanta's copper business, though such cost is included in its cost of sales.

In the oil and gas business, production costs consist of expenditure incurred towards the production of crude oil and natural gas including statutory levies, such as cess, royalties and production payments payable pursuant to the PSCs as well as operational expenditures such as costs relating to repairs on, and maintenance of, facilities, power generation and fuel for facilities, water injection, insurance, and storage, transportation and freight of crude oil and natural gas, among others.

Energy cost is the most significant component of the cost of production of Vedanta's metal production businesses. Most of Vedanta's power requirements are met by captive power plants which are primarily coal-fueled. Thermal coal, diesel fuel and fuel oil, which are used to operate Vedanta's power plants, and metallurgical coke, which is used in the zinc smelting process, are sourced from a combination of long-term and spot contracts. The aluminium business has high energy consumption due to the power-intensive nature of aluminium smelting. Coal is sourced from linkage coal, import and domestic purchase. Any change in coal prices or the mix of coal that is utilised, primarily whether the coal is sourced locally or imported, can affect the cost of generating power.

For the zinc and iron ore businesses and the portions of the copper Zambia and aluminium businesses where ore is sourced from Vedanta's own mines, ore extraction and processing costs affect the cost of production. In the zinc and iron ore businesses, the ore extraction and processing costs are approximately 25% to 35% of the overall cost of production.

Vedanta's aluminium business, which has high energy consumption due to the power intensive nature of aluminium smelting operation, sources most of its thermal coal requirement through linkage and linkage auctions route. In the aluminium business, alumina costs represent approximately one-third of the cost of production of aluminium. In addition, a significant cost of production in the zinc business is the royalty that HZL pays on the lead-zinc ore that is mined. The royalty is a function of the LME prices of zinc and lead. See the section entitled "*Management's Discussion and Analysis of Financial Condition and Results of Operations — Indian Government Policy — Taxes and royalties*" for more information. In the iron ore business, the principal activities are ore extraction, processing and sales. The cost of transporting ore from the mines to the port and the ore extraction cost account for a majority of the total cost of production for Vedanta Limited.

Vedanta sources ore from its own mines for its zinc, iron ore and aluminium businesses and hence incurs ore extraction and processing costs which affect its cost of production.

In the commercial power generation business, production costs are mainly coal costs, and the coal is primarily sourced domestically.

Labour costs are principally a function of the number of employees and increases in compensation from time to time. Improvements in labour productivity in recent years have resulted in a decrease in the per-unit labour costs. The majority of BALCO's mining operations, a substantial portion of HZL's and Vedanta's iron ore mining operations, Vedanta Limited's oil and gas operations, and a limited number of functions at Vedanta's copper, zinc and aluminium smelting operations are outsourced to third-party contractors.

Other manufacturing expenses include, among other things, additional materials and consumables that are used in the production processes and routine maintenance to sustain ongoing operations. None of these represents a significant portion of Vedanta's costs of production.

Cost of production as reported for Vedanta's metal products includes an offset for any amounts Vedanta receives upon the sale of the by-products from the refining or smelting processes. The cost of production is divided by the daily average exchange rate for the year to calculate the US dollar cost of production per lb or tonne of metal as reported.

Production costs and costs per unit are also significantly affected by changes in production volumes and variable costs. Therefore, Vedanta's production levels and variable costs are key factors in determining its overall cost competitiveness.

Costs of production for Fiscal Years 2018, 2019 and 2020 are reflected in the following table:

	Fiscal Year		
	2018	**2019**	**2020**
Oil and gas (Opex) ($ per boe)	6.6	7.7	8.9
Zinc business (India) ($ per tonne)(1)(2)	1,365	1,381	1,373
Zinc business (International) ($ per tonne)(1)	1,603	1,912	1,665
Iron Ore ($ per tonne)	23.5	13.2	11.9
Copper India business (US cents per lb)(3)	5.7	21.1	23.25
Copper Zambia business (US cents per lb)(1)	314.8	366.2	–
Aluminium business ($ per tonne)(4)	1,887	1,967	1,690

(1) Cash costs per unit for mining, smelting and refining operations (net of by-products).

(2) Includes royalties $389 per tonne, $367 per tonne and $324 per tonne in Fiscal Years 2018, 2019 and 2020, respectively.

(3) Cash costs per unit for smelting and refining operations (net of by-products).

(4) Cash costs per unit (net of by-products).

Production Volume and Mix

Production volume has a substantial effect on Vedanta's results of operations. Vedanta is generally able to sell all of the products it produces, so its revenue generally fluctuates as a result of changes in production volume. Production volume is dependent on production capacity. For Vedanta's mining operations, production volume is also dependent upon the quality and consistency of the ore. Per unit production costs are also significantly affected by changes in production volume in that higher volumes of production generally reduce the per unit production costs. Therefore, production levels are a key factor in determining Vedanta's overall cost competitiveness.

The following table summarises the production volumes for Vedanta's primary products in each of Fiscal Years 2018, 2019 and 2020:

		Fiscal Year		
		2018	**2019**	**2020**
		(Tonnes unless otherwise stated)		
Segment				
Oil and gas business	Oil and Gas – Gross (mmboe)	67.7	68.9	63.3
	Oil and Gas – Working Interest (mmboe)	43.3	43.7	40.4
Zinc business				
– HZL	Zinc	791,026	696,283	688,286
	Lead(1)	168,246	197,838	181,370
	Silver (moz)(2)	18.04	21.84	19.61
– Skorpion	Zinc	84,215	65,948	66,967
– Black Mountain Mining	Zinc in Concentrate	27,175	27,558	27,943
	Lead in Concentrate	45,113	37,354	37,628
– Gamsberg	Zinc in Concentrate	–	17,128	107,949
	Lead in Concentrate	–	–	
Copper business				

		Fiscal Year		
		2018	2019	2020
		(Tonnes unless otherwise stated)		
– Vedanta Limited	Copper	403,168	89,517	77,490
– KCM	Copper	195,337	177,035	–
	Total copper	**598,505**	**266,552**	**77,490**
– Vedanta Limited	Copper rods	202,539	111,197	100,219
Iron ore business	Saleable ore (dry million tonnes)	7.1	4.4	4.4
Steel business[3]	Pig Iron	–	141,549	167,305
	Billet	–	39,478	27,456
	TMT	–	441,251	468,396
	Wire Rod	–	426,873	412,948
	DI Pipe	–	149,946	154,721
Aluminium business				
– BALCO	Aluminium	569,051	571,231	561,338
– Vedanta Limited	Alumina	1,209,436	1,500,670	1,810,702
	Aluminium	1,106,042	1,387,784	1,342,643
	Total aluminium	**1,675,093**	**1,959,015**	**1,903,981**
Commercial power generation Business	Power sold (million units)	11,041	13,515	11,162

(1) Excludes lead contained in lead with a high content of silver (high silver lead) produced from the pyrometallurgical lead-zinc smelter for captive use, which was 6,946 tonnes, 6,534 tonnes and 7,088 tonnes in Fiscal Years 2018, 2019 and 2020, respectively.

(2) Excludes silver contained in lead with a high content of silver (high silver lead) produced from pyrometallurgical zinc-lead smelter for captive use which was 1.2 moz, 1.1 moz and 1.2 moz in Fiscal Years 2018, 2019 and 2020, respectively.

(3) June 2018 was the first full month post Vedanta Limited's 90% acquisition of ESL.

Periodically, Vedanta's facilities are shut down for planned and unplanned repairs and maintenance which temporarily reduces production volume. In addition, the mix of products Vedanta produces can have a substantial impact on its results of operations as it has different margins in each of its segments, and within each segment its margins vary between the lower margins of primary metals and the higher margins of value-added products such as copper rods and aluminium rolled products. For example, copper cathodes are converted in the copper rod plant into copper rods, a value-added product which has a higher margin than copper cathodes. As copper rods have higher margins, Vedanta endeavours to sell as large a percentage of copper rods as possible. As the production volume of its various products fluctuates primarily based on market demand and production capacity for such products, the percentage of revenue from those products will also fluctuate between higher and lower margin products, which will in turn cause Vedanta's operating profit and operating margins to fluctuate.

Indian Government Policy

India customs duties

Vedanta sells its products in India at a premium to the LME price, due in part to the customs duties payable on imported products. Profitability is affected by the levels of customs duties as Vedanta prices its products sold in India generally on an import-parity basis.

Vedanta also pays a premium on certain raw materials that it imports, or which are sourced locally but which are priced on an import-parity basis as a result of customs duties, with copper concentrate, coal, petroleum products, alumina, carbon and caustic soda being the primary examples.

The following table sets forth the customs duties that were applicable for the periods indicated:

	1 March 2016 to 5 July 2019	6 July 2019 to present
Copper	5.0%	5.0%
Copper concentrate	2.5%	2.5%
Zinc	5.0%	5.0%
Lead	5.0%	5.0%
Silver	10.0%	12.5%
Aluminium	7.5%	7.5%
Steel	10.0%	10.0%

With effect from 2 February 2018, Vedanta is liable to pay an additional surcharge (Social Welfare Surcharge), presently at the rate of 10.0% of the total customs duty payable except for silver which is 3.0%. As Vedanta sells the majority of the commodities it produces in India, Vedanta's profitability is dependent to a certain extent on the continuation of import duties and any reduction may have a material adverse effect on its results of operations and financial condition.

India export duties

The GOI levies duty on the export from India of certain products mentioned under the second schedule of the Customs Tariff Act 1975, including iron ore and concentrates, at a specified rate (ad valorem on the Free on Board, or FOB, value of exports).

Effective from 30 December 2011, the GOI raised export duty on iron ore fines and lumps from 20.0% to 30.0%, ad valorem on the FOB value of exports. Effective from 30 April 2015, the export duty on iron ore fines with Fe content less than 58.0% is 10.0% and equal to or more than 58.0% iron, duty rate is 30.0% and for iron ore lumps is 30.0%. With effect from 1 March 2016, the export duty on iron ore lumps (below 58.0% Fe content) has been reduced from 30.0% to nil and iron ore fines (below 58.0% Fe content) has been reduced from 10.0% to nil.

Indian export incentives

The GOI provides a variety of export incentives to Indian companies. Indian exports of copper, zinc and aluminium receive assistance premiums in the form of drawback from the GOI, which have been progressively reduced since 2002, consistent with similar reduction in customs duties. Export incentives do not outweigh the Indian market price premiums. Accordingly, notwithstanding the export incentives, Vedanta endeavours to sell as large a quantity of its products as possible domestically.

In Fiscal Years 2018, 2019 and 2020, exports accounted for 29.0%, 20.4% and 20.2%, respectively, of Vedanta's India zinc business revenue. The following table sets out the export assistance premiums (all industry rates for duty drawbacks), as a percentage of the FOB value of exports, on zinc concentrate, zinc ingots, lead concentrate and lead ingot for the periods indicated:

	15 November 2015 to 31 January 2020	1 February 2020 to date
	(Percentage of FOB value of exports)	
Zinc concentrate	Nil	Nil
Zinc ingots	1.5%	1.3%
Lead concentrate	Nil	Nil
Lead ingot	2.4%	2.4%

In Fiscal Years 2018, 2019 and 2020, exports accounted for 52.2%, 24.3% and 29.0% respectively, of Vedanta's Indian copper business revenue. The export assistance premiums (all India rates for duty drawbacks) for copper cathode and copper rods was revised from 1.7% each to 1.9% each effective from 22 November 2014 to date.

Further, with effect from 1 April 2015, the New Merchandise Exports from India Scheme was introduced in place of the market linked focus product scheme. In the new scheme, no export incentive has been notified for few copper products.

In Fiscal Years 2018, 2019 and 2020, exports accounted for 57.0%, 60.0% and 61.5% respectively, of Vedanta's aluminium business revenue. The following table sets out the export assistance premiums, as a percentage of the FOB value of exports, on aluminium ingots, aluminium rods and aluminium rolled products for the periods indicated:

	15 November 2016 to date
	(Percentage on FOB value of exports)
Aluminium ingots	1.0%
Aluminium rods	1.0%
Aluminium billets	1.0%
Aluminium rolled products	1.5%

The GOI may further reduce export incentives in the future, which may have a material adverse effect on Vedanta's results of operations and financial condition.

Taxes and royalties

Tax rate applicable to Domestic Company

The general effective corporate/income tax rate payable by an Indian company is 34.944% (i.e. statutory tax rate of 30% plus applicable surcharge at 12.0% on the tax and an additional cess of 4.0% on the corporate tax including surcharge) and 29.12% (i.e statutory tax rate of 25% plus applicable surcharge at 12.0% on the tax and an additional cess of 4.0% on the corporate tax including surcharge) where the turnover of the Indian company in Fiscal Year 2019 does not exceed the prescribed threshold.

The Taxation Laws (Amendment) Act, 2019 provided an option to existing domestic companies to pay tax at a concessional rate of 22% plus surcharge of 10% on tax and 4% on tax plus surcharge, resulting in an effective tax rate of approximately 25%.

The concessional tax rate is applicable subject to surrender of specified deductions/incentives by the company exercising the option. These incentives, among others, include deductions relating to (i) newly established units in Special Economic Zones, (ii) expenditure on scientific research and skill development projects, (iii) investment in new machinery/plant in notified backward areas, and (iv) additional depreciation of new machinery/plant.

A corporate taxpayer is required to exercise its option of being governed under the concessional tax regime before the due date of filing of its tax return. Once exercised, the option cannot be withdrawn and is applicable to all subsequent tax years. This is effective from Fiscal Year 2019.

Further, the Amendment Act, 2019 provides an option for New Domestic Manufacturing Companies ("NDMC") to pay effective tax rate at 17.16% (i.e. statutory tax rate of 15% plus surcharge at 10% on the tax and an additional cess of 4% on the corporate tax including surcharge). This rate is applicable to

NDMCs provided the company is established after 1 October 2019 and commences manufacturing before 31 March 2023. Further, the incentives mentioned above will also not be available to NDMC. New manufacturing companies should not be formed by: (a) splitting up or reconstruction of an existing business, (b) engaged in any business other than manufacturing or production, and (c) using any plant or machinery previously used in India (except under certain specified conditions).

Tax rate applicable under Minimum Alternate Tax ("MAT") regime

The Amendment Act 2019, reduced MAT base tax rate from 18.5% to 15% plus applicable surcharge and cess. The effective MAT rate for all Indian Companies for Fiscal Years 2018, 2019 and 2020 would be 21.34%, 21.55% and 17.47% respectively. Further, companies opting for concessional tax regime (offering income to tax at 25.17% or 17.16% as discussed above) would not be subject to MAT.

Tax rate applicable to Foreign Company under Normal tax regime and Minimum Alternate Tax (MAT) regime — Business Profit

The effective statutory corporate/income tax payable by a Foreign Company having a Permanent Establishment in India is 43.68% for Fiscal Year 2020 (i.e. statutory tax rate of 40% plus applicable surcharge at 5.0% on the tax and an additional cess of 4.0% on the corporate tax including surcharge).

For non-resident foreign companies the effective MAT rate is 16.38% of the book profit as prepared under Indian GAAP.

MAT Credit (Domestic company & Foreign company)

The excess of amounts paid as MAT over the regular income tax amount during the year is carried forward and set off against normal corporate tax payable in any of the succeeding fifteen years (as amended by finance Act 2017) subject to certain conditions.

Tax on Dividend

The tax rates imposed on us in respect of dividends paid in prior periods have varied. According to the Finance Act, 2014, DDT is to be levied on gross distributable surplus amount instead of amount paid net of taxes. This has resulted in increase in the effective DDT from 16.995% to 20%. Further, the Finance Act, 2015 has increased the surcharge from 10.0% to 12.0%, which has resulted in effective tax rate of 20.3% with effect from Fiscal Year 2016. The Finance Act, 2018 increased the rate of cess from 3.0% to 4.0% which has resulted in an effective DDT rate of 20.56% from 1 April 2018. This tax is payable by the company declaring distributing or paying the dividends. Dividends received from Vedanta's Indian subsidiaries are also subject to DDT, however, such dividend received from such subsidiary is reduced while computing DDT liability in its hands provided the dividend is received in the same financial year and DDT has been paid by the Indian subsidiaries on such dividend. Further dividend received from Vedanta's Indian subsidiary is exempt from tax in its hand.

From 1 April 2020, the concept of DDT has been abolished and, instead, dividends distributed by an India company shall be taxable in the hands of the recipient shareholders as follows:

(a) Tax rates for resident shareholders — applicable rates. The Indian company would deduct tax at source at the rate of 10%. However, as per a press release issued by the GOI in light of the COVID-19 pandemic, tax is to be deducted at source at a reduced rate of 7.5% for the period up to 31 March 2021, although a legislative amendment to enact such reduced rate of tax deduction at source is awaited.

(b) Tax rates for non-resident shareholders — 20% (plus surcharge and cess) or at such beneficial rates as provided under the tax treaties. The Indian company would withhold tax at source, at applicable rates. Non-resident investors will now be eligible to claim a credit in their home jurisdiction for the tax paid on dividends.

With respect to inter-corporate dividends, to avoid the cascading effect/multi-level taxation of the same dividend, it has also been proposed that dividends received by an Indian company and up-streamed to its shareholders will not be taxable in the hands of the Indian company. This relief is subject to the condition that the Indian company up-streams the dividend on or before one month prior to the due date for filing its income-tax return. Under the DDT regime, the relief from cascading effect/multi-level DDT was available only if *inter alia* (i) the dividend which was up-streamed by the Indian company was received by it from its "subsidiary company" as defined under the IT Act, and (ii) up-streaming by the Indian company happened in the same Fiscal Year in which it itself received the dividend from its subsidiary.

Further, from 1 April 2020 onwards, the person receiving dividends will be eligible to claim deduction of interest expense of up to 20% of the dividend income, subject to certain restrictions.

Service Tax

Previously, service tax was applicable at 14% of the value of taxable services with effect from 1 June 2015 until 1 July 2017. Further, an additional "Swachh Bharat Cess" at 0.5% with effect from 14 November 2015 and "Krishi Kalyan Cess" at 0.5% with effect from 1 June 2016 on the value of taxable services were applicable until 1 July 2017. Accordingly, the effective service tax rate until 1 July 2017 was payable at 15%.

Vedanta paid service tax in India as a service provider and service recipient.

Service Provider:

Vedanta paid service tax as a service provider in the range of 12.36% to 15.0% during the period prior to 1 July 2017 under the following categories:

- Business Support Services;
- Oil Transfer Service;
- Port Service; and
- Management Consultant Service.

Service Recipient:

Vedanta paid service tax as a service recipient under following categories:

- Foreign Service Providers: Indian subsidiaries are responsible for paying service tax directly to tax authorities in the case of receipt of service from foreign service providers who do not have any permanent establishment in India. In the case of service providers having a permanent establishment in India, they were responsible for recovering the applicable service taxes and paying them to tax authorities. Indian subsidiaries also paid service tax the as recipient of services on the company overheads payable to Vedanta;

- Service tax on fees payable to directors of company: Vedanta paid service tax on the fees payable to non-executive/independent directors of Indian companies. The fee includes director sitting fees and/or any commission payable to the directors;

- Other services: In case of services received from any goods transport agency and payments towards any sponsorship, Vedanta was responsible for paying service tax directly to tax authorities as per the applicable rates; and

- Domestic Service Providers: In case of certain services received from non-company domestic service providers, liability of payment of service tax was placed on the recipient of services with effect from 1 July 2012 under Notification No. 30/2012-Service Tax dated 20 June 2012 as per the applicable rates.

GST

With effect from 1 July 2017, the new "goods and services tax" has been implemented in India, which replaced the previous indirect tax regime, which resulted in the levy of multiple rate of federal and state taxes with respect to the operations undertaken by businesses. Transition to the GST regime was a tax reform, which is aimed at addressing anomalies and strengthening the concept of unified market. GST is a supply driven concept and applies on the supply of goods and services. Towards this end, most central and state levies (such as excise duty, service tax, countervailing duty, special additional duty, central sales tax, value added tax, entertainment tax and luxury tax) have been subsumed into GST. Therefore, the previously taxable events are replaced by a single taxable event of supply of goods and services under GST. Basic customs duty ("BCD") and related customs cess continue to be applicable on import of goods.

Taxes under GST apply as under:

- Central Goods and Services Tax and State Goods and Services Tax is simultaneously levied on intra-state supply of goods and services.

- Integrated Goods and Services Tax is levied on imports and inter-state supply of goods and services.

- In addition, compensation cess also applies on certain specified goods and services.

The general rate of GST on Vedanta's output supplies is 18.0%. However, supply of iron ore attracts GST at the rate of 5.0%, whereas silver attracts GST at 3.0%. Further, crude oil and natural gas will be subject to GST from the date to be notified by GST council and therefore, until the time GST council notifies inclusion of these products in GST, they would continue to attract existing indirect tax levies. Goods imported for the purposes of "petroleum operations" would be subject to Integrated Goods and Service Tax at 5.0%. BCD will continue to be exempt. Similar exemption notification has also been issued to tax inter-state and intra-state supplies of goods for petroleum operations at effective rate of 5.0%. Procurement of coal attracts GST compensation cess at ₹400 per ton in addition to GST rate of 5.0%. Effective 1 July 2017, CVD and SAD was subsumed in GST which is applicable at the rates as mentioned in below table:

	Integrated Goods and Service Tax rate from 1 July 2017
Copper	18.0%
Copper concentrate	5.0%
Zinc	18.0%
Lead	18.0%
Silver	3.0%
Aluminium	18.0%
Iron Ore	5.0%
Steel	18.0%

Vedanta previously paid an excise duty of 12.5% with effect from 1 March 2015 to 30 June 2017 on all of Vedanta's domestic production intended for domestic sale. For the period from 17 March 2012 to 28 February 2015, the excise duty was 12% and an additional charge of 3.0% on the excise value. Prior to 1 July 2017 Vedanta charged the excise duty and additional charge to its domestic customers. Vedanta Limited paid excise duty on metallurgical coke at the rate 6.0% and on pig iron of 12.5%. HZL paid excise duty on silver at the rate of 8.5% effective from 1 March 2016 (8.0% prior to that) until 1 July 2017 and an additional charge of 3.0% on the excise duty has been eliminated with effect from 1 March 2015. Goods procured for the purposes of "Petroleum Operations" and which were exempt from customs duty were also exempt from excise duty under notification 12/2012-Central Excise dated 17 March 2012, Sr. No 336 provided conditions as given were satisfied, all goods supplied under international competitive bidding and were exempt from customs duty.

Vedanta is also subject to government royalties. It pays royalties to the State Governments of Chhattisgarh, Rajasthan, Goa and Karnataka in India based on its extraction of bauxite, lead-zinc ore and iron ore. Most significant of these is the royalty that HZL is currently required to pay to the State of Rajasthan, where all of HZL's mines are located, at a rate of 10% with effect from 1 September 2014 (the rate was 8.4% from 13 August 2009 to 31 August 2014) of the zinc LME price payable on the zinc metal contained in the concentrate produced, 14.5% (the rate was 12.7% from 13 August 2009 to 31 August 2014) of the lead LME price payable on the lead metal contained in the concentrate produced and at a rate of 7.0% of silver LME price chargeable on silver-metal produced. In addition, a further amount of royalty effective from 12 January 2015, for DMF at 30% of base royalty and NMET at 2% of base royalty, has been notified. The royalties paid by BALCO on the extraction of bauxite are not material to Vedanta's results of operations. Vedanta Limited pays royalties at 15% of pit mouth value declared by Indian Bureau of Mines on monthly basis for its iron ore business along with DMF at 30% of base royalty and NMET at 2% of base royalty as notified.

Royalty is also payable at Vedanta Limited to the State Government of Rajasthan, Andhra Pradesh and Gujarat for the extraction of crude oil and natural gas. Vedanta Limited also pays cess to the GOI. Generally in respect of oil and gas operations, royalty and cess payments are made by the joint operation partners in proportion to their participating interest and are cost recoverable.

For the Rajasthan Block, entire royalty payments are made by ONGC at the rate of 20% of wellhead value for crude oil and 10% of well-head value for natural gas and are cost recoverable. Until February 2016, cess is paid at the rate of ₹4500/MT for crude oil; pursuant to amendments in the Finance Act 2016, cess is paid at the rate of 20% ad-valorem from March 2016 onwards. National Calamity Contingent Duty (NCCD) is paid at the rate of ₹50/MT. Sales tax payments are made at the rate of 2% (central sales tax) on sale of both crude oil and natural gas.

For the Block PKGM-1 (the "Ravva Block"), royalty is ₹481/MT and cess is fixed at ₹900/MT on crude oil. Royalty on natural gas is 10% of well-head value of gas. Sales tax payments stand at 2% (central sales tax) or 5% (value added tax) on crude oil and 14.5% on natural gas.

For the Cambay block, the entire royalty and cess payments are made by ONGC and are not cost recoverable. However, after February 2018, Vedanta shares the incremental royalty applicable on Cambay Block infill production. NCCD is paid at the rate of ₹50/MT. Sales tax payments (central sales tax) are made at a rate of 2% on crude oil and 15% (value added tax) on natural gas.

For the Block KG-ONN/2003-1 (the "KGONN Block"), royalty is payable at the rate of 12.5% of the well head value for crude oil and 10% of well head value for natural gas and are cost recoverable. Sales tax payments stand at 2% (central sales tax) or 5% (value added tax) on crude oil and 14.5% on natural gas.

For all the above blocks, education surcharge was paid at 3% of applicable cess value, which has been discontinued as per Ministry of Finance circular with effect from December 2013.

Royalties in Zinc International business are as follows:

- 3.0% of sale value of the products for Skorpion; and

- 7.0% of turnover for BMM. The royalty rate applied on the turnover is 0.5% if the adjusted earnings before interest and tax ("adjusted EBIT") is negative, and if the adjusted EBIT is positive, the royalty rate applied on the turnover is 0.5% plus the rate computed at 100/9 times the adjusted EBIT upon turnover. In any event, the maximum royalty rate is capped at 7.0%.

Tax Incentives

Certain businesses of Vedanta within India are eligible for specified tax incentives. Most of such tax exemptions are relevant for the companies operating in India. These are briefly described as under:

The location-based exemption

In order to boost industrial and economic development in undeveloped regions, provided certain conditions are met, profits of newly established undertakings located in certain areas in India may benefit from a tax holiday. Such a tax holiday works to exempt 100.0% of the profits for the first five years from the commencement of the tax holiday, and 30.0% of profits for the subsequent five years. This deduction is available only for units established up to 31 March 2012. However, such undertaking would continue to be subject to the MAT. Vedanta has such types of undertakings at Haridwar and Pantnagar, which are part of HZL. In the current year, Haridwar and Pantnagar units are eligible for deduction at 30.0% of taxable profits.

Sectoral Benefit — Power Plants and Port Operations

To encourage the establishment of infrastructure certain power plants and ports have been offered tax holiday up to 100% of profits and gains for any ten consecutive years within a block of 15-year period from the year of commencement of operations, this is subject to certain conditions. Vedanta currently has total operational capacity of 8.5 GW of thermal based power generation facilities and wind power capacity of 274 MW and port facilities. However, such undertakings would continue to be subject to MAT provisions. Vedanta has power plants which benefit from such deductions, at various locations of HZL (where such benefits has been drawn), Talwandi Sabo Power Limited, Vedanta Limited and Bharat Aluminium Company Limited (where no benefit has been drawn) and port facilities at Vizag General Cargo Berth Limited (where no benefit has been drawn).

Sectoral benefit — Oil and gas

Provided certain conditions are met, profits of newly constructed industrial undertakings engaged in the oil and gas sector may benefit from a deduction of 100% of the profits of the undertaking for a period of seven consecutive years. This deduction is only available to blocks licenced under NELP prior to 31 March 2011 and NELP VIII for production of natural gas. In order to be eligible for this deduction, commercial production should have been started prior to 31 March 2017. Such businesses would continue to be subject to the MAT provisions. In Vedanta, Cairn India Limited ("Cairn India") (now merged with Vedanta Limited) and Cairn Energy Hydrocarbons Limited ("CEHL") benefited from such deductions till 31 March 2016.

Special Economic Zone — SEZ

Provided certain conditions are met, profits of newly established undertakings located in Special Economic Zone ("SEZ") may benefit from a tax exemption where SEZ units begin to manufacture or produce articles or things or provide any services on or before 31 March 2020. Such a tax exemptions works to 100.0% Income Tax exemption on export income for SEZ units under Section 10AA of the Income Tax Act for the first five years, 50.0% for the next five years thereafter and 50.0% of the ploughed back export profit for the next five years subject to certain conditions.

Investment Allowance under Section 32 AC of the Income Tax Act

Incentive for acquisition and installation of new high value plant or machinery to manufacturing companies by providing an additional deduction of 15.0% of the actual cost of plant or machinery acquired and installed during the year. The actual cost of the new plant or machinery should exceed ₹250 million to be eligible for this deduction. The deduction under section 32AC was available till 31 March 2017.

In addition, the subsidiaries incorporated in Mauritius are eligible for tax credit to the extent of 80.0% of the applicable tax rate on foreign source income.

Exchange Rates

Vedanta's financial statements are presented in US dollars. However, its operating costs are influenced by the currencies of those countries where Vedanta's mines, fields and plants are located. A majority of its mines, fields and plants are located in India and, hence, the Indian Rupee is the currency in which most of its costs are incurred and whose fluctuation against the US dollar may have a significant impact on its financial results. When the Indian Rupee depreciates against the US dollar, Vedanta's financial results can improve as its costs of production become lower relative to the price it can obtain for its products in the global marketplace, especially as compared to competitors with costs of production that are denominated in a currency that has not depreciated against the US dollar. Conversely, when the Indian Rupee appreciates against the US dollar, Vedanta's financial results can be negatively impacted. Vedanta also has capital expenditure and services denominated in currencies other than the Indian Rupee. See the section entitled "*Risk Factors — Risks Relating to Business — Currency fluctuations among the Indian Rupee and other currencies and the US dollar could have a material adverse effect on Vedanta's results of operations.*" for more information.

Approximately 45% of Vedanta's borrowings are denominated in US dollars while a large portion of its cash and liquid investments are held in other currencies, mainly in Indian Rupee. Some financial assets and liabilities of its subsidiaries are not held in the functional currency of such subsidiaries. As a result, Vedanta is exposed to movements in the functional currency of those entities.

Vedanta's exposure to various currencies means that currency fluctuations may have a large impact on Vedanta financial results. It is subject to currency risks affecting the underlying cost bases in its operating subsidiaries, and also the translation of the cost of production, income statement and balance sheet (including non-US dollar denominated borrowings) in the consolidated financial statements, where the functional currency is not the US dollar.

COVID-19 Pandemic

Since its outbreak in December 2019, COVID-19 has spread to over 200 countries and territories resulting in the World Health Organisation on 11 March 2020 declaring it as a pandemic, expanding its assessment of the threat beyond the global health emergency it had announced in January 2020. The COVID-19 pandemic and preventative or protective actions that governmental authorities around the world have taken to counter the effects of the COVID-19 pandemic, including social distancing, office closures, travel restrictions and the imposition of nationwide lockdowns and quarantines, have resulted in a period of business disruption, including prolonged disruptions to manufacturing and global supply chains as well as restrictions on business activity and the movement of people comprising a significant portion of the world's population, and a decrease in economic activity in several countries, including those which Vedanta operates in. As a result, the COVID-19 pandemic has led to uncertainty in the global economy and significant volatility in global financial markets and has directly impacted the business operations of Vedanta.

Vedanta has adopted a pro-active approach to keep its assets and employees safe while ensuring its continuity of business. In accordance with the Ministry of Home Affairs (India) orders dated 24 March 2020 and 25 March 2020 (Order no 40-3/2020 DM-1(A)), most of Vedanta's operations were continuing during the relevant lockdown periods on the basis of them being deemed "essential" or "continuous".

Notwithstanding, Vedanta was still subject to temporary disruptions leading to production being down to 80% of the capacity during the relevant lockdown periods as applicable to the respective mines and production facilities. Production has since increased to approximately 90% of the capacity following the lifting of the relevant lockdowns. All of the sites remain open with the requisite government permissions and adherence to highest safety standards, including strict adherence to WHO standards of physical distancing, extensive cleaning and quarantine areas on sites. The COVID-19 pandemic has also severely impacted the global commodity market with weaker prices seen across oil and bulk metals in particular which has impacted in the prices of the commodities Vedanta produces and sells. During the lockdown in India, owing to the constrains in the Indian domestic market, Vedanta experienced a decline in domestic demand for its products requiring it to access the export market in order to maintain its sales. Domestic demand for Vedanta's products has since improved following the lifting of the lockdown restrictions.

Vedanta is systematically reviewing all areas of cash generation and usage and re-evaluating all costs in the prevailing circumstances, so that it can continue to manage its operations and invest towards the best opportunities. At the same time, Vedanta continues to work to support its partners in the aim of re-establishing normalcy in the extended supply chain. Vedanta's focus during the COVID-19 pandemic is to (a) adopt a proactive approach to maintain operational resilience and steady cash flows, (b) ensure that it continues to operate optimally with the lowest possible cost of production and positive free cash flows and (c) continue to evaluate its capital expenditure profile with the flexibility of adjusting spending based on global demand and cash flows.

The COVID-19 pandemic has caused significant concerns over global economic growth. Weaker commodity prices seen over recent months will have a negative impact on Vedanta's profitability. As to the longer-term implications, it is difficult to give a clear assessment of any systemic demand destruction caused by the COVID-19 pandemic for the time being. Even though the current situation remains volatile, Vedanta remains confident about its ability to manage the crisis and emerge as a stronger entity.

See the section entitled "*Risk Factors — Risks Relating to Business — The outbreak, or threatened outbreak, of any severe communicable disease, such as the ongoing COVID-19 pandemic, may adversely impact Vedanta's business, financial condition and results of operations.*" for more information.

Results of Operations

Overview

The following table sets out Vedanta's operating results for Fiscal Years 2018, 2019 and 2020:

	Fiscal Year		
	2018	2019	2020
		($ million)	
Revenue	15,294	14,031	11,790
Cost of sales	(12,029)	(11,532)	(9,611)
Gross Profits	3,265	2,499	2,179
Other operating income	154	229	142
Distribution costs	(277)	(276)	(257)
Administration expenses	(417)	(541)	(473)
Special Items	650	38	(2,065)
Operating profit/(loss)	**3,375**	**1,949**	**(474)**
Investment revenue	465	480	394
Finance costs	(1,347)	(1,258)	(1,179)
Other gains and losses (net)	(5)	(75)	(87)
Profit/(loss) before taxation	**2,488**	**1,096**	**(1,346)**
Tax credit/(expense) – special items	(338)	(16)	781
Tax expense – others	(675)	(656)	(411)

	Fiscal Year		
	2018	2019	2020
		($ million)	
Profit/(Loss) for the year from continuing operations	**1,475**	**424**	**(976)**
Profit/(Loss) for the year from discontinued operation	**–**	**–**	**(771)**
Profit/(loss) for the year	**1,475**	**424**	**(1,747)**

Revenue by Geographic Location

Vedanta's operations are located in India, Zambia, Namibia, South Africa and the UAE. The primary markets for its products are India, China, Far East Asia (others) and the Middle East. Vedanta endeavours to sell as large a quantity of its products as possible in India due to the Indian market premium that it receives on sales in India. The following table sets out Vedanta's revenue from each of its primary markets in each of Fiscal Years 2018, 2019 and 2020:

	Fiscal Year					
	2018	%	2019	%	2020	%
	($ in millions, except percentages)					
India	8,212	54%	8,643	62%	7,652	65%
China	2,181	14%	1,089	8%	380	3%
UAE/Middle East	613	4%	164	1%	116	1%
Others[(1)]	4,288	28%	4,135	29%	3,642	31%
Total	**15,294**	**100%**	**14,031**	**100%**	**11,790**	**100%**

(1) Others include the Europe, Africa, the United Kingdom, Korea, Thailand, Singapore, Malaysia, Mauritius, Sri Lanka, Bangladesh, Nepal, Pakistan, the United States, Australia, New Zealand and a number of other countries that are not classified in the other available categories.

Results of Operations: Fiscal Year 2020 compared to Fiscal Year 2019

Vedanta's revenue was $11,790 million in Fiscal Year 2020, a decrease of $2,241 million, or 16%, from $14,031 million in Fiscal Year 2019. This was mainly driven by subdued commodity prices, lower volume at Zinc India, lower volume at the oil and gas business and lower power sales at TSPL partially offset by higher volume at Aluminium business, additional volumes from Gamsberg operations, and higher sales at Iron Ore Karnataka and the steel business.

Vedanta's zinc, aluminium, copper, oil and gas, power and iron ore businesses contributed 25%, 32%, 11%, 15%, 7% and 4%, respectively to the total revenue in Fiscal Year 2020.

Oil and Gas

Revenue from the oil and gas business was $1,787 million in Fiscal Year 2020, a decrease of $105 million, or 5.5%, from $1,892 million in Fiscal Year 2019. The decrease in revenue was mainly owing to fall in oil price realization and lower volumes partially offset by a one-off for past exploration cost recovery of $180 million. Specifically, the daily average price of oil and gas decreased from $70.4 per boe in Fiscal Year 2019 to $60.9 per boe in Fiscal Year 2020, a decrease of 13.5%.

Zinc (India)

Revenue from the zinc India business was $2,563 million in Fiscal Year 2020, a decrease of $392 million, or 13.3%, from $2,955 million in Fiscal Year 2019. The decrease was primarily on account of a decline in LME prices and lower volume, partly offset by higher silver prices and a depreciation of the Indian Rupee. Specifically:

- The daily average zinc cash settlement price on the LME decreased from $2,743 per ton during Fiscal Year 2019 to $2,402 per ton during Fiscal Year 2020, a decrease of 12.4%.

- Zinc ingot production decreased from 696 kt during Fiscal Year 2019 to 688 kt during Fiscal Year 2020, a decrease of 1.2%. This decrease was mainly on account of lower grade across all mines, partly offset by higher ore treatment. Zinc ingot sales decreased from 694 kt during Fiscal Year 2019 to 683 kt during Fiscal Year 2020, a decrease of 1.6%, in line with production.

- Zinc ingot sales in the domestic market decreased from 488 kt during Fiscal Year 2019 to 479 kt during Fiscal Year 2020, a decrease of 1.9% due to the COVID-19 pandemic related lockdown in the fourth quarter of Fiscal Year 2020. Export sales decreased from 206 kt during Fiscal Year 2019 to 205 kt during Fiscal Year 2020, a marginal decrease of 0.1%.

- The daily average lead cash settlement price on the LME decreased from $2,121 per ton during Fiscal Year 2019 to $1,952 per ton during Fiscal Year 2020, a decrease of 8.0%.

- Lead ingot production decreased from 198 kt for Fiscal Year 2019 to 181 kt for Fiscal Year 2020, a decrease of 8.3%. Lead ingots sales were in line with lead ingot production.

- Silver ingot production decreased from 679 tons during Fiscal Year 2019 to 610 tons during Fiscal Year 2020, a decrease of 10.2%. This decrease was primarily due to lower metal in concentrate production, lower lead production and lower silver grades. The daily average silver LBMA price marginally increased from $15.4/oz to $16.5/oz, an increase of 7.1% during Fiscal Year 2020 compared to Fiscal Year 2019. Sale of silver ingots decreased from 676 tons during Fiscal Year 2019 to 586 tons during Fiscal Year 2020, a decrease of 13.3%.

Zinc (International)

Revenue from the international zinc business was $441 million in Fiscal Year 2020, an increase of $49 million, or 12.5% from $392 million in Fiscal Year 2019. The increase was primarily due to higher volume which was partly offset by lower zinc prices. Specifically:

- Production of refined zinc metal at Skorpion increased from 66 kt during Fiscal Year 2019 to 67 kt during Fiscal Year 2020, an increase of 1 kt or 11.5%. This increase was primarily due to the higher zinc grades and throughput.

- Production of mined metal in concentrate from the BMM mines increased from 65 kt during Fiscal Year 2019 to 66 kt during Fiscal Year 2020, an increase of 1 kt or 1.5%.

- Production of Zinc MIC from Gamsberg increased to 108 kt in Fiscal Year 2020 from 17 kt in Fiscal Year 2019, primarily because Gamsberg was commissioned in the second quarter of Fiscal Year 2019.

- The daily average zinc cash settlement price on the LME decreased from $2,743 per ton during Fiscal Year 2019 to $2,402 per ton during Fiscal Year 2020, a decrease of 12.4%.

- The daily average lead cash settlement price on the LME decreased from $2,121 per ton during Fiscal Year 2019 to $1,952 per ton during Fiscal Year 2020, a decrease of 8.0%.

Copper (India/Australia)

Revenue from the copper business in India and Australia was $ 1,277 million in Fiscal Year 2020, a decrease of $260 million, or 16.9%, from $1,537 million in Fiscal Year 2019. The decrease was primarily due to lower copper prices and lower volumes.

Copper (Zambia)

KCM has been deconsolidated and discontinued since Fiscal Year 2020.

Iron ore

Revenue from the iron ore business was $489 million in Fiscal Year 2020, an increase of $73 million, or 17.5%, from $416 million in Fiscal Year 2019. The increase was primarily due to higher sales volume at Karnataka which was partially offset by lower realizations. Specifically:

- Iron ore production remained flat at 4.4 million tons during Fiscal Year 2019 and Fiscal Year 2020. This was primarily due to the suspended operations at Goa pursuant to an order from the Supreme Court of India, which was offset by an increase of iron ore production in Karnataka by 5.9%.

- The production of pig iron decreased from 686 kt in Fiscal Year 2019 to 681 kt in Fiscal Year 2020, a decrease of 0.7%. Metallurgical coke production decreased from 477 kt to 434 kt or by 8.9%.

Steel

Revenue from the steel business was $604 million Fiscal Year 2020, an increase of $4 million, or 0.7%, from $600 million in Fiscal Year 2019. The increase was mainly due to higher volumes which was partially offset by lower steel prices. Specifically:

- Pig iron production increased from 142 kt during Fiscal Year 2019 to 167 kt during Fiscal Year 2020, an increase of 25 kt or 17.6%. The sale of pig iron increased from 142 kt during Fiscal Year 2019 to 158 kt during Fiscal Year 2020, an increase of 16 kt or 11.3% and in line with production.

- Billet production decreased from 39 kt during Fiscal Year 2019 to 27 kt during Fiscal Year 2020. The sale of billet decreased from 32 kt during Fiscal Year 2019 to 22 kt during Fiscal Year 2020, a decrease of 10 kt or 31.2%.

- The production of TMT increased from 441 kt during Fiscal Year 2019 to 468 kt during Fiscal Year 2020, an increase of 27 kt or 6.1%. The sale of TMT increased from 442 kt during Fiscal Year 2019 to 454 kt during Fiscal Year 2020, an increase of 12 kt or 2.7%. The increase was in line with the increased production and continued focus on value added products.

- The production of wire rod decreased from 427 kt during Fiscal Year 2019 to 413 kt during Fiscal Year 2020, a decrease of 14 kt or 3.3%. The sale of wire rod decreased from 421 kt in Fiscal Year 2019 to 402 kt in Fiscal Year 2020, a decrease of 19 kt or 4.5%, in line with the decrease in production.

- The production of DI pipe increased from 150 kt during Fiscal Year 2019 to 155 kt during Fiscal Year 2020, an increase of 5 kt or 3.3%. The sale of DI pipe decreased from 148 kt during Fiscal Year 2019 to 143 kt during Fiscal Year 2020, a decrease of 5 kt or 3.4%. The decrease was due to disruption in sales as a result of the COVID-19 pandemic related lockdown during the fourth quarter of Fiscal Year 2020.

Aluminium

Revenue from the aluminium business was $3,751 million in Fiscal Year 2020, a decrease of $432 million, or 10.3%, from $4,183 million in Fiscal Year 2019. This decrease was primarily due to low aluminium prices, which was partially offset by higher sales volumes. Specifically:

- Aluminium production decreased from 1,959 kt during Fiscal Year 2019 to 1,904 kt during Fiscal Year 2020, a decrease of 56 kt, or 2.8%.

- Aluminium sales increased from 1,916 kt during Fiscal Year 2019 to 1,922 kt during Fiscal Year 2020, an increase of 6 kt, or 0.4%. Sales of aluminium ingots increased from 1,105 kt during Fiscal Year 2019 to 1,167 kt for Fiscal Year 2020, an increase of 62 kt or 5.5%. Rolled product sales increased from 26 kt during Fiscal Year 2019 to 27 kt during Fiscal Year 2020, an increase of 1 kt, or 5.3%. Wire rod and billet sales decreased from 373 kt during Fiscal Year 2019 to 346 kt during Fiscal Year 2020, a decrease of 27 kt, or 7.1%.

- Aluminium sales in the domestic market increased from 617 kt during Fiscal Year 2019 to 624 kt during Fiscal Year 2020, an increase of 7 kt, or 1.2%. Aluminium exports marginally decreased from 1,299 kt during Fiscal Year 2019 to 1,298 kt during Fiscal Year 2020, a decrease of 1 kt or 0.1%. Vedanta's domestic sales as a percentage of total sales increased from 32.1% during Fiscal Year 2019 to 32.4% during Fiscal Year 2020.

- The daily average aluminium cash settlement price on the LME decreased from $2,035 per ton during Fiscal Year 2019 to $1,749 per ton during Fiscal Year 2020, a decrease of 14.1%.

- The benchmark Japanese premium decreased from $91 per ton during Fiscal Year 2019 to $85 per ton during Fiscal Year 2020, a decrease of $6 per ton or 6.6%.

Commercial Power Generation

Revenue from the commercial power generation business was $827 million in Fiscal Year 2020, a decrease of $107 million, or 11.5% from $934 million in Fiscal Year 2019. This was primarily due to a depreciation of the Indian Rupee, and a decrease in the sale of power at TSPL partially offset by improved realisations. Specifically:

- Power sold decreased from 13,515 million units during Fiscal Year 2019 to 11,162 million units during Fiscal Year 2020. The Jharsuguda 600 MW power plant operated at a Plant Load Factor ("PLF") of 11% in both Fiscal Years 2020 and 2019. At TSPL, the sale of power decreased to 8,223 million units during Fiscal Year 2020 from 9,858 million units during Fiscal Year 2019. The PPA with the state of Punjab in India compensates Vedanta based on the availability of the plant. The 300 MW BALCO IPP unit operated at a higher PLF of 71% during Fiscal Year 2020 compared to 53% during Fiscal Year 2019. Vedanta has received an order dated 1 January 2019 from CSERC for the conversion of one of the two 300 MW power plants from an IPP to a CPP. The operations of Madras Aluminium Company Limited's ("MALCO") power plant has been suspended for care and maintenance since 26 May 2017 due to lower offtake from Telangana State Electricity Board.

- The average power realization price (excluding TSPL) for Fiscal Year 2019 and Fiscal Year 2020 was ₹3.38 per unit and ₹3.58 per unit, respectively. The average power realization price for TSPL for Fiscal Year 2019 and Fiscal Year 2020 was ₹4.09 per unit and ₹3.73 per unit, respectively, based on the plant availability factor.

- The average power generation cost (excluding TSPL) for Fiscal Year 2019 and Fiscal Year 2020 was ₹2.90 per unit and ₹2.48 per unit, respectively. The average power generation cost for TSPL for Fiscal Year 2019 and Fiscal Year 2020 was ₹3.08 per unit and ₹2.68 per unit, respectively, based on the plant availability factor.

Operating profit/(loss)

Vedanta's operating profit/(loss) was a loss of $474 million for Fiscal Year 2020 compared to a profit of $1,949 million in Fiscal Year 2019, a decrease of $2,423 million. Vedanta's operating profit before special items was $1,591 million in Fiscal Year 2020, a decrease of $320 million, from $1,911 million in Fiscal Year 2019. The special items for Fiscal Year 2020 included exploration assets and claims & receivable of $2,072 million which mainly included impairment charge of oil and gas assets of $1,906 million, impairment charges of copper capital work-in-progress and capital advances of $94 million, impairment charge of iron ore assets of $17 million and impairment charge of AvanStrate Inc ("ASI") assets of $72 million. The special items for Fiscal Year 2019 pertain to an impairment reversal of $38 million in Fiscal Year 2019 following commencement of commercial production at the Krishna Godavari Onshore block. The decrease in operating profit before special items was primarily driven by a decrease in EBITDA which was mainly driven by lower commodity prices and an increase in depreciation charges. This decrease was partially offset by higher volumes, softening of input commodity prices and favourable currency movement. Operating margin before special items decreased to 13% in Fiscal Year 2020 from 14% in Fiscal Year 2019.

Contributing factors to Vedanta's operating profit/(loss) were as follows:

- Cost of sales decreased to $9,587 million in Fiscal Year 2020 from $11,532 million in Fiscal Year 2019, a decrease of $1,945 million.

- Other operating income decreased to $142 million in Fiscal Year 2020 from $229 million in Fiscal Year 2019, a decrease of $87 million.

- Distribution expenses decreased to $257 million in Fiscal Year 2020 from $276 million in Fiscal Year 2019, a decrease of $19 million, or 7%. Distribution expense as a percentage of revenue remained consistent at 2%.

- Administration expenses decreased to $490 million in Fiscal Year 2020 from $541 million in Fiscal Year 2019, a decrease of $51 million, or 9%. Administration expenses as a percentage of revenue remained consistent at 4%.

Oil and Gas

The Vedanta EBITDA for the oil and gas business was $1,032 million in Fiscal Year 2020, a decrease of $68 million, or 6%, from $1,100 million in Fiscal Year 2019. This was mainly due to fall in oil price realisation and lower volumes partially offset by a one-off for past exploration cost recovery of $180 million in Fiscal Year 2020. Crude oil prices in Fiscal Year 2019 was $70.4 compared to $60.9 in Fiscal Year 2020. Rajasthan operating cost has increased from $7.6 per barrel in Fiscal Year 2019 to $8.7 per barrel in Fiscal Year 2020, an increase of 14%.

Zinc (India)

The Vedanta EBITDA for the India zinc business was $1,230 million in Fiscal Year 2020, a decrease of $286 million, or 19%, from $1,516 million in Fiscal Year 2019. The decline was on account of lower revenue and higher cost of production. The cost of production of zinc including royalty decreased (net of by-product revenue) from $1,381 per tonne in Fiscal Year 2019 to $1,373 per tonne in Fiscal Year 2020, whereas cost of production excluding royalty increased from $1,008 per tonne in Fiscal Year 2019 to $1,047 per tonne in Fiscal Year 2020 mainly due to higher mine development expense, lower ore grades and volume, lower acid credits, higher cement prices, and electricity duty on captive power plants which was increased from ₹0.40 per unit to ₹0.60 per unit starting July 2019, which was partly offset by lower coal costs.

Zinc (International)

The Vedanta EBITDA for the international zinc business was $54 million in Fiscal Year 2020, a decrease of $46 million, from $100 million in Fiscal Year 2019. The decrease in EBITDA was primarily on account of lower price realization partially offset by improved cost and higher volume.

Copper (India/Australia)

The Vedanta EBITDA for the India and Australia copper business was $(40) million in Fiscal Year 2020, a decrease of $4 million, from $(36) million in Fiscal Year 2019. The decrease was primarily on account of decreased sales realisations.

Copper (Zambia)

KCM has been deconsolidated and discontinued since Fiscal Year 2020.

Iron ore

The Vedanta EBITDA for the iron ore business was $117 million in Fiscal Year 2020, an increase of $27 million from $90 million in Fiscal Year 2019. This was mainly due to higher volumes at the iron ore in Karnataka, which was partially offset by a decrease in value added businesses.

Steel

The Vedanta EBITDA for the steel business was $83 million in Fiscal Year 2020, a decrease of $30 million from $113 million in Fiscal Year 2019. This was driven by lower demand and a decrease in net realisation.

Aluminium

The Vedanta EBITDA for the aluminium business was $281 million in Fiscal Year 2020, a decrease of $35 million, from $316 million in Fiscal Year 2019. This was in line with lower revenue driven by lower aluminium price, which was partially offset by a decrease in cost driven by lower input commodity prices and true up of renewable purchase obligation liability.

Commercial power generation

The Vedanta EBITDA for the commercial power generation business was $232 million in Fiscal Year 2020, an increase of $13 million, or 6%, from $219 million in Fiscal Year 2019.

Investment revenue, finance costs and other gains/(losses)

Vedanta's investment revenue was $394 million in Fiscal Year 2020, a decrease of $86 million, or 18%, from $480 million in Fiscal Year 2019. This was mainly due to mark to market loss on a treasury investment made by Vedanta Limited's overseas subsidiary through a purchase of an economic interest in a structured investment in Anglo American Plc from its parent, Volcan Investments Limited, a one-time reclassification from other comprehensive income to profit and loss account at Zinc India during Fiscal Year 2019 and a depreciation of the Indian Rupee which was partially offset by mark-to-market gain on other investments during the year. The average post tax return on investment of Vedanta was 6.12% in Fiscal Year 2020 compared to 5.62% in Fiscal Year 2019.

Vedanta's finance cost was $1,179 million in Fiscal Year 2020, a decrease of $79 million, or 6%, from $1,258 million in Fiscal Year 2019. This was primarily due to a decrease in average borrowing due to repayment of debt at Vedanta Limited (standalone), TSPL and BALCO, repayment of temporary borrowing at Zinc India, repayment of preference shares at CIHL in Fiscal Year 2019, a decline in average borrowing cost in line with market trends and a depreciation of the Indian Rupee which was partially offset by increased borrowing at Vedanta's oil and gas business and the Company.

Other gains/(losses) (net) in Fiscal Year 2020 was $(87) million compared to $(75) million in Fiscal Year 2019 on account of a depreciation of the Indian Rupee.

Income tax expense and non-controlling interests

Tax expense was $411 million in Fiscal Year 2020, a decrease of $245 million from $656 million in Fiscal Year 2019. The normalised effective tax rate was 52% in Fiscal Year 2020 (excluding tax of/or dividend from subsidiaries of $276 million, new tax regime impact of $233 million and tax on exceptional items of $781 million) compared to 47% in Fiscal Year 2019. The effective tax rate increased by 5% due to following reasons:

- change in profit before tax mix within entities and primarily on account of an increase in weightage of CEHC which is taxable at a higher rate than other entities in the Group; and

- a reduction in profit base on account of Vedanta's losses which contributed to an increase in the effective tax rate.

Income/(expense) tax credit special items was an income of $781 million for Fiscal Year 2020 compared to an expense of $16 million in Fiscal Year 2019, due to tax credit on special items recognised during the year, which mainly included tax credit on impairment charge on assets.

The profit/(loss) attributable to non-controlling interests in Fiscal Year 2020 was a loss of $179 million in comparison to a profit $661 million in Fiscal Year 2019. The profits attributable to non-controlling interests without special items in Fiscal Year 2020 was $498 million compared to $646 million in Fiscal Year 2019.

Results of Operations: Fiscal Year 2019 compared to Fiscal Year 2018

Vedanta's revenue was $14,031 million in Fiscal Year 2019, a decrease of $1,263 million, or 8%, from $15,294 million in Fiscal Year 2018. This was mainly on account of shutdown of the Tuticorin smelter, lower zinc volumes, lower custom volumes at Copper Zambia and lower metal prices. This was partially offset by ramp up of volumes at Vedanta's aluminium business, volume addition from the ESL acquisition and improved oil prices.

Vedanta's copper, zinc, oil and gas, iron ore, aluminium, steel and power businesses contributed 19%, 24%, 13%, 3%, 30%, 4% and 7%, respectively to the total revenue in Fiscal Year 2019.

Oil and Gas

Revenue from the oil and gas business was $1,892 million in Fiscal Year 2019, an increase of $412 million, or 28%, from $1,480 million in Fiscal Year 2018. The increase in revenue was primarily contributed by higher Brent oil price realisation which was marginally offset by a decrease in entitlement interest sales. Specifically:

- The daily average Brent oil price realisation increased from $50.7 per boe in Fiscal Year 2018 to $66.1 per boe in Fiscal Year 2019, an increase of 30.4%.

- Entitlement interest sales decreased from 80,263 boepd in Fiscal Year 2018 to 79,049 boepd in Fiscal Year 2019, a decrease of 1,214 boepd or 1.5%.

Zinc (India)

Revenue from the zinc business was $2,955 million in Fiscal Year 2019, a decrease of $399 million, or 12%, from $3,354 million in Fiscal Year 2018. This decrease was primarily driven by lower metal prices and zinc volume which was partially offset by higher lead and silver volumes. Specifically:

- Zinc ingot production decreased from 791,461 tons in Fiscal Year 2018 to 696,283 tons in Fiscal Year 2019, a decrease of 12.0%. This decrease was primarily due to lower zinc mined metal availability during the year as underground mines ramped up to make up for the closure of open — cast operation and the higher lead ratio in ore. Zinc ingot sales also decreased in line with the lower production from 792,691 tons in Fiscal Year 2018 to 694,141 tons in Fiscal Year 2019, a decrease of 12.4%.

- Zinc ingot sales in the domestic market declined marginally from 514,511 tons in Fiscal Year 2018 to 512,893 tons in Fiscal Year 2019. Vedanta's domestic sales as a percentage of total sales increased from 65.0% in Fiscal Year 2018 to 74.0% in Fiscal Year 2019. Vedanta endeavours to sell large quantities of its products domestically, where it receives an Indian market premium. Vedanta's export sales declined from 278,180 tons of zinc in Fiscal Year 2018 to 181,248 tons of zinc in Fiscal Year 2019, a decrease of 35.0%.

- The daily average zinc cash settlement price on the LME decreased from $3,057 per ton in Fiscal Year 2018 to $2,743 per ton in Fiscal Year 2019, a decrease of 10.3%.

- Lead ingot production increased from 168,247 tons in Fiscal Year 2018 to 197,838 tons in Fiscal Year 2019, an increase of 17.6% in line with higher availability of lead mined metal mined metal, higher lead content in ore and retrofitting of pyro smelter to produce more lead. Lead ingot sales increased from 168,766 tons in Fiscal Year 2018 to 197,661 tons in Fiscal Year 2019, an increase of 17.1%, in line with increased production.

- The daily average lead cash settlement price on the LME decreased from $2,379 per ton in Fiscal Year 2018 to $2,121 per ton in Fiscal Year 2019, a decrease of 10.8%.

- Silver ingot production increased from 561,259 kilograms in Fiscal Year 2018 to 679,183 kilograms in Fiscal Year 2019, an increase of 21.8% on account of higher sliver grade and lead higher production from Sindesar Khurd mine. Sales of silver ingots increased from 557,539 kilograms in Fiscal Year 2018 to 676,173 kilograms in Fiscal Year 2019, an increase of 21.3% in line with silver production. The daily average silver LMBA prices decreased from $16.9 per ounce in Fiscal Year 2018 to $15.4 per ounce in Fiscal Year 2019, a decrease of 8.9%.

Zinc (International)

Revenue from the international zinc business was $392 million in Fiscal Year 2019, a decrease of $143 million, or 27%, from $535 million in Fiscal Year 2018. The decrease in revenue was primarily due to lower sales volume and lower commodity prices of zinc and lead. Specifically:

- Production of refined zinc metal at Skorpion registered decrease from 84,215 tons in Fiscal Year 2018 to 65,948 tons in Fiscal Year 2019, a decrease of 18,267 tons or 21.7%. This was primarily due to the planned shutdown of the acid plant during the first quarter of Fiscal Year 2019 and lower than planned zinc grades. Furthermore, the mining business partner's employees embarked on an illegal strike from 22 February to 6 March 2019. The employees cited unresolved labour matters with their employer. The strike action lasted 14 days and had a severe negative impact on mining activities and the lead time to re-establish mining operations. This resulted in the depletion of run of mine ore inventory, with the consequent effect of a temporary closure of the refinery while re-establishing mining buffers. The operations restarted in second half of April 2019.

- Production of zinc metal in concentrate from the BMM mines increased from 27,175 tons in Fiscal Year 2018 to 27,558 tons in Fiscal Year 2019, an increase of 383 tons or 1.4%. Production of lead metal in concentrate decreased from 45,113 tons to 37,354 tons, a decrease of 7,759 tons or 17.2%. This overall decrease in mined metal production was primarily due to lower grades and, hence, lower recoveries.

- Gamsberg operation was commissioned during the middle of Fiscal Year 2019 with trial production starting in November 2018, followed by the first shipment of concentrate in December 2018. Production of zinc metal in concentrate from Gamsberg stood at 17,128 tons out of which trial run production was 9,619 tons.

- The daily average zinc cash settlement price on the LME decreased from $3,057 per ton in Fiscal Year 2018 to $2,743 per ton in Fiscal Year 2019, a decrease of 10.3%.

- The daily average lead cash settlement price on the LME decreased from $2,379 per ton in Fiscal Year 2018 to $2,121 per ton in Fiscal Year 2019, a decrease of 10.8%.

Copper (India/Australia)

Revenue from the copper business in India and Australia was $1,537 million in Fiscal Year 2019, a decrease of $2,291 million, or 60%, from $3,828 million in Fiscal Year 2018. The decrease was primarily due to shutdown of the Tuticorin copper smelter. Specifically:

- Copper cathode production decreased from 403,168 tons in Fiscal Year 2018 to 89,517 tons in Fiscal Year 2019, a decrease of 77.8%. The production was lower due to the closure of the Tuticorin smelter since April 2018. Copper cathode sales decreased from 200,236 tons in Fiscal Year 2018 to 6,119 tons in Fiscal Year 2019, a decrease of 97.0%. The decrease in sales was in line with production.

- Production of copper rods decreased from 202,539 tons in Fiscal Year 2018 to 111,917 tons in Fiscal Year 2019, a decrease of 44.8%. Copper rod sales decreased from 202,676 tons in Fiscal Year 2018 to 111,505 tons in Fiscal Year 2019, a decrease of 45.0% in line with the decrease in production.

- Sales of copper in the Indian market decreased from 201,862 tons in Fiscal Year 2018 to 112,826 tons in Fiscal Year 2019, a decrease of 44.0% and Vedanta's exports decreased from 201,080 tons in Fiscal Year 2018 to 4,798 tons in Fiscal Year 2019, a decrease of 97.6%. Vedanta's domestic sales as a percentage of total sales increased from 50.1% in Fiscal Year 2018 to 96.0% in Fiscal Year 2019.

- Daily average copper cash settlement price on the LME decreased from $6,451 per ton in Fiscal Year 2018 to $6,337 per ton in Fiscal Year 2019, a decrease of 1.8%.

Copper (Zambia)

Revenue from KCM in Zambia was $1,085 million in Fiscal Year 2019, a decrease of $198 million, or 15%, from $1,283 million in Fiscal Year 2018. This was mainly due to lower metal prices and reduction in custom sales volumes. Specifically:

- Copper mined metal production increased marginally from 90,848 tonnes in Fiscal Year 2018 to 91,135 tonnes in Fiscal Year 2019.

- Copper sales decreased from 201,923 tonnes in Fiscal Year 2018 to 178,609 tonnes in Fiscal Year 2019, a decrease of 12%.

- Custom Volumes decreased from 111,044 tonnes in Fiscal Year 2018 to 86,987 tonnes in Fiscal Year 2019, a decrease of 22%, this was primarily due to availability of concentrates.

- Daily average copper cash settlement price on the LME decreased from $6,451 per ton in Fiscal Year 2018 to $6,337 per ton in Fiscal Year 2019, a decrease of 1.8%.

Iron ore

Revenue from the iron ore business was $416 million in Fiscal Year 2019, a decrease of $69 million, or 14%, from $485 million in Fiscal Year 2018. The decrease was primarily due to lower sales volume at Iron Ore Mines in Goa due to halt of mining operations partially offset by increase in sales volume at Karnataka, pig iron volume and its prices during the year. Specifically:

- Saleable iron ore production decreased from 7.1 million tons in Fiscal Year 2018 to 4.4 million tons in Fiscal Year 2019, a decrease of 2.7 million tons was primarily due to a ban on mining operation in Goa. The Supreme Court through its judgement dated 7 February 2018 directed all companies in Goa to stop mining operations with effect from 16 March 2018. This was partially offset by higher production at Karnataka of 4.1 million tons in line with the allocated environmental clearance ("EC") limits. The Supreme Court increased the mining cap in Karnataka from 30 to 35 million ton and accordingly Vedanta's mining cap limit increased from 2.3 to 4.5 million tonnes in May 2018.

- The production of pig iron increased by 6.0% from 645,823 tons in Fiscal Year 2018 to 685,659 tons in Fiscal Year 2019 and the production of metallurgical coke was 442,785 tons in Fiscal Year 2018 compared to 476,786 tons in Fiscal Year 2019, an increase of 7.7%. During the year, production of pig iron increased by 6.0% due to lower metallurgical coke availability because of weather related supply disruptions in Australia in the first quarter of Fiscal Year 2018 and a local contractor's strike in the second quarter of Fiscal Year 2018.

Steel

Revenue from the steel business was $600 million (for the 10-month period post acquisition of ESL) in Fiscal Year 2019. Vedanta acquired a 90.0% stake in ESL through Vedanta Star Limited ("VSL") on 4 June 2018. Specifically:

- Pig iron production decreased from 179,464 tons in Fiscal Year 2018 to 141,549 tons in Fiscal Year 2019, a decrease of 37,915 tons or 21.1%. The decrease was mainly due to higher production of billet. The sale of pig iron decreased from 141,686 tons in Fiscal Year 2019 as compared to 185,139 tons in Fiscal Year 2018, a decrease of 43,453 tons or 31.0%. The decrease in sales was in line with production.

- Billet production decreased from 50,273 tons in Fiscal Year 2018 to 39,478 tons in Fiscal Year 2019, a decrease of 10,795 tons or 21.5%. This reduction was due to higher focus on production of value-added products that is, TMT bars, wire rods and DI pipe. The sale of billet decreased from 31,831 tons in Fiscal Year 2019 as compared to 42,828 tons in Fiscal Year 2018, a decrease of 10,997 tons or 35.0%. The decrease in sales was in line with production.

- TMT production increased from 300,384 tons in Fiscal Year 2018 to 441,251 tons in Fiscal Year 2019. TMT recorded an increase of 140,867 tons or 47.0%. The increase was primarily due to higher billet availability and restarting of a 350 cubic metre blast furnace from August 2018 onwards. The sale of TMT increased from 310,261 tons in Fiscal Year 2018 to 442,144 tons in Fiscal Year 2019, an increase of 131,883 tons or 42.5%. The increase was in line with increased production and continued focus on value added products.

- Wire rod production increased from 365,460 tons in Fiscal Year 2018 to 426,873 tons in Fiscal Year 2019, an increase of 61,413 tons or 16.8%. The increase was primarily due to higher billet availability and restarting of a 350 cubic metre blast furnace from August 2018 onwards. Wire rod sale increased from 359,956 tons in Fiscal Year 2018 to 421,188 tons in Fiscal Year 2019, an increase of 61,232 tons or 17.0%. The increase was in line with increased production and continued focus on value added products.

- The production of DI pipe grew by 15.0% from 129,887 ton in Fiscal Year 2018 to 149,946 ton in Fiscal Year 2019. The sale of DI pipe increased from 129,887 ton in Fiscal Year 2018 to 149,946 ton in Fiscal Year 2019.

Aluminium

Revenue from the aluminium business was $4,183 million in Fiscal Year 2019, an increase of $638 million, or 18%, from $3,545 million in Fiscal Year 2018. This increase was primarily due to stabilisation of volumes at Jharsuguda from the pots ramp ups done during the year. Specifically:

- Aluminium production increased from 1,675,085 tons in Fiscal Year 2018 to 1,959,015 tons in Fiscal Year 2019, an increase of 17.0%. Production of value-added products decreased from 43.1% in Fiscal Year 2018 to 41.8% in Fiscal Year 2019.

- Aluminium sales increased from 1,672,424 tons in Fiscal Year 2018 to 1,915,557 tons in Fiscal Year 2019, an increase of 14.5%. This was in line with production volume increase.

- Sales of aluminium ingots increased from 904,800 tons in Fiscal Year 2018 to 1,105,350 tons in Fiscal Year 2019, an increase of 22.0%. This includes PFAs and alloy ingot volumes of 14,389 tons in Fiscal Year 2018 and 42,279 tons in Fiscal Year 2019 as both Jharsuguda and BALCO smelters added PFA capacities.

- Wire rod sales decreased by 3.6% from 380,878 tons in Fiscal Year 2018 to 367,252 tons in Fiscal Year 2019.

- Rolled product sales fell from 26,606 tons in Fiscal Year 2018 to 25,867 tons in Fiscal Year 2019, a decrease of 2.8%.

- Billets sale increased from 315,883 tons in Fiscal Year 2018 to 372,950 tons in Fiscal Year 2019, an increase of 18.0%.

- Slabs was introduced as a product in Fiscal Year 2019 clocking a sales volume of 10,214 tons.

- Hot metal sales during Fiscal Year 2019 were 33,924 tons, down by 23.3% from 44,257 tons in Fiscal Year 2018.

- Aluminium sales in the domestic market decreased from 673,920 tons in Fiscal Year 2018 to 616,513 tons in Fiscal Year 2019, down by 8.5%. Vedanta's aluminium exports increased from 998,503 tons in Fiscal Year 2018 to 1,299,044 tons in Fiscal Year 2019, an increase of 30.0%.

- The daily average aluminium cash settlement price on the LME decreased from $2,046 per ton in Fiscal Year 2018 to $2,035 per ton in Fiscal Year 2019.

Commercial Power Generation

Revenue from the commercial power generation business was $934 million in Fiscal Year 2019, an increase of $57 million, or 6% from $877 million in Fiscal Year 2018. Power sales increased from 11,041 million units in Fiscal Year 2018 to 13,515 million units in Fiscal Year 2019, an increase of 22.4%. This was primarily due to higher power sale from TSPL and BALCO power plant as compared to Fiscal Year 2018 wherein fire incident at TSPL resulting plant shutdown for 65 days in first quarter and BALCO power plant due to disruptions in domestic coal supply which was partially offset by lower power sales from Jharsuguda. The operations of MALCO's power plant has been suspended for care and maintenance since 26 May 2017 due to low demand in southern India. Specifically:

- Talwandi Sabo power plant, operated at record 88.0% plant availability in Fiscal Year 2019. It supplied 9,858 million units of power compared to 7,915 million units of power in Fiscal Year 2018 to PSPCL in Fiscal Year 2019. TSPL's PPA with PSEB compensates it based on the availability of the plant.

- The Jharsuguda 600 MW power plant operated at a lower PLF of 15.0% during Fiscal Year 2019, compared to 25.0% in Fiscal Year 2018, due to disruptions in domestic coal supply.

- At BALCO, the 600 MW IPP unit of the 1,200 MW power plant operated at PLF of 53.0% in Fiscal Year 2019, compared to 44.0% in Fiscal Year 2018. Vedanta has received an order dated 1 January 2019 from CSERC for the conversion of 300 MW capacity from an IPP to a CPP, making a total of 1,440 MW for captive power supply to the BALCO smelters.

- The average power realisation increased from ₹2.9 per unit in Fiscal Year 2018 to ₹3.4 per unit in Fiscal Year 2019, an increase of 17.2% (excluding power from TSPL 1,980 MW power plant). The increase in power realisation was due to better realisation at BALCO 600 MW IPP out of which 300 MW was converted into a CPP with effect from 1 January 2019.

- Cost of generation at the power business (excluding power from the TSPL 1,980 MW power plant) increased from ₹2.3 per unit in Fiscal Year 2018 to ₹2.9 in Fiscal Year 2019, an increase of 24.0%.

- The average power realisation at Talwandi Sabo power plant increased from ₹3.5 per unit in Fiscal Year 2018 to ₹4.1 per unit in Fiscal Year 2019 and cost of generation increased from ₹2.5 per unit in Fiscal Year 2018 to ₹3.1 per unit in Fiscal Year 2019, an increase of 21.0% due to increased coal prices during the year.

Operating profit

Vedanta's operating profit was $1,949 million in Fiscal Year 2019 compared to $3,375 million in Fiscal Year 2018. Vedanta's operating profit before special items was $1,911 million in Fiscal Year 2019, a decrease of $781 million, from an operating profit before special items of $2,692 million in Fiscal Year 2018. Special items in Fiscal Year 2019 include reversal of net impairment of $38 million in respect of oil and gas Block KG-ONN-2003/1 (CGU) on booking of commercial reserves and subsequent commencement of commercial production. The special items for Fiscal Year 2018 includes reversal of previously recorded non-cash impairment charge relating to oil and gas business $1,465 million and $46 million relating to contribution to District Mineral Foundation (DMF) partially offset by impairment charge at the iron ore assets pursuant to an order of the Supreme Court of India directing the cancellation of mining leases in Goa of $759 million, impairment of Palar Block at oil and gas business of $17 million, a loss of $39 million at Vedanta's aluminium business relating to certain items of capital work-in-progress which were no longer expected to be used and $13 million consequent increase in provision representing past service cost. The decrease in operating profit before special items is primarily due to decrease in revenue as stated above, input commodity inflation and higher cost of production at Zinc businesses and higher depreciation charge during Fiscal Year 2019 due to change in reserves estimates and reversal of previously recorded impairment at oil and gas business in the fourth quarter of Fiscal Year 2018, higher charge due to higher ore production at Zinc businesses and capitalisation of costs at Gamsberg, and acquisition of ESL. Operating margin before special item decreased to 14% in Fiscal Year 2019 from 18% in Fiscal Year 2018.

Contributing factors to Vedanta's consolidated operating profit were as follows:

- Cost of sales decreased from $12,029 million in Fiscal Year 2018 to $11,532 million in Fiscal Year 2019, a decrease of $497 million, or 4%. The decrease was primarily due to the shutdown of the Tuticorin plant and was partially offset by an increase in production volume at aluminium smelters, volume addition from ESL, higher cost of production of zinc, inflation in commodity prices of alumina, coke, coal and other major consumables. Vedanta deployed several measures to optimise cost spends including clean-sheet-costing for negotiations, alternate materials, new sources of supply, improving efficiencies in logistics and quality control.

- Other operating income increased from $154 million in Fiscal Year 2018 to $229 million in Fiscal Year 2019, an increase of $75 million. The increase was primarily due to additions from ESL, write back of liability pursuant to settlement agreement with a contractor at BALCO, higher export incentives in aluminium business, one time write back of royalty and related service tax at iron ore business.

- Distribution expenses were flat at $277 million in Fiscal Year 2018 and $276 million in Fiscal Year 2019. However, distribution expense as a percentage of revenue increased from 1.8% in Fiscal Year 2018 to 2% in Fiscal Year 2019.

- Administration expenses increased from $417 million in Fiscal Year 2018 to $541 million in Fiscal Year 2019, an increase of $124 million, or 30%. The increase was primarily due to addition to administration expense post acquisition of ESL and ASI, contribution to Vedanta Medical Research Foundation, higher administration expense at aluminium and zinc business due to increase in CSR, exploration and consultancy expense, and a one time cess reversal in oil and gas during Fiscal Year 2018 etc. which was partially offset by decrease in expense on account of shutdown of Tuticorin smelters and closure of iron ore mines at Goa. As a percentage of revenue, administration expenses were higher at 4% in Fiscal Year 2019 compared to 3% in Fiscal Year 2018.

Oil and Gas

The Vedanta EBITDA for the oil and gas business was $1,100 million in Fiscal Year 2019, an increase of $251 million, or 30%, from $849 million in Fiscal Year 2018. The increase was primarily driven by improved Brent prices. Crude price in Fiscal Year 2019 was $70.4 in comparison to $57.5 in Fiscal Year 2018. Rajasthan operating cost increased from $6.6 per barrel in Fiscal Year 2018 to $7.6 per barrel in Fiscal Year 2019, or 15%.

Zinc (India)

The Vedanta EBITDA for the India zinc business was $1,516 million in Fiscal Year 2019, a decrease of $386 million, or 20%, from $1,902 million in Fiscal Year 2018. The decrease was primarily on account of lower zinc metal production and lower LME prices, partially offset by record lead and silver volumes. The cost of production of zinc including royalty increased (net of by-product revenue) from $1,365 per tonne in Fiscal Year 2018 to $1,381 per tonne in Fiscal Year 2019 and cost of production excluding royalty increased from $976 per tonne in Fiscal Year 2018 to $1,008 per tonne in Fiscal Year 2019 mainly due to higher mine development, input commodity inflation and Long term Wage Settlement (LTS) related expense but was partly offset by higher acid credits and a depreciation of the Indian Rupee.

Zinc (International)

The Vedanta EBITDA for the international zinc business was $100 million in Fiscal Year 2019, a decrease of $120 million, or 55%, from $220 million in Fiscal Year 2018. The decrease was primarily due to lower sales volumes and lower price realisations along with higher cost of production driven by lower production at both Skorpion Zinc and BMM, higher amortisation of stripping costs of Pit 112 at Skorpion Zinc, higher TcRc and annual inflation partially offset by local currency depreciation, sulphur efficiencies, lower oxide consumption at Skorpion Zinc and higher copper credit at BMM.

Copper (India/Australia)

The Vedanta EBITDA for the India and Australia copper business were $(36) million in Fiscal Year 2019, a decrease of $198 million, from $162 million in Fiscal Year 2018. The decrease was primarily due to shutdown of Tuticorin copper smelter.

Copper (Zambia)

KCM's Vedanta EBITDA was $(63) million in Fiscal Year 2019, compared to $73 million in Fiscal Year 2018. This was mainly due to incremental process improvement cost, significant depreciation of the Kwacha against US dollar, lower cobalt credits and a one-off credit related to Energy Regulation Board (ERB) tariff provision in Fiscal Year 2018.

Iron ore

The Vedanta EBITDA for the iron ore business was $90 million in Fiscal Year 2019, an increase of $42 million, or 88%, from $48 million in Fiscal Year 2018. The increase was mainly due to higher volume at Karnataka in Fiscal Year 2019 due to increase in allocated mining cap limit.

Steel

The Vedanta EBITDA for the steel business was $113 million in Fiscal Year 2019. Prudent cost management and improvement of key metrics played a pivotal role for this turnaround story.

Aluminium

The Vedanta EBITDA for the aluminium business was $316 million in Fiscal Year 2019, a decrease of $98 million, from $414 million in Fiscal Year 2018. The decrease was primarily due to higher input commodity inflation (primarily imported alumina and carbon), higher power cost due to disruptions in domestic coal supply from Coal India resulting procurement of coal and power from alternate sources at higher prices and Indian Rupee appreciation, partly offset by higher production volume, higher sales realisation resulting from an increase in average LME prices of aluminium and write back of liability pursuant to a settlement agreement with a contractor at BALCO.

Commercial power generation

The Vedanta EBITDA for the commercial power generation business was $219 million in Fiscal Year 2019, a decrease of $39 million, or 15%, from $258 million in Fiscal Year 2018. The decrease was due to increase in cost of production due to one-off revenue recognition of $35 million and $22 million at BALCO and Jharsuguda IPP, respectively, in Fiscal Year 2018.

Investment revenue, finance costs and other gains/(losses)

Vedanta's investment revenue was $480 million in Fiscal Year 2019, an increase of $15 million, or 3%, from $465 million in Fiscal Year 2018. This was mainly due to mark to market gain on a treasury investment made by Vedanta Limited's overseas subsidiary through purchase of economic interest in a structured investment in Anglo American Plc from its ultimate parent, Volcan Investment Limited, partially offset by lower investment corpus and a depreciation of the Indian Rupee.

Vedanta's finance costs were $1,258 million in Fiscal Year 2019, a decrease of $89 million, or 7%, from $1,347 million in Fiscal Year 2018. This was mainly due to reversal of provision for interest of $9 million for dues towards SSNP in Fiscal Year 2019 and $17 million in this matter recognised pursuant to an unfavourable arbitration order during Fiscal Year 2018, onetime losses incurred on bond buy-back activity in Fiscal Year 2018 of $91 million, higher capitalisation and a depreciation of the Indian Rupee partially offset by higher gross debt due to ESL acquisition, temporary borrowings at Zinc India and higher average borrowing cost in line with market trends.

Other gains/(losses) in Fiscal Year 2019 was $(75) million, compared to $(5) million in Fiscal Year 2018. This was mainly on account of significant depreciation of the Indian Rupee against the US dollar.

Income tax expense and non-controlling interests

Tax expense — Others was $656 million in Fiscal Year 2019, a decrease of $19 million, from $675 million in Fiscal Year 2018. The effective tax rate for Fiscal Year 2019 after excluding special item was 63%, compared to 35% in Fiscal Year 2018 due to change in the profit mix across businesses together with depreciation of the Indian Rupee impacting tax written down value of oil and gas assets, whose functional currency is US dollar. Further the tax charge of Fiscal Year 2019 includes $121 million representing reversal of deferred tax assets on carry forward losses not expected to be utilised during the statutory permitted period and $158 million in Fiscal Year 2019 pertaining to DDT paid by subsidiaries as compared to $63 million in Fiscal Year 2018.

Income tax expense special items in Fiscal Year 2019 were $16 million compared to $338 million in Fiscal Year 2018.

The profit attributable to non-controlling interests in Fiscal Year 2019 was $661 million in comparison to $1,236 million in Fiscal Year 2018. The profits attributable to non-controlling interests without special items in Fiscal Year 2019 was $646 million in comparison to $1,064 million in Fiscal Year 2018.

Liquidity and Capital Resources

Capital Resources

Overview

As of 31 March 2020, Vedanta's cash and cash equivalents and short-term investments were $5,090 million, the majority of which were denominated in Indian Rupee. Of this, $705 million was cash and cash equivalents and $4,385 million was short-term investments. Short-term investments consist of investments in mutual funds and bank deposits with maturities of more than 90 days. Vedanta's investment policy is to invest in funds and banks with a low credit risk and high credit ratings.

Vedanta funds its operations primarily with its current cash and liquid investments, together with cash flows from operations and borrowings under working capital and term loan facilities from banks and/or other financial institutions and debt securities, and Vedanta expects that these sources will continue to be its principal sources of cash in the next few years. Vedanta believes that its current working capital is sufficient for its present capital requirements.

Vedanta's principal financing requirements include:

- repayment of debts maturing during the year;
- capital expenditures towards the maintenance, upgrading and expansion of capacity in existing businesses;
- consolidation of ownership in various subsidiaries;

- acquisitions of complementary businesses that Vedanta determines to be attractive opportunities; and

- working capital.

Vedanta evaluates its funding requirements regularly in light of its cash flow from its operating activities, the progress of its capital expenditure projects, acquisition initiatives and market conditions. To the extent it does not generate sufficient cash flow from operating activities, Vedanta may rely on debt or equity financing activities, subject to market conditions.

The following table sets out selected cash flow data and the cash and cash equivalents for Fiscal Years 2018, 2019 and 2020:

	Fiscal Year		
	2018	2019	2020
		($ million)	
Total cash from operating activities	1,494	1,886	1,250
Total cash from/(used in) investing activities	2,213	(1,676)	(1,261)
Total cash (used in)/from financing activities	(4,607)	167	(355)
Net increase/(decrease) in cash and cash equivalents	**(900)**	**377**	**(366)**
Effect of foreign exchange rate changes	16	(42)	(62)
Cash and cash equivalents at beginning of year	1,682	798	1,133
Cash and cash equivalents at end of year	**798**	**1,133**	**705**

Total Cash from Operating Activities

Total cash from operating activities was $1,250 million in Fiscal Year 2020, primarily comprised of loss before tax of $1,346 million and the add-back of depreciation and amortisation of $1,412 million, finance costs of $1,179 million and impairment charge of $2,072 million, less $394 million of investment revenues, $1,136 million in interest paid, $165 million in income tax paid and $536 million in dividends paid. Movement in working capital primarily comprised of a $713 million increase in receivables, a $352 million increase in payables and a decrease of $292 million in inventories.

Total cash from operating activities was $1,886 million in Fiscal Year 2019, primarily comprised of profit before tax of $1,096 million and the add back for impairment reversals of $38 million, finance costs of $1,258 million and depreciation and amortisation of $1,482 million, less $480 million of investment revenues, $1,278 million in interest paid, $547 million in income tax paid and $113 million in dividends paid. Movement in working capital primarily comprised of a $10 million increase in inventories, a $335 million increase in receivables and a $577 million increase in payables.

Total cash from operating activities was $1,494 million in Fiscal Year 2018, primarily comprised of profit before tax of $2,488 million and the add back for impairment reversal of $650 million, finance costs of $1,347 million and depreciation and amortisation of $1,271 million, less $465 million of investment revenues, $1,312 million in interest paid, $567 million in income tax paid and $164 million in dividends paid. Movement in working capital primarily comprised of a $355 million increase in inventories, a $607 million increase in receivables and a $247 million increase in payables.

Total Cash from or Used in Investing Activities

Total cash used in investing activities was $1,261 million in Fiscal Year 2020, primarily on account of investment in property, plant and equipment of $1,104 million, net proceeds from sale of financial asset investments of $365 million and purchase of short-term investment of $15,460 million partially offset by proceeds from redemption of short-term investments amounting to $15,178 million. Other factors included a $251 million paid against guarantees issued on behalf of KCM (discontinued operation) and cash outflow of $4 million from discontinued operations.

Total cash used in investing activities was $1,676 million in Fiscal Year 2019, primarily on account of net proceeds from redemption of short-term investments amounting to $12,588 million offset by purchases of short-term investment of $11,949 million, investment in property, plant and equipment and intangibles of $1,327 million, acquisition of subsidiary for $752 million and purchase of financial asset investment for $254 million.

Total cash used in investing activities was $2,213 million in Fiscal Year 2018, primarily on account of net proceeds from redemption of short-term investments amounting to $3,441 million partially offset by purchases of property, plant and equipment and intangibles of $1,104 million and acquisition of subsidiary $134 million.

Total Cash from or Used in Financing Activities

Total cash used in financing activities was $355 million in Fiscal Year 2020, primarily as a result of net additions to medium and long-term borrowings of $1,644 million partially offset by net repayment of short-term borrowings by $234 million and dividend to non-controlling interests of subsidiaries of $101 million.

Total cash from financing activities was $167 million in Fiscal Year 2019, primarily as a result of net addition to medium and long-term borrowings of $2,394 million partially offset by payment of dividend to non-controlling interests of subsidiaries of $1,028 million, net repayment of short-term borrowings by $1,109 million.

Total cash used in financing activities was $4,607 million in Fiscal Year 2018, primarily as a result of payment of dividend to non-controlling interests of subsidiaries of $1,414 million, buy back and repayment of non-convertible bonds of $1,129 million, repayment of short-term borrowings of $3,859 million offset by proceeds from long-term borrowings of $1,823 million.

Borrowings

Vedanta had undrawn fund based committed borrowing facilities of $424 million available to it as of 31 March 2020.

Vedanta taps both the Indian and offshore markets for its long-term funding needs. In addition, it has sizeable imports and exports and can therefore access both import and export credits, based on cost effectiveness, both in Indian Rupee and in foreign currencies, to finance its short-term working capital requirements. Vedanta has in place both secured and unsecured borrowings, with its secured borrowings being generally Indian Rupee denominated bonds.

Vedanta has tapped different segments of borrowing resources, including banks and capital markets, both in India and overseas. Vedanta currently has corporate credit ratings of "B-" on "Creditwatch Developing" by S&P and "B1" with a negative outlook by Moody's. Vedanta has not had, and does not currently expect to have, material difficulty in gaining access to short-term and long-term financing sufficient to meet its current requirements.

The following table shows total borrowings of Vedanta as of 31 March 2018, 2019 and 2020:

	As of 31 March		
	2018	2019	2020
	($ million)		
Bank loans	9,499	10,717	8,743
Bonds/Non-convertible Debentures	5,139	5,176	6,332
Other loans	93	87	20
Preference shares	463	0	0
Total	**15,194**	**15,980**	**15,095**
Borrowings are repayable:			
Within one year (shown as current liabilities)	5,460	5,456	10,186
More than one year	9,734	10,524	4,909
Total borrowings	**15,194**	**15,980**	**15,095**
Less: payable within one year	5,460	5,456	10,186
Medium and long-term borrowings	**9,734**	**10,524**	**4,909**

As at 31 March 2020, Vedanta had access to funding facilities of $11,767 million, which comprised of fund based facilities and non-fund based facilities. Fund based facilities are contractual agreements with financial institutions to provide immediate cash, such as cash credit limits and term loans and non-fund based facilities are contractual agreements with financial institutions to provide cash upon fulfilment of certain conditions, such as bank guarantees and letters of credits.

Funding Facilities	**Total Facility**	**Drawn**	**Undrawn**
	($ million)		
Fund based/Non Fund Based	11,767	10,280	1,487

A summary of the principal loans borrowed by Vedanta as of 31 March 2020 is contained in Note 22(a) to the Company's consolidated financial statements.

Vedanta's finance facilities that contain various financial covenants. These covenants require Vedanta to maintain certain financial ratios and seek the prior permission of the relevant banks and financial institutions for various activities including, amongst others, any changes in its capital structure, issue of equity, preferential capital or debentures, raising any loans, undertaking any new project, effecting any scheme of acquisition, merger, amalgamation or reconstruction, implementing a new scheme of expansion or creation of a subsidiary.

The Group is in compliance with its covenants relating to all facilities save for one one financial covenant (Net Debt/EBITDA), which was not complied with in respect of the testing period ending 31 March 2020 as a result of the impact of COVID-19 on the business. The Group has obtained a waiver from the requisite creditors of all such financing arrangements, subject to, *inter alia*, formal documentation. As of the date of this Offering Circular, the formal documentation is in the process of being finalised and signed. The Group has also agreed with its creditors either full waivers or amendment to the levels of the relevant financial covenant to be tested in September 2020, March 2021 and (only in respect of some but not all the financing arrangements) September 2021 giving it additional comfort under those financing arrangements. Notwithstanding such amendments, no assurance can be given that any financial covenant will be complied with in the future as that depends on the performance of the operations of the Group in the relevant testing periods. Please also see the section entitled *"Risk Factors — Risks Relating to Business — Vedanta is subject to covenants under its credit facilities including term loans and working capital facilities that limit its flexibility in managing its business."*.

Project Capital Expenditures

The following table shows the capital expenditures for Vedanta in Fiscal Years 2018, 2019 and 2020:

	Fiscal Year		
	2018	2019	2020
		($ million)	
Expansion capital expenditure	820	1,082	819

In Fiscal Year 2018, capital expenditure was incurred on HZL's underground mine expansion project, ramp up of aluminium and power capacities at Vedanta Limited, Gamsberg Mining project, Tuticorin smelter and various growth projects at the oil and gas business.

In Fiscal Year 2019, significant capital expenditure was incurred on HZL's mine expansion project, Gamsberg Mining project, various growth projects at the oil and gas business and ramp up of aluminium.

In Fiscal Year 2020, majority of the capital expenditure was incurred on HZL's mine development project, various growth projects at the oil and gas business and Gamsberg Mining project.

The following table sets out details regarding Vedanta's capital expenditure as of 31 March 2020, for projects in progress and capital expenditure with flexibility.

Capex in progress	Status	Capex Approved(3)	Cumulative spending up to March 2019(4)	Spent in Fiscal Year 2020(4)(7)	Unspent as at 31 March 2020(5)
Cairn India(1)					
Mangala infill, Bhagyam & Aishwariya Polymer, Liquid handling, ASP, Tight oil & gas etc.		2,493	651	492	1,350
Total Capex in progress – Oil & Gas		**2,493**	**651**	**492**	**1,350**
Aluminium Sector					
Jharsuguda 1.25 mtpa smelter	Line 3: Fully capitalized Line 4: Fully capitalized Line 5: Six sections capitalized, two pending	2,920	2,915	10	(5)(6)
Aluminium Sector Total		**2,920**	**2,915**	**10**	**(5)(6)**
Zinc Sector					
Zinc India (Mines Expansion)		**2,077**	**1,569**	**157**	**350**
Fumer	To be completed by first quarter of Fiscal Year 2021	85	75	10	0
Smelter DBN	Phase 1 to be completed by Fiscal Year 2020 & Phase 2 by Fiscal Year 2021	54	25	20	9

Capex in progress	Status	Capex Approved(3)	Cumulative spending up to March 2019(4)	Spent in Fiscal Year 2020(4)(7)	Unspent as at 31 March 2020(5)
STP	Approved by HZL Board	12	7	3	3
Solar	Approved by HZL Board	66	17	2	47
SK Village rehabilitation	Approved by HZL Board	43	–	0	43
Others		261	124	35	102
Zinc International					
Gamsberg Mining Project(2)	Completed Capitalization	400	364	22	13
Copper India					
Tuticorin Smelter 400 kTPA	Project is under Force Majeure	717	198	–	519
ASI	Furnaces operational and Cold Repair completed, KC-2 Cold Line Repair, TF-5 & KF-2 Hot Repair	56	41	7	8
Total Capex in Progress – Metals & Mining		**6,430**	**5,212**	**231**	**988**
Total Capex in Progress		**8,924**	**5,863**	**723**	**2,338**
Metals and Mining					
Lanjigarh Refinery (Phase II) – 4.0 mtpa	Under Evaluation	1,570	857	52	661
Skorpion Refinery Conversion	Currently deferred until pit 112 extension	156	14	–	142
Zinc India mine expansion (1.2 to 1.35 mtpa)	Subject to Board Approval	698	1	1	697
Total Capex with Flexibility Progress		**2,424**	**872**	**52**	**1,500**

(1) Capital expenditure approved for Cairn Ubdua represents net capital expenditure, however gross capital expenditure is $3.2 billion.

(2) Capital approved $400 million excludes interest during construction.

(3) Based on exchange rate prevailing at the time of approval.

(4) Based on exchange rate prevailing at the time of incurrence.

(5) Unspent capital expenditure represents the difference between total projected capital expenditure and cumulative spend as at 31 March 2020.

(6) Negative spent is on account of interest cost capitalization.

(7) Spent in Fiscal Year 2020 does not include the right-of-use capital expenditure of approximately $118 million.

Vedanta may undertake additional capital expenditures as opportunities or needs arise. In addition, Vedanta may increase, reduce or suspend its planned capital expenditures or change the timing and use of its capital expenditures from what is currently planned in response to market conditions or for other reasons.

Vedanta's ability to maintain and grow its revenues, net income and cash flows depends upon continued capital spending. Vedanta's current and future projects may be significantly delayed by the failure to receive regulatory approvals or renewal of approvals in a timely manner, failure to obtain sufficient funding, technical difficulties, human resources constraints, technological or other resource constraints or for other unforeseen reasons, events or circumstances. See the section entitled "*Risk Factors — Risks Relating to Business*" for more information. Vedanta adjusts its capital expenditure plans and investment budget periodically, based on factors deemed relevant by it. Therefore, Vedanta's actual capital expenditures and investments are likely to be different from its current planned amounts, and such differences may be significant.

Contractual Obligations

The following table sets out Vedanta's total future commitments to settle contractual obligations as of 31 March 2020:

Payment due by period	**< 1 year**	**1-3 years**	**3-5 years**	**> 5 years**	**Total**
Trade and other payables[1]	3,882	152	0	–	4,034
Bank and other borrowings[2]	5,600	6,262	4,571	1,981	18,414
Lease liability	62	16	9	11	98
Derivative liabilities	13	6	–	–	19
Total	**9,557**	**6,436**	**4,580**	**1,992**	**22,565**

(1) Excludes accrued interest which has been included with borrowings.

(2) Includes current and non-current borrowings and committed interest payments.

Vedanta's total future commitments to settle contractual obligations, as of 31 March 2020, were $22,565 million.

Vedanta also has commitments to purchase copper concentrate for its copper custom smelting operations. These commitments are based on future LME copper spot prices which are not ascertainable as of the date of this Offering Circular.

Off-Balance Sheet Arrangements

Vedanta has no off-balance sheet entities. In the normal course of business, it enters into certain commitments for capital and other expenditures and certain performance guarantees. The aggregate amount of indemnities and other guarantees was $867 million as of 31 March 2020.

Details of Vedanta's indemnities and other guarantees are set out in "— *Guarantees*". Details of Vedanta's capital commitments and contingencies are set out below.

Capital Commitments Contracted but Not Provided

Vedanta has a number of continuing operational and financial commitments in the normal course of business. Capital commitments contracted but not provided as of 31 March 2020 amounted to $1,413 million, related primarily to capacity expansion projects, including the construction of new facilities and the expansion of existing facilities.

Contingencies

As is typical for a group of its size and complexity, Vedanta is subject to litigation cases from time to time. Certain of its operating subsidiaries have been named as parties to legal actions by third-party claimants and by the Indian sales tax, excise and related tax authorities for additional sales tax, excise and indirect duties. These claims primarily relate either to the assessable values of sales and purchases or to incomplete documentation supporting its tax returns. Vedanta has ongoing disputes with income tax authorities relating to the tax treatment of certain items.

These mainly include disallowed expenses, tax treatment of certain expenses claimed by Vedanta as deductions, and the computation or eligibility of certain tax incentives or allowances. Some of the disputes relate to the year in which the tax consequences of financial transactions were recognised, and if these disputes are not resolved in Vedanta's favour, the tax consequences may be reflected in the tax year as required by the income tax authorities and there are therefore timing differences. Most of these disputes and disallowances, being repetitive in nature, have been raised by the tax authorities consistently in most of the years. Vedanta has a right of appeal to the High Court or the Supreme Court of India against adverse initial assessments by the appellate authorities for matters involving questions of law. The tax authorities have similar rights of appeal. The total claims related to these tax liabilities were $860 million as of 31 March 2020. Vedanta has evaluated these contingencies and estimate that it is probable that some of these claims may result in loss contingencies and hence have recorded $19 million as provision as of 31 March 2020.

The amount under dispute with other tax authorities, relating to matters such as sales tax, excise tax and electricity duty and third party claimants, as of 31 March 2020 was $1,074 million against which liability of $103 million was recorded based on Vedanta's estimate that none of these claims would become liabilities. Vedanta intends to vigorously defend these claims as necessary.

Although the results of legal actions cannot be predicted with certainty, it is the opinion of the management, after taking appropriate legal advice, that the resolution of these actions will not have a material adverse effect, if any, on Vedanta's business, financial condition or results of operations.

Therefore, Vedanta has not recorded any additional liability in relation to litigation matters in the accompanying consolidated financial statements.

Inflation

According to Inflation.eu, India's annual overall inflation rate was approximately 4.86%, 7.66% and 6.08% for Fiscal Years 2018, 2019 and 2020, respectively. Inflation in India has not significantly impacted Vedanta's results of operations in recent years.

Guarantees

Vedanta provides guarantees within the normal course of business. Guarantees have also been provided in respect of certain short-term and long-term borrowings.

As of 31 March 2020, $803 million of guarantees were advanced to suppliers in the normal course of business. Vedanta has also advanced guarantees to the customs authorities in India of $63 million relating to the export and payment of import duties on purchases of raw material and capital goods including export obligations.

Export obligations

The Indian entities of Vedanta had export obligations of $512 million as of 31 March 2020 on account of concessional rates received on import duties paid on capital goods under the Export Promotion Capital Goods Scheme and on raw materials under the Advance Licence Scheme enacted by the GOI.

If Vedanta fails to meet its obligations, Vedanta's liability would be $81 million, reduced in proportion to actual exports. This liability is backed by a bond executed in favour of the Indian customs department amounting to $227 million.

Market Risk Disclosure

Vedanta is exposed to market risk from changes in foreign exchange rates, interest rates, counterparty and concentration of credit, and commodity prices.

Vedanta uses derivative instruments to manage the exposure in foreign currency exchange rates, interest rates and commodity prices. Vedanta does not acquire or issue derivative financial instruments for trading or speculative purposes. Vedanta does not enter into complex derivative transactions to manage the treasury and commodity risks. Both treasury and commodities derivative transactions are normally in the form of forward contracts and interest rate and currency swaps and these are subject to Vedanta guidelines and policies.

Exchange Rate Risk

The results of Vedanta's operations may be affected by fluctuations in the exchange rates between the Indian Rupee, South African Rand, Zambian Kwacha, Namibian dollar and Liberian dollar against the US dollar. Exposures on foreign currency loans are managed through the foreign exchange hedging policy which is reviewed periodically to ensure that the risk from fluctuating currency exchange rates is appropriately managed. Natural hedges available in the business are identified at each entity level and hedges are placed only for the net exposure. Short term net exposures are hedged progressively based on their maturity. A more conservative approach has been adopted for project expenditures to avoid budget overruns, where cost of the project is calculated taking into account the hedge cost. The hedge mechanisms are reviewed periodically to ensure that the risk from fluctuating currency exchange rates is appropriately managed.

Hedging activities in India are governed by the RBI with whose policies Vedanta must comply. The policies under which the RBI regulates these hedging activities can change from time to time and these policies may affect the effectiveness with which Vedanta manages exchange rate risk.

Vedanta has in the past held or issued instruments such as options, swaps and other derivative instruments for purposes of mitigating exposure to exchange rate risk. Vedanta does not enter into hedging instruments for speculative purposes.

Vedanta's exposure to foreign currency arises where its group company holds monetary assets and liabilities denominated in a currency different to the functional currency of that entity with US dollar being the major foreign currency exposure of Vedanta's main operating subsidiaries. Set out below is the impact of a 10% change in the US dollar against Indian Rupee on profit/(loss) and equity arising as a result of the revaluation of Vedanta's foreign currency financial instruments.

	31 March 2020		
Currency	**Closing exchange rate**	**Effect on pre-tax profit/(loss) of 10% increase in currency**	**Effect on pre-tax equity of 10% increase in currency**
US dollar	74.8109	177	0

The sensitivities are based on financial assets and liabilities held at 31 March 2020 where balances are not denominated in the functional currency of the respective subsidiaries. The sensitivities do not take into account Vedanta's sales and costs and the results of the sensitivities could change due to other factors such as changes in the value of financial assets and liabilities as a result of non-foreign exchange influenced factors. A 10% depreciation of the US dollar against Indian Rupee would have an equal and opposite effect on Vedanta's financial instruments.

Interest Rate Risk

Vedanta is exposed to interest rate risk on short-term and long-term floating rate instruments and on the refinancing of fixed rate debt. Vedanta's policy is to maintain a balance of fixed and floating interest rate borrowings and the proportion of fixed and floating rate debt is determined by current market interest rates.

The borrowings of Vedanta are principally denominated in Indian Rupee and US dollars with mix of fixed and floating rates of interest. The US dollar floating rate debt is linked to US dollar LIBOR and Indian Rupee floating rate debt is linked to the bank's base rate. Vedanta has a policy of selectively using interest rate swaps, option contracts and other derivative instruments to manage its exposure to interest rate movements. These exposures are reviewed by appropriate levels of management on a monthly basis.

Vedanta invests cash and liquid investments in short-term deposits and debt mutual funds, some of which generate a tax-free return, to achieve Vedanta's goal of maintaining liquidity, carrying manageable risk and achieving satisfactory returns.

Floating rate financial assets are largely mutual fund investments which have debt securities as underlying assets. The returns from these financial assets are linked to market interest rate movements; however, the counterparty invests in the agreed securities with known maturity tenure and return and hence has manageable risk. Additionally, the investments portfolio is independently reviewed by CRISIL Limited, and Vedanta's portfolio has been rated as Tier I or 'Very Good', meaning highest safety. The investments are made keeping in mind safety, liquidity and yield maximisation.

Considering the net debt position as at 31 March 2020 and the investment in bank deposits, corporate bonds and debt mutual funds, any increase in interest rates would result in a net loss and any decrease in interest rates would result in a net gain. The sensitivity analysis below has been determined based on the exposure to interest rates for financial instruments at the balance sheet date.

Borrowing and interest rate hedging activities in India are governed by the RBI and as a result, Vedanta has to comply with the RBI's regulations. The policies under which the RBI regulates these borrowing and interest rate hedging activities can change from time to time and can impact the effectiveness with which Vedanta manages its interest rate risk.

The below table illustrates the impact of a 0.5% to 2.0% change in interest rate of borrowings on profit/(loss) and represents management's assessment of the possible change in interest rates for Fiscal Year 2020:

Movement in Interest Rates	Effect on pre-tax profit/ (loss) during Fiscal Year 2020
0.5%	(29)
1.0%	(58)
2.0%	(116)

Counterparty and Concentration of Credit Risk

Vedanta is exposed to credit risk from trade receivables, contract assets, cash and cash equivalents, short-term investments and other financial instruments.

Vedanta has clearly defined policies to mitigate counterparty risks. For short-term investments, counterparty limits are in place to limit the amount of credit exposure to any one counterparty. This, therefore, results in diversification of credit risk for mutual fund and bond investments. For derivative and financial instruments, Vedanta attempts to limit the credit risk by only dealing with reputable banks and financial institutions.

Credit risk on receivables is limited as almost all credit sales are against letters of credit and guarantees of banks of national standing. Moreover, given the diverse nature of Vedanta's businesses trade receivables are spread over a number of customers with no significant concentration of credit risk. During Fiscal Years 2019 and 2020, no single customer accounted for 10% or more of Vedanta's revenue or for any of Vedanta's primary businesses. The history of trade receivables shows a negligible provision for bad and doubtful debts and Vedanta does not expect any material risk on account of non-performance by any of counterparties. Notwithstanding, the risk that the impact of the COVID-19 pandemic on Vedanta's customers and counterparties is more significant and there can be no assurance that Vedanta will not be affect by the non-performance of any of its counterparties where a material increase in Vedanta's provisions in bad debts would have an adverse effect on Vedanta's results of operations and related cash flows.

Vedanta's maximum gross exposure to credit risk as of 31 March 2020 was $7,147 million compared to $7,689 million as of 31 March 2019.

Commodity Price Risk

Vedanta is exposed to the movement of base metal commodity prices on the LME. Any decline in the prices of the base metals that Vedanta produces, and sells will have an immediate and direct impact on the profitability of the businesses. As a general policy, Vedanta aims to sell the products at prevailing market prices. The commodity price risk in import of input commodities such as copper concentrate and alumina, for Vedanta's copper and aluminium business respectively, is hedged on a back-to-back basis ensuring no price risk for the business.

Hedging is used primarily as a risk management tool and, in some cases, to secure future cash flows in cases of high volatility by entering into forward contracts or similar instruments. The hedging activities are subject to strict limits set out by the Board and to a strictly defined internal control and monitoring mechanism. Decisions relating to hedging of commodities are taken at the Executive Committee level.

Whilst Vedanta aims to achieve average LME prices for a month or a year, average realised prices may not necessarily reflect the LME price movements because of a variety of reasons such as uneven sales during the year and timing of shipments.

Vedanta is also exposed to the movement of international crude oil price and the discount in the price of Rajasthan crude oil to Brent price.

Financial instruments with commodity price risk are entered into in relation to the following activities:

- economic hedging of prices realised on commodity contracts; and
- cash flow hedging of revenues and forecasted highly probable transactions.

Aluminium

The requirement of the primary raw material, alumina, is partly met from Vedanta's own sources and the rest is purchased primarily on negotiated price terms. Sales prices are linked to the LME prices. At present Vedanta on selective basis hedges the aluminium content in outsourced alumina to protect its margins.

Vedanta also enters into hedging arrangements for its aluminium sales to realise average month of sale LME prices.

Copper

Vedanta's custom smelting copper operations at Tuticorin is benefited by a natural hedge except to the extent of a possible mismatch in quotational periods between the purchase of concentrate and the sale of finished copper. Vedanta's policy on custom smelting is to generate margins from refining charges or "Rc", improving operational efficiencies, minimising conversion cost, generating a premium over LME on sale of finished copper, sale of by-products and from achieving import parity on domestic sales.

Hence, mismatches in quotational periods are managed to ensure that the gains or losses are minimised. Vedanta hedges this variability of LME prices through forward contracts and tries to make the LME price a pass-through cost between purchases of copper concentrate and sales of finished products, both of which are linked to the LME price.

Rc is a major source of income for the Indian copper smelting operations. Fluctuation in Rc is influenced by factors including demand and supply conditions prevailing in the market for mine output. Vedanta's copper business has a strategy of securing a majority of its concentrate feed requirement under long-term contracts with mines.

KCM is largely an integrated copper producer and whenever hedging is done it is with an intention to protect Vedanta from price fluctuations in copper. KCM also engages in hedging for its custom smelting operations in line with Vedanta's policy on custom smelting at Tuticorin, as explained above.

Zinc, lead and silver

The sales prices for zinc, lead and silver are linked to the LME prices. Vedanta also enters into hedging arrangements for its zinc, lead and silver sales to realise month of sale LME prices.

Zinc International

Raw material for zinc and lead is mined in Namibia and South Africa with sales prices linked to the LME prices.

Iron ore

Vedanta sells its Iron Ore production from Goa at the prevailing market prices and from Karnataka through an e-auction route as mandated by the State Government of Karnataka in India.

Oil and Gas

The prices of various crude oils are based upon the price of the key physical benchmark crude oil such as Dated Brent, West Texas Intermediate, and Dubai/Oman etc. The crude oil prices move based upon market factors, such as supply and demand. The regional producers price their crude on the basis of the benchmark crude with a premium or discount over the benchmark based upon quality differential and competitiveness of various grades.

Natural gas markets are evolving differently in important geographical markets. There is no single global market for natural gas. This could be owing to difficulties in large-scale transportation over long distances as compared to crude oil. Globally, there are three main regional hubs for pricing of natural gas, namely the United States (Henry Hub Prices), the United Kingdom (NBP Price) and Japan (imported gas price, mostly linked to crude oil).

Provisionally priced financial instruments

On 31 March 2020, the value of net financial liabilities linked to commodities (excluding derivatives) accounted for on provisional prices was a liability of $59 million (31 March 2019: liability of $45 million). These instruments are subject to price movements at the time of final settlement and the final price of these instruments will be determined in the financial year beginning 1 April 2020.

Set out below is the impact of a 10% increase in LME prices on profit/(loss) for the year and total equity as a result of changes in value of Vedanta's commodity financial instruments as at 31 March 2020:

		For Fiscal Year 2020 *($ million)*	
Commodity price sensitivity	**Total Exposure**	**Effect on pre-tax profit/(loss) of a 10% increase in the LME**	**Effect on pre-tax equity of a 10% increase in the LME**
Copper	(137)	(14)	–

The above sensitivities are based on volumes, costs, exchange rates and other variables and provide the estimated impact of a change in LME prices on profit and equity assuming that all other variables remain constant. A 10% decrease in LME prices would have an equal and opposite effect on Vedanta's financial instruments.

Further, the impact of a 10% increase in closing copper LME price for provisionally priced copper concentrate purchased at Vedanta Limited's copper division custom smelting operations is $10 million (2019: $11 million), which is pass through in nature and as such will not have any impact on profitability.

Management's Judgement and Estimation

The discussion and analysis of Vedanta's financial condition and results of operations are based upon Vedanta's consolidated financial statements, which have been prepared in accordance with IFRS as adopted by the EU. In the course of preparing these financial statements, the management has made estimates based on and assumptions that impact the amounts recognised in the consolidated financial statements. For a discussion of the significant accounting policies, see note 2(a) to the consolidated financial statements of Vedanta for Fiscal Year 2020 included elsewhere in this Offering Circular. Vedanta's critical accounting judgements and estimation uncertainty are described in note 2(c) of the consolidated financial statements of Vedanta for Fiscal Year 2020.

Unless otherwise indicated, all data relating to the copper, zinc, aluminium and iron ore industries contained in this Offering Circular is primarily derived from Wood Mackenzie. Unless otherwise indicated, all data relating to the power industry in this Offering Circular is primarily derived from the GOI and its various ministries and from various multilateral institutions. Unless otherwise indicated, all data relating to the oil and gas industry contained in this Offering Circular is primarily derived from International Energy Agency ("IEA"), Energy Information Administration ("EIA"), World Energy Outlook 2019, the BP Statistical Review of World Energy June 2020 (the "BP Statistical Review"), World Bank Commodity Markets Outlook April 2020, World Bank Economic Prospects June 2020 and other public sources.

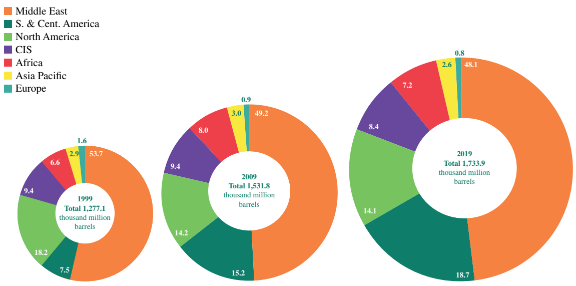
Oil and Gas Overview

Global Crude Oil and Gas Reserves and Resources

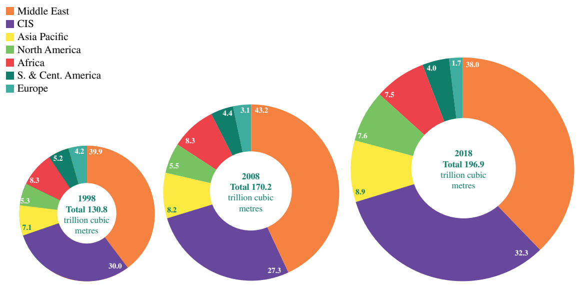
According to the BP Statistical Review, total world proved oil reserves reached over 1,733,900 mmbbls at year end 2019, enough reserves to meet approximately 50 years of global production at 2019 levels. OPEC countries continue to hold majority of world's oil reserves, accounting for 70% of the global proved reserves. Over the past decade, global proved oil reserves have increased by approximately 13%, or approximately 200 mmbbls.

Total world proved natural gas reserves reached 196.9 tcm at year end 2018, enough to meet roughly 50 years at 2019 production level. Russia (38.0 tcm), Iran (32.0 tcm) and Qatar (24.7 tcm) are the countries with the biggest reserves. By region, the Middle East holds the largest proved reserves (75.6 tcm, 38.0% of the global total), followed by CIS (62.2 tcm, a 32.3% share).

Distribution of proved oil reserves in 1999, 2009 and 2019



Distribution of proved gas reserves in 1999, 2009 and 2019



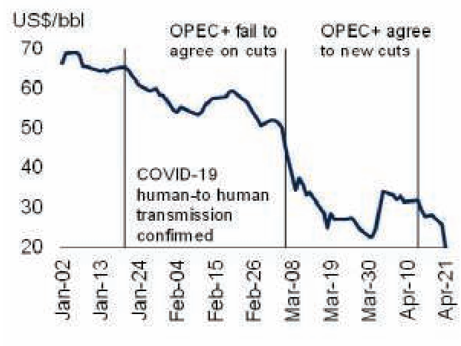
Source: BP Statistical Review 2020

Impact of the COVID-19 pandemic on the Global Oil & Gas Industry

In 2019, Brent averaged at \$64.36/bbl as compared to \$71.19/bbl in 2018. On 9 March 2020, Brent crude oil front-month futures prices fell below \$35/bbl, a 24% daily decline and the second largest daily price decline on record. All crude oil benchmarks, particularly West Texas Intermediate (WTI) contract prices facing transport bottlenecks and lower inventory capacity, fell to negative levels. On 9 April 2020, OPEC+ partners reached to an agreement to cut production by 9.7 mmbbl/d for the months of May and June 2020. The announcement failed to support to prices and Brent fell to its lowest level of \$22.74/bbl on 28 April 2020. With lockdowns around the world being slowly lifted, Brent price has recovered since and is currently trading at \$43.1/bbl as of 22nd June 2020. Henry Hub spot prices averaged \$1.877 per million British thermal units (MMBtu) in the first five months of 2020, down 87 cents/MMBtu from 2019 levels.

EIA expects monthly Brent prices will average $37/bbl during H2 2020 and rise to an average of $48/bbl in 2021. The forecast of rising crude oil prices reflects expected declines in global oil inventories during the second half of 2020 and through 2021. EIA forecasts that Henry Hub natural gas spot prices will average $2.04/MMBtu in 2020 and $3.08/MMBtu in 2021.

Brent Crude Prices ($/bbl)



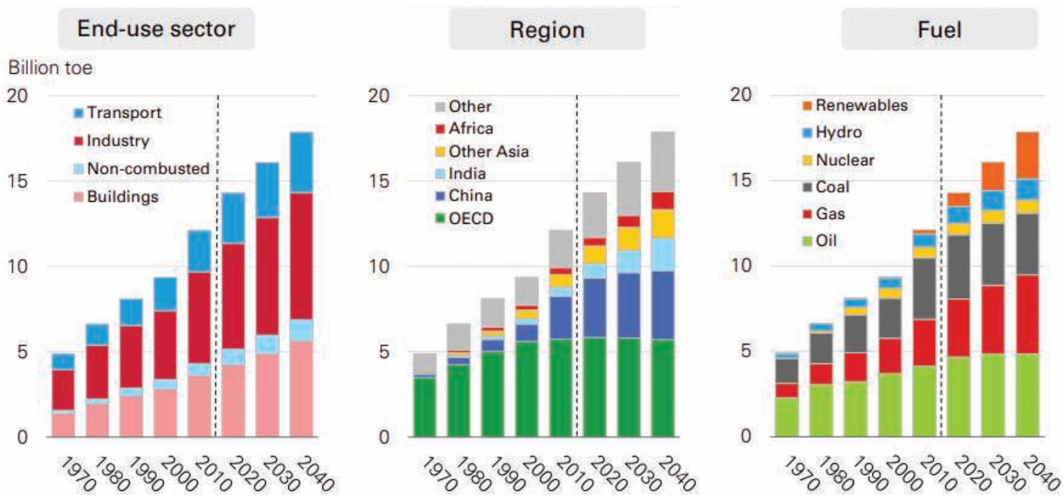
WTI Contract Prices (% decline)

Source: World Bank Commodity Markets Outlook April 2020

Worldwide lockdowns and restrictions on mobility is expected to impact total oil demand until at least 2022. After an expected decline of 7.2 million barrels per day (mbpd) in 2020, global oil output is set for a modest 1.7 mbpd recovery in 2021, assuming OPEC+ cuts ease. However, high crude and product stocks will limit the scope for Oil & Gas producers. Substantially weaker investment in new production, or greater shutdown of production this year could reduce future production capacity.

World economy is expected to shrink by 5.2% in 2020. Although a moderate recovery is envisioned in 2021, with global output reaching 4.2%, output is not expected to return to previous expected levels. The forecast assumes that the pandemic recedes in such a way that domestic mitigation measures can be lifted by mid-year, adverse global spill overs ease during the second half of the year, and dislocations in financial markets are not long lasting. In the longer term, continuing urbanisation and growing middle class in the developing world with greater access to modern energy, particularly in India and China is expected to drive the global economic and energy trends.

Primary Energy Consumption by end-use, region and fuel 1990-2040 (Billion tonnes of oil equivalent)

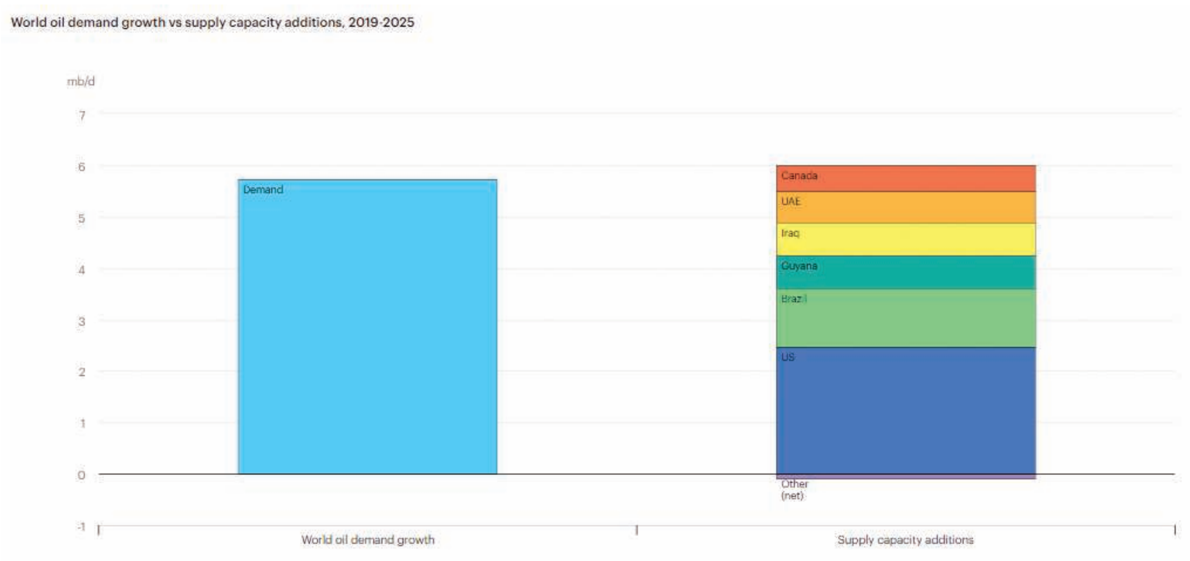


Source: BP Energy Outlook 2019 edition

Oil and Gas will continue to play a leading role in the world's energy mix, with growing demand driven from commercial transportation and petrochemicals. Between 2019 and 2025, global oil demand is forecast to grow at an average annual rate of just below 1 mbpd. Petrochemicals become an ever more important driver, with naphtha, liquefied petroleum gas (LPG) and ethane accounting for half the growth. Efforts to improve the sustainability of the plastics industry will run up against the steady increase in demand from consumers in developing countries. Bans imposed on single-use plastics and recycling, even if fully implemented, will displace only a very modest amount of oil demand. Through 2025, global oil demand is expected to increase by a total of 5.7 mbpd with China and India accounting for about half of the growth.

Global oil production capacity is expected to rise by 5.9 mbpd by 2025, enough to meet the demand growth. The US is expected to lead the way as the largest source of new supply. Total non-OPEC oil supply rises by 4.5 mbpd to reach 69.5 mbpd by 2025. As for OPEC, even though sanctions and economic distress have wiped out 2.5 mbpd of production from Iran and Venezuela since 2017, effective crude oil capacity is expected to rise by 1.2 mbpd to 34.1 mbpd.

World Oil Demand Growth vs Supply Capacity Additions 2019-2025 (mbpd)



Source: IEA Oil March 2020

Indian Oil and Gas Industry

History

The oil and gas industry in India continues to be, dominated by public sector companies. In 1955, the GOI entered the oil and gas sector with the establishment of the Oil and Gas Directorate (the predecessor to ONGC) and formed joint venture agreements with domestic and foreign operators. Until the early 1990s, the Indian oil and gas industry had been dominated by state-owned entities under a series of policies of nationalisation, including taking over the operations from foreign operators, and regulations in pricings. As India's reliance on oil imports increased, the Indian government embarked on a series of reforms aimed at reducing India's dependence on imports, deregulating the industry, improving efficiency, and encouraging private and foreign investment.

In 1997, the NELP was implemented to encourage growth of the domestic exploration and production sector. Successful bidders are required to enter PSCs with the Indian government. Historically, and to promote licencing rounds and encourage potential bidders, PSCs have contained comparatively favourable terms, including, for example, 100% costs recovery, and income tax holiday. In addition, under the NELP, private sector companies have marketing rights of crude oil and natural gas in the domestic market subject to overall government policy guidelines.

Because of the NELP, there have been significantly increased level of participations from the private sectors in the domestic exploration and production space. Seismic activities were also very strong in the early part of this decade, as was the level of exploration drilling, which led to some of India's largest discoveries being made. In the last two years, the GOI has implemented various policies to revive investments and foreign interest in the sector. For instance, from 2017, blocks will be awarded under Hydrocarbon Exploration and Licensing Policy ("HELP") under revenue sharing terms with full marketing and pricing freedom for oil and natural gas.

Most of India's oil is produced by ONGC from its Bombay Offshore fields. After staying flat for most of the last decade, oil production has been increasing since 2010 as Vedanta Limited has started producing from the prolific Mangala field in Rajasthan. Other fields on the same blocks have been brought on stream since and a major enhanced oil recovery project is also planned. Other key oil producing basins are Cambay and Assam, both of which are mature regions. State-owned ONGC and OIL have invested significantly in enhanced oil recovery projects in recent years to arrest declining production from their legacy concession areas in these mature basins.

Supply and Demand

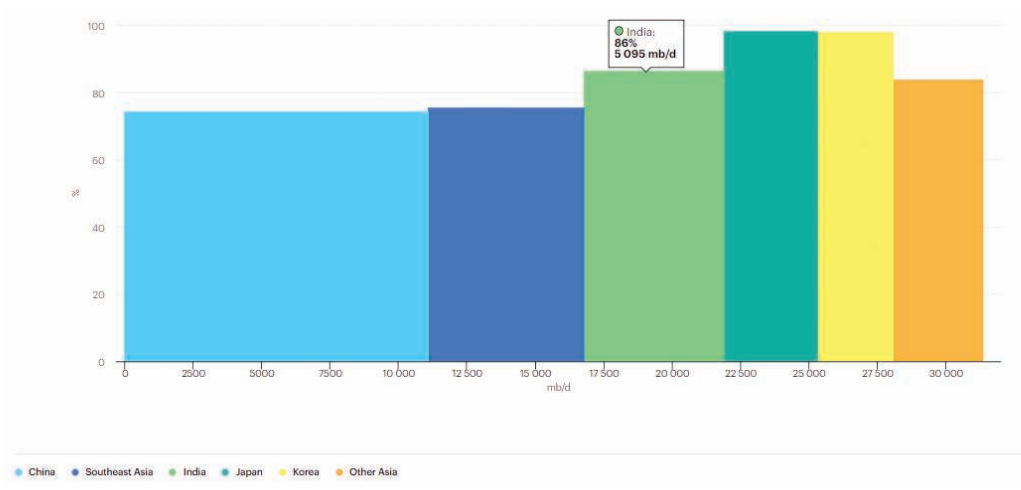
India is the second most populous country in the world with a population of approximately 1.3 billion. Rapid economic growth in India has led to a significant increase in demand for crude oil and natural gas. According to the BP Statistical Review, India's share of world oil and gas consumption was 5.1% and 1.5%, respectively, in 2019.

India is a net importer of crude oil and natural gas. The BP Statistical Review estimates that in 2019, India domestically produced 0.8 mbpd, representing 15.7% of the total crude consumption which was 5.3 mbpd. Similarly, in 2019, India's natural gas consumption was 59.7 bcm, but the country produced only 26.9 bcm of gas, representing 45.1% of the total natural gas consumption.

With consistently high GDP growth of around 7% for the past few years, India's overall energy demand is set to skyrocket over the next few decades.

A significant amount of this demand will have to be met via imports. Since 2007, Indian oil imports have doubled. The country met around 84% of its total oil consumption for the Fiscal Year 2019 with foreign crude imports. IEA expects 86% of the total demand in 2025 to be met through imports.

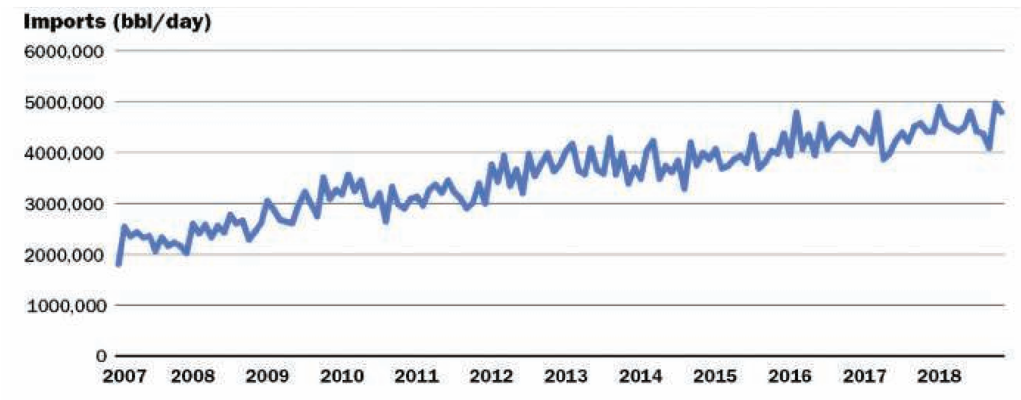
Asia Net Oil Imports Share of Demand – 2025 (%)



Source: *IEA Oil March 2020*

However, the GOI has set targets to reduce India's import of oil and gas to 67% by 2022, and laid plans to double India's domestic oil production by 2022. The GOI aims to increase the share of natural gas in the country's energy mix to 15% by 2030, from 6% in 2018.

India Historical Oil Imports (bbl/d)



Source: *Indian Ministry of Commerce*

Zinc

Global Zinc Market

Background

Zinc is a commonly produced metal, valued as an anti-corrosion agent. Annual mine production for 2019 has been estimated by Wood Mackenzie at approximately 13.4 million tonnes.

According to Wood Mackenzie, the principal use for zinc in the western world is galvanising, which involves coating steel with zinc to guard against corrosion. Galvanising, including sheet, tube, wire and general galvanising, accounted for approximately 60% of world consumption of zinc. The main end-use industries for galvanised steel products are the automobile manufacturing, domestic appliance manufacturing and construction industries, and it is these industries on which zinc consumption ultimately depends. Other major uses for zinc include die-casting alloys (13%), brass semis and castings (11%) and oxides and chemicals (9%). Alloys are principally used in toys, vehicles and hardware.

The end-user market is dominated by the construction industry with 50% of global end-use zinc consumption, followed by the sectors of transport (21%), infrastructure (16%), industrial machinery (7%) and consumer products (6%), according to Wood Mackenzie.

The zinc industry has three broad categories of producers:

- Miners, which mine the lead-zinc ore and produce zinc concentrate for sale to smelters, and usually receive payment for 85% of the zinc contained in the concentrate less a treatment charge ("Tc");

- Smelters, which purchase concentrate and sell refined metal, with some smelters also having some integrated production downstream; and

- Integrated producers, which are involved in both the mining and smelting of zinc.

For custom smelters, treatment and refining charges ("TcRc") for zinc concentrates have a significant impact on profitability as prices for zinc concentrate are equal to the LME price net of TcRc and prices of finished zinc products are equal to the LME price plus a premium. A significant proportion of zinc concentrates are sold under frame contracts and TcRc are negotiated annually. The main conditions of the contract which are subject to negotiation are the TcRcs that are expressed in US dollars per dry metric tonne of concentrate being the Tc and in cents per pound of payable zinc being the Rc and, until recently (under long-term contracts) price participation. The TcRc rates are influenced by the demand-supply situation in the concentrate market, prevailing and forecasted LME prices and mining and freight costs.

Global Zinc Reserves

Global zinc reserves were estimated to be, as of December 2019, 250 million tonnes, according to preliminary estimates by the US Geological Survey ("USGS"). Australia, China, Peru, Mexico and Kazakhstan collectively account for 72% of world reserves.

The following table shows world zinc reserves by country:

	Reserves
	(in million tonnes)
Australia	68.0
China	44.0
Russia	22.0
Mexico	22.0
Peru	19.0
Kazakhstan	12.0
United States	11.0
India	7.5
Bolivia	4.8
Sweden	3.6
Canada	2.2
Other countries	34.0
World total (rounded)	**250.0**

Source: US Geological Survey (USGS), Mineral Commodity Summaries, January 2020

Zinc consumption

According to Wood Mackenzie, global zinc consumption decreased by 1.8% to 13.9 million tonnes in 2019, owing to weak global economic growth. Global zinc consumption is expected to further decline in 2020 as a result of the demand rout caused by the COVID-19 pandemic. Nevertheless, global zinc consumption is forecasted to return to 2019 volumes by 2021. China, Europe and North America together accounted for 75.7% of global zinc consumption in 2019. With a CAGR of 5.4% between 2009 and 2019, China has been the fastest growing zinc market in the world. While the US-China trade war has affecting investor sentiment, imposition of tariffs by US and China have had little impact on either country's zinc consumption.

The following table shows the regional consumption pattern of refined zinc from 2016 to 2019:

	Year Ended 31 December							
	2016		2017		2018		2019	
Region	Volume	%	Volume	%	Volume	%	Volume	%
	(thousands of tonnes, except percentages)							
China	6,673	47.7%	6,827	48.0%	6,875	48.5%	6,954	49.9%
Europe	2,341	16.7%	2,399	16.9%	2,403	16.9%	2,285	16.4%
Rest of Asia	2,005	14.3%	2,083	14.6%	1,964	13.9%	1,897	13.6%
North America	1,418	10.1%	1,375	9.7%	1,375	9.7%	1,297	9.3%
India	685	4.9%	703	4.9%	701	4.9%	683	4.9%
Latin America	373	2.7%	361	2.5%	364	2.6%	337	2.4%
Russia and Caspian	234	1.7%	252	1.8%	261	1.8%	239	1.7%
Africa	140	1.0%	143	1.0%	131	0.9%	136	1.0%
Oceania	108	0.8%	94	0.7%	103	0.7%	96	0.7%
Total	**13,977**	**100.0%**	**14,238**	**100.0%**	**14,178**	**100.0%**	**13,924**	**100.0%**

Source: Wood Mackenzie Metals Market Service Report — Long Term Outlook, March 2020
Note: "Russia and Caspian" includes Russia, Armenia, Georgia, Kazakhstan, Tajikistan and Uzbekistan; "Rest of Asia" includes Middle East

Zinc supply

According to Wood Mackenzie, the five largest zinc mining countries in 2019 are China (35.9%), Peru (9.7%), Australia (10.1%), the United States (5.8%) and Mexico (5.4%), which together accounted for 66.9% of total zinc mined worldwide. The five largest zinc mining companies are Glencore (8.6%), HZL (5.4%), Teck (4.8%), Nexa Resources (2.4%), and Boliden (2.2%) which together accounted for about 23.4% of the total zinc produced worldwide.

The following table shows the regional production pattern of zinc mines from 2016 to 2019:

	Year Ended 31 December							
	2016		2017		2018		2019	
Region	Volume	%	Volume	%	Volume	%	Volume	%
	(thousands of tonnes, except percentages)							
China	4,693	38.8%	4,663	37.1%	4,467	34.6%	4,800	35.9%
Latin America	1,965	16.2%	2,118	16.8%	2,178	16.9%	2,090	15.6%
North America	1,717	14.2%	1,781	14.2%	1,838	14.3%	1,821	13.6%

	Year Ended 31 December							
	2016		2017		2018		2019	
Region	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**
	(thousands of tonnes, except percentages)							
Oceania	887	7.3%	819	6.5%	1,134	8.8%	1,346	10.1%
Europe	836	6.9%	866	6.9%	953	7.4%	936	7.0%
Russia and Caspian	690	5.7%	761	6.0%	776	6.0%	740	5.5%
India	645	5.3%	831	6.6%	749	5.8%	724	5.4%
Africa	350	2.9%	427	3.4%	454	3.5%	545	4.1%
Rest of Asia	327	2.7%	312	2.5%	347	2.7%	361	2.7%
Total	**12,110**	**100.0%**	**12,577**	**100.0%**	**12,894**	**100.0%**	**13,363**	**100.0%**

Source: *Wood Mackenzie Metals Market Service Report — Long Term Outlook, March 2020*
Note: *"Russia and Caspian" includes Russia, Armenia, Georgia, Kazakhstan, Tajikistan and Uzbekistan; "Rest of Asia" includes Middle East*

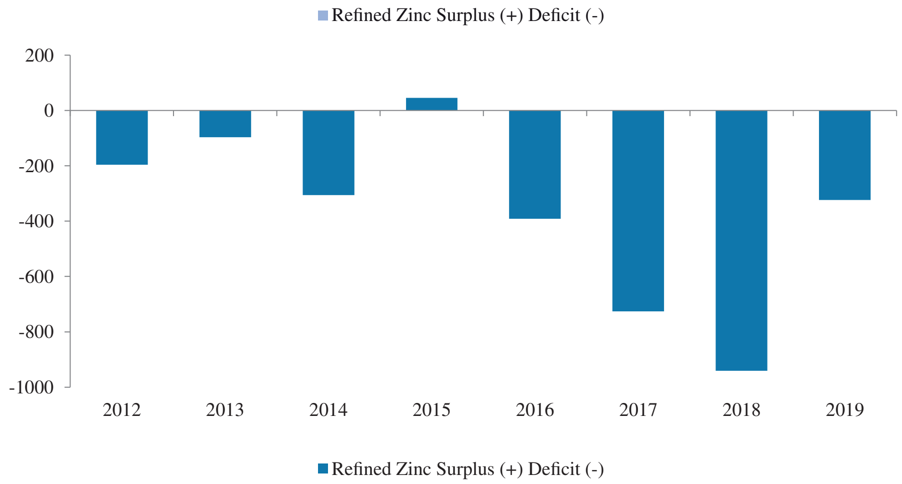
Zinc smelting is slightly less geographically concentrated than zinc mining. Zinc smelter production increased to 13.4 million tonnes in 2019 from 13.2 million tonnes in 2018, a 1.2% increase. China is the largest single refined zinc-producing country in the world with a production of 5.9 million tonnes in 2019, representing a 44.2% global market share. The other major refined zinc producing countries include South Korea (7.3%), India (5.5%), Canada (4.9%), and Japan (4.0%). The top five countries account for approximately 65.8% of total global refined zinc production. The five largest refined zinc producing companies are Korea Zinc (8.9%), Glencore (7.5%), Nyrstar (7.4%), HZL (5.2%), and Nexa Resources (4.5%), which together accounted for about 33.6% of the total refined zinc produced worldwide.

The following table shows the regional production pattern of refined zinc from 2016 to 2019:

	Year Ended 31 December							
	2016		2017		2018		2019	
Region	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**
	(thousands of tonnes, except percentages)							
China	6,036	44.4%	6,003	44.4%	5,636	42.6%	5,923	44.2%
Europe	2,181	16.1%	2,160	16.0%	2,238	16.9%	2,186	16.3%
Rest of Asia	1,791	13.2%	1,686	12.5%	1,681	12.7%	1,684	12.6%
North America	1,138	8.4%	1,051	7.8%	1,105	8.4%	1,155	8.6%
India	641	4.7%	828	6.1%	760	5.7%	730	5.5%
Latin America	616	4.5%	583	4.3%	610	4.6%	611	4.6%
Russia and Caspian	625	4.6%	649	4.8%	640	4.8%	563	4.2%
Oceania	464	3.4%	459	3.4%	489	3.7%	460	3.4%
Africa	94	0.7%	94	0.7%	77	0.6%	78	0.6%
Total	**13,586**	**100.0%**	**13,511**	**100.0%**	**13,237**	**100.0%**	**13,391**	**100.0%**

Source: *Wood Mackenzie Metals Market Service Report — Long Term Outlook, March 2020*
Note: *"Russia and Caspian" includes Russia, Armenia, Georgia, Kazakhstan, Tajikistan and Uzbekistan; "Rest of Asia" includes Middle East*

The global refined zinc market is in deficit due to mine closures from 2016.



Source: Wood Mackenzie Zinc LTO Q1 2020, March 2020

Pricing

Zinc is traded on the LME. Although prices are determined by LME price movements, producers normally charge a regional premium that is market driven. Significant price decrease in 2015 has resulted in a number of mine production cuts, which, along with the closure of mines reaching end of production, pushed the zinc price to $2,895 per tonne in 2017, an increase of 38.2% over 2016 and $2,921 per tonne in 2018, an increase of 0.9% over 2017. During 2019, demand for zinc fell by an estimated 1.8%, due to weak global economic growth. Zinc prices fell 12.9% to reach $2,546 per tonne in 2019.

The following table shows the movement in zinc prices from 2009 to 2019:

	Year Ended 31 December										
	2009	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
	($ per tonne, except percentages)										
Zinc LME cash price . . .	1,658	2,158	2,190	1,946	1,909	2,164	1,928	2,094	2,895	2,921	2,546
% change	(11.3%)	30.1%	1.5%	(11.1%)	(1.9%)	13.4%	(10.9%)	8.6%	38.2%	0.9%	(12.9%)

Source: Wood Mackenzie Metals Market Service Report — Long Term Outlook, March 2020

The last closing LME zinc cash price was $2,083 per tonne as of 19 June 2020.

Indian Zinc Market

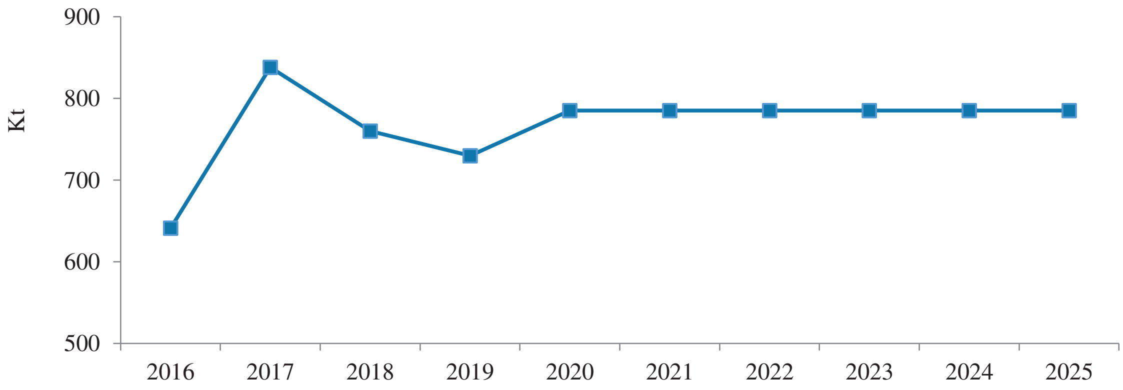
Background

India holds substantial zinc resources — according to the Indian Minerals Yearbook 2018, India held around 36.4 million tonnes in zinc resources. The USGS estimates that India's zinc reserves to be around 7.5 million tonnes, making it the eighth largest country in terms of zinc reserves globally. The Indian zinc industry is dominated fully by Vedanta's majority-owned subsidiary, HZL, which had a 100% market share in India in Fiscal Year 2018 for zinc, according to the Indian Minerals Yearbook 2018. The other producer is Edayar Zinc, with a 4.3% share of India's total zinc capacity, but no production in 2018.

Production

Based on Wood Mackenzie data, refined zinc production in India decreased by 8.2% from 828,000 tonnes in 2017 to 760,000 tonnes in 2018, and further by 4.0% to 730,000 tonnes in 2019. Production is expected to recover to 785,000 tonnes in 2020 and remain constant thereafter.

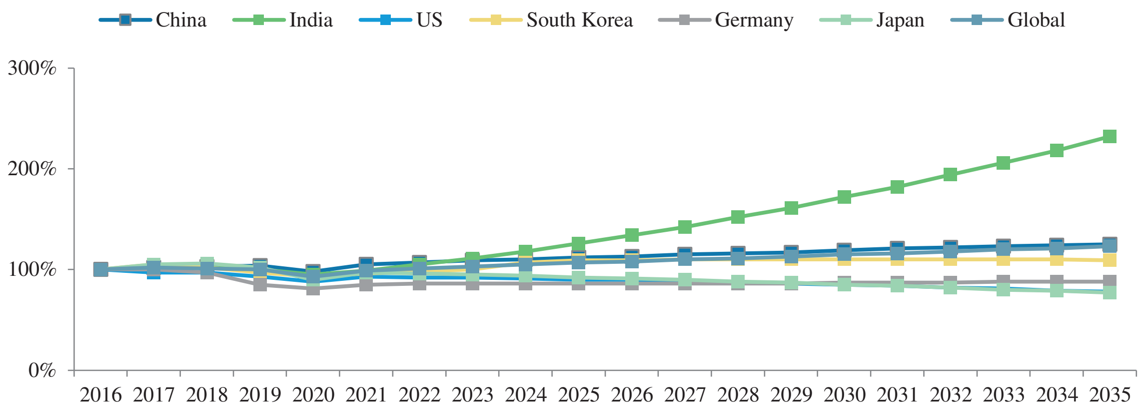
India Zinc Production Outlook



Source: Wood Mackenzie Zinc LTO Q1 2020

Consumption

According to Wood Mackenzie, consumption of refined zinc in India reached 683,000 tonnes during 2019. The principal use of zinc in the Indian market is in the galvanising sector, which is primarily used for tube, sheet and structural products. The other significant end-user of zinc in India is the alloys sector, like western world consumption trends, which has seen an increased demand for die-casting alloys. With expected infrastructure developments such as roads, irrigation, construction, oil and gas and ports, there is expected to be increased demand for steel, thus providing significant opportunities for zinc in India. Wood Mackenzie forecasts Indian refined zinc demand to increase at a CAGR of 3.9% from 683,000 tonnes in 2019 to 861,000 tonnes in 2025. India's zinc consumption is expected to grow rapidly over the next decade.



Source: Wood Mackenzie Zinc LTO Q1 2020

Pricing and tariff

Indian zinc prices track global prices as the metal is priced based on the landed costs of imported metal.

The following table shows the customs duties that were applicable on zinc for the periods indicated:

	22 January 2007 to 28 April 2008	29 April 2008 to 2 January 2009	3 January 2009 to 29 February 2016	1 March 2016 to present
Zinc	5.0%	0.0%	5.0%	5.0%

In addition, the Finance Act (2 of 2004) of India levies an additional surcharge at the rate of 3% of the total customs duty payable, which is an increase from 2% prior to 1 March 2007.

Market Outlook

Global zinc outlook

According to Wood Mackenzie, global zinc demand will continue to grow over the next few years, at a CAGR of 1.2% between 2019 and 2025, to reach 14.9 million tonnes in 2025. Growth will be led by developing economies in Asia, and at a slower pace (0.9% CAGR) in Europe, while consumption will decline in United States and Canada (which together have a -0.5% CAGR over the same period).

China's zinc consumption will continue to contribute to the global zinc demand growth based on Wood Mackenzie's forecast. The total consumption of slab zinc in China is expected to grow from 7.0 million tonnes in 2019 to 7.5 million tonnes in 2025. That would translate to China's consumption growth at a CAGR of 1.2% between 2019 and 2025.

According to Wood Mackenzie, between 2019 and 2040, 26 new zinc mines will enter production adding 0.5 million tonnes per annum at peak output. The average size of these operations is quite modest at around 30,000 tonnes per annum. Expansions or production creep at 69 mines globally will add 1.0 million tonnes per annum. The 201 existing producers are forecast to close on reserve depletion by 2040 for the loss of 6.8 million tonnes per annum. And 20 mines which produced 1.7 million tonnes per annum in 2019 will produce only 1.4 million tonnes per annum by 2040 for a loss of 0.3 million tonnes per annum output by attrition.

Indian zinc outlook

The Indian market is expected to remain positive, with strong growth in key user segments such as sheet galvanising and zinc alloys for the construction segment. As per Wood Mackenzie, Indian zinc demand is expected to grow at a CAGR of 3.9% between 2019 and 2025. Key drivers for India's zinc demand growth are economic reforms, urbanization, and a growing middle-class. The pace of economic reforms will have an impact on zinc demand growth in the Indian market.

Copper

Global Copper Market

Background

Copper is a non-magnetic, reddish-coloured metal with a high electrical and thermal conductivity (second only to silver in electrical conductivity among all pure metals at room temperature), high tensile strength and resistance to corrosion.

The copper market is geographically diverse in terms of both production and consumption. The different geographical locations of the copper mines and the smelting and refining facilities have led to the development of "custom smelters/refineries", which tend to be heavily reliant on imported concentrates.

Copper consumption can be divided into three main product groups: copper wire rods, copper products and copper alloy products. According to Wood Mackenzie, the predominant first use of copper has been the production of copper wire rod, which accounted for an estimated 74% of total global refined consumption in 2019. Wire rod is consumed in five main wire and cable markets which include general and industrial cable, utility power cable, telecommunication cable, other insulated wire and winding wire.

For the total global copper consumption breakdown by market sector, the construction segment accounted for 28% of copper consumption, followed by the electrical and electronic products segment (28%), the transportation equipment segment (12%), the industrial machinery segment (11%) and the consumer products segment (21%), as estimated by Wood Mackenzie for 2019.

The copper industry has three broad categories of producers:

- Miners, which mine the copper ore and produce copper concentrate;
- Custom smelters, which smelt and refine copper concentrate to produce copper metal; and
- Integrated producers, which mine copper ore from captive mines and produce copper metal either through smelting and refining or through leaching.

Global Copper Reserves

Global copper reserves were estimated to be, as of 31 December 2019, 870 million tonnes, according to preliminary estimates by the USGS. Chile, Australia, Peru, Mexico and Russia collectively account for 56% of world reserves.

	Reserves
	(in million tonnes)
Chile	200.0
Australia	87.0
Peru	87.0
Russia	61.0
Mexico	53.0
United States	51.0
Indonesia	28.0
China	26.0
Kazakhstan	20.0
Congo	19.0
Zambia	19.0
Other countries	220.0
World total (rounded)	**870.0**

Source: US Geological Survey (USGS), Mineral Commodity Summaries, January 2020

Refined copper consumption

Global refined copper demand was flat at 23.6 million tonnes in 2018 and 2019, according to Wood Mackenzie data.

Refined consumption grew in China, India and North America in 2019, but declined in the Rest of Asia, Latin America, Europe, Africa, and Russia and Caspian regions, while remaining relatively flat in Oceania. China was the largest consumer of copper in 2019 with a 50.9% market share globally, providing Asia with a combined market share of 70.1%, followed by Europe (15.3%), North America (10.3%), and Latin America (1.8%). Previously Europe and North America accounted for approximately 60% of copper consumption during the 1980s, but strong growth in Asia, led by China and Japan, has since significantly changed global consumption patterns. This trend of Asia's growing dominance in copper consumption is expected to continue.

The following table shows the regional consumption pattern of refined copper from 2016 to 2019:

	Year Ended 31 December							
	2016		**2017**		**2018**		**2019**	
Region	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**
	(thousands of tonnes, except percentages)							
China	10,802	47.8%	11,182	48.5%	11,820	50.0%	12,038	50.9%
Rest of Asia	4,134	18.3%	4,226	18.3%	4,012	17.0%	3,987	16.9%
Europe	3,722	16.5%	3,745	16.2%	3,776	16.1%	3,626	15.3%
North America	2,366	10.5%	2,366	10.3%	2,404	10.2%	2,423	10.3%
India	464	2.1%	466	2.0%	508	2.2%	537	2.3%
Latin America	447	2.0%	422	1.8%	420	1.8%	414	1.8%
Russia and Caspian	431	1.9%	444	1.9%	448	1.9%	415	1.8%
Africa	214	0.9%	209	0.9%	208	0.9%	182	0.8%
Oceania	10	0.0%	11	0.0%	11	0.0%	11	0.0%
Total	**22,592**	**100.0%**	**23,070**	**100.0%**	**23,626**	**100.0%**	**23,633**	**100.0%**

Source: Wood Mackenzie Metals Market Service Report — Long Term Outlook, June 2020

Note: "Russia and Caspian" includes Russia, Armenia, Georgia, Kazakhstan, Tajikistan and Uzbekistan; "Rest of Asia" includes Middle East

Copper supply

Global mine production is the principal source of copper, with scrap recycling accounting for only a minor part of the aggregate supplies.

According to Wood Mackenzie's data, the five largest copper mining countries were Chile (27.9%), Peru (11.5%), China (8.1%), Congo DR (7.1%), and the United States (6.2%), which together accounted for approximately 61.0% of the total copper mined worldwide in 2019. The five largest copper mining companies were Codelco (8.3%), Glencore (6.2%), BHP Group (6.1%), Freeport-McMoran (5.3%), and Southern Copper (4.7%).

The major smelting locations include China (41.9%), Japan (7.6%), Chile (5.1%), Russia (4.8%) and Zambia (3.6%), which together accounted for 63.0% of global production in 2019. The five largest copper smelting companies were Glencore (5.7%), Jiangxi Copper (5.2%), Tongling (4.4%), Aurubis (3.5%), and JXTG Group (3.2%).

The five largest refined copper producing countries were China (38.5%), Chile (9.7%), Japan (6.4%), Congo DR (4.8%) and the United States (4.6%), which together accounted for about 63.9% of the total refined copper produced worldwide in 2019. The five largest copper refining companies were Jiangxi Copper (5.3%), Codelco (4.8%), Tongling (4.6%), Aurubis (4.4%) and Glencore (4.3%).

Global refined copper production was largely flat at 23.5 million tonnes through 2018 to 2019. The following table shows the regional production pattern of refined copper from 2016 to 2019:

	Year Ended 31 December							
	2016		**2017**		**2018**		**2019**	
Region	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**
	(thousands of tonnes, except percentages)							
China	7,830	34.4%	8,268	36.0%	8,625	36.7%	9,037	38.5%
Rest of Asia	3,025	13.3%	3,041	13.2%	3,201	13.6%	3,149	13.4%
Europe	2,842	12.5%	2,942	12.8%	2,891	12.3%	2,833	12.1%
Latin America	3,200	14.1%	2,953	12.8%	2,998	12.8%	2,788	11.9%
North America	1,962	8.6%	1,800	7.8%	1,814	7.7%	1,779	7.6%
Russia and Caspian	1,395	6.1%	1,490	6.5%	1,549	6.6%	1,596	6.8%
Africa	1,241	5.5%	1,263	5.5%	1,474	6.3%	1,458	6.2%
India	777	3.4%	846	3.7%	549	2.3%	430	1.8%
Oceania	461	2.0%	390	1.7%	374	1.6%	421	1.8%
Total	**22,734**	**100.0%**	**22,993**	**100.0%**	**23,477**	**100.0%**	**23,492**	**100.0%**

Source: Wood Mackenzie Metals Market Service Report — Long Term Outlook, June 2020
Note: "Russia and Caspian" includes Russia, Armenia, Kazakhstan and Uzbekistan; "Rest of Asia" includes Middle East

Pricing

Copper is traded on the LME. Although prices are determined by LME price movements, producers normally charge a regional premium that is market driven. Copper price fell by 37.6% between 2011 and 2015 on the back of slowing Chinese growth and increasing production due to continued investments. This trend continued into 2016, with the average LME cash copper price falling by another 11.5% to $4,862 per tonne on the back of strong supply relative to demand and rising stocks. In 2017, prices rose by 26.8% on the back of lower supply relative to the demand for refined copper. In 2018, prices rose by 5.8% as demand growth continued to outpace that of supply, before falling by 8.0% in 2019 owing to the global economic downturn and the US-China trade war.

The following table shows the movement in annual average LME copper prices from 2009 to 2019 in nominal terms:

	Year Ended 31 December										
	2009	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
	($ per tonne, except percentages)										
Copper LME cash price	5,163	7,539	8,810	7,949	7,322	6,862	5,494	4,862	6,166	6,523	5,999
% change	(25.7)	46.0	16.9	(9.8)	(7.9)	(6.3)	(19.9)	(11.5)	26.8	5.8	(8.0)

Source: Wood Mackenzie Metals Market Service Report — Long Term Outlook, June 2020

The last closing LME copper cash price was $5,829 per tonne as of 19 June 2020.

Since peak levels of $1,080 per tonne in 2006, annual benchmark treatment and refining charges (25% concentrate) have fallen significantly, reflecting a continuing tightening in the physical concentrate demand/supply balance while inventories of refined metal trended higher to 75 days of consumption in 2012, vs. 50 days back in 2007. In 2017, the annual benchmark TcRc was agreed at $92.5/t and 9.25c/lb or $589 per tonne, representing a 5.0% decline on the 2016 annual benchmark according to Wood Mackenzie data. The annual benchmark TcRc has continued to come under pressure and in 2019 was agreed at $80.80/t and 8.08c/lb or $515 per tonne and fell again in 2020 to $62.00/t and 6.20c/lb or $395 per tonne.

The following table shows the movement in the annual benchmark TcRcs agreed for copper covering the period from 2008 to 2020 in nominal dollars:

	Year Ended 31 December												
	2008	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
	($ per tonne, except percentages)												
TcRc (25% concentrate)	287	478	296	357	405	446	586	682	620	589	524	515	395
% change	(25.0)	66.7	(38.0)	20.4	13.4	10.2	31.4	16.3	(9.0)	(5.0)	(11.1)	(1.8)	(23.3)

Source: Wood Mackenzie Metals Concentrates Market Service Report — Short Term Outlook, June 2020

Indian Copper Market

Background

The Indian copper industry consists primarily of custom smelters as there are limited copper deposits in the country. The available deposits are owned by the government-owned Hindustan Copper Limited ("HCL"), which was the only producer in India until 1995 and has transformed significantly with the entry of Birla Copper, now owned by Hindalco. The Indian industry can be classified into two broad categories — manufacturers of refined copper (copper cathodes) and manufacturers of copper products. Of the three manufacturers of refined copper, HCL is the only primary producer, which mines and refines copper. Hindalco and Vedanta Limited process primarily imported copper concentrate to produce end products such as copper bars, rods and wires.

The Indian copper industry opened to private sector investment in 1992. Prior to 1992, the industry was dominated by HCL, a PSU, owned by the GOI. HCL was incorporated in November 1967 with the objectives of carrying out mining operations and producing copper and related products.

Production and Consumption

According to the Indian Mineral Yearbook 2018, in 2017, India's per capita consumption of copper (0.6 kg per person) is significantly less than that of China (5.4 kg per person) and other developed nations including Germany (13.6 kg per person), United States (5.5 kg per person), Italy (8.9 kg per person). India's consumption of copper is dominated by electrical, telecom, engineering, construction and transport. There is an imbalance between India's smelting/refining capacity and its limited production capacity in copper mining. From 2016 to 2019, based on Wood Mackenzie data, Indian refined copper consumption increased at a CAGR of 5.0% to reach 537,000 tonnes in 2019, while over the same period of time, refined copper output in India decreased by 44.6% with 430,000 tonnes of refined copper produced in 2019. Wood Mackenzie expects refined copper demand in India to increase to 992,000 tonnes in 2025 growing at a CAGR of 10.8% between 2019 and 2025.

Pricing and tariff

Indian copper prices track global prices as the metal is priced on the basis of landed costs of imported metal. The following table sets out the customs duties that were applicable on copper for the period indicated:

	22 January 2007 to 28 April 2008	29 April 2008 to 2 January 2009	3 January 2009 to 27 February 2011	28 February 2011 to present
Copper	5%	5%	5%	5%
Copper concentrate	2%	2%	2%	2.5%

In addition, the Finance Act (2 of 2004) of India, which has been in effect since 8 July 2004, levies an additional surcharge at the rate of 2% of the total customs duty payable, which has been further increased to 3% of the total customs duty payable effective as of 1 March 2007.

Further, on 1 March 2011, the GOI announced an exemption from import duty on copper concentrate up to an amount equivalent to the customs duty leviable on the value of gold and silver contained in such copper concentrate.

Market Outlook

Global copper outlook

According to Wood Mackenzie, the surplus in refined copper production is expected to continue in the near term as long project lead time means that new production is still coming to the market despite slower demand.

However, copper markets are expected to tighten as output growth slows, with reserve depletion and falling head grades triggering a fall in base case production beyond 2023. According to Wood Mackenzie, refined copper consumption will grow at a CAGR of 1.7% between 2019 and 2025, reaching 26.2 million tonnes in 2025. Mined production from base case assets will remain steady with a CAGR of 1.6% over the same period, with 23.0 million tonnes mined in 2025. This imbalance will support higher copper prices and should encourage new investments in production capacity. Additionally, the growth of power and auto sectors across emerging markets, including rising demand for electric vehicles globally, will further support the demand growth for copper.

Indian copper outlook

India's copper market is expected to recover from a slowdown in growth experienced in 2019, driven by an acceleration in industrial production. Indian refined copper consumption is expected to continue to grow strongly in line with the overall growth of the economy, at a CAGR of 10.8% between 2019 and 2025 according to Wood Mackenzie.

The five major sectors that consume most of the copper in India are the electrical, telecom, engineering, construction and transport sectors. These copper consuming sectors have been recognised by the GOI as key infrastructure sectors to sustain the growth of the Indian economy, as well as urbanisation. The GOI's implementation of anti-subsidy duties during January 2020 on copper wire rods from Indonesia, Malaysia, Thailand, and Vietnam, for a duration of five years, is likely to impact copper wire rods imports from these markets (147,000 tonnes in 2018) and further supporting India domestic copper demand as copper wire rods production capacity ramps up.

Iron Ore

Global Iron Ore Market

Background

Iron ore is the key raw material used to make pig iron and steel. According to the Mineral Information Institute, 98% of the mined iron ore is used to make steel.

The iron ore itself is usually found in the form of magnetite (Fe_3O_4), hematite (Fe_2O_3), goethite, limonite or siderite. Hematite is also known as "natural ore". The name refers to the early years of mining, when certain hematite ores contained 66% iron and could be fed directly into iron making blast furnaces.

The iron ore industry has two broad categories of producers:

(1) Mining companies with a focus on extracting different metals and minerals including iron ore; and

(2) Steel companies, who mine and produce iron ore to benefit from security of supply of its key raw materials.

Historically, steel producers have looked to manage iron ore prices by securing the supply of iron ore through long-term contracts, strategic investments directly in iron ore projects and acquisition of iron ore producers.

World Iron Ore Reserves

Global crude iron ore reserves were estimated to be, as of 31 December 2019, 170.0 million tonnes, according to preliminary estimates by the USGS. Australia, Russia, Brazil, China and India collectively account for 76.3% of world reserves.

The following table shows world iron ore reserves by country:

	Crude Ore	Iron Content
	(in billion tonnes)	
Australia	48.0	23.0
Brazil	29.0	15.0
Russia	25.0	14.0
China	20.0	6.9
Ukraine	6.5	2.3
Canada	6.0	2.3
India	5.5	3.4
United States	3.0	1.0
Iran	2.7	1.5
Kazakhstan	2.5	0.9
Sweden	1.3	0.6
South Africa	1.1	0.7
Other countries	18.0	9.5
World total (rounded)	**170.0**	**81.0**

Source: US Geological Survey (USGS), Mineral Commodity Summaries, January 2020

Iron ore consumption

Chinese steel consumption has fuelled demand for iron ore between 2000 and 2013, as Chinese apparent finished steel demand grew at a CAGR of 14.8% over the period 2000-2013 based on estimates from Wood Mackenzie. However, steel demand in China contracted at a CAGR of 3.7% per annum between 2013 and 2015, falling from 767 million tonnes in 2013 to 712 million tonnes in 2015. Demand picked up in 2016-2019 and grew at a CAGR of 5.7% over the period 2015-2019. Global steel consumption also grew at a CAGR of 3.3% over the same period.

The following table shows the apparent finished steel consumption pattern from 2016 to 2019

	Year Ended 31 December			
Region	**2016**	**2017**	**2018**	**2019**
	(million of tonnes, except percentages)			
China	722	786	819	888
Change (%)	1.4	8.9	4.2	8.4
India	84	89	97	96
Change (%)	4.5	5.9	9.1	(1.2)
Rest of the world	754	770	776	773
Change (%)	0.3	2.1	0.8	(0.3)
Total	**1,559**	**1,644**	**1,691**	**1,757**
Change (%)	**1.0**	**5.5**	**2.9**	**3.9**

Source: Wood Mackenzie Steel Market Service Report — Long Term Outlook, June 2020

The slowdown in the Chinese steel industry directly impacted global iron ore demand, which has remained flat.

The following table shows the regional consumption pattern of iron ore from 2016 to 2019:

	Year Ended 31 December							
	2016		**2017**		**2018**		**2019**	
Region	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**
	(thousands of tonnes, except percentages)							
China	1,185	57.9%	1,165	56.8%	1,194	56.2%	1,247	57.4%
Rest of Asia	278	13.6%	282	13.8%	300	14.1%	313	14.4%
Europe	153	7.5%	157	7.7%	154	7.2%	144	6.6%
CIS	135	6.6%	132	6.4%	132	6.2%	130	6.0%
India	166	8.1%	175	8.5%	196	9.2%	198	9.1%
North America	63	3.1%	67	3.2%	71	3.3%	70	3.2%
South America	48	2.3%	51	2.5%	52	2.5%	49	2.2%
Africa	14	0.7%	17	0.8%	18	0.9%	16	0.8%
Oceania	6	0.3%	6	0.3%	6	0.3%	6	0.3%
Total	**2,047**	**100.0%**	**2,052**	**100.0%**	**2,123**	**100.0%**	**2,174**	**100.0%**

Source: Wood Mackenzie Iron Ore Market Service Report — Long Term Outlook, June 2020
Note: "Rest of Asia" includes Middle East

Iron ore supply

The largest iron ore producing countries in 2019 are Australia, Brazil, China and India as reported by Wood Mackenzie, and these countries collectively account for 76% of the world's production.

The following table shows the regional production pattern of iron ore from 2016 to 2019:

	Year Ended 31 December							
	2016		2017		2018		2019	
Region	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**
	(thousands of tonnes, except percentages)							
Oceania	860	38%	882	38%	897	38%	890	38%
South America	461	20%	476	20%	481	21%	420	18%
China	298	13%	272	12%	240	10%	270	11%
CIS	191	8%	191	8%	194	8%	198	8%
India	185	8%	202	9%	205	9%	235	10%
North America	102	4%	112	5%	114	5%	122	5%
Rest of Asia	66	3%	74	3%	81	3%	89	4%
Africa	88	4%	93	4%	90	4%	90	4%
Europe	38	2%	38	2%	37	2%	39	2%
Total	**2,290**	**100.0%**	**2,340**	**100.0%**	**2,338**	**100.0%**	**2,353**	**100.0%**

Source: Wood Mackenzie Iron Ore Market Service Report — Long Term Outlook, June 2020
Note: "Rest of Asia" includes Middle East

The iron ore market is highly consolidated with a few producers accounting for the majority of supply. According to Wood Mackenzie, the four largest iron ore mining companies are Rio Tinto (15% of global iron ore production in 2019), Vale (13%), BHP Billiton (12%), and Fortescue Metals Group (7%). These four companies accounted for 47% of global iron ore production.

World iron ore trade

Due to the disparity in regional supply and demand, particularly in China, there has been a significant increase in world exports of iron ore over the last few years.

During 2019, Australian producers exported 880 million tonnes, while Brazil exported approximately 340 million tonnes of iron ore. These two countries together represented 76.9% of all world exports of iron ore in 2019. In addition to Australia and Brazil, Canada, CIS and the African continent are also significant exporters of iron ore.

Although its iron ore consumption is slowing, China remains by far the main destination for world iron ore shipments, importing 1,069 million tonnes in 2019, representing a 70.0% share of the total world imports.

The below table shows historical world seaborne iron ore trade for the last four years with major exporting and importing countries:

Region	Year Ended 31 December 2016	2017	2018	2019
	(million of tonnes, except percentages)			
World iron ore exports	**1,556**	**1,605**	**1,612**	**1,586**
Change (%)	**5.7**	**3.1**	**0.4**	**(1.6)**
Top 5 exporters (2019)				
Australia	847	870	884	880
Brazil	374	384	390	340
South Africa	65	67	63	66
Canada	43	43	48	52
Ukraine	39	37	36	40
World iron ore imports	**1,478**	**1,537**	**1,542**	**1,526**
Change (%)	**4.4**	**4.0**	**0.3**	**(1.0)**
Top 5 importers (2017)				
China	1,025	1,075	1,064	1,069
Japan	130	127	124	120
South Korea	72	72	73	75
Germany	40	40	41	39
Taiwan	23	24	24	23

Source: Wood Mackenzie Metals Market Service Report — Long Term Outlook, June 2020

Pricing

Iron ore has seen significant price decreases in recent years due to ample supply in the market and slowdown of global demand. Prices have decreased by 59.2% between 2013 and 2015, but rebounded slightly and rose by 23.7% in 2017 from 2015 lows, driven by China's ongoing commitment to supply side reform aimed at coal and steel.

The following table shows the movement in iron ore prices from 2009 to 2019:

	Year Ended 31 December 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	($ per tonne, except percentages)										
Iron Ore Fines (62% Fe, CFR NE China)	80	147	169	130	135	97	56	58	71	69	93
% change	(30.6)	83.7	15.3	(23.1)	4.1	(28.4)	(42.5)	4.6	22.4	(2.6)	34.2

Source: Wood Mackenzie Metals Market Service Report — Long Term Outlook, June 2020

Indian Iron Ore Market

Background

India is a self-sufficient producer in iron ore for domestic steel production. India has been a traditional exporter of iron ore, with most of the exports going to China, Japan, South Korea and other Far Eastern countries. India has substantial iron ore resources, and has around 33.3 billion tonnes of iron ore resources in estimates as of as reported in the Indian Minerals Yearbook 2018. According to the estimates by USGS, India is the seventh largest country in terms of size of crude ore reserves in 2018, at 5.5 billion tonnes of crude ore. Key players include National Mineral Development Corporation ("NMDC"), Steel Authority of India ("SAIL"), Tata Steel, Rungta Mines Ltd ("Rungta"), Serajuddin and Co., Vedanta Limited and Odisha Mining Corporation Ltd. ("OMCL").

Supply and Demand

As of 2019, based on Wood Mackenzie data, India was producing approximately 235 million tonnes of iron ore, of which approximately 31 million tonnes are for export. From 2009 to 2013, India's iron ore production has decreased by 38.4% from 221 to 139 million tonnes, before recovering over 2014-2019 to 235 million tonnes in 2019. However, during 2009-2019, exports have fallen from 114 million tonnes to around 31 million tonnes in 2019. India iron ore imports have increased since 2011, with a peak at 16 million tonnes in 2018. The sharp decrease in both production and exports can be attributed to mining ban and suspensions of mining activities that were in place since 2011 and 2012 in the Indian states of Karnataka and Goa, respectively. On 18 April 2013, the Indian Supreme Court of India has eased the ban on mining in the state of Karnataka by allowing around 100 iron ore mines to restart operation.

The table below shows India's historical iron ore production, consumption, imports and exports:

	Year Ended 31 December									
	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
	($ millions of tonnes)									
Production	209	189	147	139	138	143	185	202	205	235
Consumption	102	107	114	122	132	144	166	175	196	198
Imports	1	1	3	1	7	10	7	5	16	2
Exports	108	81	33	14	9	4	22	28	18	31

Source: Wood Mackenzie Metals Market Service Report — Long Term Outlook, June 2020

Pricing and tariff

As India is self-sufficient in iron ore with minimal quantities being imported, the domestic market is localised in nature with local demand and supply playing a major role in pricing. In addition, logistic costs, local duty structures and other operating costs affect prices unevenly across the different regional markets. This results in prices at regional markets such as Odisha, Chhattisgarh, Karnataka and Goa having a disparity against international prices, while still tracking the general trend in international prices. As the largest producer of iron ore in India, particularly in the Chhattisgarh and Karnataka regions, the government-owned agency NMDC determines contract prices. Such prices are reactionary to international prices, with the NMDC adjusting domestic prices to align with international prices with a time lag.

Prior to June 2008, the GOI had set an export duty on iron ore fines with less than 62% iron content of ₹50 per tonne while the export duty on iron ore fines with an iron content of 62% or more and all grades of lumps was ₹300 per tonne. On 13 June 2008, the GOI changed the export duty on iron ore to 15% ad valorem on the FOB value of exports. On 28 February 2011, India raised the duty to 20% from 5% on fines and to 20% from 15% on lumps with effect from 1 March 2011. In 30 December 2011, the GOI raised the rate of export duty on both iron ore fines and lumps to 30%. From 1 May 2015, export duty in iron ore lumps and fines with less than 58% iron content was reduced to 10%. However, since 1 March 2016, export duty on lumps and fines with less than 58% iron content has been reduced to zero, while lumps and fines with more than 58% iron ore content continue to be charged with a 30% export duty.

	13 June 2008 to 28 February 2011	**1 March 2011 to 29 December 2011**	**30 December 2011 to Present**
Lumps	15%	20%	30%
Fines	5%	20%	30%

Market Outlook

Global Iron Ore Outlook

The slowdown in Chinese steel growth has severely impacted iron ore markets over the last few years. Wood Mackenzie estimates that Chinese demand for iron ore will peak in 2020 and will continue to slowly decrease over time as scrap usage rises. The rebound in iron ore prices in 2016 was relatively unsupported by fundamentals and kept marginal cost producers cash positive. Medium term outlook still looks challenging, as the low point in demand coincides with rapid growth in low cost seaborne supply.

According to Wood Mackenzie, iron ore markets would enter a cyclical downturn following a supply constrained 2019, reaching a low in 2023. Thereafter, seaborne supply and demand will become more closely aligned with long term iron ore prices approaching a long term estimate of $65 per tonne for iron ore fines (62% Fe, CFR NE China, in 2019 real terms).

Indian Iron Ore Outlook

According to Wood Mackenzie, growth in iron ore consumption in India will outpace China and the rest of the world, as Indian iron ore demand will grow at a CAGR of 2.2% between 2019 and 2025, vs. a decline of 0.8% for China and CAGR of 0.3% for world excluding India. Indian iron ore consumption is expected to reach 225 million tonnes in 2025, of which 95.2% will be fulfilled by domestic production.

Steel

Global Steel Market

Background

Steel is an alloy of iron and carbon. It is one of the most widely used materials in the construction, automobile and manufacturing industries. According to the World Steel Association, there are approximately 3,500 different grades of steel, each with unique physical and chemical properties. Commercial steel is generally classified into four groups, depending on their metal alloy content:

(1) Carbon Steel: Can be further classified into low carbon (0.3% carbon), medium carbon (0.3% — 0.6% carbon) and high carbon steels (>0.6% carbon).

(2) Alloy Steel: Contain alloying elements such as manganese, silicon, nickel, titanium, copper, chromium, and aluminium in varying proportions to manipulate the steel's properties, such as its hardenability, corrosion resistance, strength, formability, weld ability, and ductility. Applications for steel alloys include pipelines, auto parts, transformers, power generators, and electric motors.

(3) Stainless Steel: Steel is alloyed with chromium (10% — 20%) to make stainless steel. Its strength, resistance to corrosion, and low maintenance make ideal for a wide range of applications. It also has a long-life cycle and is 100% recyclable. The material is extensively used in construction materials, automotive industry and consumer durables.

(4) Tool Steel: Contains tungsten, molybdenum, cobalt, and/or vanadium in varying quantities to increase heat resistance and durability, making the material ideal for cutting and drilling equipment.

Steel Consumption

Based on Wood Mackenzie data, world steel consumption increased from 1,559 million tonnes in 2016 to 1,757 million tonnes in 2019, at a CAGR of 4.1%. Demand growth is driven by Asia, led by China and India growing at a CAGR of 7.2% and 4.5% in the period 2016-2019, respectively. China will remain the largest contributor to global steel demand growth until 2020, post which India will take over as the prime engine of growth.

The following table shows the regional consumption pattern of finished steel from 2016 to 2019:

	Year Ended 31 December							
	2016		2017		2018		2019	
Region	Volume	%	Volume	%	Volume	%	Volume	%
	(million tonnes, except percentages)							
China	722	46.3%	786	47.8%	819	48.4%	888	50.6%
Rest of Asia	289	18.5%	287	17.5%	286	16.9%	294	16.8%
Europe	204	13.1%	211	12.8%	212	12.5%	201	11.5%
North America	135	8.7%	144	8.7%	145	8.6%	146	8.3%
India	84	5.4%	89	5.4%	97	5.7%	96	5.4%
Russia and Caspian	46	2.9%	49	3.0%	50	2.9%	52	3.0%
Latin America	36	2.3%	38	2.3%	40	2.3%	37	2.1%
Africa	38	2.4%	35	2.1%	37	2.2%	36	2.1%
Oceania	7	0.4%	6	0.4%	7	0.4%	6	0.3%
Total	**1,559**	**100.0%**	**1,644**	**100.0%**	**1,691**	**100.0%**	**1,757**	**100.0%**

Source: Wood Mackenzie Steel Market Service Report — Long Term Outlook, June 2020

Note: "Russia and Caspian" includes Russia, Armenia, Georgia, Kazakhstan, Tajikistan and Uzbekistan; "Rest of Asia" includes Middle East

Steel Supply

According to Wood Mackenzie data, China was the largest producer of crude steel (53.0%) followed by India (5.9%), Japan (5.3%), and United States (4.7%). Asia together contributes 74.3% to total crude steel production in 2019.

The following table shows the regional production pattern of crude steel production from 2016 to 2019:

	Year Ended 31 December							
	2016		**2017**		**2018**		**2019**	
Region	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**
	(thousands of tonnes, except percentages)							
China	868	51.3%	901	51.0%	929	51.0%	996	53.0%
Rest of Asia	258	15.2%	271	15.4%	283	15.5%	290	15.4%
Europe	224	13.2%	232	13.1%	231	12.7%	219	11.6%
North America	111	6.5%	115	6.5%	121	6.6%	120	6.4%
India	96	5.6%	102	5.7%	109	6.0%	111	5.9%
Russia and Caspian	78	4.6%	80	4.5%	80	4.4%	80	4.2%
Latin America	41	2.4%	44	2.5%	45	2.5%	41	2.2%
Africa	13	0.8%	15	0.8%	17	1.0%	17	0.9%
Oceania	6	0.3%	6	0.3%	6	0.3%	6	0.3%
Total	**1,693**	**100.0%**	**1,766**	**100.0%**	**1,822**	**100.0%**	**1,880**	**100.0%**

Source: Wood Mackenzie Steel Market Service Report — Long Term Outlook, June 2020

Pricing

Steel prices declined by 50.3% from 2011 to 2015 on the back of slowing demand. Prices have recovered since then driven by improved outlook on construction and rising utilisation rates.

The following table shows the movement in finished steel product prices from 2009 to 2019:

	Year Ended 31 December										
	2009	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
	($ per tonne, except percentages)										
Hot Rolled Coil China	518	523	610	543	514	453	300	348	474	533	496
% change	(24.6)	0.9	16.5	(11.0)	(5.2)	(11.9)	(33.7)	16.0	36.2	12.4	(6.9)
Rebar China	514	521	622	537	494	423	292	308	481	535	509
% change	(22.9)	1.2	19.5	(13.6)	(8.0)	(14.4)	(31.1)	5.8	56.1	11.3	(5.0)

Source: Wood Mackenzie Steel Market Service Report — Long Term Outlook, June 2020

India Iron and Steel Market

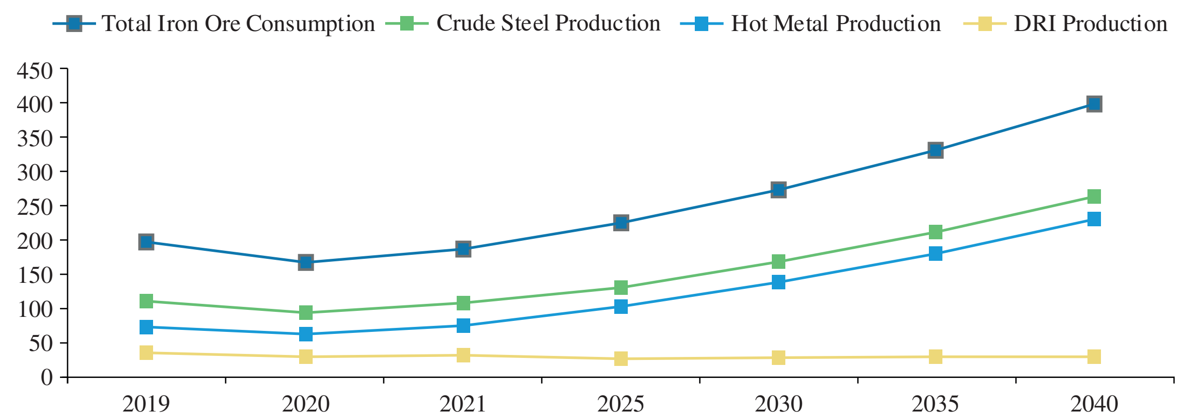
Background

India is the second largest producer of steel after China. In 2019, India contributed 5.9% to total crude steel production. The large steel producers in India are Steel Authority of India, Rashtriya Ispat Nigam Ltd., Tata Steel, Essar Steel, JSW Steel, Jindal Steel and Power Ltd. Besides the steel producing units, there are many sponge iron plants, mini blast finance units, hot and cold rolling mills and galvanising/colour coating units spread across the country. As per the India Minerals Yearbook 2018, India steel demand is driven by Infrastructure (23%), Construction (22%), Manufacturing (18%), Automobiles (12%) and Consumer Durables (6%).

Supply and Demand

As per the Indian Minerals Yearbook 2018, Iron and Steel (90.8%) and Sponge Iron Industries (8.7%) were the major consumer of iron ore and together accounted for over 99.5% of the consumption.

Indian iron-ore demand expected to grow in line with growth of steel and hot metal production.



Source: *Wood Mackenzie Steel Market Service Report — Long Term Outlook, June 2020*

Domestic crude steel production has shown a sustained rise in last five years growing at a CAGR of 5.5%. With the expansion of capacities of integrated plants and installation of new plants, additional supply of steel in Indian markets has considerably increased, creating an intense competition in the domestic market.

	Year Ended 31 December										
	2009	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
	($ millions of tonnes)										
Crude Steel Production	64	69	74	77	81	87	89	96	102	109	111
Finished Steel Consumption	58	65	70	72	74	76	80	84	89	97	96
Finished Steel Imports	8	9	9	9	7	9	13	9	8	8	9
Finished Steel Exports	5	7	8	8	9	9	7	9	14	9	11

Source: *Wood Mackenzie Steel Market Service Report — Long Term Outlook, June 2020*

The 2017 New Steel Policy aspires to target 300 mt of steelmaking capacity by 2030. The policy seeks to increase consumption of steel by promoting consumption in major sectors such as Infrastructure, Automobiles and Construction. The policy seeks to increase the per capita consumption to 160 kg by 2030 from existing level of 65 kg.

Present Indian Capacity

	(In million tonnes per annum)
Item	**Present rated capacity**
Crude Steel	130
Sponge Iron	50

Source: India Minerals Yearbook 2018

In 2017, the Ministry of Steel under GOI, introduced the new National Steel Policy 2017 and the DMI&SP policy, to promote the domestic steel industry. Direct benefits are expected to come from the government's massive thrust on infrastructure development, though timely execution of projects remains a core parameter for steel demand. To boost domestic manufacturing, a step up in allocation for smart Cities mission, higher expenditure on railways infrastructure, airport capacity expansion and transportation especially debottlenecking of the railways and affordable housing which are all expected to act as a major boost for raising domestic steel demand. Additionally, to ensure availability of raw material in domestic market at reasonable prices, export duty on iron ore is 30% for iron-ore varieties of 58% Fe content and above; there is no export duty for varieties of 58% Fe content and less, as well as for iron ore pellets.

Market Outlook

Global steel outlook

According to Wood Mackenzie, global crude steel production is forecasted to grow at a 0.1% CAGR between 2019 and 2025 to reach 1,893 million tonnes in 2025, of which China will contribute 50.6% of the volume with annual production being 958 million tonnes in 2025.

Indian steel outlook

India's share of global crude steel production is expected to increase from 5.9% in 2019 to 7.0% in 2025. India's crude steel production will increase at a 2.9% CAGR between 2019 and 2025 to reach 132 million tonnes in 2025. Wood Mackenzie forecasts steel demand to be driven by various policy reforms announced by the government in 2019, which should improve the macroeconomic environment. On the supply side, while India's growing demand will be predominately be met through domestic production increase, net steel imports will support about 10% of India's demand in the long term.

Aluminium

Global Aluminium Market

Background

Aluminium is lightweight in relation to its strength, durability and resistance to corrosion. It can be extruded, rolled, formed and painted for a wide variety of uses.

The raw material from which aluminium is produced is bauxite, which is a very common mineral found mainly in tropical regions. It normally occurs close to the surface and can be mined by open-pit methods. Bauxite is refined into alumina which is used to produce aluminium. Typically, bauxite ranges from 35% to 60% contained alumina. There are several different types of bauxite, and alumina refineries are usually designed to treat a specific type. The majority of alumina refineries are therefore integrated with mines.

The importance of different sectors in aluminium demand varies significantly between developed and developing nations. In mature economies, transport plays a more important role in aluminium demand than construction. As estimated by Wood Mackenzie, in 2019, the four largest sectors of end-uses for aluminium in mature economies like the United States and Canada were transport (41%), packaging (21%), construction (17%) and machinery (7%). In comparison, in 2019, the four largest sectors of end-uses for aluminium in China and India were construction (26%), followed by transport (19%), consumer goods (16%) and electrical (14%).

Aluminium consumption

Based on Wood Mackenzie data, world primary aluminium consumption increased from 59.6 million tonnes in 2016 to 65.5 million tonnes in 2019, at a CAGR of 3.2%. Chinese demand is fuelling the growth, as China accounted for 56.6% of total global consumption in 2019. Between 2016 and 2019, China's demand for primary aluminium increased at a CAGR of 5.4%, compared to an increase of 0.6% for world demand excluding China.

The following table shows the regional consumption of primary aluminium from 2016 to 2019:

	Year Ended 31 December							
	2016		**2017**		**2018**		**2019**	
Region	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**
	(thousands of tonnes, except percentages)							
China	31,664	53.1%	34,419	54.5%	36,519	55.7%	37,067	56.6%
Europe	8,748	14.7%	9,084	14.4%	9,302	14.2%	9,139	13.9%
Rest of Asia	7,173	12.0%	7,458	11.8%	7,279	11.1%	7,086	10.8%
North America	6,567	11.0%	6,573	10.4%	6,688	10.2%	6,481	9.9%
India	2,064	3.5%	2,156	3.4%	2,217	3.4%	2,245	3.4%
Latin America	1,272	2.1%	1,318	2.1%	1,282	2.0%	1,236	1.9%
Russia	898	1.5%	925	1.5%	961	1.5%	989	1.5%
Africa	652	1.1%	673	1.1%	702	1.1%	708	1.1%
Oceania	563	0.9%	569	0.9%	581	0.9%	584	0.9%
Total	**59,602**	**100.0%**	**63,175**	**100.0%**	**65,530**	**100.0%**	**65,533**	**100.0%**

Source: Wood Mackenzie Metals Market Service Report — Long Term Outlook, March 2020
Note: "Rest of Asia" includes Middle East

Aluminium supply

Aluminium production has become increasingly more concentrated in recent years, with the leading ten producers accounting for 28.8% of world primary aluminium production in 2019 as reported by Wood Mackenzie. The five largest primary aluminium producing companies are China Hongqiao Group (8.4%), UC Rusal (6.0%), Xinfa Group (5.4%), Rio Tinto (5.0%) and Emirates Global Aluminium (4.0%), which together accounted for approximately 28.8% of the total primary aluminium produced worldwide in 2019.

Global production of primary aluminium increased from 59.0 million tonnes in 2016 to 63.6 million tonnes in 2019, at a CAGR of 2.6%. In 2019, North America, Europe and China together accounted for approximately 69.1%, with China alone accounting for 56.0%, of global primary aluminium production.

The following table shows the regional production of primary aluminium from 2016 to 2019:

	Year Ended 31 December							
	2016		2017		2018		2019	
Region	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**
	(thousands of tonnes, except percentages)							
China.	32,187	54.6%	36,210	57.1%	36,833	57.1%	35,624	56.0%
Rest of Asia.	6,431	10.9%	6,511	10.3%	6,710	10.4%	7,074	11.1%
Europe	4,490	7.6%	4,499	7.1%	4,484	7.0%	4,349	6.8%
Russia and Caspian.	4,136	7.0%	4,142	6.5%	4,184	6.5%	4,309	6.8%
North America	4,009	6.8%	3,933	6.2%	3,820	5.9%	3,980	6.3%
India	2,728	4.6%	3,250	5.1%	3,676	5.7%	3,655	5.7%
Oceania	1,971	3.3%	1,827	2.9%	1,917	3.0%	1,915	3.0%
Africa	1,691	2.9%	1,678	2.6%	1,668	2.6%	1,644	2.6%
Latin America.	1,360	2.3%	1,379	2.2%	1,165	1.8%	1,088	1.7%
Total	**59,003**	**100.0%**	**63,430**	**100.0%**	**64,457**	**100.0%**	**64,637**	**100.0%**

Source: Wood Mackenzie Metals Market Service Report — Long Term Outlook, March 2020
Note: "Russia and Caspian" includes Russia, Kazakhstan, Tajikistan and Azerbaijan; "Rest of Asia" includes Middle East

Alumina

Alumina is a key raw material for aluminium production. Generally, it takes two tonnes of alumina to produce one tonne of primary aluminium. According to data compiled by Wood Mackenzie, in 2019, the five largest alumina producing companies are China Hongqiao Group (12.8%), Chalco (12.4%), Xinfa Group (7.9%), Alcoa Inc. (6.5%), and Rio Tinto (6.0%), which together accounted for approximately 45.7% of the total alumina produced worldwide.

The following table shows the regional production of alumina from 2016 to 2019:

	Year Ended 31 December							
	2016		2017		2018		2019	
Region	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**
	(thousands of tonnes, except percentages)							
China.	61,222	50.8%	69,873	53.9%	72,275	55.6%	70,920	54.1%
Oceania	20,906	17.4%	20,856	16.1%	20,416	15.7%	20,543	15.7%
Latin America.	12,977	10.8%	13,058	10.1%	10,767	8.3%	11,427	8.7%
Europe	8,439	7.0%	8,488	6.5%	8,537	6.6%	8,496	6.5%
India	5,994	5.0%	6,145	4.7%	6,426	4.9%	6,746	5.1%
Russia and Caspian.	4,170	3.5%	4,322	3.3%	4,244	3.3%	4,156	3.2%
Rest of Asia.	2,625	2.2%	3,878	3.0%	4,259	3.3%	5,410	4.1%
North America	4,094	3.4%	3,033	2.3%	2,870	2.2%	2,963	2.3%
Africa	–	0.0%	–	0.0%	182	0.1%	368	0.3%
Total	**120,427**	**100.0%**	**129,654**	**100.0%**	**129,975**	**100.0%**	**131,029**	**100.0%**

Source: Wood Mackenzie Metals Market Service Report — Long Term Outlook, March 2020
Note: "Russia and Caspian" includes Russia, Azerbaijan and Kazakhstan; "Rest of Asia" includes Middle East

The following table shows the estimated global demand-supply balance for smelter grade alumina from 2016 to 2019:

	Year Ended 31 December			
	2016	2017	2018	2019
	(thousands of tonnes)			
Global alumina surplus/(deficit)	(803)	(787)	(2,842)	(225)

Source: Wood Mackenzie Metals Market Service Report — Long Term Outlook, June 2020

Bauxite

Bauxite, the principal raw material used in the production of alumina, is typically open-pit mined in very large-scale operations. Between 2.0 to 3.6 dry tonnes of bauxite are usually required to make one tonne of alumina (depending on ore type, alumina content and variables such as proportion of reactive silica and organic matter). Based on data from the USGS as reported in February 2019, Guinea has the largest bauxite reserves in the world (25%), followed by Australia (20%), Vietnam (12%), Brazil (9%), Jamaica (7%) and Indonesia (4%).

The table below shows the world reserves of bauxite:

	Reserves (in million tonnes)
Guinea	7,400
Australia	6,000
Vietnam	3,700
Brazil	2,600
Jamaica	2,000
Indonesia	1,200
China	1,000
India	660
Russia	500
Saudi Arabia	200
Malaysia	110
United States	20
Other countries	5200
World total (rounded)	**30,000**

Source: US Geological Survey (USGS), Mineral Commodity Summaries, January 2020

According to Wood Mackenzie, global production of bauxite reached approximately 380 million tonnes in 2019. Australia, China, Brazil, Guinea and India are the largest bauxite producing countries, representing 83.5% of world's total production in 2019.

The following table shows the regional production of bauxite from 2016 to 2019:

	Year Ended 31 December							
	2016		2017		2018		2019	
Region	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**
	(thousands of tonnes, except percentages)							
China	94,944	31.3%	101,572	30.6%	89,886	26.1%	88,211	23.4%
Oceania	87,785	29.0%	93,612	28.2%	96,586	28.0%	103,400	27.4%
Latin America	47,104	15.5%	44,263	13.3%	42,938	12.5%	43,406	11.5%
Africa	30,540	10.1%	48,275	14.5%	62,238	18.1%	74,822	19.8%
India	21,457	7.1%	17,596	5.3%	20,157	5.9%	20,572	5.5%
Rest of Asia	7,655	2.5%	12,927	3.9%	18,020	5.2%	30,480	8.1%
Russia and Caspian	9,126	3.0%	9,337	2.8%	10,304	3.0%	11,599	3.1%
Europe	4,440	1.5%	4,752	1.4%	4,226	1.2%	4,431	1.2%
North America	126	0.0%	126	0.0%	126	0.0%	126	0.0%
Total	**303,177**	**100.0%**	**332,460**	**100.0%**	**344,480**	**100.0%**	**377,047**	**100.0%**

Source: *Wood Mackenzie Metals Market Service Report — Long Term Outlook, March 2020*
Note: *"Russia and Caspian" includes Russia and Kazakhstan; "Rest of Asia" includes Middle East*

Pricing

Aluminium is an LME traded metal. It is either sold directly to consumers or on a terminal market. The price is based on LME price, but producers are also able to charge a regional price premium, which generally reflects the cost of obtaining the metal from an alternative source.

Alumina prices are negotiated on an individual basis between buyers and sellers but are usually determined by reference to the LME price for aluminium. The negotiated agreements generally take the form of long-term contracts, but fixed prices can be negotiated for shorter periods and a relatively small spot market also exists.

The following table shows the movement in aluminium and alumina prices from 2009 to 2019:

	Year Ended 31 December										
	2009	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
	($ per tonne, except percentages)										
Aluminium											
LME cash price	1,667	2,173	2,395	2,019	1,846	1,866	1,663	1,604	1,968	2,110	1,791
% change	(35.2)	30.3	10.2	(15.7)	(8.6)	1.1	(10.9)	(3.6)	22.7	7.2	(15.1)
Alumina											
Spot price	245	333	374	319	327	330	301	254	354	474	333
% change	(32.2)	35.6	12.5	(14.9)	2.5	1.1	(8.7)	(15.8)	39.5	33.9	(29.8)
Ratio											
Alumina/aluminium	14.7	15.3	15.6	15.8	17.7	17.7	18.1	15.8	18.0	22.5	18.6

Source: *Wood Mackenzie Metals Market Service Report — Long Term Outlook, March 2020*

The LME aluminium cash price was $1,573 per tonne as of 19 June 2020.

Indian Aluminium and Bauxite Market

Background

India has been producing primary aluminium since 1938, and over the years, the model that prevailed was of a fully integrated operation with access to bauxite, alumina and power. As this model consolidated, the corporate structure of the aluminium industry also changed, with smaller regional producers being absorbed or merged to form larger integrated players with international presence.

India possesses considerable bauxite resources, estimated at 3.9 billion tonnes according to the Indian Minerals Yearbook 2018. By States, Odisha only accounts for 51% of total India bauxite resources, with large reserves in Panchpatmali, Pottangi and Baphlimali. Andhra Pradesh accounts for 16% of total India bauxite resources, with large bauxite concentrations in Saparla and Jarella. At current extraction rates, these two states alone have the equivalent of over 100 years of Indian demand. Even using the more conservative USGS reserve estimate, India has reserves equivalent to almost 30 years at current output. According to the USGS, India has the eighth largest reserves of bauxite ore in the world, with total recoverable reserves estimated at 660 million tonnes. These bauxite ore reserves are high grade and require less energy to refine, thus resulting in significant cost advantages for Indian aluminium producers.

Supply and demand

As of 2018, there are four major smelting and refining companies in India; 51.5% state-owned National Aluminium Company Limited, privately held Hindalco, Vedanta Limited and BALCO, which is owned 49% by the Indian government and 51% by Vedanta Limited.

The aluminium industry in India has traditionally been largely self-sufficient. Primary aluminium production has broadly kept pace with demand between the 1980's and 2011, with the country being a small net exporter. Following a surge in aluminium demand, India has experienced a small supply deficit in primary aluminium production between 2012 and 2013 according to the estimates by Wood Mackenzie. Significant new production capacity has been built since then, as smelter capacity has grown from 2.5 million tonnes in 2015 to 4.2 million tonnes in 2019. Local demand for aluminium will gradually catch up; growing at a 4.2% CAGR between 2019 and 2025 is estimated to reach 2.9 million tonnes that year.

Pricing and tariff

Domestic aluminium prices track global price trends as producers usually price the metal at a marginal discount to the landed cost of imported metal. Though value-added product prices also track metal price movement, they usually have relatively less volatility and command a premium reflecting the degree of value addition and quality, as indicated by the brand.

The following table shows the customs duties that were applicable for the periods indicated:

	29 April 2008 to 2 January 2009	**3 January 2009 to 29 February 2016**	**1 March 2016 to present**
Primary Aluminium	5%	5%	7.5%

In addition, the Finance Act (2 of 2004) of India, which has been in effect since 8 July 2004, levies an additional surcharge at the rate of 2% of the total customs duty payable, which has been further increased to 3% of the total customs duty payable effective 1 March 2007.

Pursuant to a notification dated 1 March 2013, a customs duty of 10% was introduced by the GOI on bauxite (natural), in calcined and non-calcined form.

Market Outlook

Global aluminium outlook

According to Wood Mackenzie, global primary aluminium production is forecasted to grow at a 3.1% CAGR between 2019 and 2025 to reach 76.4 million tonnes in 2025. China will contribute 58.8% of global production volume and its annual production will be 44.9 million tonnes in 2025.

Collectively, Wood Mackenzie expects the aluminium market to be oversupplied over the next four years until 2024 when a deficit is expected.

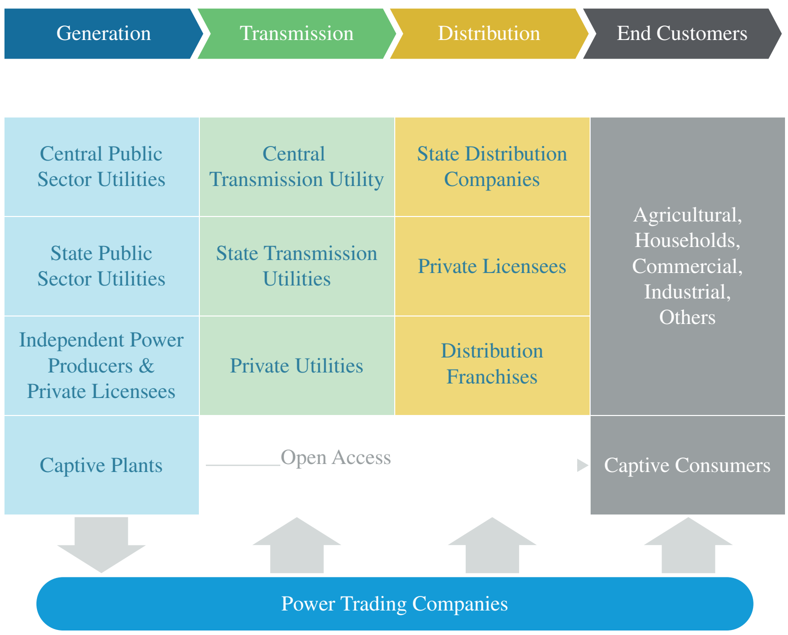
Indian aluminium outlook

India will account for 5.6% of primary aluminium production globally in 2025. India's aluminium consumption will increase at a 4.2% CAGR between 2019 and 2025 to reach 2.9 million tonnes in 2025. This growth will be fueled by India's demand for housing, retail and office space. Indian smelters form part of integrated chains, stretching back to bauxite, alumina and forward into semi-fabricating operations. Indian smelters are also endowed with their own captive power plants and favourable labour costs.

Commercial Power Generation Business

Organisation of the Power Industry

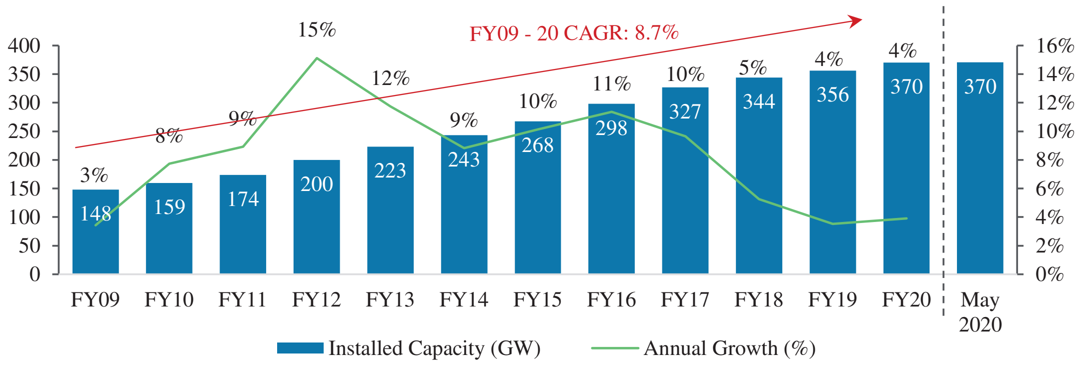
Given below is a summary on the organisation of the India Power industry. State, Central and Private entities each play important roles along the generation, transmission and distribution value chain.



Overview of the Indian Power Sector

The Indian power sector has grown significantly in size and capacity since independence and is one of the largest power markets globally today. Over the past 11 years, installed capacity grew strongly at a CAGR of 8.7% to 370 GW in Fiscal Year 2020 (370 GW as of May 2020). Despite growth in the installed capacity, some parts of the country continue to face power shortages due to the growth of consumption outpacing the growth of electricity supply.

Total Installed Capacity Growth (FY09-2MFY21)



Source: Central Electricity Authority (CEA)

Demand for electricity is on the rise as India's economy gains in global importance. Factors that contribute to rising per capita consumption include: 1) improvement of electrification in villages, 2) GDP growth and general economic activity, 3) growth in consumer electronic device penetration.

The projected demand growth envisaged in the CEA 19th Electric Power Survey which was released in January 2017 is given below.

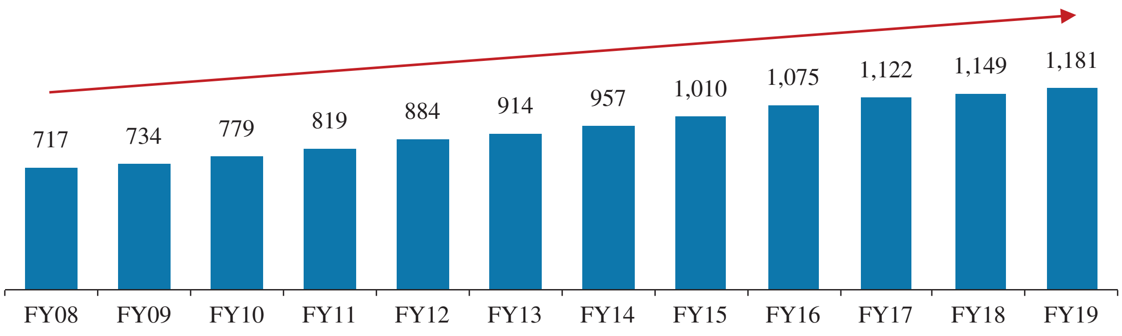
	Electricity requirement (TWh)[1]	CAGR	Peak demand (GW)	CAGR
Fiscal Year 2020	1,291		184	
Fiscal Year 2022E	1,566	10.1%	226	10.8%
Fiscal Year 2027E	2,047	6.8%	299	7.2%
Fiscal Year 2030E	2,325	6.1%	340	6.3%

Source: CEA 19th Electric Power Survey (January 2017), CEA Executive Summary on Power Sector (April 2020), and the Draft Report on Optimal Generation Capacity Mix for 2029-30 (February 2019)

Note: (1) Electricity requirement and peak demand are estimated by aggregating the electrical energy requirement of all the States/Union Territories and does not factor in demand side management or energy efficiency/conservation measures.

India's per capita consumption has increased steadily at an annualised growth rate of 4.6% over the Fiscal Year 2008 to Fiscal Year 2019 period. However, India's per capita consumption continues to remain low when compared to other emerging economies like China and Brazil. It is also significantly lower compared to the world average of 3,152 kWh as of 2017. *(Source: IEA (2019) Key World Energy Statistics. All rights reserved.)*

Per Capita Electricity Consumption (kWh) (FY08-19)

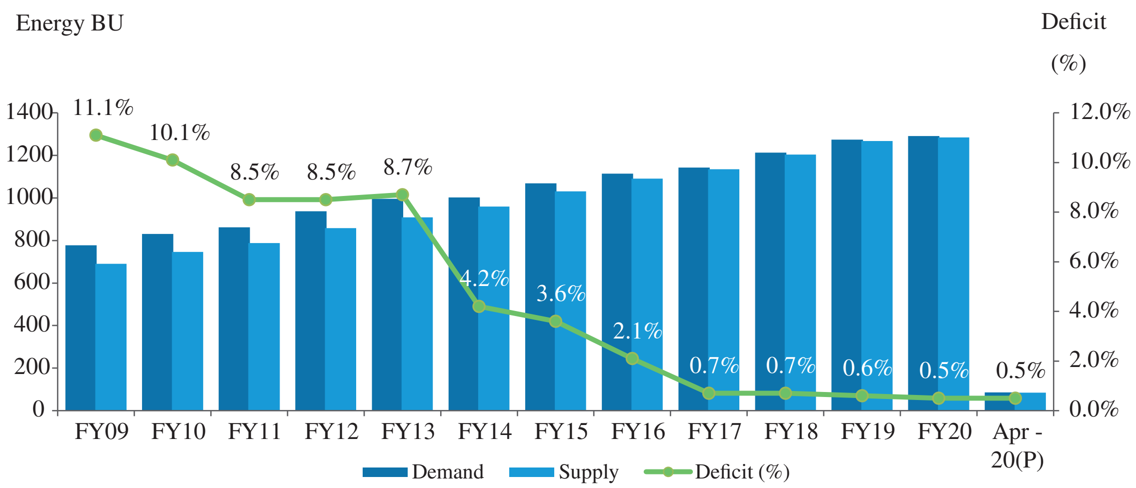


Source: Central Electricity Authority (CEA)

In order to address the lack of adequate electricity availability to all people in the country, the Government has launched several schemes to ensure continuous and uninterrupted electricity supply to all households, industries and commercial establishments by creating and improving necessary infrastructure. There are also other demand drivers that facilitate accelerated capacity additions in the sector, including low household access to electricity for lighting and the advent of smart cities and industrial corridors, which are likely to further increase per capita consumption of electricity.

Electricity shortages have imposed significant constraint on India's economic growth. In Fiscal Year 2020, India experienced energy and peak deficits of 0.5% and 0.7% respectively. Significant capacity addition by renewable sources, such as wind and solar, have helped the power deficit situation.

Energy Demand vs Supply (FY09-1MFY21[1])



[1] Energy Power Supply Position Report for Fiscal Year 2020 and April 2020 is provisional (CEA information as of April 2020)

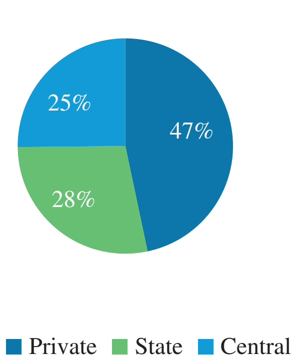
Source: Central Electricity Authority (CEA)

Installed Capacity

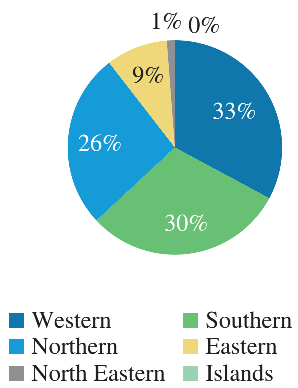
India's power sector has been traditionally dependent on conventional resources like coal and gas. As of May 2020, approximately 62% (231 GW) of the total installed capacity (370 GW) comes from thermal sources (coal, gas, lignite and diesel). With limited domestic access to such resources and inherent exploration, production and transportation challenges, India is dependent on imports of substantial quantities of gas, oil and coal in order to meet its domestic energy demand.

Private sector accounts for a substantial amount of installed capacity in India (47% as of May 2020 compared to 13% as of March 2007). This is a result of the GOI's reforms for the power generation sector to attract private capital.

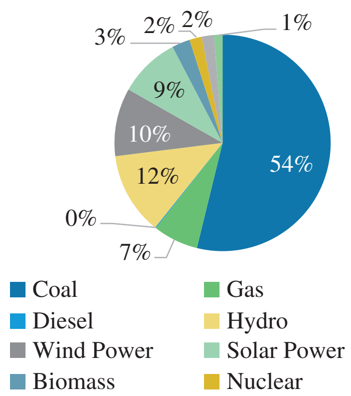
By Ownership



By Region



By Fuel Type

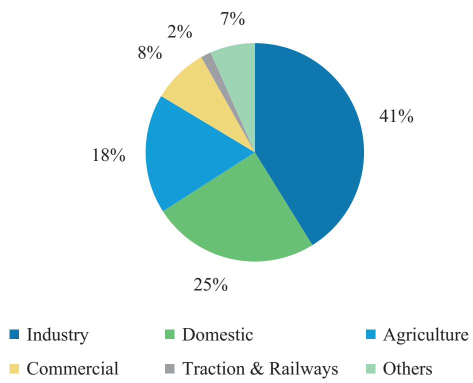


Source: Central Electricity Authority (CEA) (information as of May 2020)

Power Consumption

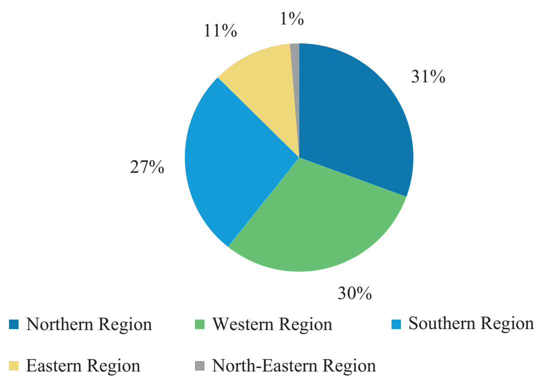
The end users of electricity in India can be broadly classified into industrial, domestic, agricultural and commercial consumers. The electricity consumption in domestic sector and miscellaneous sectors increased at a much faster pace compared to other sectors during the Fiscal Year 2007 to Fiscal Year 2019 period with CAGRs of 8.5% and 10.7% respectively.

Electricity Consumption by Sector (Fiscal Year 2019 Estimated)



Source: Central Electricity Authority (CEA)

Electricity Requirement by Region (Fiscal Year 2020)



Source: Central Electricity Authority (CEA)

Based on the Central Electricity Authority's Executive Summary (Fiscal Year 2020), energy requirement of the Northern and Western regions represented 31% and 30% respectively of the national energy requirement in the period. The Southern region accounts for 27%, while the Eastern and North-Eastern region together constitute 13% of the national energy requirement.

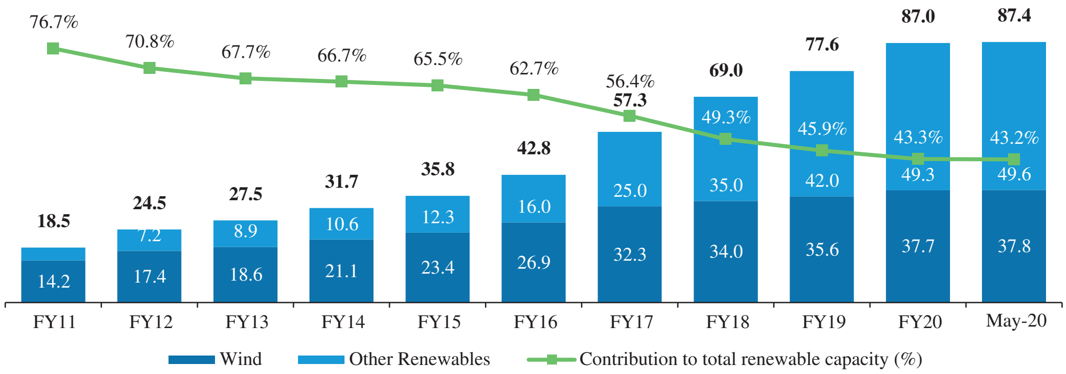
Renewable Energy

India has one of the largest installed renewable capacities in Asia with a generation capacity of 87 GW as of May 2020. Renewable energy sources such as wind, solar and biomass are expected to play an increasingly important role for India amidst favourable government policies supporting the sector. As a result, renewable capacity (excluding large hydro and nuclear projects) as a proportion of total capacity has grown from 5.0% in March 2006 of the total capacity in India to 23.6% in May 2020.

Renewable energy in India is set to continue its trajectory of growth, given India's significant untapped renewable resources. MNRE estimates India to possess about 900 GW of renewable energy potential (as of Fiscal Year 2017), of which only a small potential has been tapped. To further utilise these resources, the India Government up-scaled the target of renewable energy capacity to 175 GW by the year 2022 which includes 100 GW from solar, 60 GW from wind, 10 GW from bio-power and 5 GW from small hydro-power. It also aims to increase the country's share of non-fossil-based installed electric capacity to 40% by 2030. With 87 GW of renewable capacity as of May 2020, India has achieved around 50% of its 2022 target.

In terms of the installed renewable capacity mix, wind represents the largest share at 43.2% contribution followed by solar with 40.0% contribution as of May 2020. Historically, wind has played a dominant role in the renewable power generation space in India. However, in recent years, ground mounted solar has benefitted from an increased policy push and interest among developers primarily as a result of the solar auctions, which resulted in a substantial increase in installed solar capacity to 35 GW as of May 2020.

Growth of Renewable Capacity in India[2] (FY11-2MFY21)



2 Definition of renewable excludes large hydro and nuclear projects.

Source: Central Electricity Authority (CEA) and Ministry of New and Renewable Energy (MNRE)

Wind energy has been a key contributor to the renewable energy growth in India and is one of the most successful renewable energy options in India. India's wind energy sector has grown rapidly, reaching 37.7 GW of installed capacity in Fiscal Year 2020 from 14.2 GW in Fiscal Year 2011, registering a CAGR of 11%.

To ensure that India is on track to achieve its renewable energy capacity target of 175 GW by 2022, the Ministry of Power, in conjunction with Ministry of New and Renewable Energy (MNRE), has notified a trajectory to achieve 21% Renewable Purchase Obligations (RPOs) target by Fiscal Year 2022, comprising a target of 10.5% for solar and 10.5% for non-solar renewables for all States/Union Territories in India.

Transmission and Distribution

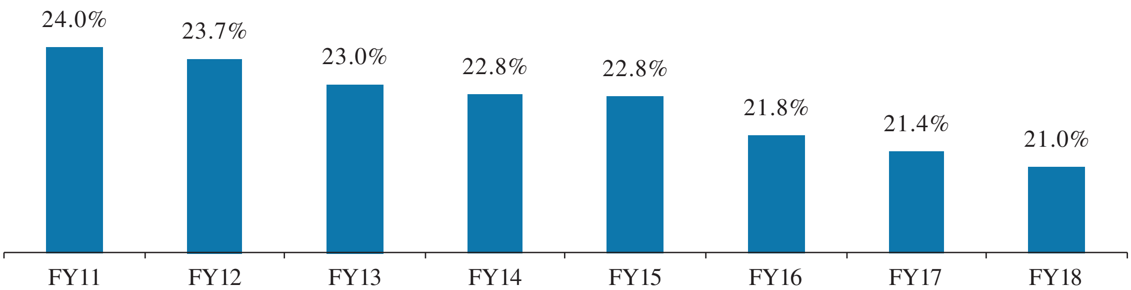
Transmission and distribution in India follows a three-tier structure comprising of: 1) Interconnected regional grids, 2) state grids and 3) distribution networks. Currently there are five regional grids i.e. Northern, Eastern, Western, Southern and North-Eastern grids which have been interconnected to form a single national grid.

Regional grids enable power to be transferred to a power deficit state from a power surplus state. Regional grids also facilitate co-ordination between the power plants and scheduling of maintenance outages to optimise system delivery of electricity.

State grids and distribution networks are primarily owned and operated by the respective State Electricity Boards (SEBs) or state governments (through state electricity departments). State distribution networks are managed at the state level. While the Ujjwal Discom Assurance Yojana (UDAY) programme has led to an improvement in finance strength of SEBs, they continue to be constrained in terms of ability to invest in upgrading transmission and distribution network or making any large investments in generation.

With the enactment of the Electricity Laws (Amendment) Act, 1998 and the Electricity Act, 2003 as well as publishing of the guidelines for competitive bidding in transmission projects, private investment was permitted in power transmission, which became recognised as an independent activity. Power distribution in the States of Delhi and Orissa has been privatised and distribution networks are now operated by private utilities companies such as Tata Power, CESC Limited, Reliance Energy Limited, Torrent Power AEC, Torrent Power SEC, Noida Power Company Limited etc.

Transmission and distribution (T&D) system losses in India (FY11-18)



Source: Central Electricity Authority (CEA)

The transmission sector has grown from a capacity of 52,034 circuit kms during the 6th five-year plan (as of Fiscal Year 1985) to 425,580 circuit kms as on April 2020. The table below shows growth of the transmission sector since the 6th five-year plan:

At end of	HVDC		AC			Grand Total
	±800kV	±500kV	765kV	400kV	220kV	
6th Plan	–	–	–	6,029	46,005	**52,034**
7th Plan	–	–	–	19,824	59,631	**79,455**
8th Plan	–	1,634	–	36,142	79,600	**117,376**
9th Plan	–	4,738	1,160	49,378	96,993	**152,269**
10th Plan	–	5,872	2,184	73,438	114,629	**196,123**
11th Plan	–	9,432	5,250	106,819	135,980	**257,481**
12th Plan	6,124	9,432	31,240	157,787	163,268	**367,851**
Plan Period 2017-2022 (up to Mar 2020)	6,124	9,432	44,853	184,521	180,141	**425,071**
Plan period 2017-2022 (up to Apr 2020)	6,124	9,432	44,854	184,727	180,443	**425,580**

Source: Central Electricity Authority (CEA)

Regulatory Structure of the Indian Power Sector and Key Policy Initiatives

Given below are the key components of the regulatory structure of the Indian Power sector, and their major functions:

- Ministry of Power (MoP): 1) Responsible for planning, policy formulation and processing of projects for investment decisions; 2) Enacts legislation with regard to power generation, transmission and distribution; 3) Monitors implementation of project

- Central Electricity Authority (CEA): A division of the MoP which deals with matters relating to the National Electricity Policy and formulation of plans for development of the power sector

- Central Electricity Regulatory Commission (CERC): Responsible for regulation of tariff and promotion of efficient policies at central level

- State Electricity Regulatory Commission (SERC): Responsible for regulation of tariff, promotion of efficient policies at state level and formulation of policies regarding subsidies

- Central Transmission Utility (CTU): Focuses on development of a coordinated, efficient and economical system of inter-state transmission lines

- State Transmission Utility (STU): 1) Focuses on development of a coordinated, efficient and economical system of intra-state transmission lines; 2) Undertakes intra-state transmission

- National Load Dispatch Centre (NLDC)/Regional Load Dispatch Centre (RLDC): Focuses on ensuring integrated operations of power systems at the national/regional level

- State Load Dispatch Centre (SLDC): Focuses on ensuring integrated operations of power systems at the state level

The Indian power sector was opened to private sector participation in 1991. A list of key policy initiatives by the Government are given below:

1991	**Electricity Laws (Amendment) Act**	
	Private participation in generation was allowed	
	Foreign ownership cap was increased to 100%	
	Framework for Power Purchase Agreements with State Electricity Boards laid down	
1998	**Electricity Laws (Amendment) Act**	
	Private participation in transmission was allowed	
	CTU and STUs were mandated	
	Electricity Regulatory Commissions Act	
	CERC/SERCs were formed to promote competition and transparency as well as protect consumer interest	
	Level playing-field was created for all players in the market	
2003	**The Electricity Act**	
	This Act replaced earlier laws relating to the electricity sector	
	The main aim was to enable reform and restructuring of the power sector	
	National policy brought out mandatory formation of SERCs	
	Emphasised rural electrification as well as non-discriminatory open access in transmission and distribution	
2006	**National Tariff Policy**	
	Framework for determining tariffs and rate of return for generation, transmission and distribution projects was laid down	
	After January 2011, mandatory competitive bidding was introduced for all transmission projects	
2011	**National Tariff Policy (Amendment)**	
	Intra-state transmission sector was exempted from mandatory competitive bidding until 5 January 2013	
	Select experimental, urgent or compressed time schedule work was exempted from competitive bidding based on tariffs	
2016	**National Tariff Policy (Amendment)**	
	Emphasised renewable energy sector by allowing competitive bidding for renewable energy procurement and through waiver of inter-state transmission charges	
	Mandatory procurement of power from waste-to-energy introduced	
	Discouraged differential duties particularly when states impose differential duties on captive power generation	
	Allowed licensees to charge lower tariffs than those determined by the SERC	

In September 2018, the GOI published the "Proposed amendment to the Electricity Act, 2003". The proposed amendment covers:

- separation of distribution and supply functions and measures to improve electricity supply;
- direct benefit transfer to consumers;
- obligation of distribution and supply licence holders to supply 24x7 power to its consumers;
- penalties for the violation of PPAs; and
- promotion of smart grids, net metering, ancillary support, and decentralised distributed generation.

In April 2020, the GOI published the "Proposed amendment to Electricity Act, 2003" (Electricity (Amendment) Bill, 2020. Some of the key points of the Proposed Amendment include:

- establishing an Electricity Contract Enforcement Authority that shall have the sole authority and jurisdiction to adjudicate upon matters regarding specific performance of contracts related to the purchase or sale of power between a generating company and licensees or between licensees;
- promoting the generation of electricity from renewable sources, and the prescription of a minimum percentage of purchase of electricity from such sources;
- adjusting the existing tariff structure to ensure it reflects the cost of supply of electricity and cross subsidies;
- distribution sub-license and franchise; and
- increased adherence and compliance to the regulatory framework.

Other Government Initiatives

Integrated Power Development Scheme

In November 2014, the Integrated Power Development Scheme ("IPDS") was launched by Ministry of Power, GOI with the objectives of:

1. Strengthening of sub-transmission and distribution network in the urban areas;
2. Metering of distribution transformers / feeders / consumers in the urban areas;
3. IT enablement of distribution sector and strengthening of distribution network as per Cabinet Committee on Economic Affairs ("CCEA") approval dated 21 June 2013 for completion of targets laid down under Restructured Accelerated Power Development and Reforms Programme ("R-APDRP") for 12^{th} and 13^{th} Five-Year Plans by carrying forward the approved outlay for R-APDRP to IPDS.

The scheme will help in reduction in AT&C losses, establishment of IT enabled energy accounting/ auditing system, improvement in billed energy based on metered consumption and improvement in collection efficiency.

Deep e-Bidding & e-Reverse Auction Portal for Procurement of Short-Term Power by DISCOMs

In April 2016, the DEEP (Discovery of Efficient Electricity price) e-Bidding & e-Reverse Auction portal for the procurement of short-term power by DISCOMs was launched by the Ministry of Power, GOI with the objectives of:

1. Ensuring uniformity in the process of power procurement;

2. Reducing the overall costs of procurement of power, thereby benefiting the ultimate consumer;

3. Creating a common e-bidding platform with e-Reverse Auction facility, therein providing nation-wide power procurement to a wider network within the power sector;

Although the Deep e-Bidding portal was purpose built for the short-term procurement of power, it is expected to be expanded to include the medium- and long-term procurement of power.

Deen Dayal Upadhyaya Gram Jyoti Yojana (Rural Electrification Initiative)

The Deen Dayal Upadhyaya Gram Jyoti Yojana ("DDUGJY") is a GOI scheme designed to provide continuous power supply to rural India. The scheme replaces the Rajiv Gandhi Grameen Vidyutikaran Yojana ("RGGVY").

DDUGJY was instituted to accomplish (i) separation of agriculture and non-agriculture feeders facilitating judicious rostering of supply to agricultural and non-agricultural consumers in rural areas and (ii) strengthening and augmentation of sub transmission and distribution infrastructure in rural areas, including metering of distribution transformers/feeders/consumers.

The estimated cost of the scheme for above two components was estimated to be approximately ₹430 billion which includes the requirement of budgetary support of approximately ₹335 billion from GOI over the entire implementation period. The Cabinet further approved, that the balance work relating to rural electrification as per CCEA's approval in August 2013 with the norms of the ongoing scheme of RGGVY in 12th and 13th Plans will get subsumed in DDUGJY as a distinct component for rural electrification, for which CCEA has already approved the scheme cost of approximately ₹393 billion including budgetary support of approximately ₹354 billion.

SAUBHAGYA — Pradhan Mantri Sahaj Bijli Har Ghar Yojana

In September 2017, the GOI launched the Saubhagya scheme to achieve universal household electrification in India by March 2019. Under the Saubhagya scheme, free electricity connections will be provided to households that qualify. The scheme is expected to cost approximately ₹163 billion.

The scheme is designed to:

- Provide electricity connections to all un-electrified households in rural areas

- Provide Solar Photo Voltaic (SPV) based standalone system for un-electrified households located in remote and inaccessible villages/habitations, where grid extension is not feasible or cost effective

- Provide electricity connections to all remaining economically poor un-electrified households in urban areas

As of June 2020, India has achieved close to 100% household electrification.

Scheme for Harnessing and Allocating Koyala (Coal) Transparently in India ("SHAKTI")

In May 2017, the Cabinet Committee on Economic Affairs approved a new scheme for providing long term coal linkages to power projects in India which do not yet have a secured coal supply contract.

Under the policy, coal linkages would be awarded to designated state-owned DISCOMs. These, in turn, would assign linkages to state or central power generation companies via allocation, and through auction to independent power producers.

The independent power producers, already having PPAs, participating in the auction bid for discounts on the existing tariff and this will be adjusted from the gross coal bills. The future linkages for supply of coal to independent power producers without PPAs shall be on the basis of auctions where bidding for linkages will be done over the notified price of the coal company.

The approved framework is designed to provide long term domestic coal security to power projects which do not have long term coal supply agreements and have to rely on short term purchases through e-auction or imported coal. Key benefits of this policy are as follows:

- Transparent and objective allocation of coal supply for all power plants;
- A framework to address the stress in the power sector due to non-availability of linkages for power; and
- Reduced power costs as independent power producers will need to provide competitive tariffs to secure coal linkages under PPAs.

In line with the Ministry of Coal's Power Sector Linkage Policy (dated 22 May 2017), the first phase of coal linkage auctions for IPPs having PPAs based on domestic coal was conducted between 11 and 13 September 2017. Under the first auction, ten power plants won coal linkages totalling 27.2 mtpa for 25 years in the auctions. Fuel supply agreements (FSAs) have also been executed with each successful bidder.

With the approval of CCEA, the SHAKTI Policy 2017 has been amended and the same has been issued by the Ministry of Coal (dated 25 March 2019). The second round of SHAKTI B (ii) linkage auctions concluded in May 2019. As of May 2020, FSA's have been executed with three successful bidders, and the documentation processing for the signing of FSA's with most of the other successful bidders is underway. The implementation of linkage auction to IPPs/power producers without PPAs completed in March 2020 — of the 11.8 MT on offer, 6.5 MT has been booked by seven successful bidders.

Ujjwal Discom Assurance Yojana

In November 2015, the Ujjwal Discom Assurance Yojana (UDAY) scheme was launched to address the problem of high accumulated losses and debts of electricity distribution companies (DISCOM) in India. As of Fiscal Year 2015, DISCOMs had accumulated losses of approximately ₹3.8 trillion and outstanding debt of approximately ₹4.3 trillion.

The scheme is designed to improve financial performance of DISCOMs. Key initiatives under UDAY include:

- Phased takeover of DISCOM debt by state governments, with a view to reduce interest costs of distribution companies;
- Incentivising distribution companies to achieve higher operational efficiencies;

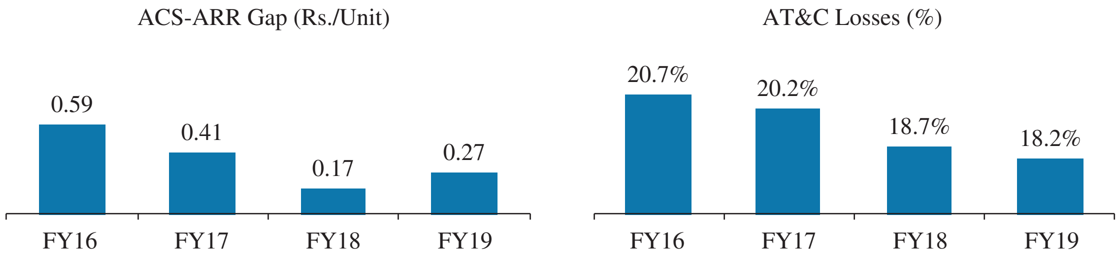
- Reduction in cost of power purchase; and
- Imposing financial discipline on distribution companies through an alignment with state finances.

Under the UDAY scheme, states take over 75% of DISCOM debt as of 30 September 2015 over a two-year period (50% of DISCOM debt taken over in Fiscal Year 2016 and 25% in Fiscal Year 2017). Principal debt taken over will not be included in fiscal deficit of states for Fiscal Year 2016 and Fiscal Year 2017. However, interest has to be serviced within Fiscal Responsibility and Budgetary Management Act (FRBM) limits. Currently, 27 states and five Union Territories have joined the UDAY scheme.

States	Memorandum of Understanding
Jharkhand	5 Jan 2016
Chhattisgarh	25 Jan 2016
Rajasthan	27 Jan 2016
Uttar Pradesh	30 Jan 2016
Gujarat	13 Feb 2016
Bihar	22 Feb 2016
Punjab	4 Mar 2016
Haryana	11 Mar 2016
Jammu and Kashmir	15 Mar 2016
Uttarakhand	31 Mar 2016
Goa	16 Jun 2016
Karnataka	16 Jun 2016
Andhra Pradesh	24 Jun 2016
Manipur	26 Jul 2016
Madhya Pradesh	10 Aug 2016
Puducherry (UT)	10 Aug 2016
Maharashtra	7 Oct 2016
Himachal Pradesh	8 Dec 2016
Assam	4 Jan 2017
Telangana	4 Jan 2017
Tamil Nadu	9 Jan 2017
Sikkim	23 Feb 2017
Meghalaya	9 Mar 2017
Kerala	15 Mar 2017
Arunachal Pradesh	29 Mar 2017
Tripura	29 Mar 2017
Mizoram	31 Mar 2017
Nagaland	20 Nov 2017
Daman & Diu (UT)	20 Nov 2017
Dadra & Nagar Haveli (UT)	20 Nov 2017
Andaman & Nicobar Islands (UT)	20 Nov 2017
Lakshadweep (UT)	28 Feb 2018

Source: Ministry of Power

Performance of UDAY Scheme



Source: Ministry of Power and Press Information Bureau

Based on the latest UDAY updates by the Ministry of Power, the ACS-ARR gap (see above) has come down from ₹0.59/kWh in Fiscal Year 2016 to ₹0.27/kWh in Fiscal Year 2019 due to cost side optimisation measures such as control in power purchase costs and reduced interest expenses. Similarly, AT&C losses have also declined consistently year-on-year, from 20.7% in Fiscal Year 2016 to 18.2% in Fiscal Year 2019. The decline in line losses below 20% is largely attributable to an increase in billing and collection of revenues, decreases in theft and a contraction in technical losses.

Recommendations of Group of Ministers (GoM)/High level Empowered Committee (HLEC)

In 2019, the Cabinet Committee on Economic Affairs (CCEA) that is chaired by the Prime Minister also approved the recommendations put forth by the Group of Ministers (GoM) constituted to examine the specific recommendations of High-Level Empowered Committee (HLEC) constituted to address the issues of Stressed Thermal Power Projects.

Key recommendations approved by the CCEA include:

- Granting of linkage coal for short-term PPA;
- Allowing coal linkages to be used in cases of termination of PPAs due to payment defaults by DISCOMs;
- Procurement of bulk power by a nodal agency against pre-declared linkages;
- Central/State Gencos being allowed to act aggregators of power;
- Increases in the quantity of coal for special forward e-auction for the power sector;
- Regular coal linkage auctions;
- Continuous short supplies of coal;
- ACQ being determined based on efficiency; and
- Ensuring that Late Payment Surcharges (LPS) are made mandatory.

It is envisioned that these measures would resolve many issues currently affecting the thermal power sector.

Provision for Merchant Power Plants

Merchant power plants generate electricity for sale at market-driven rates in the open wholesale market. Typically, these plants do not have long-term PPAs and are constructed and owned by private developers. Merchant sales, however, include the sale of power under short-term PPAs and on spot basis. Merchant power plants can sell power to the power trading companies (such as PTC India Limited and Tata Power Trading Company Limited), the SEBs, distribution companies and industrial and bulk customers.

Captive Power Generation

Another important segment of power generation in India is the captive power segment. Captive power refers to power generation from a project established for industrial consumption. Continuing increase in demand for power and India's sustained economic growth make captive power an important avenue of electricity supply. Captive power capacity is 54,932 MW in India as of March 2018.

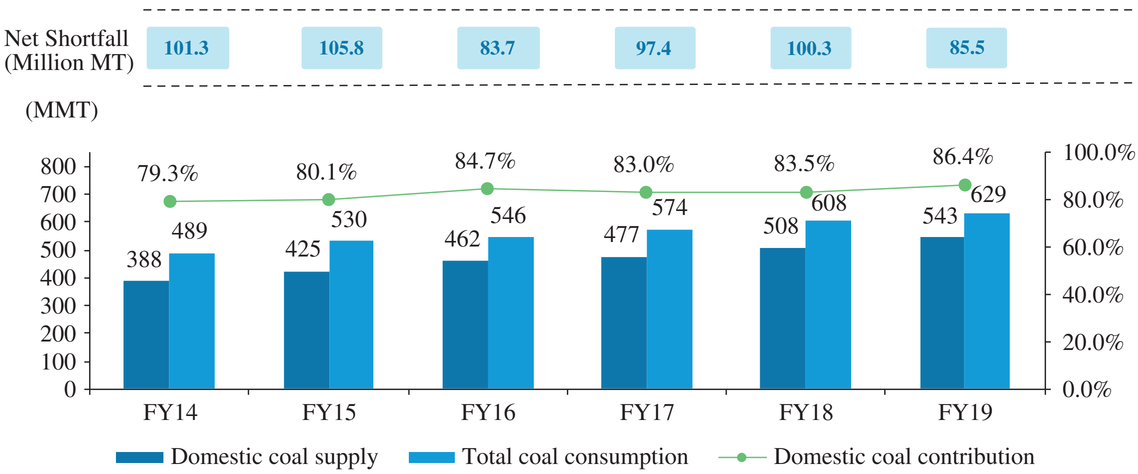
Overview of Coal Availability

Coal is the most important and abundant fossil fuel in India. As of May 2020, it accounted for c.54% of its power generation capacity in the country.

Indian coal-based power generation is predominantly supplied by domestic coal. India consumed approximately 629 million MT of coal as in Fiscal Year 2019, of which approximately 86.4% was supplied domestically and the balance was supplied by imports from countries such as Indonesia, South Africa and Australia. According to the Geological Survey of India, India is estimated to have total coal reserves of approximately 326 billion MT for Fiscal Year 2020.

Coal India Ltd. ("CIL"), the state-controlled coal mining company, produces a majority of the country's overall coal production (it is expected to contribute to c.81% of total production in Fiscal Year 2020 according to the Ministry of Coal Annual Report 2020) and is the single, largest coal producing company in the world. Over the last few years, it has undertaken various measures to increase the production of coal. These measures include implementation of state-of-the-art mechanisation for high capacity mines, modernisation of both opencast and underground mines, improvement in capacity utilisation through efficiency improvement, capacity augmentation of running projects, and better coordination with related ministries and state governments.

Improvements in the domestic supply of coal through CIL and Singareni Collieries Company Limited for the power sector have resulted in a reduction of shortfalls which must be met through other sources namely imports, captive mines, and e-auctions. Overall shortfalls of coal have decreased marginally between Fiscal Year 2014 and Fiscal Year 2019 from 101.3 million MT to 85.5 million MT; at the same time, contribution from domestic linkages of coal has increased from 388 million MT in Fiscal Year 2014 to 543 million MT in Fiscal Year 2019. Proportion of domestic coal linkage to total consumption has increased from 79.3% in Fiscal Year 2014 to 86.4% in Fiscal Year 2019. This allow the country to achieve greater energy sufficiency and reduce shortfall.



Source: Central Electricity Authority (CEA), Ministry of Coal

In line with the Ministry of Coal's Power Sector Linkage Policy (dated 22 May 2017), the approval of CCEA, and the amendments to the policy dated 25 March 2019, the Ministry of Coal is taking steps to address issues related to coal supply for IPPs having PPAs based on domestic coal as well as IPPs without PPAs. It is also formulating policy for potential linkages to IPPs having PPAs based on imported coal.

The first round of auctions for coal linkages to IPPs having PPAs based on domestic coal was conducted in September 2017. Under the first auction, ten power plants won coal linkages totaling 27.2 mtpa for 25 years in the auctions. Fuel supply agreements (FSAs) have also been executed with each successful bidder.

The second round of SHAKTI B (ii) linkage auctions concluded in May 2019. As of May 2020, FSA's have been executed with three successful bidders, and the documentation processing for the signing of FSA's with most of the other successful bidders is underway.

BUSINESS

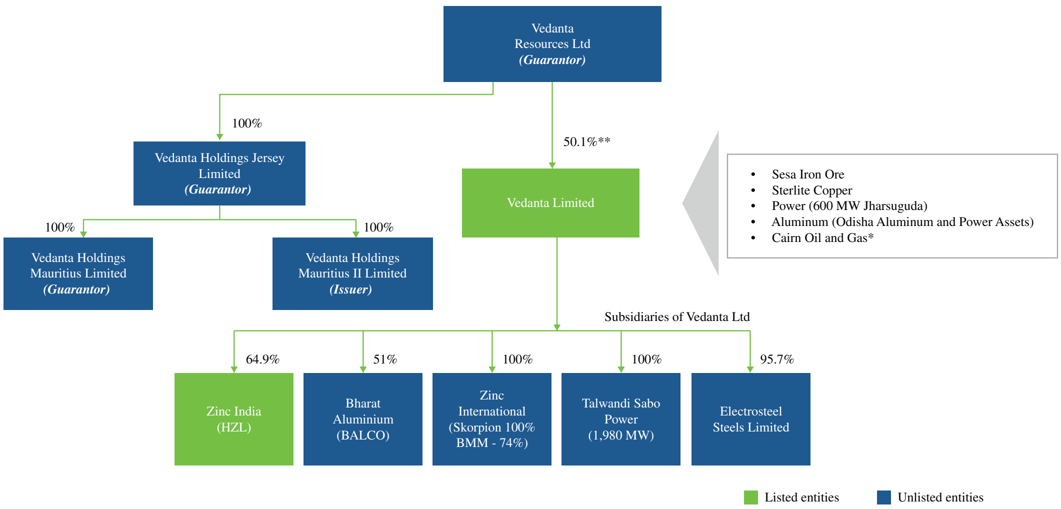
Overview

Vedanta is a globally diversified metals and mining, oil and gas and power generation company, currently contributing 1% of India's GDP *(Source: IFC report on economic and social impact (IFC is Institute for Competitiveness, the strategy arm of Harvard Business School))*. Its businesses are principally located in India. India is one of the fastest growing large economies in the world with a long term GDP growth forecast of over 6%, according to Euromonitor. Vedanta also has operations in Zambia, Namibia, South Africa, the UAE, Japan, South Korea, and Taiwan, and a workforce of over 76,000 people worldwide and approximately 20,000 of them are employees as at 31 March 2020. Vedanta is primarily engaged in oil and gas, zinc, copper, iron ore, lead, silver, steel, aluminium, commercial power generation, glass substrate and port operation businesses. Vedanta has expanded its existing business across oil and gas, copper, zinc, aluminium and iron ore and acquired new businesses, such as, the steel business through acquisition of ESL in 2018. Vedanta believes its experience in operating and expanding its businesses in India will allow it to capitalise on attractive growth opportunities arising from India's large mineral reserves, relatively low cost of operations and large and inexpensive labour and talent pools.

For Fiscal Years 2018, 2019 and 2020, Vedanta reported total revenue of $15,294 million, $14,031 million, and $11,790 million respectively, and Vedanta EBITDA of $3,963 million, $3,393 million and $3,003 million, respectively.

Group Structure

The following chart depicts Vedanta's corporate structure as at the date of this Offering Circular. Vedanta owns other subsidiaries that are not material and are not shown in the chart below.



* 50% of the share in the RJ Block is held by a subsidiary of Vedanta Ltd

** includes the ADS issued by Vedanta Limited

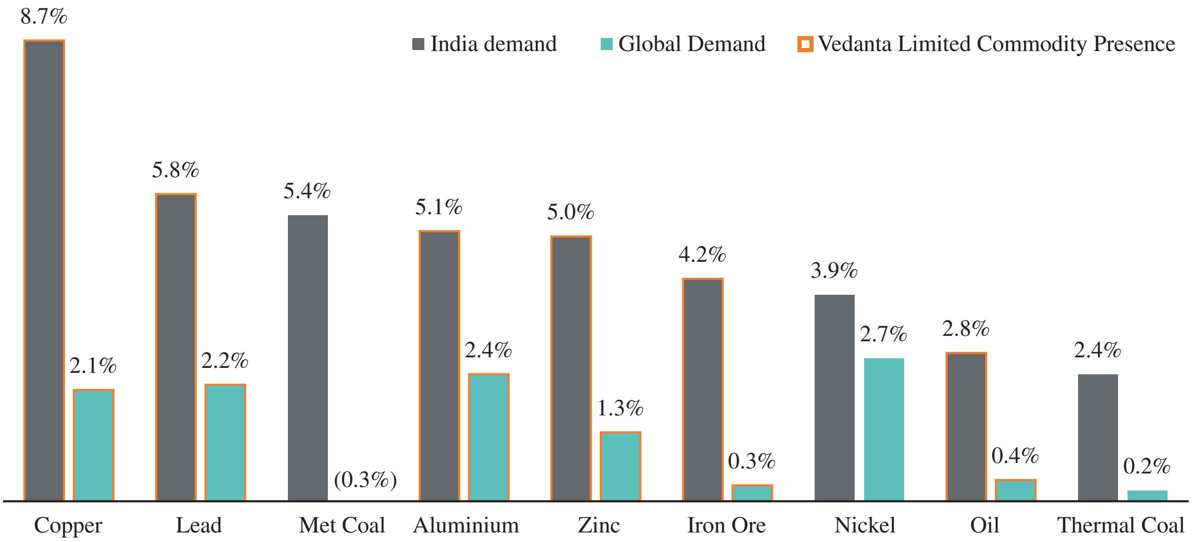
Competitive Strengths

Vedanta believes it has the following competitive strengths:

Significant presence in most attractive commodities with large market sizes and favorable supply and demand gap

Vedanta's large-scale, diversified asset portfolio, with an attractive cost position in many of its core businesses, positions us to deliver strong margins and free cash flows through the commodity cycle. We have an attractive commodity mix, with strong fundamentals and leading demand growth and focus on base metals and oil. Vedanta is a leading diversified natural resources company with assets primarily located in India. Vedanta believes that its business comprises of high-quality assets of global size and scale. The following chart highlights the demand for copper, lead, coal, aluminium, zinc, iron ore and oil in India and outside India for the period indicated.

Demand 2020-2030 CAGR



Source: Wood Mackenzie

- *Zinc*:

  According to Wood Mackenzie, HZL is the second largest integrated zinc-lead miner and the fourth largest zinc-lead smelter globally based on production volume in calendar year 2019. HZL owns five zinc-lead mines and one rock phosphate mine of which Rampura Agucha mine is the second largest zinc mine globally in calendar year 2019 and HZL assets sit in the first quartile of global zinc cost curve, according to Wood Mackenzie. Under Zinc international operations, Vedanta operates the Skorpion mine and refinery in Namibia, and Black Mountain Mine and smelter operations, and Gamsberg mine in South Africa. The development of the Gamsberg mine, which is one of the largest undeveloped zinc deposits, was being carried out in a modular and flexible manner to maximize value.

  With the COVID-19 pandemic and concerns over global demand the market is not expected to return to normal soon. Even so, absolute downside in zinc looks limited from current levels with so much of global production uneconomic at current levels. Nevertheless, even with increased production in China, globally mine production in expected to contract by 3-4% in calendar year 2020. Countries like Peru, Canada, Mexico and Bolivia, which contribute roughly 20% of global mine production went into lockdowns and miners were forced to suspend operations. Consistent low LME pricing will mean number of mines will become uneconomic and will be forced to close. This shift will provide a natural buffer to the weaker demand trends being seen, nevertheless market challenges will persist for calendar year 2020 as uncertainly over underlying economic growth persists. Significant recovery has been seen in Zinc prices over the last few months. Average zinc LME price has recovered from $1,814/t on 23 March 2020 to $2,304/t on 7 August 2020, which is higher than February 2020 levels ($2,013/t on 26 February 2020).

• *Oil and gas*:

Vedanta's oil and gas business is owned and operated by Vedanta Limited, one of the largest independent oil and gas exploration and production companies and the largest private sector producer of crude oil in India. Vedanta's oil and gas business has a diversified asset base with 58 blocks in India. The blocks are primarily located across the Indian basins in Barmer, Krishna-Godavari, Cambay, Assam, Gujarat Kutch and Cauvery, and the Orange Basin in South Africa.

In pursuit of reaching 50% contribution to India's domestic crude oil production, Vedanta increased its block acreage by acquiring 51 blocks in Open Acreage Licensing Policy ("OALP") and two blocks in Discovered Small Fields ("DSF"). This acquisition made Vedanta's oil and gas business one of the largest private acreage holders in India, with a tenfold jump in acreage to approximately 65,000 sq km in Fiscal Year 2020 from just 6,000 sq km in Fiscal Year 2019.

With the outbreak of the pandemic, demand for transportation fuels fell dramatically. The COVID-19 pandemic containment measures in 187 countries meant mobility came to a halt. Whilst the shock has been sharp and deep in the near term the longer-term outlook for oil demand remains positive. Whilst the negative demand trends are likely to continue for at least next six months, the return to normalcy and boarder economic recovery should allow oil markets to steadily rebalance over the next 12-18 months. Significant recovery has been seen in oil prices over the last few months. Average Brent price has recovered from $27/bbl on 23 March 2020 to $44.6/bbl on 7 August 2020. Prices were around $53.4/bbl on 26 February 2020.

• *Aluminium*:

Vedanta, through its subsidiaries BALCO and Vedanta Limited Jharsuguda, is the largest primary producer of aluminium in India with present capacity of 2.0 mtpa aluminium capacity. Vedanta operates one of the largest single location smelters in the world at its Jharsuguda facility. Vedanta also has captive power and an alumina refinery at Lanjigarh as part of its aluminium capacity.

Global aluminium demand is expected to be lower than the last Fiscal Year 2020 impacted by lockdown in various parts of the world due to the COVID-19 pandemic. However, consumption is expected to grow over the next decade with innovation in automobile industry across vehicular light-weighting and increasing adoption of electric vehicles. The rapidly urbanizing Asia-Pacific and African economies (mainly emerging markets) with demand mainly growing in packaging, automobile, construction and power sector is expected to keep the global aluminium market buoyant for the years to come. Significant recovery has been seen in Aluminum prices over the last few months. Average Aluminum LME price has recovered from $1,536/t on 23 March 2020 to $1,722/t on 7 August 2020, which is higher than February 2020 levels ($1,676/t on 26 February 2020).

- *Copper*:

  Refined copper is predominantly used for manufacturing cables, transformers and motors as well as castings and alloy-based products.

  Global refined copper consumption remained unchanged in Fiscal Year 2020. Geopolitical tensions and a struggling global manufacturing sector plagued refined copper consumption. Vedanta expects over the medium and long term, copper consumption in India and China is likely to increase, driven by population growth, urbanization, the rise of the aspiring middle class and demand of EVs. These trends are supported by enabling government measures and initiatives. However, these forecasts will only hold true if the virus is contained properly and there are no further significant disruptions in socio-economic life across geographies.

  On the supply side, there could be further disruptions in copper production due to the smelter upgrades in Chile following the introduction of new environmental regulations. Our ability to take advantage of emerging opportunities is largely dependent on the re-opening of our smelter at Tuticorin.

- *Iron ore: Iron ore a key ingredient in steel manufacturing, is used in the construction, infrastructure and automotive sectors.* Vedanta Limited Iron ore operations ceased in Goa from March 2018 pursuant to a Supreme Court order. However, Vedanta Limited continues to engage with the GOI to secure a resumption of mining operations. Meanwhile, the permitted mining capacity in Karnataka increased to 4.5 million tonnes from 2.3 million tonnes.

- *Power:* As of 31 March 2020, Vedanta has a total power portfolio of 9,055.1 MW, including 3,230.5 MW of commercial power generation capacity. This includes the coal-fired power plant at Talwandi Sabo with a design capacity of 1,980 MW. The projects are strategically located with easy access to fuel and water and are well connected by railways and roads. Vedanta has reduced production and pricing risks with long-term power off-take arrangements with state electricity boards and state-owned utilities.

The COVID-19 pandemic has had an unprecedented impact on global economics and businesses. The virus outbreak which saw lockdown across geographies has become one the biggest threats to the global economy, disrupting businesses and supply chains the world over. During this pandemic Vedanta limited has taken a proactive approach to keep the assets and people safe while ensuring continuity of the business. Most of its operations were continuing during the lockdown period being deemed 'essential' or 'continuous' in nature though temporary disruptions did lead to utilization falling to 80% of capacity during the early lockdown period. More recently Vedanta Limited have now been able to ramp-up back to approximately 90-100% of normal levels.

Ideally positioned to capitalise on India's growth and natural resources potential leading to solid returns

Vedanta is ideally positioned to take advantage of the strength in its key operating markets, given the scale, high quality and low-cost nature of its assets. Vedanta believes that its experience in operating and expanding its business in India will allow it to capitalise on attractive growth opportunities arising from factors including:

Economic growth in Key Geographies. India is one of the fastest growing large economies in the world with a real GDP CAGR of 7% between Fiscal Year 2012 and Fiscal Year 2020, according to the Central Statistical Organization of the GOI's Ministry of Statistics and Programme Implementation. According to the United Nations World Urbanisation Prospects: The 2018 Revision, India's population is expected to grow at 0.9% CAGR from 1.35 billion in 2018 to 1.51 billion in 2030 and urbanisation is expected to increase from 34% in 2018 to 40% in 2030 at 2.3% CAGR.

Significantly lower per capita consumption of Aluminium, Zinc and Copper. According to Wood Mackenzie and IMF population data, India's per capita aluminium consumption is 1.7 kg compared to 8.7 kg globally and 26.5 kg in China; and India's per capita zinc consumption is 0.5 kg compared to 1.9 kg globally and 5.0 kg in China. Based on BP Energy Outlook 2019, India's per capita oil consumption is 1.2 boe compared to 4.1 boe globally and 3.2 boe in China.

India's mineral resource base. According to USGS Mineral Commodity Summaries (February 2019) and OPEC Annual Statistical Bulletin 2018, India's zinc reserves are the seventh largest in the world with total reserves estimated at 10 million tonnes, bauxite reserves are the eighth largest in the world with total reserves estimated at 660 million tonnes, has the seventh largest iron ore reserves in the world at 5 billion tonnes and oil reserves of 4.5 billion boe.

Strong market position. According to Wood Mackenzie, Vedanta's is the largest zinc and aluminium producer in India. Globally, Vedanta is the second largest zinc smelter and ninth largest aluminium smelter. Vedanta is the largest private sector oil producer in India with 25% share in domestic crude production according to the Petroleum planning and Analysis Cell of the MoPNG, India.

Vedanta is strongly positioned to benefit from this expected growth and resource potential, as 64.9% of its revenue for Fiscal Year 2020 came from India. Vedanta has a long history of established operations and experience in the country. Vedanta also has a strong market share in India in its key commodities. In Fiscal Year 2020, Vedanta had a market share of 79% by sales volume in the Indian zinc market according to India Lead Zinc Development Association ("ILZDA") and is a primary aluminium producer with a 40% market share according to the Aluminium Association of India and a primary crude oil producer operating 25% of the crude oil produced in India according to the provisional data published by Petroleum Planning and Analysis Cell of MoPNG statistics.

Well invested facilities with prudent capital allocation policy

With a significant amount of its capital investment programme completed, Vedanta is now ramping up and have commenced reaping benefits of these investments. Vedanta believes that it will be able to reach full capacity with limited capital expenditure and consequently, Vedanta's cash flows are poised for a significant increase.

Vedanta has largely completed its capital expenditure programmes in all its businesses though the businesses are not fully ramped up. It is now ramping up its capacities in its zinc, aluminium, iron ore and power businesses with incremental capital expenditure as described under the section "*Management's Discussion and Analysis of Financial Condition and Results of Operations — Project Capital Expenditures*", with focus on strong cash flow growth.

- *Zinc:* In Fiscal Year 2013, HZL announced an expansion of its zinc-lead mined metal production capacity to 1.2 million tonnes, which involved the sinking of underground shafts and developing underground mines. Benefit of these growth projects started in Fiscal Year 2016 but the full ramp up to 1.2 million tonnes is expected in Fiscal Year 2021 and the remaining capital expenditure for this project is $350 million as of 31 March 2020. The growth plan will increase mined metal production capacity to 1.2 mmtpa, including 24 million ounces of silver. Vedanta's Gamsberg project in South Africa, has a design capacity of 250,000 tonnes per annum which had a remaining capital expenditure is $13 million as of 31 March 2020.

- *Aluminium:* Vedanta Limited has set up another 1.25 mtpa aluminium smelter in Jharsuguda, of which some sections of line five are yet to be commissioned with remaining capital expenditure of $49 million for this project as of 31 March 2020.

- *Oil and Gas:* Vedanta has finalised development partners for the next phase of growth to get to a near term capacity of approximately 225 kboepd by undertaking various projects at Rajasthan — enhanced oil recovery, tight oil, and gas.

Committed to sustainability, operational excellence and highest standards to corporate governance

Vedanta continues to focus on operational excellence and high asset utilisation to deliver top quartile cost performance and strong cash flows. Digitalisation in the mining industry is gaining traction and Vedanta is capitalising on India's leading position and expertise in information technology. Examples of technology initiatives undertaken by Vedanta to drive efficiency and sustainability include: (i) autonomous machines for 24x7 manning at SK Mine, (ii) the world's largest continuously heated pipeline for an oil and gas business in India and (iii) a collision awareness system at Gamsberg.

Vedanta's sustainability framework guides to ensure a long-term, sustainable future for its business operations, meeting growth aspirations, and creating long-term value for all stakeholders. Vedanta Limited's Dow Jones Sustainability Index ranking has improved, moving up four ranks to the 20^{th} (out of a total 61 metals and mining companies). In addition, HZL ranked 3^{rd} in the environment category and 5^{th} overall in the metals and mining sector globally and ranked 1^{st} in the environment category and 1^{st} overall in the metals and mining sector in the Asia Pacific region.

Vedanta has been proactively disclosing its sustainability performance for the last 11 years and its reporting is in accordance with Global Reporting Initiative (GRI) Standards. Vedanta also published a tax transparency report and has semi-annual disclosures for VRL and quarterly disclosures for HZL.

Vedanta focuses on operational efficiencies to drive sustainability performance, with a focus on 'waste to wealth' programs and on reducing its carbon footprint and improving its water recycle rates. Vedanta also remains committed to serving the communities in places where Vedanta operates. Vedanta's signature program — Nand Ghar — provides early childhood education and nutritious meals to 44,000 children and 33,000 women. 1,302 Nand Ghar's were operational as of 31 March 2020. Vedanta is committed towards development of football at the grassroots level through the football academies in Goa and Rajasthan. Zinc Football trains around 2,000 young people, both girls and boys in its 64 Zinc Football schools. Sesa Goa also has four similar centres training 500 children on a weekly basis. Collectively, Vedanta contributed around $40 million to multiple CSR programs that have benefitted around 3.26 million across 868 villages in India and South Africa.

Diversified FCF generative asset well equipped to weather commodity downturn

Vedanta generated a total revenue of $11,790 million and Vedanta EBITDA of $3,003 million in Fiscal Year 2020, respectively. Through its diversified portfolio of assets, Vedanta has maintained strong Vedanta EBITDA margins during the period of low and volatile commodity prices.

The free cash flow ("FCF") after accounting for capital expenditure for Vedanta for Fiscal Years 2018, 2019 and 2020 was $925 million, $1,191 million and $822 million respectively, as highlighted in the table below:

	Fiscal Year		
	2018	2019	2020
		($ million)	
Vedanta EBITDA	3,963	3,393	3,003
Operating exceptional items	33	–	–
Changes in working capital	(627)	280	(74)
Changes in non-cash items	28	34	18
Sustaining Capital expenditure	(385)	(435)	(558)
Changes in capital creditors	42	107	84
Sales of property, plant and equipment's	10	18	21
Net Interest paid	(821)	(738)	(687)
Tax Paid	(498)	(386)	(165)
Expansion Capital expenditure	(820)	(1,082)	(819)
Free cash flow post capex (FCF)	**925**	**1,191**	**823**
Free cash flow from discontinued operations (KCM)	**–**	**–**	**(1)**
Total cash flow post capex (FCF)	**925**	**1,191**	**822**

For Fiscal Year 2015, 2016, 2017 as well Vedanta has generated positive free cash flow to weather any commodity downturns, where the business generated $3,741 million, $2,336 million and $3,191 million EBITDA and $1,047 million, $1,773 million and $1,554 million free cash flow post capex in Fiscal Year 2015, 2016 and 2017 respectively.

Vedanta has achieved Adjusted Vedanta EBITDA margin of 35%, 29%, and 29% for Fiscal Years 2018, 2019 and 2020, as highlighted in the table below:

	Fiscal Year		
	2018	2019	2020
		($ million)	
Vedanta EBITDA	**3,963**	**3,393**	**3,003**
Less:			
Vedanta EBITDA from Copper India custom smelting	(162)	36	40
Vedanta EBITDA from Copper Zambia custom smelting	(26)	9	–
Vedanta EBITDA from Zinc India custom smelting	–	–	–
Adjusted Vedanta EBITDA	**3,775**	**3,438**	**3,043**
Revenue	**15,294**	**14,031**	**11,790**
Less:			
Revenue from Copper India custom smelting	(3,828)	(1,537)	(1,278)
Revenue from Copper Zambia custom smelting	(742)	(528)	–
Revenue from Zinc India custom smelting	–	–	–
Adjusted Revenue (d-e)	**10,779**	**11,966**	**10,512**
Adjusted Vedanta EBITDA margin	**35%**	**29%**	**29%**

Vedanta's return on capital employed ("ROCE") was 14.3%, 9.6% and 10.3% for Fiscal Years 2018, 2019 and 2020 (computed on the basis of last twelve months) respectively, as highlighted in the table below:

	Fiscal Year		
	2018	**2019**	**2020**
		($ million)	
Operating Profit before special items	2,692	1,911	1,591
Tax Outflow	498	(386)	(165)
Operating profit (post-tax)	**2,194**	**1,525**	**1,426**
Equity attributable to equity holders of the Parent	(330)	(928)	(3,263)
Non-controlling interest	6,870	6,181	5,536
Net Debt	9,588	10,292	10,005
Capital Employed	**16,128**	**15,545**	**12,278**
Average Capital Employed	**15,323**	**15,837**	**13,912**
Return on Capital Employed	**14.3%**	**9.6%**	**10.3%**

ROCE is defined as operating profit before special items and net of tax outflow, as a ratio of average capital employed.

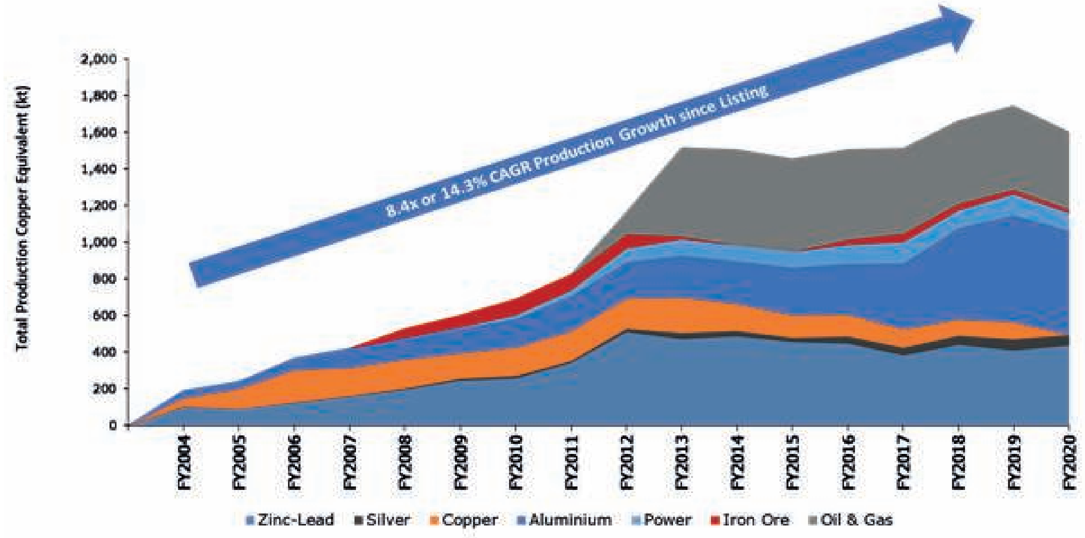
Vedanta also has a balanced debt portfolio with a diversified range of funding sources. Vedanta maintains a strong relationship with its lending banks which enables it to obtain funding at attractive rates.

In addition, both Vedanta Limited and HZL have dividend policies in place which have been filed with their relevant stock exchanges.

Proven track record of execution

Vedanta has a strong track record of exploration, executing projects and delivering production growth. Vedanta have a proven management team with a diverse and extensive range of sector and global experience who ensure that operations are run efficiently and responsibly. Vedanta has taken a disciplined approach to development, growing its production steadily with an ongoing focus on operational efficiency and cost savings.

Vedanta has delivered a 14.3% annualised production growth in copper equivalent terms since Fiscal Year 2004, to 1,603 kt in Fiscal Year 2020. It has further increased the EBITDA from $323 million in Fiscal Year 2004 to $3,003 million in Fiscal Year 2020.



All commodity and power capacities rebased to copper equivalent capacity (defined as production x commodity price/copper price) using average commodity prices for Fiscal Year 2020. Power rebased using Fiscal Year 2020 realisations, copper custom smelting production rebased at Tc/Rc for Fiscal Year 2020, iron ore volumes refers to sales with prices rebased at realized prices for Fiscal Year 2020.

Vedanta Limited, post-acquisition of Cairn, has added proven exploration expertise to its fold having made 40 hydrocarbon discoveries in India since 1994. Particularly, it has ramped-up oil production from 150 kboepd in 2011 at the time of Cairn acquisition to 174 kboepd currently. Vedanta Limited has continued to add to its exploration portfolio and, in addition to accessing new opportunities, has been an active and successful participant in OALP licencing rounds, as demonstrated by being awarded 51 exploration blocks in sedimentary basins throughout India. Vedanta Limited's executive management team has a proven track record of developing hydrocarbon resources which includes making 38 discoveries in the Rajasthan Block including the landmark Mangla field, commencing natural gas production in less than 28 months at the Lakshmi field in Cambay Basin, building the world's longest continuously heated and insulated crude oil pipeline, and executing the world's largest polymer flood project. The PSC blocks offer a rich project portfolio comprising of enhanced oil recovery, tight oil, tight gas, facility upgradation and exploration and appraisal prospects. These projects are being executed under an Integrated Development strategy involving leading global oilfield service companies and are on track to deliver near term additional volumes. During the Fiscal Year 2020, 136 wells were drilled, and 41 wells hooked up.

- Vedanta started its aluminium business with the acquisition of BALCO with an installed capacity for aluminium smelting of 100 ktpa. It has since then expanded its aluminium business to include Design capacities for aluminium smelting of 570 ktpa at BALCO and 1,750 ktpa at Jharsuguda.

- Vedanta acquired HZL in 2002, when its production was at 170 ktpa and reserves and resources life of five years. Through investments in technology and people with an innovative mindset and increasing productivity, HZL today has a reserves and resources life of more than 25 years with a 1.2 mtpa production capacity, making HZL the second largest zinc miner in the world.

- Vedanta's senior management has significant experience in all aspects of its business which has contributed in transforming Vedanta into a leading diversified natural resources company Mr. Anil Agarwal, Vedanta's founder, remains involved in overseeing Vedanta Limited's business as its Non-Executive Chairman. Vedanta's executive management team focuses on group strategy and capital allocation, while operational and project goals are led by the experienced management teams overseeing each individual business.

- Vedanta's experienced and focused management and dedicated project execution teams have proven track record of successfully implementing capital-intensive projects to increase its production capacities. Vedanta utilises project monitoring and assurance systems to facilitate timely execution of its projects.

Vedanta's Strategy

Vedanta's strategic goal is to become one of the top diversified natural resources company in the world, and has the following key strategic priorities:

Commitment to the larger purpose with focus on world class environmental, social and corporate governance performance

Vedanta operates as a responsible business, focusing on achieving 'zero-harm, zero-discharge & zero-wastage', and thus minimizing its environmental impact. Vedanta promotes social inclusion across its operations to promote inclusive growth. Vedanta also establishes management systems and processes in place to ensure its operations create sustainable value for all stakeholders. The majority of the social initiatives are identified, developed and carried out in collaboration with local government bodies and community organisations. Vedanta operates on the '4Ps' (public-private-people-partnership) model and through its 'Nandghar' initiative and is committed to transform the lives of 85 million children and 20 million women. Currently, Vedanta has crossed the 1,250th Nandghar mark and rapidly moving towards a target of 4,000 Nandghars in India. As it continues to grow, Vedanta is committed to the triple bottom line of 'People, Planet and Prosperity' to create a sustainable future in zero harm environment for communities. Vedanta embraces a conducive environment for encouraging innovation that leads to a zero-harm environment and exemplifying optimal utilisation of resources, improved efficiencies and recovery of by-products.

Augment reserves and resources base

Vedanta looks at ways to expand its reserves and resources base through targeted and disciplined exploration programs. Vedanta's exploration teams aim to discover mineral and oil deposits in a safe and responsible way, to replenish the resources that support future growth. At Zinc India, during Fiscal Year 2020, gross additions of 14.6 million tonnes were made to reserve and resource, prior to depletion, whilst at the Zinc International, gross additions of 75.4 million tonnes of ore and 4 million tonnes of metal were made to reserve and resource after depletion. Vedanta is excited about the upside potential of approximately 5.5 billion barrels of resources across 51 blocks that Vedanta had won under the OALP which will further augment its oil reserves and resources in years to come.

Delivering on growth opportunities

Vedanta is focused on growing operations organically by developing brownfield opportunities in its existing portfolio. Such large well-diversified, low-cost and long-life asset portfolio offers attractive expansion opportunities, which are evaluated based on return criteria for long term value creation for all stakeholders.

At Zinc India, all major projects to build capacity of 1.2 mtpa were completed during the Fiscal Year 2020. At Rampura Agucha, a major milestone was achieved with start of ore hauling post commissioning of the production shaft during the fourth quarter of Fiscal Year 2020. This will enable the mine to achieve production capacity of over 5.0 mtpa. At Vedanta's oil and gas business, early gas production facility fully commissioned with ramped up volumes to approximately 127 mmscfd. Vedanta's oil and gas business also won 10 additional blocks in OALP Round II. The addition of these blocks catapults the business to one of the largest private acreage holders in India with a tenfold jump in acreage from its existing blocks of approximately 6,000 square kilometer to approximately 65,000 square kilometer across 58 blocks in total. This large reserve accretion under OALP as well as the growth and expansion projects, will take Vedanta a step closer to its aspiration of meeting 50% of India's crude oil demand.

Optimise capital allocation and maintain strong balance sheet

A key strategic priority for Vedanta is to maintain and grow strong cash flow through disciplined approach on capital allocation towards capital expenditure and operating expenditure; along with disciplined management of working capital. Despite low commodity prices recently, Vedanta continued to deliver strong EBITDA margins and free cash flows through a strong focus on its cost optimization plan. As Vedanta continues to ramp up its portfolio of diversified, low-cost and well-invested assets, Vedanta expects to generate significant organic free cash flow with minimal remaining capital expenditure. In 2017, Vedanta completed an exclusive liability management program that resulted in meaningful deleveraging by proactively tendering for its 2018, 2019 and 2021 bonds and completing the cash redemption of the remaining 2018 bonds.

Operational Excellence

Vedanta strive for all-round operational excellence to achieve benchmark performance across our business, by debottlenecking our assets to enhance production, supported by improved digital and technology solutions. Our efforts are focused on enhancing profitability by optimizing our cost and improving realization through the right marketing strategies

Highlights of Vedanta's recent achievements include:

- Zinc India business achieved record ore production of 14.5 million tonnes despite disruptions on account of the COVID-19 pandemic;

- Zinc India also successfully implements tele-remote operation of production drill machine. This enables underground equipment being operated from surface control room, which reduces idle time of machine, improve error troubleshooting as it is now resolved from the surface and reduce operators' exposure to humid and noisy underground environment;

- Vedanta is continuously ramping up its Gamsberg operations first phase of expansion plan with 108 kt of production in Fiscal Year 2020 as compared to 17 kt in Fiscal Year 2019. Once all expansion plan phases have been completed, the Gamsberg operations is expected to achieve a total production capacity of approximately 250 kt;

- At Vedanta's oil and gas business, two new wells hooked up in Ravva Block adding approximately 10 kboepd of incremental volumes. Gas production for Rajasthan block also increased by 122% to 79 mmscfd as early gas production facility fully commissioned with ramped up volumes to approximately 127 mmscfd;

- Vedanta's oil and gas business implemented the largest Full Tensor Gravity Gradiometry™ ("FTG") airborne survey in India covering an area of 1,200 line kilometres in Assam blocks and 8,000 line kilometres in Kutch blocks;

- Vedanta's oil and gas business implemented hydraulic fracking to connect more reservoir, improving the recovery of the field. This is India's first higher density multi-stage fracturing in transverse horizontal wells. Four wells that were fracked in Raageshwari Deep Gas field, including the hi-way frack technique. More than two million pounds of proppant were pumped in 16 hydraulic fracture stages;

- Vedanta's Aluminium business had India's highest aluminium production at 1,904 kt in Fiscal Year 2020 with record alumina production from Lanjigarh refinery at 1,811 kt through continuous debottlenecking;

- Aluminium business has achieved significantly low hot metal cost of production of $1,451/t in 4th quarter of Fiscal Year 2020. Business also saw one of the lowest quarterly alumina costs of production at Lanjigarh of $258/t due to benefits from increase in locally sourced bauxite, continued debottlenecking and improved plant operating parameters; and

- Talwandi Sabo Power plant achieved record plant availability factor of 91% in Fiscal Year 2020.

History and Development

In 1979, Mr. Anil Agarwal acquired Shamsher Sterling Corporation, which manufactured polyvinyl chloride power and control cables, overhead power transmission conductors and enamelled copper wire. Sterlite Cables Limited, in which the Agarwal family had a substantial interest, subsequently acquired this business and in 1986 changed its name to Sterlite Industries (India) Limited ("Sterlite").

- In 1988, Sterlite conducted an initial public offering in India;

- In 1995, Sterlite entered the aluminium production business by acquiring an 80% interest in MALCO;

- In 1997, Sterlite commissioned the first privately developed copper smelter in India;

- In 2001, Sterlite acquired a 51% interest in BALCO;

- In 2002, Sterlite acquired a 26% interest in HZL. In 2003, Sterlite increased its interest in HZL to 64.9%;

- In 2003, Vedanta was incorporated and re-registered as a public company and its name was changed to Vedanta Resources plc;

- In 2003, Vedanta was listed on the LSE;

- In 2004, Vedanta acquired a 51% interest in KCM;

- In 2006, Sterlite acquired Sterlite Energy Limited;

- In 2007, Vedanta acquired its iron ore business through the acquisition of a 51.2% interest in Sesa Goa Limited ("SGL") (now Vedanta Limited);

- In 2007, Sterlite completed an initial public offering on the NYSE. Vedanta's ownership interest in Sterlite decreased to 59.9%;

- In 2008, Vedanta increased its ownership interest in KCM to 79.4%;

- In 2009, Vedanta increased its ownership interest in MALCO to 94.8%;

- In 2009, Sterlite conducted a follow-on offering of its shares. Vedanta's ownership interest in Sterlite decreased to 56.9%;

- In 2009, SGL acquired SRL, which increased its iron ore reserves and resources by an estimated 101.8 million tonnes;

- In 2010 and 2011, Vedanta acquired Skorpion, Black Mountain Mining, and Lisheen;

- In 2011, SGL acquired the steel plant assets in Karnataka of Bellary Steel and Alloys Limited;

- In 2011, SGL acquired 51% of WCL;
- In 2011, Vedanta acquired a 58.5% interest in Cairn India;
- In 2012, SGL acquired Goa Energy Limited;
- In 2012, SGL acquired the remaining 49% of WCL;
- In 2014, Vedanta completed the reorganisation transactions though effective from August 2013, where in Sterlite merged with and into SGL;
  - Aluminium business of Vedanta Aluminium Limited was demerged into SGL;
  - Sterlite Energy Limited was merged with and into SGL;
  - Power business of MALCO was demerged into Vedanta Aluminium Limited (now renamed as MALCO Energy Limited or MEL);
  - Remaining MALCO was merged with and into SGL;
  - Power business of Vedanta Aluminium Limited was slump sold to SGL;
  - Vedanta's ownership in Cairn India was consolidated under SGL;
  - The name of SGL was changed to Sesa Sterlite Limited with effect from 18 September 2013;
- In 2015, the name of Sesa Sterlite Limited was changed to Vedanta Limited;
- In 2017, the merger of Cairn India with Vedanta Limited was completed;
- In 2017, Vedanta Limited's wholly owned subsidiary Cairn India Holdings Limited acquired AvanStrate Inc., a Japanese manufacturer of LCD glass substrate;
- On 2 October 2018, Vedanta Resources Plc delisted from the London Stock Exchange and re-registered as a private limited company under the name Vedanta Resources Limited;
- In May 2019, Vedanta has deconsolidated KCM and has presented the same in the income statement as a discontinued operation. See the section entitled "*Litigation — Proceedings against KCM*" for more information; and
- During the third quarter of Fiscal Year 2020, the ownership stake in ESL increased to 95.49% from 90% in Fiscal Year 2019 through the merger of VSL and ESL pursuant to the approval granted by NCLT.

Oil and Gas Business

Vedanta's oil and gas business is primarily owned and operated by Vedanta Limited and its subsidiaries. Vedanta's oil and gas business segment has 58 blocks in India. The blocks are primarily located across the Indian basins in Barmer, Krishna-Godavari, Cambay, Assam, Gujarat Kutch and Cauvery, and the Orange Basin in South Africa.

Zinc Business

Vedanta's zinc India business is owned and operated by HZL. The international zinc business is owned and operated by Skorpion in Namibia, Lisheen in Ireland and Black Mountain Mining in South Africa.

HZL. HZL was incorporated in Jaipur, India, and is headquartered in Udaipur in the State of Rajasthan. HZL's equity shares are listed and traded on the NSE and the BSE and as of 31 March 2020, had a market capitalisation of ₹656 billion ($8.77 billion). As of 31 March 2020, Vedanta Limited directly owns 64.9% of the share capital of HZL and has management control. GOI and institutional and public shareholders own the remaining 29.5% and 5.6% of HZL respectively. HZL's fully integrated zinc operations include five lead-zinc mines at the Chanderiya, Dariba and Zawar facilities in Rajasthan. Processing facilities are located at Haridwar, Punjab and Uttrakhand.

THL Zinc Namibia Holdings (Pty) Ltd. Skorpion was incorporated in Namibia, and is headquartered near Rosh Pinah. Skorpion was acquired from Anglo American plc in May 2010. The acquisition of Skorpion was completed on 3 December 2010. Skorpion produces zinc ingots of London Metal Exchange ("LME") grade.

Vedanta Lisheen Holdings Limited. Lisheen was incorporated in Ireland, and is headquartered in Thurles. Lisheen was acquired from Anglo American plc in May 2010. The acquisition of Lisheen was completed on 15 February 2011. The Lisheen mine is located in County Tipperary, Republic of Ireland. Mining and milling activities at the Lisheen mine ceased in December 2015 and expects to receive the closure certificate by December 2020.

Black Mountain Mining (Pty) Ltd. Black Mountain Mining was incorporated in South Africa, and is headquartered in Aggeneys. Black Mountain Mining was acquired from Anglo American plc in May 2010 and its assets include the Black Mountain mine and the Gamsberg deposit in South Africa. On 4 February 2011, Vedanta Limited completed the acquisition of the 74.0% ownership interest in Black Mountain Mining. Black Mountain Mining consists of the Black Mountain mine and the Gamsberg Project which produces zinc, copper and lead in concentrate.

Copper Business

Vedanta's copper business comprises operations in India, Zambia and Australia. Vedanta's Indian copper business is operated by Vedanta Limited and its Australian copper mines are held by CMT, while its Zambian copper business is owned and operated by KCM.

Vedanta Limited. Vedanta Limited's shares are listed and traded on the NSE and the BSE, and are also listed and traded on the NYSE in the form of ADSs. Vedanta, as of 31 March 2020 owns 50.1% of Vedanta Limited and has management control of the company. The remainder of Vedanta Limited's share capital is held by institutional and public shareholders. Vedanta Limited operates the copper business in India and operates the Australian business through CMT.

CMT. CMT was incorporated in Belmont, Australia, and is headquartered in Queenstown, Tasmania. Vedanta Limited owns 100.0% of CMT as of 31 March 2020 and has management control of the company. CMT's registered office is in Marin Place, Sydney.

KCM. KCM was incorporated in Lusaka, Zambia, and has its registered office in Chingola, Zambia. As of 31 March 2020, Vedanta owns 79.4% of KCM's share capital through Vedanta's wholly-owned subsidiary, VRHL. KCM's other shareholder is ZCCM Investment Holdings Plc. The Government of Zambia has a controlling ownership interest in ZCCM Investment Holdings Plc. With effect from 21 May 2019, Vedanta deconsolidated KCM and has presented the same in the income statement for the Fiscal Year 2020 Financial Statement as a discontinued operation. See the sections entitled "*Risk Factors — Risks Relating to Business — Vedanta may not be able to regain control over KCM.*", "*Business — Description of the Business — Copper Business — Latest Development at KCM*", "*Business — Litigation — Proceedings related to KCM.*" and the audit report and note 3(e) to the Fiscal Year 2020 Financial Statements.

Iron Ore Business

Vedanta's iron ore business comprises operations in India and Liberia.

Vedanta Limited. Vedanta Limited operates Vedanta's iron ore business in Goa and Karnataka, India.

Western Cluster Limited. WCL was incorporated in Liberia and is headquartered in Monrovia, Liberia. WCL's assets include development rights to the Western Cluster, a network of iron ore deposits in West Africa.

Aluminium Business

BALCO. BALCO was incorporated in New Delhi, India and is headquartered at Korba in the State of Chhattisgarh. Vedanta Limited owned 51.0%, as of 31 March 2020, of the share capital of BALCO and has management control of the company. The GOI owns the remaining 49.0%. BALCO operates two Bauxite mines in Chhattisgarh, India.

Vedanta Limited. Vedanta Limited operates Vedanta's aluminium business in the state of Odisha.

Commercial Power Generation Business

Vedanta Limited. Vedanta Limited operates the 2,400 MW coal based power plant facility in Jharsuguda in the state of Odisha. The three units of 600 MW each of coal-based thermal power plants in Jharsuguda have been converted from commercial power plants to captive power plants from 1 April 2016 and is now part of the aluminium business and one unit is an independent power plant for commercial power generation.

TSPL is a wholly-owned subsidiary of Vedanta Limited acquired by Vedanta Limited in September 2008. It is currently operating a 1,980 MW coal-based thermal commercial power plant at Talwandi Sabo, Punjab, India.

MEL. MEL is a wholly owned subsidiary of Vedanta Limited and operates a 106.5 MW coal based thermal power plant in Mettur Dam.

BALCO. BALCO operates an independent thermal power plant of 600 MW in Korba, Chhattisgarh. One unit of 300 MW has been converted from IPP to CPP since 1 January 2019.

HZL. HZL operates wind power plants in Gujarat, Karnataka, Maharashtra, Tamil Nadu and Rajasthan with a combined capacity of 274.2 MW as of 31 March 2020.

Recognition and Awards

Vedanta has been consistently recognised through the receipt of various awards and accolades. The table below sets out the numerous awards and recognitions received for the last two calendar years.

Calendar Year	Award/Recognition
2020	Hindustan Zinc, the only Indian Metal & Mining company was featured in The Sustainability Yearbook 2020 by S & P Global in association with Robeco SAM for 3rd consecutive year as Sustainability Leaders (as Member) out of 79 Metal and Mining companies globally.
	Hindustan Zinc's Corporate Communication Team bagged the Udaipur Media Awards 2020 for their efforts as a corporate towards local and regional media of Rajasthan.
	Hindustan Zinc received the "Excellent Renewable Initiative under Platinum Category" for 22 MW Solar Power Project at Rampura Agucha Mine.
	Hindustan Zinc received recognition in the category of "Significant Achievement in HR Excellence Award" in the 10th CII National HR Excellence Award Confluence 2019-20.
	Cairn Oil & Gas Won Best Technology Implementation of the Year Award 2020 under Oil &Gas for the project 'Next Generation Workplace — Office 365' at the CIO Conclave Award 2020.
	Cairn Oil & Gas, Vedanta Ltd. was awarded for 'Good work on Road Safety' in Rajasthan at district and state level during the 31st National Road Safety Week celebrations by Ministry of Transport and Highways, Government of Rajasthan.
	Maru Samvad, a Cairn communication-led community engagement campaign, won gold for Best Regional Communication Campaign under the Practice Area Awards category; won bronze for Best Campaign in Energy (Power/Oil & Gas/Renewables) under the Industry Awards category at ET Brand Equity Kaleido Awards 2020.
	Jharsuguda was adjudged winner of CII-EHS Award 2019 at the 15th State Level Competition for Best Practices in Environment, Health and Safety (EHS).
	BALCO won the Golden Peacock Award in Corporate Social Responsibility.
	BALCO received Significant Achievement HR Excellence Award organized by Confederation of Indian Industry.
	Sesa Goa's Value-Added Business won Social Impact Award by Indian Chamber of Commerce under Healthcare under Large Enterprise category.
	Sesa Goa's Value-Added Business won IMC RBNQ Performance Excellence Trophy-2019' under manufacturing category.
	Sterlite Copper Silvassa unit won Par Excellence Award for Kaizen Competition by Quality Circle Forum India at 6th National Conclave on 5S Sterlite Copper Silvassa unit Silver Award for Case study by Quality Circle Forum India at 33rd Annual chapter Convention on Quality Concepts CCQC-2019 at Mumbai.
	Nand Ghar was awarded for 'Best CSR Practices' at ET Now World CSR Awards 2020.

Calendar Year	Award/Recognition
2019	Vedanta Limited and Hindustan Zinc were conferred Dun & Bradstreet awards under Metal and minerals and non-ferrous metals category respectively.
	Vedanta was bestowed with the coveted Golden Peacock Global Award for excellence in Corporate Governance 2019.
	Hindustan Zinc received Best Sustainability Award in the category of National Award for excellence in Corporate Social Responsibility and Sustainability.
	Vedanta Limited's Dow Jones Sustainability Index ranking improved to 20th (from 24th in 2018). In addition, HZL ranked 3rd in the environment category and 5th overall in the metals and mining sector globally and ranked 1st in the environment category and 1st overall in the metals and mining sector in the Asia Pacific region.
	The world's largest PR awards programme, "The Sabre Awards" presented Oil and Gas and Vedanta Ltd, a Gold SABRE APAC 2019 award in B2B category.

Description of the Businesses

Oil and Gas Business

Introduction

Vedanta's oil and gas business is primarily owned and operated by Vedanta Limited and its subsidiary, Cairn India Holdings Limited. The oil and gas business segment has a diversified asset base with 58 blocks in India. The blocks are primarily located across the Indian basins in Barmer, Krishna-Godavari, Cambay, Assam, Gujarat Kutch and Cauvery.

Vedanta Limited's oil and gas business along with joint venture partner Petro SA, filed closure application with Petroleum Agency SA on 19 September 2018 to exit from South Africa operations. The application was accepted, and the closure certificate was granted by Petroleum Agency SA on 20 September 2019.

Vedanta Limited's oil and gas business is primarily engaged in the business of exploration, development and production of crude oil, gas and related by-products. Oil and gas business continues to contribute significantly to India's domestic crude oil production. Vedanta Limited operates approximately 25% of India's domestic crude oil production as derived from the provisional data published by Petroleum Planning and Analysis Cell of MoPNG statistics as of 31 March 2020.

The following table sets forth details of Vedanta Limited's assets including its percentage interest and its partners, as of 31 March 2020:

	Asset	Basin	Our interest	Joint venture partners	Area (in sq km)
	India				
1.	RJ-ON-90/1	Barmer	70%	ONGC	3,111
2.	CB/OS-2	Cambay	40%	ONGC, Tata Petrodyne	207
3.	RAVVA	KG Offshore	22.50%	ONGC, Ravva Oil, Videocon	312
4.	KG-ONN-2003/1	KG Onshore	49%	ONGC	315
5.	KG-OSN-2009/3	KG Offshore	100%	–	1,988
6.	AA-ONHP-2017/1	Assam	100%	–	715
7.	AA-ONHP-2017/6	Assam	100%	–	279
8.	AA-ONHP-2017/14	Assam	100%	–	1,719
9.	AA-ONHP-2017/4	Assam	100%	–	839
10.	AA-ONHP-2017/5	Assam	100%	–	758
11.	AA-ONHP-2017/8	Assam	100%	–	611
12.	AA-ONHP-2017/9	Assam	100%	–	18
13.	AA-ONHP-2017/11	Assam	100%	–	785
14.	AA-ONHP-2017/15	Assam	100%	–	1,367
15.	AA-ONHP-2017/2	Assam	100%	–	73
16.	AA-ONHP-2017/3	Assam	100%	–	268
17.	AA/ONDSF/ Hazarigaon/2018	Assam	100%	–	31
18.	KG-ONHP-2017/1	KG Onshore	100%	–	2,321
19.	KG-ONHP-2017/2	KG Onshore	100%	–	668
20.	KG-ONHP-2017/3	KG Onshore	100%	–	49
21.	KG/ONDSF/Kaza/2018	KG Onshore	100%	–	115
22.	KG-OSHP-2017/1	KG Offshore	100%	–	177
23.	KG-DWHP-2017/1	KG Deepwater	100%	–	6,574
24.	CY-OSHP-2017/1	Cauvery Offshore	100%	–	Onshore 154 Offshore 1,640
25.	CY-OSHP-2017/2	Cauvery Offshore	100%	–	Onshore 100 Offshore 2,474
26.	GK-ONHP-2017/1	Gujarat Kutch Onland	100%	–	Onshore 2,454 Offshore 236
27.	GK-OSHP-2017/1	Gujarat Kutch Offshore	100%	–	2,960
28.	GS-OSHP-2017/1	Gujarat Kutch Offshore	100%	–	2,627
29.	GS-OSHP-2017/2	Gujarat Kutch Offshore	100%	–	674
30.	MB-OSHP-2017/2	Mumbai Offshore	100%	–	2,690
31.	RJ-ONHP-2017/5	Barmer	100%	–	917
32.	RJ-ONHP-2017/6	Barmer	100%	–	925
33.	RJ-ONHP-2017/7	Barmer	100%	–	603
34.	RJ-ONHP-2017/1	Barmer	100%	–	542
35.	RJ-ONHP-2017/2	Barmer	100%	–	1,072
36.	RJ-ONHP-2017/3	Barmer	100%	–	1,430
37.	RJ-ONHP-2017/4	Barmer	100%	–	1,087
38.	CB-ONHP-2017/1	Cambay	100%	–	1,490
39.	CB-ONHP-2017/7	Cambay	100%	–	1,335
40.	CB-ONHP-2017/10	Cambay	100%	–	2,766
41.	CB-ONHP-2017/6	Cambay	100%	–	19
42.	CB-ONHP-2017/2	Cambay	100%	–	317
43.	CB-ONHP-2017/3	Cambay	100%	–	83

	Asset	Basin	Our interest	Joint venture partners	Area
					(in sq km)
44.	CB-ONHP-2017/4	Cambay	100%	–	95
45.	CB-ONHP-2017/5	Cambay	100%	–	990
46.	CB-ONHP-2017/11	Cambay	100%	–	70
47.	HF-ONHP-2017/1	Himalaya Foreland	100%	–	666
48.	GV-ONHP-2017/1	Ganga Valley	100%	–	1,817
49.	CB-ONHP-2018/1	Cambay	100%	–	185
50.	GK-OSHP-2018/1	Kutch	100%	—	1,732
51.	GK-OSHP-2018/2	Kutch	100%	—	813
52.	MN-OSHP-2018/1	Mahanadi	100%	—	1,825
53.	RJ-ONHP-2018/1	Barmer	100%	—	417
54.	AA-ONHP-2018/1	Assam	100%	—	249
55.	CB-ONHP-2018/3	Cambay	100%	—	519
56.	CB-ONHP-2018/4	Cambay	100%	—	559
57.	KG-ONHP-2018/1	KG Onshore	100%	—	2,601
58.	KG-ONHP-2018/2	KG Onshore	100%	—	230
	Total				**64,663**

Oil and gas is produced from the Rajasthan, Ravva and Cambay blocks. Gross operated production of Vedanta Limited was 185.6 kboepd in Fiscal Year 2018, 188.8 kboepd in Fiscal Year 2019 and 173.0 kboepd in Fiscal Year 2020. For Fiscal Year 2020, the Vedanta EBITDA from the oil and gas segment was $1,032 million compared to $1,100 million for Fiscal Year 2019.

Rajasthan, RJ-ON-90/1 block, Barmer Basin (operator, 70.0% participating interest)

Block RJ-ON-90/1 (the "Rajasthan Block") is an onshore block. It is Cairn's principal production asset, where Vedanta Limited along with CEHL owns a 70% participating interest pursuant to the production sharing contract. Cairn's joint operation partner, ONGC, has a 30% participating interest. The Rajasthan Block is spread over 3,111 sq. kms in the west of Barmer district, and consists of three contiguous development areas ("DA"): (i) DA 1, primarily comprising the Mangala, Aishwariya, Raageshwari and Saraswati (ii) DA 2, primarily consisting of the Bhagyam, NI and NE and Shakti fields; and (iii) DA 3, comprising the Kaameshwari West fields.

The Mangala field was discovered in January 2004. This was followed by many other discoveries including the Aishwariya and Bhagyam fields. In the Rajasthan Block, 38 discoveries have been established, since inception. Exploration activities and studies indicate that the block has further potential for reserves for future growth opportunities.

Cairn also own and operate significant infrastructure assets to facilitate the processing, transportation, and sale of crude oil produced in the Rajasthan Block.

Cambay, CB/OS-2 block, Cambay Basin (operator, 40.0% participating interest)

The Cambay CB/OS-2 (the "Cambay block") is an offshore block which is located in the Cambay Basin of the state of Gujarat in western India. Vedanta Limited's oil and gas business's operations in the Cambay block are centred on the Lakshmi and Gauri oil and gas fields and the CB-X development area. Based on exploration and development activities undertaken by Vedanta Limited. the Cambay block has yielded natural gas discoveries in its offshore Lakshmi and Gauri fields and onshore CB-X field and crude oil discoveries in the former two fields. Vedanta Limited, along with its Joint venture partners ONGC and Tata Petrodyne Limited ("Tata Petrodyne"), commenced its gas production from the Lakshmi gas field in 2002 and from the Gauri field in 2004. Production of co-mingled crude oil, which consists of crude oil plus condensate, from the Gauri field commenced in 2005. Lakshmi and Gauri offshore fields cover areas of 121.1 square kms and 52.7 square kms, respectively, in the Cambay Basin and lie off the coast of the state of Gujarat in water depths of approximately 20 metres. CB-X is an onshore gas field situated in the Cambay block and covers an area of 33.3 square kms. Currently, there is no production from CB-X field.

Ravva, PKGM-1 block, Krishna Godavari Basin, Eastern India (operator, 22.5% participating interest)

Vedanta Limited's oil and gas business production operations in the Krishna-Godavari Basin are centred on the Ravva Block, lying off the coast of Andhra Pradesh in Eastern India, in water depths up to 40 metres. Developed in partnership with ONGC, Videocon Industries Limited and Ravva Oil Singapore, Vedanta Limited's oil and gas business became the operator of Ravva Block in 1996.

KG Onshore, KG-ONN-2003/1, Krishna Godavari Basin (49.0% participating interest)

The onshore block KG-ONN-2003/1, located in the Krishna Godavari basin in the state of Andhra Pradesh, was awarded in NELP V round to a joint venture between Vedanta Limited and ONGC. Nagayalanka-1Z was the first discovery in the block.

KG Offshore, KG-OSN-2009/3, Krishna Godavari Basin (operator, 100.0% participating interest)

The offshore block KG-OSN-2009/3 covers an area of 1,988 square kms and is located in the Krishna Godavari Basin off the coast of the state of Andhra Pradesh.

South Africa, Block 1-Orange Basin, South Africa (operating through a subsidiary, 60.0% participating interest)

On 16 August 2012, Cairn signed a farm-in agreement with PetroSA, the national oil company of South Africa, for the 19,898 square kms off-shore block one, located in the Orange Basin in South Africa. Cairn South Africa Proprietary Limited, a wholly owned subsidiary of Vedanta Limited held a 60.0% participating interest in offshore block 1 with operatorship and PetroSA as the Joint venture partner.

The regulator, Petroleum Agency SA, intimated to the joint venture on lapsing of the exploration right as a consequence of the Supreme Court of Arbitration ruling in South Africa (Mawatse Judgement). Accordingly, along with joint venture partner PetroSA, closure application with Petroleum Agency SA has been filed in 19 September 2018 to exit from South Africa operations. The application was accepted and the closure certificate was granted by Petroleum Agency SA on 20 September 2019.

Open Acreage Licensing Policy (100% participating interest)

Under the OALP, revenue-sharing contracts have been signed for 41 blocks in October 2018 and for 10 exploration blocks as part of the OALP Round II and III in July 2019. These blocks offer a rich conventional and unconventional resource play. The secured blocks increased the acreage of Vedanta Limited's oil and gas business by approximately 65,000 sq km.

Discovered Small Fields (100% participating interest)

Vedanta Limited's oil and gas business has won two discovered small fields in DSF Round II named as Hazarigaon and Kaza gas field located in Assam and KG basins respectively.

Principal products

Oil. Vedanta Limited produces crude oil of various grades with different degrees and contents across fields. The crude oil in the majority of fields in the Rajasthan Block is medium sweet oil with high pour point. Conversely, the crude oil produced from Ravva and Cambay block are light sweet in nature.

Gas. The Rajasthan, Ravva and Cambay blocks produce natural gas and natural gas commingled with crude oil. While Cairn has been historically selling gas from the offshore blocks of Ravva and Cambay, it commenced gas sales in the Rajasthan Block in Fiscal Year 2014, following the regulatory approval in March 2013.

Production

The table below sets out Vedanta Limited's gross production[(1)] for the periods indicated:

	Fiscal Year		
	2018	**2019**	**2020**
Average Daily Gross Operated Production (boepd)	185,587	188,784	172,971
Rajasthan	157,983	155,903	144,260
Ravva	17,195	14,890	14,232
Cambay	10,408	17,991	14,479
Average Daily Working Interest Production (boepd)	118,620	119,798	110,459
Rajasthan	110,588	109,132	100,982
Ravva	3,869	3,350	3,202
Cambay	4,163	7,196	5,792
KG-ONN	0	119	483
Total Oil and Gas (mmboe)			
Oil and Gas-Gross	67.7	68.9	63.3
Oil and Gas-Working Interest	43.3	43.7	40.4

(1) See the section entitled "*Presentation of Information — Basis of Presentation of Reserves and Resources — Reserves and Production*" for an explanation of the basis of preparation of production amounts.

The following table sets forth Vedanta Limited's production for the periods indicated.

	Fiscal Year		
	2018	**2019**	**2020**
Gross:			
Oil (bopd)	177,678	178,207	154,677
Gas (mmscfd)	47	64	110
Oil and gas (boepd)	**185,587**	**188,784**	**172,971**
Total:			
Oil (mmbbls)	64.8	65.0	56.6
Gas (mmboe)	2.9	3.9	6.7
Oil and gas (mmboe)	67.7	68.9	63.3

Vedanta Limited's Estimates of Hydrocarbons Initially in Place, Reserves and Contingent Resources

Vedanta Limited uses various measures of hydrocarbons to make decisions regarding exploration priorities and investment in field developments. In the exploration phase, estimates of hydrocarbons initially in place, and the associated estimate of prospective resource are essentially speculative and subject both to a binary risk (probability of success or failure) and considerable uncertainty of volumetric magnitude. Following successful exploration and appraisal work, and as a field matures technically and commercially through development work and actual production, it becomes possible for Vedanta Limited to make estimates, which may change over time, of the volumes of hydrocarbons or reserves that, in varying degrees of certainty or uncertainty, will ultimately be recoverable.

Vedanta Limited relies primarily on estimates of 2P reserves for purposes of significant capital investment decisions.

Estimates of contingent resources are also used as a further measure of the potential commerciality of known accumulations of hydrocarbons in Vedanta Limited's areas. The estimation of these resources, and the likelihood that they may be reclassified as reserves, depends on Vedanta Limited's ability to prove commercial and technical viability of recovery within a reasonable timeframe. Vedanta Limited employs reserves and resources definitions according to international standards set by the Society of Petroleum Engineers and the World Petroleum Council which provide detailed descriptions for each category of reserves and resources.

The table below sets forth certain data regarding Vedanta Limited's estimates of gross hydrocarbons initially in place, gross and net working interest reserves and contingent resources from fields within the Rajasthan Block, the Ravva Block, Cambay Basin Block and the KG-ONN-2003/1 block as of 31 March 2020. In this table, gas has been converted into oil equivalent using a conversion factor of 6,000 standard cubic feet per barrel of oil equivalent. Based on the Fiscal Year 2020 gross production, the gross 2P reserves and 2C resources have a life of approximately 19 years.

	Gross Proved Plus Probable Hydrocarbons Initially in Place	**Gross Proved Plus Probable Reserves and 2C resources**	**Net Working Interest Proved Plus Probable Reserves and 2C resources**
		(mmboe)	
Rajasthan Block			
Total "MBA" Fields	2,288	317	222
Rajasthan enhanced oil recovery	–	317	222
Rajasthan Block Other Fields	3,535	449	314
Ravva Block	692	28	6
Cambay Basin Block	292	40	16
KG-ONN-2003/1	303	36	17
KG OSN 2009/3	32	4	4
OALP and DSF	14	3	3
Total (excluding enhanced oil recovery)	7,155	877	584
Total (including enhanced oil recovery)	7,155	1,194	806

DeGolyer and MacNaughton's Estimates of Reserves

DeGolyer and MacNaughton, independent petroleum engineering consultants, had been engaged to prepare estimates of the proved, probable, and possible oil, condensate, and marketable gas reserves and the contingent resources contained within the areas of Vedanta Limited.

The estimation of oil and gas reserves and resources is uncertain and subjective and different, reasonable estimates may be produced by different engineers analysing the same geological, technical and commercial data. As a result, there are differences between Vedanta Limited's estimates and DeGolyer and MacNaughton's estimates.

The table below sets forth a summary of the gross and net participating interest oil equivalent reserves reported in millions of barrels for certain properties which have been derived from estimates of gross oil and marketable gas reserves prepared by DeGolyer and MacNaughton for fields within the Rajasthan Block, the Ravva Fields, and fields within the Cambay Basin Block and the KG-ONN-2003/1 Block. In this table, marketable gas has been converted into oil equivalent using a conversion factor of 6,000 standard cubic feet per barrel of oil equivalent.

	Gross Proved Plus Probable Hydrocarbon Reserves[(1)]	**Net Participating Interest Proved Plus Probable Hydrocarbon Reserves**[(1)]
	(mmboe)	**(mmboe)**
Rajasthan Block		
Mangala	259.8	181.9
Bhagyam	50.2	35.1
Aishwariya	49.3	34.5
Total "MBA" Fields	**359.3**	**251.5**
Rajasthan Block Small Fields	–	–
Rajasthan Block Other Fields	152.9	107.0
Ravva Block	**23.8**	**5.4**
Cambay Basin Block	**11.1**	**4.4**
KG-ONN-2003/1	**4.0**	**2.0**

(1) All numbers are as of 31 March 2020.

The difference in total gross "Proved plus Probable" hydrocarbon reserves estimates between Vedanta Limited and DeGolyer and MacNaughton is approximately 1%. The field by field differences are due to differences in the interpretations made by the estimating engineers.

The Rajasthan Block

The majority of the estimated hydrocarbons in place, 2P reserves and contingent resources attributable to fields in which Vedanta Limited has an interest are contained in the Rajasthan Block.

As of 31 March 2020, Vedanta Limited estimates the gross hydrocarbons initially in place and the gross 2P reserves plus 2C resources of 5.8 bnboe and 1.1 bnboe.

As of 31 March 2020, Vedanta Limited's oil and gas estimates that the MBA fields (including enhanced oil recovery) contained gross hydrocarbons initially in place and the gross 2P reserves plus 2C resources 2.3 bnboe and 0.6 bnboe respectively. The other fields in Rajasthan Block contained gross hydrocarbons initially in place and the gross 2P reserves plus 2C resources 3.5 bnboe and 0.5 bnboe, respectively.

Set out below is the gross production from the Rajasthan Block and Vedanta Limited's net participating interest with regard to such production for the periods indicated:

		Fiscal Year		
Particulars Average Daily Production	**Units**	**2018**	**2019**	**2020**
Gross Operated	Boepd	157,983	155,903	144,260
Net Operated	Boepd	110,588	109,132	100,982
Oil	Bopd	108,015	104,975	91,748
Gas	Mmscfd	15.4	24.9	55.4

The Rajasthan Block PSC

Vedanta Limited's oil and gas business along with CEHL are working in partnership with its joint operations partner, ONGC RJ-ON-90/1 Block located in Barmer district, Rajasthan Block. The Rajasthan Block production sharing contract ("Rajasthan Block PSC") was signed in May 1995 between the GOI and a consortium consisting of ONGC and Shell India Production Development B.V. ("SIPD").

Vedanta Limited's oil and gas business acquired interest in the Block from SIPD in two tranches and held 100.0% interest on 20 June 2003. Under the Rajasthan Block PSC, the GOI has an option to acquire a participating interest of 30.0% in any development area containing a commercial discovery. The GOI exercised their right in all three development areas, specifically, DA 1 in 2005, DA 2 in 2007 and DA 3 in 2009, acting through its nominee ONGC, and acquired a 30.0% participating interest. As of 31 March 2020, ONGC holds 30.0% and Vedanta Limited's oil and gas business holds 35.0% participating interest in the Rajasthan Block and the remaining 35.0% interest being held by CEHL, which is a wholly owned subsidiary of Vedanta Limited.

As per the terms of the Rajasthan Block PSC and permissions from the GOI, the crude oil and condensate produced at Rajasthan Block is being sold to both public sector undertakings and private refineries. As of 31 March 2020, commercial sales arrangements were in place for over 250,000 bopd with public sector undertakings and private refineries.

The Rajasthan Block PSC established a Management Committee for the Rajasthan Block which consists of four members, two of whom are nominated by and represent the GOI and the licensee, i.e. ONGC, taken together, and two of whom are nominated by and represent Vedanta Limited's oil and gas business and CEHL. The Management Committee must unanimously approve annual work programmes, budgets, proposals for the declaration of a discovery as commercial, field development plans, and the delineation of or additions to a development area as provided in Rajasthan Block PSC.

The Rajasthan Block PSC is valid until May 2020, unless it is terminated in accordance with its terms, but may be extended by mutual agreement among the parties for up to an additional term of five years, provided in case of commercial production of natural gas which is expected to continue beyond 2020, the production sharing contract shall be extended for a period of 35 years from 15 May 1995. There is also a provision to further extend the Rajasthan Block PSC by agreement of the parties if production of crude oil or of natural gas is expected to continue after the relevant period.

Vedanta Limited filed a writ petition before the High Court of Delhi against the Ministry of Petroleum and Natural Gas ("MoPNG"), the DGH and ONGC regarding the extension of the tenure for the Rajasthan Block PSC for the Rajasthan Block. As of the date of this Offering Circular, the Rajasthan Block PSC addendum for extension of the tenure of the Rajasthan Block has not been executed. See the section entitled "*Business — Litigation — Writ petition filed in the Delhi High Court by Vedanta Limited relating to extension of tenure of the Rajasthan Block PSC.*" for more information.

Separately, Cairn has initiated arbitration and filed a Notice of Arbitration dated 1 March 2019 against ONGC with respect to the issue of cost oil finalisation. ONGC filed its response on 12 April 2019. The Arbitral Tribunal stands constituted. A Statement of Claim was filed by Vedanta on 31 January 2020, in accordance with the procedural timetable. Due to the COVID-19 pandemic restrictions, ONGC has been granted an extension to file its responses by 31 August 2020. In parallel, on 10 May 2019, ONGC filed an interim application before the High Court of Delhi under Section 9 of the (Indian) Arbitration Act in respect of their claims. No order has been passed in the matter and the matter will be listed in due course.

The Rajasthan Block had benefitted from a tax holiday of seven years from Fiscal Year 2009 (the year of commencement of commercial production from the Rajasthan Block) to 31 March 2016. However, during the seven-year tax holiday, minimum alternate tax rules were applicable which resulted in a taxation of book profits computed in accordance with the generally accepted accounting principles as used in India. Any minimum alternate tax paid can be carried forward for a total period of 15 years from the year of payment and used to reduce corporate tax to be paid in future years in excess of minimum alternate tax payable in those years.

Under the Rajasthan Block PSC, all crude oil sales made to GOI or Government companies as well as private buyers are valued at a weighted average FOB selling price per barrel of a basket of international crude oil as agreed by all parties which is quoted in Platts, a provider of energy information. For any delivery period in which sales take place, the price is set at an average price per barrel determined by calculating the average for the month of such delivery period of the mean of the high and low FOB prices.

The crude oil produced at the Rajasthan Block is benchmarked to Bonny Light, an international low sulphur crude oil published in Platts Crude Oil Market wire on a daily basis. The pricing formula also adjusts for differences in yield and quality.

In the event of any dispute, difference or claim between the parties to the Rajasthan Block PSC arising out of or in connection with any of the terms and conditions of the said PSC or concerning any interpretation or performance thereof which cannot be settled amicably may be referred a sole expert, to be appointed by the parties to the dispute jointly, who is to be an independent and impartial person of international standing with relevant qualifications and experience. Under the provisions of the Rajasthan Block PSC, the decision of the sole expert is final and binding on the parties and not subject to arbitration. The Rajasthan Block PSC also provides for settlement of any dispute, difference or claim between the parties through arbitration.

Mangala

The Mangala field commenced production in August 2009 and continues to be the largest contributor to production from the Rajasthan asset. To increase the ultimate oil recovery and support for production volumes, Cairn has embarked on an enhanced oil recovery project, which was successfully executed in Fiscal Year 2016.

In order to accelerate recovery from the Mangala field, an infill drilling campaign consisting of 15 wells was carried out during Fiscal Year 2018. Further, during Fiscal Year 2019, Cairn executed a 45 well infill drilling campaign in the field. As of 31 March 2020, 35 wells were hooked up.

Bhagyam

Bhagyam, the second largest field in Rajasthan, forms part of DA2 and commenced production in January 2012.

Cairn is looking to replicate the success of the Mangala enhanced oil recovery programme to enhance recovery from the Bhagyam field through the execution of polymer flooding. The field development plan for the Bhagyam polymer enhanced oil recovery project has been approved and the drilling of 28 well programme has been completed, of which 19 wells are hooked up as of 31 March 2020. Surface facility development for polymer implementation has commenced and polymer injection is ongoing.

Aishwariya

Aishwariya, the third largest discovery in Rajasthan, commenced production in March 2013. Cairn is replicating the success of the Mangala enhanced oil recovery programme to enhance recovery from the Aishwariya field through the execution of polymer flooding. The approved field development plan for the Aishwariya is being executed and all the 14 planned wells have been drilled, of which eight wells are hooked up as of 31 March 2020. Surface facility development for polymer implementation has commenced and polymer injection is ongoing.

South Satellite fields including Raageshwari, Saraswati, Guda and Kaameshwari

The Raageshwari oil field commenced production in March 2012, while the Saraswati field commenced production in May 2011. Kaameshwari and Guda oil fields commenced production in May and June 2017, respectively.

Availability of the integrated processing and evacuation facility has reduced operating costs and has therefore made these fields economically viable.

Facilities

Mangala Processing Terminal

The Mangala processing terminal is spread over an area of 1.6 square kms and is a core asset. The Mangala processing terminal processes crude oil produced from various oil fields in the Rajasthan Block. The Mangala processing terminal is currently operational with three oil processing trains. The overall liquid handling nameplate capacity of the oil processing trains is 850 kboepd. The oil processing train primarily consists of slug catchers, production heaters, a production separator and settling tank for oil water separation and degassing. Stabilised crude after meeting export crude specification is transported to refineries through a 24-inch diameter continuously heated and insulated pipeline. The Mangala processing terminal's integrated production facilities support the field development plan approved production, which is in line with Cairn's unified Rajasthan Block off-take capability.

Raageshwari Gas Processing Facility

The Raageshwari gas terminal about 70 kms from the Mangala processing terminal, comprises facilities to remove condensable hydrocarbon liquids and water from the gas produced from Raageshwari gas terminal wells. Gas produced and processed at Raageshwari gas terminal was supplied solely to Mangala processing terminal and to the heating stations along the oil export pipeline from Mangala processing terminal. In March 2013, Cairn commenced the commercial sale of gas from the Raageshwari deep gas field. This was the first step towards unlocking the natural gas potential of the Rajasthan assets. An ongoing drilling programme with surface upgradation project is expected to increase natural gas production and sales from the field. The construction of facility is progressing as per plan. The upgraded facility along with existing and early production facility shall have the capacity to process approximately 240 mmscfd of gas. On the pipeline front, GSPL India Gasnet Limited (GIGL) has commissioned a pipeline connecting Raageshwari Gas Terminal to Pali and thereon connecting to Palanpur in Gujarat. Gas flow via GIGL line commenced in the third quarter of Fiscal Year 2019.

Power facilities

At the Rajasthan Block, captive power is generated at the Mangala processing terminal via steam turbine generators and Raageshwari gas terminal via gas engines. The total power capacity across Mangala processing terminal and Raageshwari gas terminal aggregates to 63.3 MW. The gas used as fuel is the associated gas from the fields at Rajasthan. For power requirements exceeding the power generation capacity, which is based on associated gas availability, Cairn taps into the Rajasthan state grid power or buys it through open access from the energy exchanges at lower rates.

Mangala Development Pipeline

The Mangala development pipeline is designed to evacuate the crude oil and transport gas from the Rajasthan Block. Beginning at the Mangala processing terminal and Raageshwari terminal respectively, the 24 inch crude oil and 8 inch gas pipeline passes through eight districts across two states, Rajasthan and Gujarat. The pipeline ends at Bhogat near Jamnagar on the western coast of India. There are buffer crude storage terminals at Radhanpur and Viramgam for sales to Indian Oil Corporation and off-take lines at Salaya for sales to the Reliance India Limited and Nayara Energy refineries in Jamnagar.

Since its commissioning, total cumulative crude oil sales of 551 million barrels have been achieved through the existing pipeline facilities up to 31 March 2020. With the use of drag reducing agents, the proven dispatch capacity of the Mangala development pipeline has been enhanced to around 250,000 bbls per day. Given its length, the Mangala development pipeline incorporates a pipeline intrusion detection system to provide surveillance along its entire length by using fibre optics. Vedanta Limited's oil and gas business's pipeline operations received accreditation of both OHSAS: 18001 and ISO: 14001 systems in Fiscal Year 2018.

In Fiscal Year 2014, gas sales commenced through the 8 inches gas line. Capacity was further enhanced through installation of higher capacity gas compressors at Raageshwari and Viramgam terminals to nearly double gas sales capability; as well as modification of impellers of the mainline booster pumps at Viramgam. During Fiscal Year 2016, stabilisation of the compressors and optimisation of plant operations aided production.

In November 2015, the Salaya-Bhogat pipeline and terminal at Bhogat were commissioned and the first cargo of 500,000 barrels of Rajasthan crude oil was successfully loaded in December 2015 through the Bhogat terminal for Mangalore Refinery and Petrochemicals Limited ("MRPL"). The terminal has provided access to a larger market for Rajasthan crude.

Bhogat Terminal Facilities

The Bhogat terminal in the Jamnagar district, Gujarat, is a 160 hectare site located eight kms from the Arabian Sea coast. The terminal serves to facilitate the storage and evacuation of crude oil by sea. The terminal consists of tankages with storages capacity of around 2.1 million barrels of Rajasthan crude. It also has associated facilities for the operation of terminal and marine export of crude. The evacuation facility includes two 24 inch sub-sea export pipelines from the Bhogat landfall point to the single point mooring system to enable crude transfer and a single point mooring system and sub-sea pipeline end manifold in deep sea to enable tanker berthing and loading. The terminal was commissioned in November 2015 and the dispatch of Rajasthan crude to MRPL has commenced. In Fiscal Year 2018 supplies of Rajasthan Block crude to Bharat Petroleum Corporation Limited ("BPCL") commenced from Bhogat terminal. During Fiscal Year 2020, cargos from Bhogat terminal was successfully loaded during monsoon season by deploying additional marine support infrastructure to ensure safe operations.

The Ravva Block — Krishna Godavari Basin

Vedanta Limited's oil and gas business's production operations in the Krishna-Godavari Basin are centred on the Ravva Block, lying off the coast of Andhra Pradesh in Eastern India, in water depths up to 40 metres. Developed in partnership with ONGC, Videocon Industries Limited and Ravva Oil Singapore, Vedanta Limited's oil and gas business became the operator of Ravva Block in 1996.

As of 31 March 2020, Ravva field had produced more than 297 mmbbls of crude oil and 367 bcf of gas.

The Ravva PSC

The production sharing contract for the exploration, development and production of the Ravva Block (the "**Ravva PSC**") was signed on 28 October 1994 between GOI and a consortium consisting of ONGC, Videocon Industries Limited (formerly Videocon Petroleum Limited), Ravva Oil and Cairn Energy India Pty Limited (formerly known as Command Petroleum (India) Pty Limited) ("**Command Petroleum**") with Command Petroleum being designated as the operator. In 1996, Cairn Energy acquired Command Petroleum, including its interest in the Ravva Block, and subsequently Vedanta Limited's oil and gas business (since merged with Vedanta) became the operator.

As at 31 March 2020, Vedanta Limited held a 22.5% working interest in the Ravva Block with the remaining interests currently held by ONGC (40%), Videocon Industries Limited (25%) and Ravva Oil (12.5%) (together the "Ravva Joint Operating Partners"). The Ravva PSC was originally valid until 27 October 2019. The MoPNG, through a notification dated 28 March 2016 issued a policy for the grant of an extension to the production sharing contracts signed by the GOI awarding small, medium sized and discovered fields to private joint ventures (the "Ravva Extension Policy"). The Ravva Extension Policy defines the framework for granting of the extension and covers 28 small and marginal fields, including the Ravva field.

The Ravva Extension Policy, amongst others, provides for an increased share of profit petroleum of 10% for the GOI during the extended term of the Ravva PSC and payment of royalty and cess as per prevailing rate in accordance with PNG rules 1959 and OIDB Act. According to the terms of the Ravva Extension Policy, the joint operation partners applied to the GOI seeking extension of the Ravva PSC by ten years and the DGH vide 11 March 2019 has communicated to the GOI, approval of PSC extension for ten years with some conditions. All the joint venture parties have submitted the acceptance of these conditions to the DGH vide their letter dated 25 April 2019. All the Parties including GOI have executed the PSC amendment incorporating the period extension of 10 years and other terms and conditions of extension on 24 October 2019.

As per the terms of the Ravva PSC, the crude oil and condensate produced from the Ravva Block is being sold to the public sector undertakings refineries. As of 31 March 2020, commercial sales arrangements are in place for over 25,000 bopd with public sector undertakings. All sales to the GOI nominees are to be valued at a FOB selling price per barrel in US dollars based on a pricing formula based on Bonny Light ascertained on Platts.

The Ravva PSC also provides that royalties and cess are payable on production and sales respectively. The royalty rate on crude oil and casing head condensate is set at ₹481 per metric ton ($1.0 per barrel), regardless of the value of the crude oil. A levy on the production of crude oil under the provisions of the Oil Industry (Development) Act, 1974 of India (the "OIDA Cess") is set by the Ravva PSC at ₹900 per metric ton of crude oil production ($1.8 per barrel). The royalty payable on natural gas is set at 10% of the wellhead value of the natural gas (typically 9% of natural gas revenue). OIDA Cess is not payable on natural gas production. Royalties and OIDA Cess are capped by the Ravva PSC at these levels regardless of the generally prevailing royalty and cess rate, however, post Ravva PSC extension these will be as per prevailing rate under PNG rules 1959 (10% cum duty of the wellhead value for crude oil) and OIDB Act 1974 (20% ad-valorem). Payment of royalty and OIDA cess payments are recoverable under the Ravva PSC before any profit is allocated among the parties. As ONGC originally discovered the Ravva Block, Vedanta Limited's oil and gas business and other members of the Ravva Joint Operating partner are obliged to make a series of production payments to ONGC based on cumulative crude oil production. The method of calculating the production payments is set out below.

	Gross Payment Owed to ONGC	Net Payment by Vedanta Limited — oil and gas business
	($ million)	
For every 25 million barrels produced up to 75 million barrels	9.0	3.4
For every 5 million barrels produced between 75-100 million barrels	1.8	0.7
For every 5 million barrels produced between 100-225 million barrels	1.7	0.6
For every 5 million barrels produced between 225-250 million barrels	1.4	0.5
For every 5 million barrels produced over 250 million barrels	0.9	0.3

Disputes have arisen between the Ravva Joint Operating Partners over the interpretation of the Ravva PSC which have required arbitration. These include disputes between the GOI and the Ravva Joint Operating Partners on the issues pertaining to excess cost recovery made by the Ravva Joint Operating Partners against the base development cost pursuant to the Ravva PSC.

See the sections entitled "*Business — Litigation — Arbitration proceedings on issues related to the cost recovery of the Ravva Block*." and "*Business — Litigation — Ravva Joint Venture Arbitration Proceedings: Base Development Cost*." for more information.

Facilities

Currently, there are eight unmanned offshore platforms and a 225-acre onshore processing facility at Surasaniyanam, Andhra Pradesh, for processing the natural gas and crude oil produced from the offshore field. The Ravva onshore terminal operates under internationally recognised environmental standard (ISO 14001) and occupational health and safety standard (OHSAS 18001). The onshore facility has the capacity to handle 90,000 barrels per day of liquid, 95 mmscfd of natural gas, and 110,000 bbls of water injection per day. The terminal also has the capacity to store 1.0 mmbbls of crude oil and captive power generation capacity of 10 MW.

Production from the Ravva Field

The production of Ravva Block decreased from 14,890 boepd on a gross basis in Fiscal Year 2019 to 14,232 boepd in Fiscal Year 2020. This was primarily due to natural field decline partially offset by the two new wells bought online through Ravva drilling campaign commenced during Fiscal Year 2020.

The following table sets out the net average oil and gas daily production from the Ravva Block for the years ended 31 March 2018, 2019 and 2020.

		Fiscal Year		
Particulars Average Daily Production	**Units**	**2018**	**2019**	**2020**
Gross Operated	Boepd	17,195	14,890	14,232
Net Operated	Boepd	3,869	3,350	3,202
Oil	Bopd	3,329	2,800	2,474
Gas	Mmscfd	3.2	3.3	4.4

The Cambay Basin Block — Lakshmi, Gauri and CB-X

The Cambay CB/OS-2 ("Cambay block") is an offshore block which is located in the Cambay Basin of the state of Gujarat in western India. Vedanta Limited's oil and gas business's operations in the Cambay block are centred on the Lakshmi and Gauri oil and gas fields and the CB-X development area. Based on exploration and development activities undertaken by Vedanta Limited's oil and gas business, the Cambay block has yielded natural gas discoveries in its offshore Lakshmi and Gauri fields and onshore CB-X field and crude oil discoveries in the former two fields. Vedanta Limited's oil and gas business along with its Joint venture partners ONGC and Tata Petrodyne commenced its gas production commenced from the Lakshmi gas field in 2002 and from the Gauri field in 2004. Production of co-mingled crude oil, which consists of crude oil plus condensate, from the Gauri field commenced in 2005. Lakshmi and Gauri offshore fields cover areas of 121.1 sq. kms and 52.7 sq. kms, respectively, in the Cambay Basin and lie off the coast of the state of Gujarat in water depths of approximately 20 metres. CB-X is an onshore gas field situated in the Cambay block and covers an area of 33.3 sq. kms. Currently, there is no production from CB-X field.

As of 31 March 2020, the block has produced 42 mmbbls of crude oil and 242 bcf of gas.

Cambay Basin PSC

Exploration, development and production of the Cambay block is governed by a production sharing contract between the GOI and a consortium consisting of ONGC, Tata Petrodyne and Vedanta Limited's oil and gas business, (the "Cambay Joint Operating Partners") which was signed on 30 June 1998 (the "Cambay PSC") and runs until 2023 unless the Cambay PSC is terminated earlier in accordance with its terms and may be extended for a further period of not exceeding five years, provided that in the event of commercial production of non-associated natural gas the Cambay PSC may be extended for period not exceeding 35 years from the 30 June 1998. By way of a notification dated 7 April 2017, the Ministry of Petroleum and Natural Gas ("MoPNG") issued a policy for the grant of extension to the production sharing contracts signed by the GOI awarding Pre-NELP blocks (the "Pre-NELP Extension Policy"), which defines the framework for granting extensions for Pre NELP blocks. The Pre-NELP Extension Policy, amongst others, provides for an increased share of profit petroleum of 10% for the GOI during the extended term of the Cambay PSC. The extension application for the Cambay block shall be due for filing in 2021. Vedanta Limited's oil and gas business's participating interest in the Cambay Basin joint operation consists of a 40% interest in the Lakshmi, Gauri and CB-X development areas. The remaining interests in these development areas are held by ONGC (50%) and Tata Petrodyne (10%).

Facilities

The 82-acre onshore processing facility at Suvali processes natural gas and crude oil from the Lakshmi and Gauri fields. This facility has a capacity to process 150 mmscfd of natural gas and 12,000 bopd of crude oil and includes a three-stage separator oil processing train, four storage tanks of combined capacity of 40,000 bbls as well as 4.8 MW captive power generation capacity. As part of the asset's long-term facility augmentation plan, the liquid handling capacity has been augmented. The oil processing capacity has been increased by debottlenecking of liquid processing train by adding additional heater and heat exchangers. Also, the water treatment and disposal capacity has been augmented by increasing the Effluent Treatment Plant (ETP) capacity from 3,000 bwpd to 6,000 bwpd and laying of new water disposal pipeline. The processing plant and offshore infrastructure are certified to ISO 14001 and ISO 45001 standards.

Production from the CB/OS-2 Field

During Fiscal Year 2020, the Cambay block produced 14,479 boepd, representing a 20% year-on-year decrease, which was primarily due to natural field decline partially offset by production optimization measures.

The following table sets out the net average oil and gas daily production from the CB/0S-2 block for the years ended 31 March 2018, 2019, and 2020.

		Fiscal Year		
Particulars Average Daily Production	Units	2018	2019	2020
Gross Operated	Boepd	10,408	17,991	14,479
Net Operated	Boepd	4,163	7,196	5,792
Oil	Bopd	3,430	6,320	5,046
Gas	Mmscfd	4.4	5.3	4.5

KG-ONN-2003/1, Krishna Godavari Basin (49% participating interest)

The onshore block KG-ONN-2003/1, located in the Krishna Godavari basin in the state of Andhra Pradesh, was awarded in NELP V round to a joint venture between Vedanta Limited's oil and gas business and ONGC. Vedanta Limited's oil and gas business and ONGC entered into a production sharing contract on 23 September 2005 (the "KG-ONN-2003/1 PSC").

The Declaration of Commerciality for the two Nagayalanka discoveries (Nagayalanka-1z and Nagayalanka SE-1) was approved at the management committee meeting held in July 2014. Operatorship was then transferred to ONGC as per the KG-ONN-2003/1 PSC. Production from existing well has commenced in first quarter of Fiscal Year 2019. Drilling of three development wells was completed by fourth quarter of Fiscal Year 2019, of which one well is online. Hydrofrac and well completion campaign in remaining two wells is expected to be completed in the near term.

Krishna-Godavari Offshore

KG-OSN-2009/3, Krishna Godavari Basin (operator, 100% participating interest)

The offshore block KG-OSN-2009/3 covers an area of 1,988 square kms and is located in the Krishna Godavari Basin off the coast of the state of Andhra Pradesh. Vedanta Limited's oil and gas business is the operator and holds a 100% interest in the block. Block KG-OSN-2009/3 is a shallow water block with water depths within the block ranging between near shore to 400 metres. The production sharing contract was signed on 30 June 2010 and the petroleum exploration licence was granted in August 2010. The block is currently in the exploration phase. The phase was extended till 30 January 2019 due to Ministry of Defence access restrictions. Further extension was sought from the DGH and the MoPNG as per available extension policies and PSC provisions and same has been granted till 30 April 2020 pursuant to the DGH vide letter dated 30 January 2020. Period extension of one year was further sought on excusable delay and also removal of access restriction imposed by Ministry of Defence. A further extension was granted until 4 December 2020 pursuant to the DGH vide letter dated 17 June 2020. In light of the COVID-19 pandemic, force majeure was invoked by the parties which was accepted by the DGH in its vide letter dated 30 March 2020.

A two-well exploratory drilling campaign commenced during the first quarter of Fiscal Year 2019 to establish the potential of the block. Gas discovery was notified post first well drilling. In the fourth quarter oil discovery was notified in second exploratory well. Analysis and studies are ongoing to assess the discoveries and further potential.

Open Acreage Licensing Policy

Vedanta Limited's oil and gas business was awarded 51 blocks under OALP I, II and III and revenue sharing contracts have been signed for them with $800 million commitment. The 51 blocks, comprising 40 onshore and 11 offshore blocks, are located primarily in established basins, and with some optimally located close to existing infrastructure. Contracts for seismic acquisition has been awarded for Assam, Rajasthan, Cambay and Offshore region blocks and acquisition and interpretation of data is in progress.

Discovered Small Fields

Vedanta Limited's oil and gas business has won two discovered small fields in DSF Round II named as Hazarigaon and Kaza gas field located in Assam and KG basins respectively. These discovered fields are providing synergy to existing Vedanta Limited's oil and gas business blocks in the vicinity.

South Africa

Block 1 — Orange Basin, South Africa (operating through a subsidiary, 60% participating interest)

On 16 August 2012 Cairn signed a farm-in agreement with PetroSA, the national oil company of South Africa, for the 19,898 square kms off-shore block 1 ("Block 1"), located in the Orange Basin in South Africa. Cairn South Africa Proprietary Limited, a wholly owned subsidiary by Vedanta Limited held a 60% participating interest in offshore Block 1 with operatorship and PetroSA as the Joint venture partner. Cairn along with joint venture partner have completed 3D and 2D seismic surveys within the first phase of exploration.

Cairn along with the joint venture partner had maintained a deferral to enter the second phase awaiting clarity on the proposed regulatory changes and fiscal terms as given in the amendment bill of Mineral and Petroleum Resources Development Act, 2002.

The regulator, Petroleum Agency SA, intimated to the joint venture on lapsing of the exploration right as a consequence of the Supreme Court of Arbitration ruling in South Africa (Mawatse Judgement). Accordingly, along with joint venture partner Petro SA, closure application with Petroleum Agency SA has been filed on 19 September 2018 to exit from South Africa operations. The application was accepted, and the closure certificate was granted by Petroleum Agency SA on 20 September 2019.

Distribution, Logistics and Transport

Rajasthan

The MPT has been designed as a centralised hub facility to handle crude oil production from the fields in the Rajasthan Block that have been discovered by Cairn. Once crude oil reaches the MPT, generally via the pipeline, it is processed and transported to public-sector customers or private refineries that have purchased it. See the section entitled "*Business — The Rajasthan Block — Facilities — Mangala Processing Terminal*" for more information.

Cambay

The 82-acre onshore processing facility at Suvali processes natural gas and crude oil from the Lakshmi and Gauri fields. See the section entitled "*Business — The Cambay Basin Block — Lakshmi, Gauri and CB X — Facilities*" for more information.

The crude oil produced from Suvali Onshore Terminal is transported via truck tankers approximately 15 km to Adani Hazira Port Private Limited. Thereafter, the crude cargo is sold to coastal refineries via sea tankers.

The processed natural gas is sold through the Gujarat State Petronet Limited pipeline facility to CLP India Private Limited and Gujarat Gas Corporation Limited.

Ravva

There are eight unmanned offshore platforms and a 225-acre onshore processing facility at Surasaniyanam, Andhra Pradesh, for processing the natural gas and crude oil produced from the offshore field. See the section entitled "*Business — The Ravva Block — Krishna Godavari Basin — Facilities*" for more information.

The crude produced from the wells in the Ravva Block is sent to the onshore processing terminal via subsea pipelines. The oil is processed and stored in the storage tanks at the terminal. Thereafter, the crude oil is transported to local refineries (nominated by GOI) via 20 inch export line (approximately 16 km long) from the terminal to a ship tanker, which is moored to the single point mooring buoy located in the field. The single point mooring buoy and associated equipment are together termed as tanker mooring and loading facility.

Natural gas from the wells after treatment is transported to buyer's ("GAIL") pipeline.

Sales and marketing

Vedanta Limited's ten largest customers in the oil and gas business accounted for 100% of its revenue in Fiscal Years 2018, 2019 and 2020, respectively. Four of Vedanta Limited's customers in the oil and gas business accounted for 89.8% of its business revenue in Fiscal Year 2018, 89% in Fiscal Year 2019 and 90.0% in Fiscal Year 2020. In Fiscal Year 2020, Vedanta Limited sold 100% of the oil and gas it produces in the Indian market.

100% of the oil and gas that Vedanta Limited produced in Fiscal Year 2020 was sold under annual/monthly contracts specifying quantity and price. For Rajasthan, Cambay and Ravva Blocks, crude oil price in Fiscal Year 2020 was benchmarked to Bonny Light, West African low sulphur crude that is frequently traded in the region, with appropriate adjustments for crude quality. The crude oil price benchmarks are based on crude oil sales agreement.

Projects and Developments

The oil and gas business has commenced investment in growth projects in order to monetise the available resource base. The oil and gas business has a rich project portfolio comprising of enhanced oil recovery projects, tight oil, tight gas, satellite field development, facility upgradation, exploration and appraisal prospects. The gross capital expenditure being invested is estimated at $3.2 billion (Vedanta Limited's oil and gas business net capital expenditure at $2.3 billion).

In order to execute the projects, Vedanta Limited's oil and gas business has devised a model to partner with world class oil field service companies for the end to end integrated execution of its projects. The scope of the project involves end to end turn-key development including exploration and appraisal, reservoir establishment, well construction and surface facilities development. The contracts are being awarded with built in risk-reward mechanism for early execution. The rewards (bonus) over and above the base costs are primarily linked to schedule adherence, reserve accretion and health, safety and environment performance as per the respective contracts for the projects.

Some of Vedanta Limited's oil and gas business's principal projects are set out below:

Enhanced Oil recovery — Polymer in Bhagyam and Aishwariya fields and Alkaline Surfactant Polymer in Mangala, Bhagyam and Aishwariya Fields

The success of the polymer enhanced oil recovery at Mangala is being replicated at Bhagyam and Aishwariya fields to increase recovery rates. Drilling campaign for 42 wells has been completed, of which 27 wells are hooked as of 31 March 2020. Surface facility development for polymer implementation has commenced and polymer injection is ongoing.

Cairn also commenced drilling a 45 infill wells drilling campaign in the prolific Mangala field to accelerate near term production. All 45 wells have been drilled, of which 35 wells are hooked as of 31 March 2020.

In addition, the Alkaline surfactant polymer ("ASP") project at Mangala will enable incremental recovery from the prolific Mangala field. The project entails drilling wells and developing infrastructure facilities at the Mangala Processing Terminal. Drilling campaign is already under progress and the contract for the ASP surface facility is yet to be awarded. As of 31 March 2020, 60 wells have been drilled.

Barmer Hill and Satellite field development

The development of Barmer Hill and Satellite fields is a key growth driver for Cairn, with a focus on increasing production through the development of these fields. The Barmer Hill formation can be classified into two major development opportunities namely, Barmer Hill North consisting of oil prone porcellanite rocks and Barmer Hill South consisting of muddy porcellanites.

The Aishwariya Barmer hill is the first tight oil project being monetised. Aishwariya Barmer hill stage I production from seven existing wells commenced during second quarter of Fiscal Year 2018. Aishwariya Barmer hill stage II consists of drilling and fracking of 39 new wells, new surface facilities including well hook-ups, pipeline augmentation and installation of de-gassing facility. Drilling of all 39 wells have been completed as of 31 March 2020. These are being progressively hooked up to ramp up volumes.

Vedanta Limited's oil and gas business has made overall 38 discoveries in the Rajasthan Block to date. In order to monetise the satellite fields, appraisal as well as development activities through global technology partnership has commenced.

The tight oil appraisal for four discoveries (Vijaya and Vandana, Mangala Barmer Hill, DP and Shakti) entails the drilling and extended testing of 10 new wells with multi-stage hydraulic fracturing. As of 31 March 2020, seven wells have been drilled.

An integrated work programme for the development of 14 satellite fields through global technology partnership has commenced. 13 wells have been drilled as of 31 March 2020.

Raageshwari Deep Gas development

Gas development in the Raageshwari Deep Gas field continues to be a strategic priority. Early production facility has been commissioned during Fiscal Year 2020 and ramped up to its design capacity of 90 mmscfd. Further construction of gas terminal through integrated contract is expected to deliver additional 90 mmscfd of gas production in near term. This will ramp up the overall Rajasthan gas production to 240 mmscfd. In order to realise the full potential of the gas reservoir, contract for the drilling of 42 wells has been awarded and as of 31 March 2020, 25 wells have been drilled.

Surface facility upgrade at Mangala Processing Terminal

The Mangala processing terminal facility upgradation is progressing in line with the schedule to handle incremental liquids. Intra-field pipeline augmentation project has been completed, the Mangala processing terminal surface facility augmentation project is expected to be commissioned in near term. The project will lease to increasing liquid handling capacity by 30% at the Mangala processing terminal.

Ravva Exploration and Development

In order to increase the reserve and resource base, an integrated contract for drilling nine exploratory and appraisal wells and seven development wells has been awarded. As of 31 March 2020, four wells have been drilled of which two are online.

Market share and competition

The oil and gas exploration and production industry in India has tremendous potential for investment. Acreages to explore and exploit hydrocarbon resources are offered under an open acreage licensing system by the MoPNG under the Hydrocarbon Exploration and Licensing Policy. The GOI has launched special bid rounds for small discoveries, thereby further enhancing competition to acquire acreage.

For Vedanta Limited, competition is faced from Indian companies, including National Oil Companies ONGC and OIL as well as private players like Reliance Industries Limited. The GOI has a major stake in ONGC and OIL. ONGC has been awarded the majority of the exploration blocks offered in the nine NELP licensing rounds and has also acquired 17 blocks under the four OALP auctions that have been held to date. OIL has won 21 blocks under the four OALP bid rounds. Many of these competitors have access to financial or other resources substantially in excess of those available to Vedanta Limited and accordingly may be better positioned to acquire and exploit prospects, hire personnel and market production. In addition, many of Vedanta Limited's competitors may be better able to withstand the effect of external changes in industry conditions such as worldwide crude oil and natural gas prices and levels of supply and the application of government regulations, which affect Vedanta Limited's business, and which are beyond Vedanta Limited's control.

Vedanta Limited's oil and gas business is a significant contributor to India's domestic crude oil production, operating approximately 25% as derived from the provisional data published by Petroleum Planning and Analysis Cell of MoPNG statistics as of 31 March 2020.

Zinc Business

Introduction

Vedanta's fully integrated zinc business in India is owned and operated by HZL, India's leading primary zinc producer with a 77.0% market share by sales volume in India in Fiscal Year 2020, according to ILZDA.

HZL's fully-integrated zinc operations include five lead-zinc mines, one rock phosphate mine, four hydrometallurgical zinc smelters, two lead smelters, one pyrometallurgical lead-zinc smelter, eight sulphuric acid plants and six captive power plants at the Chanderiya, Dariba and Zawar facilities in the state of Rajasthan, processing and refining facilities for zinc at Haridwar and processing and refining facilities for zinc and lead, as well as a silver refinery at Pantnagar, both located in the State of Uttarakhand in northern India. HZL sources almost all of its concentrate requirements from its mines. HZL's annual production of zinc and lead for Fiscal Year 2020 was 688,286 tonnes and 181,370 tonnes, respectively. Lead metal production 188,458 is inclusive of HSL production, saleable lead is 181,370 MT. HZL also continues to increase its production capacities in order to achieve a total production capacity of approximately 1,200,000 tonnes.

In 2019, HZL was the second largest mining companies based on production volumes and in the first quartile in terms global cost curve, according to Wood Mackenzie. In addition, HZL's Rampura Agucha mine was the second largest zinc mine in the world on a production basis and its Chanderiya hydrometallurgical zinc smelter was the third largest smelter on a production basis worldwide, according to Wood Mackenzie.

As of 31 March 2020, Vedanta Limited has a 64.9% ownership interest in HZL, with the remainder owned by the GOI (29.5%) and institutional and public shareholders (5.6%). Vedanta Limited exercised a call option on 21 July 2009 to acquire the GOI's remaining ownership interest in HZL. The GOI has refused to act upon the second call option, stating that Vedanta Limited's second call option violates the provisions of the Indian Companies Act, 1956, by restricting the right of the GOI to transfer its shares and the matter remains the subject on ongoing proceedings. See the section entitled "*Business — Litigation — Vedanta Limited has commenced proceedings against the GOI, which has disputed Vedanta Limited's exercise of the call option to purchase its remaining 29.5% ownership interest in HZL.*" *for more information.*

In recent years, HZL has improved its operating performance by:

- its ability to maintain a high share of concentrate from its Rampura Agucha mine by consistently adding to the capacity of the mine and the concentrator and by adopting the technique of underground mining, as its open cast is closed;

- commissioned a concentrator at Sindesar Khurd mine of 1.5 mmtpa in 2011 and increased capacity to 2.80 mmtpa in Fiscal Year 2017. The capacity of Sindesar Khurd mine was increased to 4.5 mmtpa in Fiscal Year 2019 and then further to 6.5 mmtpa in Fiscal Year 2020;

- commenced ore mining Kayad mine since Fiscal Year 2013 and has a capacity of 1.2 mmtpa in Fiscal Year 2019;

- continuing its initiatives to improve operational efficiencies at its existing operations;

- reducing power costs by building on-site captive power plants rather than relying on state power grids;

- reducing the size of its workforce including through voluntary retirement plans;

- increasing productivity and upgrading existing technology; and

- increasing recovery from its residue and waste.

HZL pays royalties to the State Government of Rajasthan based on its extraction of lead-zinc ore. The royalty rate is 10% of the LME zinc metal price payable on the zinc metal contained in the concentrate produced and 14.5% of the LME lead metal price payable on the lead metal contained in the concentrate produced. For silver, the royalty rate is 7.0% of the silver LBMA price chargeable on silver-metal produced. Since September 2015, the MMDRA Amendment Act provides for a royalty of 30% the base royalty rate to be contributed to the DMF for the benefit of people affected by mining and an additional 2% of the base royalty rate to the NMET.

In addition to ongoing exploration activities, HZL has finalised plans for the next phase of development growth, which will involve the sinking of underground shafts and developing underground mines. The plan comprises developing a 3.75 mtpa shaft at Rampura Agucha, expanding the Sindesar Khurd mine from 4.5 mtpa to 6.0 mtpa, expanding the Zawar Group mines from 1.2 mtpa to 4.0 mtpa, expanding the Rajpura Dariba mine from 0.6 mtpa to 1.2 mtpa and developing a new mine at Kayad with capacity of 1.2 mtpa.

Vedanta's Zinc International business comprises assets held by Vedanta Limited, namely (i) Skorpion, which owns the Skorpion mine and refinery in Namibia, (ii) a 74%, (as of 31 March 2020) ownership interest in Black Mountain Mining, which has assets that include the Black Mountain mine and the Gamsberg Mine, in South Africa; and (iii) Lisheen, which owns the Lisheen mine in Ireland, which ceased operations in December 2015 and is in the process of mine closure. Vedanta commenced the closure operation in April 2014 and expects to receive the closure certificate by December 2020.

Principal products

Zinc. HZL produces and sells zinc ingots in all five international standard grades: Special High Grade (99.995%) ("SHG"), High Grade (99.95%) ("HG"), Continuous Galvanising Grade (99.5%) ("CGG"), die casting alloys ("HZDA"), electroplating grade ("EPG") and Prime Western (98.0%) ("PW"). HZL sells most of its zinc ingots to Indian steel producers for steel to improve its durability and also in the export markets. Some of its zinc is also sold to alloy, dry cell battery, die casting and chemical manufacturers. Skorpion produces SHG zinc ingots of LME grade. Prior to the operations of the Skorpion mine being suspended on 31 March 2020 for care and maintenance, Skorpion offered the product to customers through one-year contracts and also through short term or spot contracts with market-determined premiums, covering the sale of all zinc ingots produced at the integrated mine and refinery of Skorpion. Black Mountain produces zinc in concentrate which is sold through market priced off-take concentrate sales contracts with international customers and also in the spot market. Gamsberg Mine produces zinc in concentrate which is sold through market priced off-take concentrate sales contracts with international customers and also in the spot market.

Lead. HZL produces and sells lead ingots of 99.99% purity primarily to battery manufacturers and to a small extent to chemical manufacturers. Black Mountain produces lead in concentrate, which is sold through market-priced off-take concentrate sales contracts with international customers and in the spot market.

By-products

Sulphuric acid. HZL sells sulphuric acid to cement manufacturers and other industries.

Silver. HZL produces and sells silver ingots primarily to industrial users, jewellery manufacturers and traders of silver. Black Mountain also produces silver as a by-product.

Copper. Black Mountain produces copper in concentrate as a by-product, which is sold through market-priced off-take concentrate sales contracts with international customers and in the spot market.

Production

The following table sets out Vedanta's total production[1] from its Chanderiya, Debari, Dariba and Vizag facilities for the periods indicated:

		Fiscal Year		
Facility	**Product**	**2018**	**2019**	**2020**
		(Tonnes, except for silver which is in m oz)		
Chanderiya:				
ISPI pyrometallurgical lead-zinc smelter	Zinc	86,424	24,331	21,505
	Lead[2]	23,868	40,728	54,963
Hydrometallurgical zinc smelters	Zinc	410,624	400,472	404,274
AusI™ lead smelter	Lead	48,583	45,188	39,953
Sulphuric acid plants	Sulphuric acid	615,409	552,660	546,001
Dariba:				
Hydrometallurgical zinc smelter	Zinc	217,433	203,512	200,689
Lead smelter	Lead	95,796	111,922	86,454
Sulphuric acid plant	Sulphuric acid	512,945	477,217	426,623
Debari:				
Hydrometallurgical zinc smelter	Zinc	76,979	67,968	61,817
Sulphuric acid plant	Sulphuric acid	275,741	253,363	267,844
Pantnagar Silver Refinery	Silver[3]	17.92	21.8	19.6
Skorpion:				
Zinc refinery	Zinc	84,215	65,948	66,967
Total	Zinc	875,675	762,231	755,252
	Lead	168,247	197,838	181,370
	Silver	17.92	21.84	19.6
	Sulphuric acid	1,404,095	1,283,240	1,240,468

(1) See the section entitled "*Presentation of Information — Basis of Presentation of Reserves and Resources — Reserves and Production*" for an explanation of the basis of preparation of production amounts.

(2) Excludes lead contained in lead with high content of silver (High Silver lead) produced from the pyrometallurgical lead-zinc smelter for captive use, which was 6,946 tonnes, 6,534 tonnes and 7,088 tonnes in Fiscal Year 2018, 2019 and 2020, respectively.

(3) Excludes silver contained in lead with high content of silver (High Silver Lead) produced from pyrometallurgical zinc-lead smelter for captive use which was 1.17 moz, 1.10 moz and 1.18 moz in Fiscal Years 2018, 2019 and 2020, respectively.

The following table sets out Vedanta's total ore, zinc concentrate and lead concentrate production[1] for the periods indicated:

		Fiscal Year		
Facility	**Product**	**2018**	**2019**	**2020**
		(Tonnes, except for silver which is in m oz)		
Rampura Agucha (Open-pit and Underground)[2]	Ore mined	5,042,187	4,529,834	5,079,168
	Ore grade – Zinc	10.41%	10.11%	10.19%
	Lead	1.52%	1.56%	1.46%
	Recovery – Zinc	89.82%	88.17%	88.20%
	Lead	60.37%	56.31%	55.33%
	Zinc concentrate	1,063,638	910,223	906,154
	Lead concentrate	91,195	77,624	73,838
Zawar Group (Underground)	Ore mined	2,176,111	2,864,587	3,270,668
	Ore grade – Zinc	2.48%	2.36%	2.52%
	Lead	1.99%	1.97%	1.94%
	Recovery – Zinc	78.61%	78.21%	86.29%
	Lead	75.13%	80.18%	84.05%
	Zinc concentrate	51,288	104,497	139,241
	Lead concentrate	32,849	70,458	92,014
	Bulk Concentrate[3]	41,697	0	0
Sindhesar Khurd (Underground)	Ore mined	4,500,000	5,310,794	5,077,646
	Ore grade – Zinc	3.94%	3.75%	3.37%
	Lead	2.09%	2.40%	2.05%
	Recovery – Zinc	90.93%	90.41%	91.27%
	Lead	87.94%	88.38%	88.83%
	Zinc concentrate	326,890	350,272	325,195
	Lead concentrate	146,148	187,273	166,776
Rajpura Dariba (Underground)	Ore mined	895,568	1,079,955	1,037,608
	Ore grade – Zinc	4.78%	5.04%	4.85%
	Lead	1.10%	1.21%	1.18%
	Recovery – Zinc	83.86%	83.84%	84.24%
	Lead	68.64%	68.32%	69.33%
	Zinc concentrate	76,495	91,815	78,365
	Lead concentrate	18,394	23,027	19,119
	Bulk Concentrate[3]	0	0	0

Facility	Product	Fiscal Year 2018	Fiscal Year 2019	Fiscal Year 2020
		(Tonnes, except for silver which is in m oz)		
Skorpion (Open-pit)	Ore mined	537,066	1,009,243	1,038,936
	Ore grade – Zinc	8.2%	7.6%	7.8%
	Recovery – Zinc	81.2%	79.9%	79.8%
Lisheen (Underground)	Ore mined	–	–	–
	Ore grade – Zinc	–	–	–
	– Lead	–	–	–
	Recovery – Zinc	–	–	–
	– Lead	–	–	–
	Zinc concentrate	–	–	–
	Lead concentrate	8	–	–
Black Mountain (Underground)	Ore mined	1,605,892	1,611,301	1,486,754
	Ore grade – Zinc	2.3%	2.3%	2.3%
	– Lead	3.4%	2.9%	2.9%
	Recovery – Zinc	76.4%	74.8%	80.6%
	– Lead	86.8%	83.0%	85.6%
	Zinc concentrate	55,501	58,874	56,857
	Lead concentrate	65,381	55,548	54,694
Gamsberg (Open pit)	Ore mined	–	1,551,361	3,437,460
	Ore grade – Zinc	–	5.8%	6.55%
	– Lead	–	0.3%	0.4%
	Recovery – Zinc	–	58.3%	61.7%
	– Lead	–	–	–
	Zinc concentrate	–	36,621	228,258
	Lead concentrate	–	–	–
Totals	**Ore mined**	**14,756,824**	**17,957,075**	**20,428,240**
	Zinc concentrate	**1,573,812**	**1,552,302**	**1,734,070**
	Lead concentrate	**353,967**	**413,930**	**406,441**
	Bulk Concentrate(3)	**41,697**	**–**	**–**

(1) See the section entitled "*Presentation of Information — Basis of Presentation of Reserves and Resources — Reserves and Production*" for an explanation of the basis of preparation of production amounts.

(2) Includes mining operations at Kayad mine.

(3) Bulk concentrate is concentrate that contains both zinc and lead.

Ore Reserve base

The following table sets out Vedanta's Proved and Probable zinc and lead Ore Reserves[(1)] as of 31 March 2020:

	Proved Reserve				Probable Reserve				Total Proved and Probable Reserves			
	Quantity	**Zinc Grade**	**Lead Grade**	**Silver Grade**	**Quantity**	**Zinc Grade**	**Lead Grade**	**Silver Grade**	**Quantity**	**Zinc Grade**	**Lead Grade**	**Silver Grade**
	(Million tonnes)	**(%)**	**(%)**	**g/T**	**(Million tonnes)**	**(%)**	**(%)**	**g/T**	**(Million tonnes)**	**(%)**	**(%)**	**g/T**
Rampura Agucha	14.5	11.7	1.7	58	24.6	13.2	1.5	52	39.1	12.6	1.6	54
Rajpura Dariba . .	4.7	5.8	1.6	61	15.7	4.9	1.7	52	20.4	5.1	1.7	54
Zawar Group . . .	2.1	4.9	2.4	25	12.1	2.8	1.4	20	14.2	3.1	1.5	21
Kayad	2.8	4.5	1.1	16	0.9	7.0	0.7	13	3.6	5.1	1.0	15
Sindesar Khurd . .	9.6	3.9	1.9	103	27.7	3.5	2.4	123	37.3	3.6	2.3	118
Skorpion.	0.1	7.0	0.0	0	1.2	11.4	0.0	0	1.3	11.1	0.0	0
Black Mountain	1.5	2.9	3.4	35	27.8	0.7	1.7	22	29.3	0.9	1.8	22
Gamsberg	80.0	6.4	0.5	0	29.9	5.2	0.5	0	109.8	6.1	0.5	0
Total.	**115.2**	**6.8**	**0.9**	**19.7**	**139.9**	**5.2**	**1.5**	**45**	**255.1**	**5.9**	**1.2**	**33.8**

(1) See the section entitled "*Presentation of Information — Basis of Presentation of Reserves and Resources*" for an explanation of the basis of preparation of reserve amounts.

Description of operations

Smelters and refineries. The following table sets out the total capacities[(1)] as of 31 March 2020 at Vedanta's Chanderiya, Debari, Dariba, Zawar, Pantnagar and Skorpion facilities:

	Capacity				
Facility	**Zinc**	**Lead**	**Silver**	**Sulphuric Acid**	**Power Plant**
			(tpa)		**(MW)**
Chanderiya[(2)(3)]	585,000	90,000	–	859,000	247.7
Debari	88,000	–	–	387,600	7.3
Dariba[(3)]	240,000	120,000	–	710,500	174.2
Zawar Group	–	–	–	–	80
Pantnagar	–	–	800	–	–
Skorpion	150,000	–	–	335,000	–
Total	**1,063,000**	**210,000**	**800**	**2,292,100**	**509.2**

(1) See the section entitled "*Presentation of Information — Basis of Presentation of Reserves and Resources — Reserves and Production*" for an explanation of the basis of preparation of production amounts.

(2) The Haridwar plant refines and processes zinc ingots from zinc cathodes produced in the Chanderiya and Dariba smelters and therefore its production capacity does not increase the total production capacity of HZL's facilities.

(3) The Pantnagar plant refines and processes zinc and lead ingots from zinc and lead cathodes that are produced in the Chanderiya and Dariba smelters and silver ingots from lead residues in the Dariba lead smelter. Accordingly, it does not contribute to the total production capacity of HZL's facilities.

Chanderiya. The Chanderiya facility is located approximately 120 km east of Udaipur in the State of Rajasthan in northwest India. The Chanderiya zinc smelter is the third largest smelter on a production basis worldwide in 2019, according to Wood Mackenzie. The facility contains four smelters, two associated captive power plants, three sulphuric acid plants and one silver refinery:

- I ISP(TM) pyrometallurgical lead-zinc smelter with a capacity of 105,000 tpa of zinc ingots and 35,000 tpa of lead ingots that was commissioned in 1991;

- Two hydrometallurgical zinc smelters with 480,000 tpa capacity that were commissioned in May 2005 and December 2007 and expanded in April 2008 together with associated captive power plants;

- I Ausmelt(TM) lead smelter with a capacity of 55,000 tpa that was commissioned in February 2006;

- Associated 154 MW and 80 MW coal-based thermal captive power plants commissioned in May 2005 and April 2008, respectively;

- A 14.8 MW fuel based captive power plant which was originally commissioned at Debari in March 2003 and transferred from Debari to Chanderiya in March 2009;

- Three sulphuric acid plants with a total capacity of 859,000 tpa sulphuric acid; and

- A silver refinery with a capacity of 168 tpa silver ingots.

The 154 MW, 80 MW and 14.8 MW captive power plants provide all of the power for the Chanderiya facilities. The captive power plant requires approximately 100,000 metric tonnes of coal per month, which is currently met through imports, mostly from Indonesia.

HZL was also awarded 1.16 million tonnes of coal linkage by the Ministry of Coal, which will enable it to source coal from mines of Coal India Limited ("Coal India") (catering to approximately four months of its total coal requirements), although access to this coal has been stopped since April 2013. HZL's operations source their back-up power from imported coal with own captive power plants or import from local power companies.

Debari. The Debari hydrometallurgical zinc smelter is located approximately 12 km east of Udaipur in the State of Rajasthan, India. The hydrometallurgical zinc smelter was commissioned in 1968, uses RLE technology and has a capacity of 88,000 tpa. The Debari facility also includes a 387,600 tpa sulphuric acid plant. A majority of the power requirements of the facility is sourced from the coal-based thermal captive power plant at Chanderiya and Zawar and partially from 7.3 MW WHRB power generation facility at Debari. Balance is sourced from an on-site liquid fuel-based 14.8 MW captive power plant commissioned in March 2003. The liquid fuel is procured from domestic oil-producing companies through a tender process for a yearly contract.

Vaizag. Operations at the Vaizag plant have been shut down since July 2013.

Haridwar. The 210,000 tpa zinc ingot melting and casting plant in Haridwar in the State of Uttarakhand was commissioned in July 2008. This plant refines and processes zinc ingots from zinc cathodes produced in the Chanderiya and Dariba smelters and therefore its production capacity does not increase the total production capacity of HZL's facilities. After the start of the second stream, the capacity of Haridwar Zinc Plant is 288,000 tpa. The plant is no longer in operation. However, limited operations were conducted at the plant from July 2017 to March 2019.

Zawar Group. The Zawar Group facility does not have a smelter. The captive power plant at this facility provides power to the mine.

Dariba. The Dariba hydrometallurgical zinc smelter is located in the Rajsamand district of Rajasthan which was commissioned in March 2010 and has a capacity of 240,000 tpa. The Dariba facility also includes a 306,000 tpa sulphuric acid plant. A new lead smelter was commissioned in July 2011 and has a capacity of 120,000 tpa, which also included a 98,500 tpa sulphuric acid plant. A majority of the power requirements of the facility is sourced from the 160 MW coal-based captive power plant at Dariba. A new roaster was commissioned in April 2013 in the Dariba facility with an associated sulphuric acid plant capacity of 306,000 tpa. Total sulphuric acid production capacity is 710,500 MT. Zinc cathodes are sent to its refining facilities at Pantnagar in Uttarakhand state for finishing and casting. The anode slime obtained as a residue from lead smelting at this smelter is refined and casted into silver ingots at the Pantnagar plant.

Pantnagar. The Pantnagar plant, which is located in Pantnagar in the State Uttarakhand, India, includes facilities for the refining and processing of zinc, lead and silver. The silver refinery has a capacity of 800 tpa and was commissioned in December 2011. The 465,000 tpa zinc ingot and 100,000 tpa lead ingot melting and casting plant were commissioned in March 2012. This plant was established to convert zinc and lead cathodes from the Chanderiya and Dariba hydrometallurgical smelters, as well as silver-rich lead residues from the Dariba lead smelter, into ingots.

Skorpion. The Skorpion mine and refinery are located 25 kms of Rosh Pinah town in Namibia. The Skorpion mine is an open cast oxide deposit mine, which feeds material directly to the refinery. The refinery uses a leaching process due to the oxide feed from the mine. Metal is casted in the electro wining-circuit as ingots. The Skorpion refinery runs on oxide feed.

Mines

Rampura Agucha. The Rampura Agucha lead-zinc mine is located near Gulabpura in the north-west State of Rajasthan. The good ore mineralogy of the mine provides a high metal recovery ratio and a low overall cost of production for zinc concentrate extracted from the mine. The mining and processing facilities are modern and in good condition. The ore body has been mined by open-pit and underground methods. The operation of the open-pit was closed in Fiscal Year 2018. The capacity of the mine and concentrator was expanded between 2003 and 2010 from 2.4 million tpa to 6.2 million tpa for mine and 6.5 million tpa for mill through the purchase of additional mining equipment, upgrades to the truck fleet, improvements to the operational efficiency of the plant and the installation of a new semi-autogenous, or SAG, mill and ball mill circuit.

The processing facility is a conventional crushing, milling and differential lead-zinc floatation plant. Ore from the open-pit is crushed in a series of crushing circuits and then milled in four streams, one rod mill-ball and three other sag mill-balls in closed circuit. The milled ore is then sent to the lead flotation circuit which includes roughing, scavenging and three stages of cleaning. The lead concentrates are thickened and filtered ahead of storage and transport to the Chanderiya and Dariba lead smelter. The lead flotation tails proceed to zinc flotation which comprises roughing, scavenging and four stages of cleaning. Zinc concentrates are thickened and filtered ahead of storage and transported to different HZL zinc smelters. Zinc flotation tails are thickened ahead of disposal to the tailings dam.

Since 2004, exploration at Rampura Agucha has resulted in significant increases in the reserves at the mine. Following an extensive drilling programme to convert mineralised material to reserves, better definition of the ore body boundaries, addition of mineralised material and the conduct of open-pit re-optimisation, as well as the commencement of underground mine project work, the reserves were 39.1 million tonnes as of 31 March 2020 with an average grade of 13.2% zinc and 1.5% lead in ore. The drill spacing for the definition of Proved Ore Reserves were approximately 50 metres by 50 metres while for probable reserves was 100 metres by 100 metres. HZL commenced production at the mine in 1991. Since inception, approximately 79.2 million tonnes of ore, with an ore grade of 12.5% zinc and 1.84% lead, respectively, have been extracted from the open-pit mine. HZL is continuing to evaluate the potential of this deeper mineralisation.

According to the Ore Reserve report, the Proved and Probable Ore Reserves for the Rampura Agucha mine as of 31 March 2020 was 39.1 million tonnes with 12.6% zinc, 1.6% lead and 54g/t silver. As of 31 March 2020, HZL estimates the remaining mine life at Rampura Agucha to be nine years based on (i) reserves; and (ii) planned production which is determined on the basis of a life-of-mine plan.

In Fiscal Year 2020, 3.94 million tonnes of ore at 11.1% zinc and 1.6% lead were mined from Rampura Agucha. It produced approximately 380,740 tons of zinc metal in concentrate and approximately 33,398 tons of lead metal in concentrate in Fiscal Year 2020. The expansion of the mine from 5 mmtpa to 6.2 mmtpa was completed in 2010 and has resulted in a significant increase in the strip ratio as there was dimensional change in the pit with the ultimate depth of the mine increasing to 421 metres. During Fiscal Year 2020, approximately 87.93% of the zinc was recovered to the zinc concentrate, while 54.91% of the lead and 60.23% of the silver was recovered from the metal contained in the ore mined. The Rampura Agucha mine has transitioned from open pit to underground mine production, with the underground project picking up pace after a slower than planned ramp up due to difficult geotechnical conditions.

The mining lease of Rampura Agucha mine is up to March 2030. Power is mainly supplied from the HZL's captive thermal power plants with two backup 5 MW generators on-site.

Rajpura Dariba. Rajpura Dariba is a medium sized underground lead-zinc mine and processing facility located northeast of Udaipur in the Rajsamand district in the state of Rajasthan, northwest India.

Mining at Rajpura Dariba commenced in 1983 and is carried out using the vertical crater retreat method and blasting hole mining method with mined out stopes backfilled with cemented classified mill tailings. In certain areas the ground conditions adversely affect slope stability and dilution. These ground conditions are the result of the weak graphitic nature of the shear zone combined with the dissolution of fractured and sheared dolomites by percolating acidic groundwater derived for overlying adjacent oxidised zones. HZL's Rajpura Dariba's mine lease is valid until May 2030. The mine is serviced by two vertical shafts approximately 600 metres deep. The main shaft is 6 metres in diameter and the auxiliary shaft is 4.5 metres in diameter. The main shaft has the capacity to hoist 0.7 million tpa of ore and is equipped with a modern multi-rope koepe winder. All personnel and materials are hoisted in a large counterbalanced cage which is operated by the koepe winder. The surface infrastructure includes ventilation fans, compressors and ore loading facilities. A 2.2 km surface decline was commissioned in September 2013 to increase the ore production.

The ore is crushed underground before being hoisted to the surface. It is then crushed again and milled before undergoing a lead flotation process incorporating roughing, scavenging and includes three stages of cleaning of rougher concentrate to get final lead concentrate. Lead flotation tails are sent to the zinc flotation process which incorporates roughing, scavenging and includes three stages of cleaning of rougher concentrate to get final Zinc concentrate. In one flotation the Zinc rougher concentrate is being cleaned in column flotation cells. Then Zinc flotation tails proceed to a backfill plant where final trains are cycloned with the underflow proceeding to intermediate storage where cement is added in preparation for use as underground fill. The cyclone overflow is thickened to recover water ahead of disposal in the tailings dam. The final lead and zinc concentrates are thickened, filtered and stored before they are sent to HZL's smelters.

Power for the mine is supplied largely from HZL's 160 MW captive power plants at Dariba and through a contract with a state-owned entity.

According to the Ore Reserve report, the Proved and Probable Ore Reserves for the Rajpura Dariba mine as of 31 March 2020 was 20.4 million tonnes with 5.1% zinc, 1.7% lead and 54g/t silver. As of 31 March 2020, HZL estimates the remaining mine life at Rajpura Dariba to be around 14 years based on (i) reserves; and (ii) planned production which is determined on the basis of a life-of-mine plan which includes assumed production expansion. An exploration programme is also underway to identify new resources with the potential to be upgraded to reserves, and has been and continues to be focused on maintaining the reserve position after annual mining depletion. The drill spacing for Proved Ore Reserves was approximately 30 metres while for probable reserves was less than 60 metres.

The average grade for each individual stope was defined using standard parameters for internal waste and dilution and a geological cut-off grade of 3.0% combined lead and zinc, though the mineralisation generally has a sharp natural contact. The in-situ quantities and qualities were adjusted by applying a mining loss factor of 10.0%, a dilution factor of between 12.0% and 20.0% depending on ground conditions. These parameters are based on a reconciliation of historical production. Stopes with average grades below this economic cut-off grade were excluded from the reserve estimate. The final reserve estimate is the sum of the stopes with an average grade above the economic cut-off limit. As the stopes are all accessed using the existing infrastructure and as there is sufficient capacity on the tailings dam, the capital expenditure was limited to the replacement of mining equipment and was therefore considered not to have a material impact on the cut-off grade.

In Fiscal Year 2020, 1.04 million tonnes of ore at a grade of 4.85% zinc and 1.2% lead ore was mined at Rajpura Dariba mine which produced 37,272 tons of zinc metal in concentrate and 7,473 tons of lead metal in concentrate, with 84.24% of the zinc being recovered in the zinc concentrate and 69.33% of the lead and 73.10% of the silver.

Sindesar Khurd. The Sindesar Khurd mine is a large scale underground mine deposit that was explored during 1992 to 1995. Mine production began at the Sindesar Khurd mine in April 2006 and HZL's mining permit is valid until March 2049. The Sindesar Khurd mine lies on the same geological belt as the Rajpura Dariba mine. The mine is approachable from Rajpura Dariba mines by road.

The mineralisation has been traced over almost 2.5 kilometres along strike and 1.3 kilometre vertical extension. In the mine area, dip is steep westerly, while the dip turns into easterly direction in the lower-southern part of the deposit. The current mine block extends over 1,500 metres along strike and up to 570 metres depth extension.

The deposit has been drilled to a depth of approximately 1,300 metres below surface and the ore body is traced over approximately two kilometres along the strike with a 1,100 metres vertical extension. While the deposit is still open in depth in the southern extension of the present mine block, the area below the mine block and towards the north extension only has narrow and low to moderate grade mineralisation intersected.

Exploration at the south part of Sindesar Khurd has been continuing since March 2005 with a drilling programme aimed at increasing the size of the ore body. A continuous exploration programme from underground is also underway with the aim to upgrade the reserve status so that the stopes planned to be mined out shall be extracted with maximum recovery and thereby reducing mining losses. The drill spacing for Proved Ore Reserves was 12.5-25 metres while for probable reserves was less than 25-50 metres.

According to the Ore Reserve report, the Proved and Probable Ore Reserves for the Sindesar Khurd mine as of 31 March 2020 is 37.3 million tonnes with 3.6% zinc, 2.3% lead and 118g/t silver. The in-situ quantities are adjusted by applying a mining loss factor of 5.0% and dilution factor of 12.0%.

Sindesar Khurd Mine ("SKM") is a world-class silver rich mine with state-of-the-art infrastructure and best-in class mechanisation. The mine produced 255 kt in Fiscal Year 2020. As a result of ongoing volume ramp-up and higher recoveries, the mine has achieved a production of 5 million MT of ore during the Fiscal Year 2020. SKM started operations in 2006 and has seen several phases of expansions from 0.3 million MT to its current capacity of 6 million MT of ore, making it the largest underground mine in India. SKM consists of multiple standalone deposits, or auxiliary lenses leading to three standalone production centres at present. SKM's expansion has significantly contributed to the Company's integrated lead and silver production.

The management system of SKM comprises of Quality System ISO 9001:2008, Environmental System ISO 14001:2004 and Occupational Health, Safety Management System OHSAS 18001:2007, SA 8000:2008 and 5S Certifications.

The gross book value at this mine is approximately ₹58,253 million ($779 million) as of 31 March 2020.

As of 31 March 2020, HZL estimates the remaining mine life at Sindesar Khurd to be around seven years based on (i) reserves; and (ii) planned production which is determined on the basis of a life-of-mine plan which includes assumed production expansion. Power for the mill and the mine is supplied from HZL's captive power plant located at Dariba itself.

In Fiscal Year 2020, 5.07 mt of ore at a grade of 3.37% zinc and 2.07% lead ore was mined at Sindesar Khurd mine 160,122 tons of zinc metal in concentrate and 95,028 tons of lead metal in concentrate, with 91.27% of the zinc being recovered in the zinc concentrate and 88.83% of the lead and 89.84% of the silver.

Zawar Group. Zawar consists of four mines namely, Mochia, Balaria, Zawar Mala and Baroi. The deposit is located near Udaipur city, in Rajasthan in northwest India. The deposits lie within a 36.2 square kilometres mining lease granted by the State Government of Rajasthan which is valid until 31 March 2030.

Ore processing is carried out in a conventional comminution and flotation plant having facility for "differential" as well as "bulk flotation" of zinc and lead metals. The ore is crushed primarily underground and then hoisted to the surface. Thereafter, the ore is crushed to 12 to 15mm in size before being milled to 74 microns. In the differential flotation process, milled ore is conveyed separately to two lead flotation circuits and undergoes a process incorporating roughing, scavenging and cleaning. Lead flotation tails proceed to two zinc flotation circuits comprising roughing, scavenging and cleaning. Zinc flotation tails are disposed in slurry form in designated tailings disposal area. Lead and zinc concentrates are thickened, filtered and then stored before they are sent to HZL's smelters. In the bulk flotation process, milled ore is conveyed to the flotation circuit and undergoes a process incorporating roughing, scavenging and cleaning. Final bulk concentrate is thickened, filtered and then stored before it is sent to the lead zinc smelter at Chanderiya. Bulk flotation tails are disposed in slurry form in designated tailings disposal areas.

Ore production capacity at Zawar Mines is expected to progressively increase to 4.8 million MT per annum by Fiscal Year 2021 and the vision is 8.0 million MT per annum based on reserves and resources potential. On completion of the ongoing expansion, Zawar Mines will become a significant contributor to the Company's output.

During the year, production capacity was ramped-up to 2.18 million MT annual rate respectively with production commencing via the large declines at Mochia and Baroi using 60 MT LPDTs.

In Fiscal Year 2020, approximately 3.27 million tonnes of ore at 2.52% zinc and 1.94% lead was mined which produced 71,672 tons of zinc metal in concentrate and 53,675 tons lead metal in concentrate. The recovery of zinc and lead during Fiscal Year 2020 was 86.29% and 84.05%, respectively.

The gross book value of the Zawar fixed assets and mining equipment was approximately ₹31,169 million ($417 million) as of 31 March 2020 and of the 80 MW coal-based thermal captive power plant at Zawar was ₹3,282 million ($44 million).

Power is supplied through a combination of an 80 MW thermal coal-based captive power plant commissioned in December 2008 and a 6 MW captive power plant.

As of 31 March 2020, HZL estimates the remaining mine life of the Zawar mine to be four years based on (i) reserves; and (ii) planned production which is determined on the basis of a life-of-mine plan which includes assumed production expansion. The focus of mine exploration at Zawar is to enhance the ore reserve to expand the mine lift by five years and to identify and to look for new mineralised areas to enhance the ore reserves to expand the mine life by five years and to identify. A surface drilling programme is underway to locate deeper resources below -100 metre reduce level up to 500 metre reduce level. Underground exploratory drilling is carried out on a grid of between 25 metres and 30 metres which is then infilled to 12.5 metres/15 metres after completing the development for final delineation of ore bodies. Past exploration has outlined additional in-mine mineral resources which require further delineation to add to reserves and further extend the mine life.

According to the Ore Reserve report, the Proved and Probable Ore Reserves for the Zawar Group as of 31 March 2020 is 14.2 million tonnes with 3.1% zinc, 1.5% lead and 21g/t silver.

Kayad. The Kayad lead-zinc mine is located in Ajmer, in the state of Rajasthan.

The Kayad lead-zinc deposit was initially prospected by Airborne Mineral Survey and Exploration wing of Geological Survey of India and drilling commenced in August 1988 and was completed in December 1991. Mineral Exploration Corporation Limited worked on the project on promotional basis, started the exploration and a total of 9,585 metres of drilling was achieved in 42 completed bore holes between 1994 and 1997. The detailed exploration of Kayad deposit was commenced by HZL in 1999 and continues as of today with a total of 178 kilometres in 1,132 drill holes.

According to the Ore Reserve report, the Proved and Probable Ore Reserves for Kayad mine as of 31 March 2020 was 3.6 million tonnes at 5.1% zinc, 1.0% lead and 15g/t silver. As of 31 March 2020, HZL estimates the remaining mine life of the Kayad mine to be over three years based on (i) reserves; and (ii) planned production which is determined on the basis of a life-of-mine plan which includes assumed production expansion.

The ground breaking of the mine commenced on 11 June 2011. The access is through a decline which then divides into two declines at 420 metre reduce level. Development ore production was achieved in the second quarter of Fiscal Year 2013, and the mine started operations in Fiscal Year 2014. The mining method practised in Kayad is long hole open stopping with cemented rock filling/rock filling in the steeper portions of the deposit; while transverse stopping method at flat portion along with rock filling/cemented rock filling. The mining is highly mechanised with twin boom jumbo drills used for face drilling, rock bolting machines used for support and 10 T and 17 T diesel load haul dump vehicles coupled with 30 T/50 T low profile dump trucks for loading and hauling. For production drilling Simba Drills are being used. The run of mine is stacked in the surface ore stock pile and transported by trucks to the Rampura Agucha mine for beneficiation.

A mine lease of 480.45 hectares was granted to Kayad mine by the state of Rajasthan and is valid until February 2048, subject to further renewal. Surface land rights over 49.8 hectares have been obtained. Mine plan approval from the Indian Bureau of Mines have been obtained and received environmental clearance from the MoEF for an increase in lead zinc ore production capacity from 1.0 million tonnes per annum to 1.2 million tonnes per annum. Consents under various environmental laws to operate the mine, including from the Rajasthan State Pollution Control Board have also been obtained.

A 33 KV power line was commissioned on 2 February 2012 to meet the constructional power requirements of the mine. Currently, most of the power is being taken from captive power plant, Zawar and some power is taken from state grid. A one megavolt amperes diesel generator is kept as a backup power supply for emergency operations in the event of power failure. For proper power distribution 2 megavolt amperes underground substation is commissioned in north and south section each.

Skorpion. The Skorpion mine and refinery is located in the Karas region of southern Namibia, comprising an open pit mine. As of 31 March 2020, the remaining mine life of the Skorpion mine is approximately eight months based on (i) reserves; and (ii) planned production which is determined on the basis of a life-of-mine plan. The Skorpion mine has an attached electrolytic refinery producing approximately 150,000 tonnes of SHG zinc ingots annually. Further opportunities to extend the life of the mine are currently being evaluated based on the sulphide ore bodies in the nearby areas. Skorpion is also working towards re-purposing the refinery from stand-alone oxide ore treatment to sulphide ore treatment.

The Skorpion mine produces only high-grade, high purity SHG zinc ingots that are registered on the LME. Exploration of nearby ore bodies is underway to extend the life of mine beyond 2021. On 31 March 2020, the board of directors of Skorpion approved management's request to commit approximately $1 million to refresh the feasibility study that was previously performed for the refinery conversion and to commence prework for the conversion. It is management's intention to obtain approval from the board of directors of Skorpion for the full conversion of the refinery during the next Fiscal Year.

On 31 March 2020, the operations of the Skorpion mine was suspended for care and maintenance following a series of slope failures that occurred during the Fiscal Year 2020. The pit has been assessed by a series of industry experts who have concluded that while the pit remains mineable, but a new mine plan will need to be developed. The board of directors expects that mining operations at the Skorpion mine will resume in October 2020 subject to safe mining and it will take approximately eight months from the restart of mining operations to fully mine the declared ore reserves from the pit and approximately eleven months to fully process the ore in refinery. Following the suspension, the refinery has also been suspended for care and maintenance on 30 April 2020 until the Skorpion mine has been completely mined. All employees were retrenched as of 1 May 2020 and staff required for the care and maintenance activities have been rehired.

The mineral rights over the Skorpion zinc deposit are currently held under mining license ML108 and exclusive prospective license EPL2229. Mining licence ML108 was granted in July 2000 and is valid for 25 years up to July 2025. Mining licence ML108 covers 951 hectares and includes the site for the refinery. Skorpion is also the holder of mining licence ML127, covering the limestone quarry area. Mining licence ML 127 is valid until February 2026. Exclusive prospective license EPL2229 covers 16919.8 hectares surrounding the area covered by mining licence ML108 and is due for its next renewal on 12 February 2021.

Skorpion is Neoproterozoic Zn-(Cu) volcanogenic massive sulphide ("VMS") deposit, hosted by the Gariep belt in south-western Namibia. Skorpion was a "blind" deposit and entirely concealed by about 5-15m of overburden at the time of discovery. The Skorpion deposit is unusual in that mineralisation consists almost entirely of zinc oxides. Zinc oxide mineralization is hosted by weathered siliciclastic rocks, namely shale, arkose, and greywackes. Most common ore minerals are sauconite, hemimorphite, and simithonite. An important feature of Skorpion is that original sulphide mineralisation (now leached gossans), and the mineralised Zn oxide ore are spatially separated, and Skorpion is therefore considered a hydrologically displaced "exotic" zinc deposit.

Proto-mineralization (gossan) is hosted by a mixed volcano-sedimentary sequence just to the west of the Zn oxide orebody. Stratigraphy is moderately folded and dipping to the east at angles of about 20-70 degrees. The sequence is abruptly truncated against calcareous siliciclastics and limestone to the east. Gossan zones are typically leached in Zn, but still contain considerable concentration of Pb, Cu, and Ag.

The structural sub-vertical contact zone between the barren calcareous and gossanous volcano-sedimentary rocks has been extensively modified by supergene processes. Karst-related brecciation, and pervasive leaching of calcite cement from the calcareous siliciclastics are most common. This contact zone forms the centre of the oxide mineralisation.

Although the geology of the deposit is complex and the ore, limestone and arkose interface requires careful separation, the Skorpion mine has managed this with accurate grade control and selective mining.

The processing at the Skorpion mine is unique, using solvent-extraction/electrowinning from zinc oxide ore. In this process, mined ore is crushed, homogenised and milled before acid leaching in agitated tanks at the refinery. Clarified liquor is purified by solvent extraction and zinc is electrolytically plated on to aluminium cathodes. Zinc is periodically stripped from these cathodes before being melted and cast as ingots for export.

Zinc at the Skorpion mine is cast into ingots for export and transported from the refinery to the port of Luderitz, approximately 300 km away, by trucks each having a maximum capacity of 35 tonnes.

The maximum power demand of the Skorpion mine is 85 MW and power is supplied by Namibia Power Corporation (Proprietary) Limited which in turn procures power from South Africa's Eskom Holdings Limited. The contract between Skorpion and Namibia Power Corporation is fixed price contract that currently links the annual increases in power costs to NERSA (National Energy Regulator of South Africa) approved increases.

During Fiscal Year 2020, 1.04 million tonnes of ore at 7.81% zinc were mined from the Skorpion mine, which produced approximately 66,967 tonnes of zinc metal. According to the Ore Reserve report, the Proved and Probable Ore Reserves for the Skorpion mine as of 31 March 2020 was 1.3 million tonnes with 11.1% zinc, 0.0% lead, 0.4% Cu and 0g/t silver

Lisheen. The Lisheen mine is located in County Tipperary, Republic of Ireland and when operational consisted of an underground mine, concentrator and backfill plant, with a related capacity of approximately 131,000 tonnes of zinc in concentrate annually. The Lisheen mine also included approximately 19,000 tonnes of lead in concentrate annually. Mining and milling activities ceased in December 2015.

Closure operations commenced in April 2014 and are expected to be complete by December 2020. Vedanta expects to procure the required mine closure certificate in December 2020. After successfully closing down the mine, Vedanta will continue to provide care and maintenance for 30 years as required under Irish law.

Black Mountain. The zinc mine at Black Mountain is an underground operation, mining a polymetallic ore body, with an attached concentrator producing zinc, lead, copper and silver in concentrate, annually. Exxaro Resources (through its wholly owned subsidiary, Exxaro Base Metals) holds the remaining 26.0% interest in Black Mountain.

The Black Mountain mine is operated pursuant to mining right 58/2008 MR granted pursuant to the Mineral and Petroleum Resources Development Act, 28 of 2002 of South Africa which entitles Black Mountain Mining to mine for lead, copper, zinc and associated minerals in, on and under an area in the district of Namaqualand measuring 24,195 hectares for a period of 30 years from 2008 to 2038.

Four major stratiform exhalative sediment hosted base metal deposits are located in a 10 by 30 km area, centred on Aggeneys. The deposits are situated in the supracrustal rocks of the mid-Proterozoic age Bushmanland group of the Namaqualand metamorphic complex. The deeps ore body, which is currently being mined, is considered to start at 166 metres above mean sea level, with a down plunge extent of 1.1 km with the deepest position of the ore body being 1,680 metres below the surface. Mineralisation in the deeps is hosted by iron formations, massive sulphide and sulphide quartzite. The massive sulphide rock is either banded, massive or occurs as fine grained mylonite. Banding is expressed as 1-5 m thick sulphide bands alternating with quartz rich bands of similar thickness.

Underground drilling of the deeps' ore body started in 2000 and was completed in 2012. Based on Ore Reserves and Mineral Resources as of 31 March 2020 and current production levels, Black Mountain Mine estimates the remaining life of the mine of the deeps ore body to be around four years.

The predominant mining method is ramp in stope cut and fill. The planned production rate is 1.68 mtpa plant feed and the shaft hoisting capacity is approximately 1.45 mtpa from Deeps mine and 0.31 mtpa from Swartberg. All production stopes in the Deeps mine are backfilled and waste filled, integrated into the mining sequence.

The mining process includes primary crushing underground before being hoisted to surface coarse ore silos for stockpile. Coarse ore is screened before secondary and tertiary crushing, from where it is fed into a milling plant. The slurry product from the grinding mills passes directly to the floatation circuits from which copper concentrates, lead concentrates and, finally zinc concentrates are floated off. The concentrates are dewatered by thickening and subsequent pressure filtration to reduce moisture content to shipment requirements. The dewatered concentrates are discharged onto conveyors, before being transferred to separate copper, lead and zinc concentrate stockpiles. From the stockpiles, the concentrates are hauled by truck to a dedicated railway siding 170 kms away, where they are loaded onto rail cars for outbound shipping.

Power at the zinc mine at Black Mountain is supplied from two 40 MVA transformers at the Eskom Aggeneys substation. Water is supplied by the Pelladrift Water Board, which supplies potable water to the mine from the Orange River for both human consumption and industrial water requirements.

Zinc, lead and copper concentrate from the mine are road hauled to the Saldanha port which is approximately 600 km from the Black Mountain mine. Delivery terms to export customers are based on a cost, insurance and freight basis.

During Fiscal Year 2020, 1,486,754 tonnes of ore at 2.29% zinc and 2.87% lead were mined from the Black Mountain mine, which produced approximately 56,857 tonnes of zinc concentrate and 54,694 tonnes of lead concentrate, containing 27,943 tonnes of zinc and 37,628 tonnes of lead respectively. In addition, the Black Mountain mine also produced 4,998 tonnes of copper in concentrate and 41 tonnes of silver in concentrate.

According to the Ore Reserve report, the Proved and Probable Ore Reserves for the Black Mountain mine as of 31 March 2020 was 29.3 million tonnes with 0.7% zinc, 1.8% lead, 0.5% Cu and 23g/t silver.

The Gamsberg. ore body is a large zinc deposit situated approximately 22 kms from Black Mountain. The Gamsberg Project was officially approved by the Company's Board in November 2014. In April 2015, the project schedule was revised after optimising the mining cost. The pre-start mining (creating access to the mine to enable the start of bulk prestripping) started in 27 July 2015 and the major milestone of creation of north access ramp was achieved by end April 2017. Bulk pre-stripping commenced in April 2017 and the total pre-stripping of 68 million tons as against the project target tons was completed in July 2018. Currently all three pits — North, South and East Pits are well established and at steady state performance. As of 31 March 2020, approximately 1.8 Mt of healthy ore stockpile has been built ahead of plant and crusher has been consistently running at better than design throughput.

The plant and infrastructure order was placed in October 2016 and site construction started in early June 2017. The milestone of first ore feed as part of the commissioning was achieved by end of September 2018, with all construction activities getting completed in October 2018 and trial saleable production started. First shipment was done in December 2018. The plant reached a steady state of production in February 2019 and the plant was capitalized during March 2019. The plant produced 17,128 and 107,949 tons of zinc concentrate in Fiscal Years 2019 and 2020, respectively. Zinc and Lead concentrates are the principal raw materials of Gamsberg mine.

According to the Ore Reserve report, the Proved and Probable Ore Reserves for the Gamsberg mine as of 31 March 2020 was 109.8 million tonnes with 6.1% zinc, 0.5% lead, 0.0% Cu and 0g/t silver.

Principal raw materials

The principal inputs of HZL's zinc smelting business are zinc and lead concentrates and power. HZL has in the past been able to secure an adequate supply of the principal inputs for its business.

Zinc and lead concentrates: Zinc and lead concentrates are the principal raw material of HZL's smelters. HZL's lead-zinc mines have provided nearly all of its requirements for zinc and lead concentrates in the past. Vedanta expect HZL's mines to continue to provide nearly all of its zinc and lead concentrate requirements for the foreseeable future.

Power: Most of HZL's operations are powered by the coal-based captive power plants at Chanderiya, Dariba and Zawar. HZL imports the required thermal coal from a number of third party suppliers and part of the requirement is sourced by way of linkage with South Eastern Coalfields Limited ("SECL"), Western Coalfields Ltd ("WCL") and Northern Coal Field ("NCL").

In the past, coal supplies to Chanderiya had stopped due to pending decision at Ministry of Coal on the linkage supply to plants which have been allocated coal blocks. In February 2014 the coal block allocated to the Chanderiya lead zinc smelter captive power plant was deallocated by the Ministry of Coal. As of January 2016, the coal supplies to Dariba captive power plant had stopped due to the expiry of the existing fuel supply agreement and further renewal of such agreement has not been sanctioned by SECL. Linkage coal supplies to HZL's power plants at Zawar are continuing whilst the linkage quantity for the plants has been restricted to 50.0% of 0.4 million tonnes. The remaining coal requirements are met through the import of coal from various countries.

HZL currently has a fuel supply agreement of 1.39 million tons of coal linkage with the Ministry of Coal of India. However, due to limited coal availability, Coal India has been supplying only 50.0% of the 1.39 million tons linkage quantity in Fiscal Year 2020. The fuel supply agreement was signed in September 2017 for coal supplies to Chanderiya and Dariba. For Zawar, the fuel supply agreement was valid until June 2019 which HZL has applied for extension up to the new auction date. Despite this, Coal India continues to provide supply until the new linkage auction has been conducted and a new agreement has been signed.

HZL's remaining operations source their required power from liquid fuel-based captive power plants or from local power companies. The liquid fuel is sourced from third party suppliers on yearly contracts.

Metallurgical coke: In addition, HZL's pyrometallurgical smelter at Chanderiya requires metallurgical coke that is used in the smelting process. HZL currently sources its metallurgical coke requirements from third parties under long-term contracts and the open market.

Distribution, logistics and transport

Zinc and lead concentrates from HZL's lead-zinc mines are transported to the Chanderiya and Debari smelters by road. Zinc and lead ingots, silver and sulphuric acid by-products are transported primarily by road to customers in India directly or via HZL's depots. Zinc and lead cathodes are mostly transported by rail to its processing and refining facilities in Uttarakhand state in northern India. Zinc and lead ingots are transported for exports to ports in India primarily by rail, from where they are loaded on ships. The facilities in Uttarakhand also serve as finished goods centre for nationwide distribution of its finished products.

Zinc at the Skorpion mine is cast into ingots for export and transported from the refinery to the port of Luderitz, approximately 300 km away by trucks each having a maximum capacity of 35 tonnes.

Zinc concentrate, lead concentrate and copper concentrate from the Black Mountain and Gamsberg mine is hauled by road to the port of Saldanha with delivery terms to export customers on a cost, insurance and freight basis.

Sales and marketing

HZL's 10 largest customers accounted for 35.5%, 30.6% and 33.7% of its revenue in Fiscal Years 2018, 2019 and 2020, respectively. No customer accounted for greater than 10.0% of HZL's zinc business revenue in Fiscal Years 2018, 2019 and 2020.

HZL's marketing office is located in Mumbai, and it has field sales and marketing offices in most major metropolitan centers in India. In Fiscal Year 2020, HZL sold approximately 71.7% of the zinc metal it produced in the Indian market and exported approximately 28.3% of our Zinc India segment revenue. In lead metal, approximately 87.5% of total sales in made in domestic market, while the rest approximately 12.5% is being exported.

In Fiscal Year 2020, HZL sold approximately 97% of the zinc metal in the domestic market and exported approximately 80% under annual contracts specifying quantity, grade and price, with the remainder sold on the spot market. The contract sales price is linked to prevailing LME price with an additional physical market premium. Thus, the price that HZL receives for its zinc is dependent upon, and subject to fluctuations in the LME price.

Skorpion's 10 largest customers accounted for approximately, 94.4%, 83.6% and 98.52% of its revenue in Fiscal Years 2018, 2019 and 2020, respectively. Three of Skorpion's customers accounted for approximately 75.0%, 49.5% and 82.98% of Skorpion's revenue in Fiscal Years 2018, 2019 and 2020. Skorpion's marketing office is located in Rosh Pinah. Most of the zinc metal that Skorpion produced in Fiscal Year 2020 was sold under spot or short term contracts. About 30.71% of the metal produced is sold in the Southern African Customs Union market and balance is sold to other regions. The contract sales price is linked to prevailing LME price with an additional market premium. Thus, the price that Skorpion receives for its zinc is dependent upon and is subject to fluctuations in the LME price.

BMM produces zinc, lead and copper concentrates that are sold in international markets on a spot basis or a frame contract basis. The commercial terms negotiated include taking into account the percentage of payable metals, treatment and refining charges and applicable prices. Some of the customers of Black Mountain mine are Cliveden Trading AG, Ocean Partners UK Limited, Louis Dreyfus Company Metals Suisse SA and Trafigura PTE Limited.

Gamsberg Mine produces zinc and lead concentrates that are sold in international markets on a spot basis or a frame contract basis. The commercial terms negotiated include taking into account the percentage of payable metals, treatment and refining charges and applicable prices. Some of the customers of Gamsberg Mine are Korea Zinc, MRI Trading AG, Nyrstar, Nobel Resources Limited.

All the zinc and lead metal that BMM and Gamsberg Mine produced in Fiscal Year 2020 was sold under frame or spot contracts specifying quantity, grade and price. The contract sales price is linked to the prevailing LME price with an additional market premium. Thus, the price that BMM and Gamsberg receives for its zinc and lead is dependent upon and is subject to fluctuations in the LME price.

Projects and developments

HZL has been actively conducting exploration, which has resulted in net Ore Reserves of 114.7 million tonnes grading 6.9% of zinc and 1.8% of lead across all mines in Fiscal Year 2020. Based on long-term evaluation of assets and in consultation with mining experts, Vedanta is working on existing phase of growth and has finalised the next phase of growth, which will involve sinking of underground shafts and developing underground mines. The plan comprises developing a 4.5 mmtpa underground mine at Rampura Agucha mine and expanding the Sindesar Khurd mine from 4.5 mmtpa to 6.00 mmtpa, Zawar mines from 1.2 mmtpa to 4.50 mmtpa, Rajpura Dariba mine from 0.9 mmtpa to 2.0 mmtpa and Kayad mine to 1.2 mmtpa. The growth plan will increase mined metal (MIC) production capacity to 1.25 mmtpa.

Vedanta has also introduced "Smart Ore", a digital concept providing end to end solutions performance and mine condition which enables data driven decision making for both mining and blending management.

Market share and competition

HZL is the only integrated zinc producer in India and had a market share by sales volume of the Indian zinc market of 77.35% in Fiscal Year 2020, according to ILZDA. Imports accounted for the remaining 22.65% market share, according to ILZDA. Zinc is a commodity product and HZL competes primarily on the basis of price, time of delivery and location. Zinc metal also faces competition as a result of substitution of materials, including aluminium, stainless steel and other alloys, plastics and other materials being substituted for galvanised steel and epoxies, paints and other chemicals being used to treat steel in place of galvanisation in the construction market.

HZL is the only primary lead producer in India, with competition coming from imports which provide a substantial majority of the lead consumed in India. Lead is a commodity product and HZL competes primarily on the basis of price, time of delivery and location.

Copper Business

Introduction

Vedanta's copper business comprises operations in India, Zambia and Australia. Vedanta's Indian and Australian copper business is operated by Vedanta Limited, while its Zambian copper business is owned and operated by KCM. As of Fiscal Year 2020, Vedanta owned 50.1% of the share capital of Vedanta Limited and 79.4% of the share capital of KCM.

Vedanta's Indian copper business is principally a custom smelting business, which includes a smelter, refinery, phosphoric acid plant, sulphuric acid plant, copper rod plant and three captive power plants at Tuticorin in southern India, a refinery and a copper rod plant, and three anode casting plants at Silvassa in western India, a precious metal refinery that produces gold and silver, a doré anode plant, and a copper rod plant at Fujairah in the UAE. According to Wood Mackenzie, Vedanta Limited's Tuticorin smelter was one of the world's top ten, in terms of production volumes in 2016.

In addition, Vedanta Limited owns the Mt. Lyell copper mine in Tasmania, Australia, which provides a small percentage of its copper concentrate requirements. The operation of Mt. Lyell mine was suspended in January 2014, following a mud slide incident. Subsequently, the operations at Mt. Lyell copper mine was further suspended for care and maintenance since 9 July 2014 following a rock falling on the ventilation shaft in June 2014.

As a custom smelter, Vedanta Limited buys copper concentrate at LME-linked copper prices less TcRc that it negotiates with suppliers. Vedanta Limited sells refined copper at LME-linked prices in domestic and export markets. Vedanta Limited receives a discount from its suppliers in the form of a TcRc, which is influenced by the global copper concentrate demand, supply of copper smelting and refining capacity, LME trends, LME-linked price participation and other factors. Vedanta Limited sources its concentrate from various global suppliers and its Mt. Lyell copper mine.

In recent years, Vedanta Limited has improved the operating performance of its copper business by improving operational efficiencies and reducing unit costs, including reducing power costs by constructing a captive power plant at Tuticorin. Vedanta Limited intends to further improve the operating performance of its copper business by continuing to reduce unit operating costs through improvements in recovery rates, lowering power and transport costs, achieving economies of scale and achieving other operational efficiencies. The copper business in Zambia is owned and operated by KCM, which is largely an integrated copper producer. KCM's Zambian operations comprise various facilities at Konkola, Nchanga, Nkana and Nampundwe. KCM's operations at Nchanga include a number of open-pit mines, a large underground mine, TLP with the associated solvent extraction electro winning ("SX-EW") facility, a smelter with a cobalt recovery furnace, and a sulphuric acid plant and copper concentrators comprising two main processing units and a refractory ore stockpile. At Konkola, KCM operates a large underground mine and a concentrator on site. There is also a refinery at Nkana and a pyrite mine and concentrator at Nampundwe.

Since the acquisition of KCM in 2004, Vedanta has implemented various projects and expansions to improve KCM's operating performance. These include:

- the Konkola Deep Mining Project (the "KDMP"), a comprehensive project developing mining infrastructure to access the large copper ore body available at deeper levels at KCM's Konkola mine, which Vedanta estimates will increase the output of KCM's Konkola underground mine to approximately 7.5 mtpa at full ramp-up. It is a flagship asset with a life of over 50 years;

- debottlenecking the TLP at Nchanga to increase its capacity from 15.1 mtpa to up to 17.3 mtpa;

- installing a second cobalt recovery furnace at the Nchanga smelter to double cobalt recovery;

- upgrading and modernising the east and west mill processing plants at the Nchanga concentrator, including upgrading the west mill Nchanga underground mine concentrator with a new 3.0 mtpa concentrator and the east mill Nchanga open-pit concentrator with a new 6.5 mtpa concentrator;

- commissioning a 311,000 tpa direct-to-blister flash smelter at Nchanga with a cobalt recovery furnace;

- commissioning a 6 mtpa concentrator at Konkola to enhance mining output, improve recovery and improve the concentrate grade of its copper;

- expanding the Nkana refinery to a production capacity of 300,000 tpa of copper cathode; and

- commissioning a 640,000 tpa sulphuric acid plant at Nchanga to produce acid for use in the TLP.

Latest Development at KCM

In May 2019, ZCCM, a company majority owned by the Government of Zambia, which owns 20.6% of the shares in KCM, filed a petition in the High Court of Zambia to wind up KCM on "just and equitable" grounds. ZCCM also obtained an ex-parte order from the High Court of Zambia appointing a provisional liquidator of KCM pending the hearing of the Petition. On 11 June 2019, without any prior notice, ZCCM amended the petition to include an additional ground for winding up KCM based on allegations that KCM is unable to pay its debts. Since all the significant decision-making powers, including carrying on the business of KCM and taking control over all the assets of KCM, rests with the provisional liquidator, Vedanta believes that the appointment of the provisional liquidator has caused the loss of its control over KCM. Accordingly, Vedanta deconsolidated KCM with effect from 21 May 2019 and has presented the same in the income statement for the Fiscal Year 2020 Financial Statement as a discontinued operation.

See the sections entitled "*Risk Factors — Risks Relating to Business — Vedanta may not be able to regain control over KCM*.", "*Risk Factors — The Fiscal Year 2020 Financial Statements and the Fiscal Year 2019 Financial Statements are not directly comparable*.", "*Business — Litigation — Proceedings related to KCM*." and the audit report and note 3(e) to the Fiscal Year 2020 Financial Statements.

Principal products

Copper cathode. Vedanta's copper cathodes from the Tuticorin and Nkana refinery are square shaped with purity levels of 99.9% copper. These cathodes meet international quality standards and are registered as LME "A" Grade. KCM also produced Kabundi copper cathode, which is marketed as "KBC" from SX-EW TLP at Nchanga. The major uses of copper cathodes are in the manufacture of copper rods for the wire and cable industry and copper tubes for consumer durable goods. Copper cathodes are also used for making alloys like brass, bronze and alloy steel, with applications in transportation, electrical appliances and machinery in defence and construction.

Copper rods. Vedanta's copper continuous cast rods meet all the requirements of international quality standards including the ASTM B 49: 2010 or the BS EN 1977:1998 standards. Vedanta's copper rods are currently used primarily for power and communication cables, transformers and magnet wires.

Sulphuric acid. Vedanta Limited and KCM produce sulphuric acid at their sulphuric acid plants through conversion of sulphur dioxide gas that is generated from the copper smelter. A significant amount of the sulphuric acid produced at the Tuticorin smelter is consumed by the phosphoric acid plant in the production of phosphoric acid, and the remainder is sold to fertiliser manufacturers and other industries. Sulphuric acid produced at the sulphuric acid plants at the Nchanga smelter is used in the TLP to extract oxide copper minerals from the current and old tailings and any surplus sulphuric acid is sold in the region.

Phosphoric acid. Vedanta Limited produces phosphoric acid at its phosphoric acid plant by chemical reaction of sulphuric acid and rock phosphate, which is imported. Phosphoric acid is sold to fertiliser manufacturers and other industries.

Other by-products. Other by-products of Vedanta Limited's copper smelting operations are gypsum, bismuth and anode slimes, which Vedanta Limited sells to third parties. Copper cobalt alloy is a by-product of KCM's copper mining operations, which KCM also sells to third parties. KCM also pursued potential opportunities to extract sales from the slag produced at its Nchanga smelter.

Production

Copper anode is an intermediate product produced by copper smelters and is generally not sold to customers except KCM where copper anodes were sold to customers. Approximately one tonne of copper anode is required to produce one tonne of copper cathode. Sulphuric acid is used as an input material for phosphoric acid. Approximately 2.8 tonnes of sulphuric acid is required to produce one tonne of phosphoric acid. Copper Starter Sheets were produced from Copper Anodes at Nkana Refinery to support TLP's Cathode Production. Copper cathode was produced at the TLP at Nchanga using current tailings from the Nchanga west concentrator and reclaimed tailings sourced from the decommissioned tailings storage facilities. The Nchanga smelter produced copper in the form of copper-cobalt alloy, which accounts for approximately 6% to 8% of the smelter's total design capacity of 311,000 tpa. Nampundwe produced pyrite concentrates which is blended with copper concentrate at the Nchanga smelter when required. Copper cathode is used as an input material for copper rods. Approximately one tonne of copper cathode is required to produce one tonne of copper rods. The table below sets out Vedanta's total production[1] from Tuticorin, Silvassa, Nkana, Nchanga and Nampundwe for the periods indicated.

		Fiscal Year		
Facility	**Product**	**2018**	**2019**	**2020**
			(Tonnes)	
Tuticorin	Copper anode	328,076	4	–
	Copper cathode	216,749	2,873	–
	Copper rods	67,207	2,282	–
	Sulphuric acid	1,033,249	0	–
	Phosphoric acid	191,746	182	–
Silvassa[4]	Copper cathode	186,418	86,644	77,487
	Copper rods	135,332	108,915	100,216
Nkana refinery	Copper anode[2]	0	0	–
	Copper cathode[3]	13,649	11,733	–
Nchanga (smelter and TLP)	Copper anodes[2]	131,629	107,646	–
	Copper cathode[3]	43,316	54,294	–
	Sulphuric acid	263,863	217,339	–
Nampundwe	Pyrite concentrate	7,713	10,894	–
Total	**Copper anode**	**459,705**	**107,646**	**77,487**
	Copper cathode	**460,134**	**167,275**	**100,216**
	Copper rods	**202,539**	**111,196**	**–**
	Sulphuric acid	**1,297,113**	**217,339**	**–**
	Phosphoric acid	**191,746**	**0**	**–**
	Pyrite concentrate	**7,713**	**10,894**	**–**

(1) See the section entitled "*Presentation of Information — Basis of Presentation of Reserves and Resources — Reserves and Production*" for an explanation of the basis of preparation of production amounts.

(2) During Fiscal Years 2018 and 2019, 115,344 tonnes and 91,175 tonnes respectively of copper anode were not processed into copper cathode and sold as copper anode and anode slags at KCM.

(3) The production numbers for copper cathode excludes the copper in copper cobalt alloy and copper in concentrate produced and sold as concentrate. Copper in copper cobalt alloy production in Fiscal Years 2018 and 2019 was 23,028 tonnes and 19,833 tonnes respectively.

(4) In Fiscal Year 2020, with new technological innovation, Vedanta converted its two rod plants into an Anode Casting Plant with an installed capacity of 132,960 MT of anode production per annum. During Fiscal Year 2020, these plants produced secondary material of 95,000 tonnes which further supported the refinery at Silvassa.

The table below sets out KCM's and CMT's total mine production[1] for the periods indicated:

Mine (Type of Mine)	Product	Fiscal Year 2018	2019	2020
			(Tonnes)	
Nchanga (Open-Pit and Underground) . . .	Ore mined	11,718,538	11,853,235	–
	Copper concentrate	110,799	96,564	–
	Copper in concentrate	12,465	12,317	–
Konkola Mine (Underground).	Ore mined	1,403,112	1,037,929	–
	Copper concentrate	107,094	90,910	–
	Copper in concentrate	37,316	30,001	–
Nampundwe Mine (Underground)	Pyrite ore mined	102,357	125,667	–
Total	**Copper ore mined**	**13,121,649**	**12,891,164**	**–**
	Copper concentrate	**217,893**	**187,474**	**–**
	Copper in concentrate	**49,780**	**42,318**	**–**
	Pyrite ore mined	**102,357**	**125,667**	**–**

(1) See the section entitled "*Presentation of Information — Basis of Presentation of Reserves and Resources — Reserves and Production*" for an explanation of the basis of preparation of production amounts.

Ore Reserve base

The figures for the Mt. Lyell Mine show the split between the ore derived from primary ("in-situ") ore and secondary ore, which consists of broken fresh ore from previous levels, remnants of ore from the open-pit side wall and pillars remaining from a former mining method together with sub-economic dilution from the mineralised material surrounding the ore body. The quantity and grade of the secondary ore was determined from the analysis of historical production. The estimate of the quantity and grade of the remnant material has been evaluated from previous studies and only uses a small proportion of this source of ore. Consequently, Vedanta believes that this allowance can be sustained for the forecast life of the Ore Reserves.

As of 31 March 2020, the Proved and Probable copper Ore Reserves at the Mt. Lyell Mine is nil. Description of operations

Smelters and Refineries

The table below sets out Vedanta's total capacities from the Tuticorin, Silvassa, Nkana and Nchanga facilities as of 31 March 2020:

	Capacity: Copper Anode[(1)]	Copper Cathode[(4)]	Copper Rods[(2)]	Sulphuric Acid[(3)]	Phosphoric Acid[(3)]	Captive Power Plant
			(tpa)			(MW)
Tuticorin.	400,000	246,000	96,000	1,300,000	230,000	191.5
Silvassa[(5)]	132,960	216,000	258,000	–	–	–
Nkana	–	300,000	–	–	–	–
Nchanga	311,000	80,000	–	582,750	–	–
Total	**843,960**	**842,000**	**354,000**	**1,882,750**	**230,000**	**191.5**

(1) Copper anode is an intermediate product produced by copper smelters and is generally not sold to customers except in the case of KCM where copper anodes were sold to customers. It is used to produce copper cathode by copper refineries. Approximately one tonne of copper anode is required to produce one tonne of copper cathode.

(2) Copper cathode is used as an input material for copper rods. Approximately one tonne of copper cathode is required to produce of one tonne of copper rods.

(3) Sulphuric acid is used as an input material for phosphoric acid. Approximately 2.8 tonnes of sulphuric acid are required to produce one tonne of phosphoric acid.

(4) Copper starter sheets are used as a starting material for KBC copper cathodes. Approximately one tonne of copper starter sheets are required to produce eight tonne of copper cathodes at TLP.

(5) In Fiscal Year 2020, with new technological innovation, Vedanta converted its two rod plants into an Anode Casting Plant with an installed capacity of 132,960 MT of anode production per annum. During Fiscal Year 2020, these plants produced secondary material of 95,000 tonnes which further supported the refinery at Silvassa.

Tuticorin facility. The Tuticorin facility, commissioned by Vedanta Limited in 1997 and is located approximately 17 km inland from the port of Tuticorin in the State of Tamil Nadu in southern India. Tuticorin is one of India's largest copper smelters based on production volume. As of 31 March 2020, the Tuticorin facility consists of a 400,000 tpa copper smelter, a 246,000 tpa copper refinery, a 96,000 tpa copper rod plant, a 1,300,000 tpa sulphuric acid plant, a 230,000 tpa phosphoric acid plant, and three complete captive power plants with capacities of 160 MW, 7.5 MW and 24 MW, respectively. The coal based power plant of 160 MW is primarily used for captive consumption.

Vedanta Limited also generates five MW of power from a smelter waste heat boiler. Coal for the 160 MW power plant is imported, and other captive power plants at Tuticorin operate on furnace oil. With captive power plants with a total capacity of 191.5 MW, which, together with a further five MW generated from the smelter waste heat boiler, Tuticorin facility will meet most of the facility's power requirements once the proposed expansion to 800,000 tpa is complete. Vedanta Limited's operations at Tuticorin, India are currently suspended due to ongoing litigation regarding the renewal of the its consent to operate. See the section entitled "*Business — Litigation — Proceedings related to the existing copper smelting operations and the proposed expansion at the Tuticorin plant*." for more information.

Silvassa refinery. The Silvassa facility, commissioned in 1997, comprises a refinery and two copper rod plants and is located approximately 140 km from Mumbai in the union territory of Dadra and Nagar Haveli in western India. Its refinery is ISA Process(TM) technology to produce copper cathode and its copper rod plants use conti rod technology. Silvassa facility consists of a 132,960 MT of blister/secondary material processing plant which is developed by converting its existing two old rod plants into anode casting plant, a 215,000 tpa copper refinery, and a new copper rod mill with an installed capacity of 258,000 tpa that was commissioned in October 2019. Vedanta Limited's Silvassa facility draws power from the state power grid to satisfy its power requirements.

Fujairah precious metal refinery. The Fujairah Gold FZE facility is located in Fujairah Free Zone-2. It is strategically located 130 km east of Dubai, on the coast of the Arabian Sea. The precious metals refinery at the Fujairah Gold FZE facility was completed in March 2009 and it began production in April 2009. The precious metals refinery has a capacity of 20 million tonnes ("mt") of gold and 105 mt of silver.

The technology for the refinery was supplied by Outotec Oyj, Finland, a pioneer in providing technology for the extraction and refining of precious metals. The Fujairah Gold FZE facility also has a copper rod plant with an annual capacity of 100,000 tpa. Production commenced in May 2010. Continuous-Properzi S.p.A., Italy supplied the rod mill equipment for this project, and the copper cathode required for the copper rod plant is expected to be sourced from the smelters of KCM. Additionally, the doré anode plant which was previously located at Tuticorin has been relocated to the precious metals refinery at Fujairah in June 2012 for smelting of "anode slime" to "doré anode" which is the raw material used by the Fujairah precious metal refinery.

Nkana facility. The Nkana facility, commissioned in 1932, primarily comprises a smelter, as refinery and a sulphuric acid plant, of which smelter and sulphuric acid plant have been dismantled. The Nkana operations are located in Kitwe approximately 360 km from Lusaka in the Copper belt Province of Zambia and approximately 55 km from Chingola where the Nchanga facilities are located.

The Nkana refinery produces finished copper in the form of cathodes. It also produces anode slime as a by-product, which contains copper and smaller amounts of certain precious metals, such as gold, silver, platinum, and palladium. The Nkana refinery uses the conventional electrolytic refining process to produce copper cathode that is LME-registered REC brand, which is at a minimum 99.99% pure copper. Further, the starter sheets produced at the Nkana refinery are used at the Nkana and Nchanga TLP for electro-refining and electro-winning, respectively. Capacity at the Nkana refinery has been expanded from approximately 220,000 tpa to 300,000 tpa and this expansion was completed in November 2009.

Nchanga facility. The Nchanga facility, initially commissioned in 1971, comprises a TLP and SX-EW facility and a state-of-the-art smelter commissioned in 2008 with a capacity of 311,000 tpa in the form of copper in copper anode and copper in copper-cobalt alloy and sulphuric acid plants with a capacity of 2,350 tonnes per day. The facility processes reclaimed tailings sourced from the Nchanga surface source operations and current tailings from the Nchanga concentrator to produce copper cathode.

The TLP comprised an acid leach SX-EW circuit which treats both reclaimed tailings and mine tailings from the copper flotation circuits at the west mill.

The Nchanga Smelter consists of a flash smelting furnace, slag cleaning furnace, cobalt recovery furnace, anode furnaces along with an acid, oxygen and water treatment plants. It operates on a direct to blister OUTOTEC technology and processes concentrates received from its integrated Mines (Nchanga and Konkola) as well as custom concentrates received from other mines in Zambia and the Democratic Republic of Congo.

During Fiscal Year 2013, the west mill Nchanga underground mine concentrator was upgraded with the commissioning of a new 3.0 mtpa concentrator and the east mill Nchanga open-pit concentrator was upgraded with the commissioning of a new 6.5 mtpa concentrator. Additionally, a cobalt recovery furnace was commissioned.

Mines

Mt. Lyell. The Mt. Lyell mine is located at Queenstown, Australia. It comprises of an underground copper mine and a copper processing facility and is owned and operated by CMT. The Mt. Lyell mine is owned and operated under the terms and conditions as stipulated in Mining Leases 9M/2013 (earlier 1M95) and 10M/2013 (earlier 5M95) granted by the State Government of Tasmania. Mining Lease 9M/2013 was granted on 1 January 1995 for a period of 15 years and the mining lease 10M/2013 was granted on 1 February 1995 for a period of 14 years and 11 months. Both leases have been renewed for a period of 18 years and are valid up to 30 December 2027. The mine is also covered by the Copper Mines of Tasmania (Agreement) Act 1999, which, in conjunction with an agreement between the State Government of Tasmania and CMT entered into pursuant to that Act, limits CMT's environmental liabilities to the impact of current operations, thereby insulating CMT from any historical legacy claims. The operation of Mt. Lyell mine was suspended in January 2014, following a mud slide incident.

Monte Cello acquired CMT in 1999 from Mt. Lyell Mining Company Limited. Since Monte Cello took over the mine, annual production has increased from 2.2 million tpa in Fiscal Year 2000 to 2.5 million tpa in Fiscal Year 2013. Vedanta Limited acquired Monte Cello, and CMT, from a subsidiary of Twin Star Holdings Ltd. ("Twin Star") in the year 2000.

The principal deposits in the Mt. Lyell region are all of the volcanic disseminated pyrite-chalcopyrite type which accounts for approximately 86.0% of the known ore in the region. The geology of the Mt. Lyell mine consists of a series of intercalated felsic to mafic-intermediate volcanics. Lithologies are highly altered quartz-sericite-chlorite volcanics with individual units delineated largely by the relative abundance of phyllosilicates. Volcanoclastic and rhyolitic lithologies occur sporadically throughout the sequence, as does pervasive iron mineralisation in the form of haematite, magnetite and siderite.

Chalcopyrite is the principal ore mineral and occurs chiefly in higher grade lenses enveloped by lower grade halos. The overall structure of Mt. Lyell is that of a steeply dipping overturned limb of a large anticline. The hanging wall (stratigraphic footwall) of the ore body consists of weakly mineralised chloritic schists with disseminated pyrite. The footwall is sharply defined by the Great Lyell Fault — Owen Conglomerate contact which truncates the ore body at its southern end.

The operations of the Mt. Lyell mine has been suspended for care and maintenance following a rock falling on the ventilation shaft in June 2014. All mining operations at CMT, when operational were undertaken by contractors while the processing and mill maintenance operations are undertaken by CMT employees. A sub-level caving underground mining method is used at the Prince Lyell ore body. Ore is loaded into trucks and then transported to the underground crusher and skip loading area. Crushed ore is then hauled by the Prince Lyell shaft and unloaded onto a conveyor feeding the ore bin at the Mt. Lyell processing plant. At the processing plant, the ore is crushed and ground prior to processing by flotation to produce copper concentrate which is then filtered to form a cake and trucked to the melba flats railway siding for transport to the port of Burnie. The concentrate is stored at Burnie until it is loaded into ships for transport to the port of Tuticorin from where it is trucked to the smelter. CMT has an active exploration and evaluation programme at Mt. Lyell which involves upgrading resources below the Prince Lyell reserves and testing additional exploration targets on the mining lease. The western tharsis deposit lies to the west of the Prince Lyell ore body, but CMT has not yet committed to its development. Additional targets include Tasman and Crown, Glen Lyell, Copper Clays and NW Geophysics. The tailings dam is a valley-fill type and excess water is discharged via a spillway. The water quality is sampled before the water is released from the site. The tailings are deposited on beaches around 300 metres from the dam spillway. CMT's accepted closure plan is to flood the tailings which will require CMT to raise the tailings dam wall and such plan is currently in progress.

The processing plant is approximately 30 years old and has been partially refurbished following CMT's acquisition with the addition of crushers, a float cell and a regrind mill at the surface. While the condition of the plant is ageing, maintenance is carried out as required to ensure that the process plant remains in safe and efficient condition.

Power at the mine is supplied through an electricity supply agreement with Aurora Energy Proprietary Limited and Hydro Tasmania Proprietary Limited to supply approximately 112 giga watts per hour. Aurora Energy Proprietary Limited supplies electricity on a spot price basis and Hydro Tasmania Proprietary Limited is under a fixed arrangement. There is ample supply of mine water and storm water captured on the tailings dam.

The cut-off grades are based on copper grades with the gold credit deducted from the operating costs. The reserves are derived from stopes which are designed such that the limits of the stope are defined by a cut-off grade of 0.8% copper and have an average grade that exceeds 0.8% copper. The revenue derivation of the cut-off grade includes the gold credit. The break-even cut-off grade of 0.65% copper is the grade that makes enough margin to cover the fixed and variable costs while the actual or operational cut-off grade used is 0.55% copper. CMT operates on a 0.8% copper operational cut-off grade in practise, which prefers to take higher revenue at the expense of a longer mine life.

At the time of finalisation of reserve statement as of 31 March 2018, no mineral reserves have been determined due to government statutory restrictions imposed post the mud slide incident in January 2014.

The reserves at CMT in the Proved Ore Reserve category are defined as the portion that can be economically mined of the measured in-situ resource, which has gold drill coverage (<50 metres) and is on or within the 50 metre zone below the lowest active production level. The probable in-situ reserve is the material which has been defined as the portion that can be economically mined and has good drill coverage but is outside the 50 metre zone from the lowest active production level. The ex-situ probable reserve is the portion of ex-situ indicated resource which can be economically recovered with the mining of the in-situ reserves; this is applied as a modifying factor.

CMT does not use a copper equivalent calculation for the determination of stope limits as the relationship between the copper and gold grades is essentially linear, allowing the gold credits to be deducted from operating costs.

CMT has identified additional mineral deposits in the Mt. Lyell mine and had engaged in drilling, scoping and feasibility studies on these deposits and has completed scoping study of Prince Lyell North Flank bottom block/lift and Copper Chert prospect and feasibility of Prince Lyell North Flank top block.

KCM mines. KCM's mining operations are located in the Copper belt Province of Zambia and consist of the Nchanga open pits and Nchanga underground mines, concentrator and TLP, the Konkola underground copper mine and concentrator, the Nchanga smelter with a copper recovery furnace and sulphuric acid plant, and the Nkana refinery. The Zambian Copper belt ore deposits lie along a 50-km wide strip of country that extends for 150 km from Chililabombwe in the northwest to Luanshya in the southeast. The Nampundwe pyrite mine and the concentrator are located in the Central Province approximately 50 km from Lusaka.

The geological setting of the Zambian Copperbelt is unusual compared to other worldwide copper deposits in that it occurs in sedimentary host rocks that have high carbonate content. The presence of dolomite in the geological sequence effectively eliminates any risk of acid mine drainage. The dominant structural feature of the Zambian Copperbelt is the Kafue Anticline, a Northwest — Southeast striking structure, the core of which is comprised of granite, schist and gneiss of the basement complex.

The focus of KCM's exploration has been the maintenance of resources and reserves following mining depletions. In July 2020, KCM closed a part of the Nchanga open pit mine following geo-technical assessments which detected some slope instability due to slough. KCM has implemented measures to protect the communities around the mining area and employees from the impact of the slough.

Konkola. The Konkola mine is situated about 26 km north of Chingola and is the most northerly of KCM's Copperbelt mines. These mining operations currently exploit the Kirila Bombwe ore body by underground methods and have historically been focused on two existing shaft systems, the Kirila Bombwe South ore body (the "No. 1 shaft") and the Kirila Bombwe North ore body (the "No. 3 shaft"). Additionally, in June 2006, KCM commenced sinking of the No. 4 shaft in the Kirila Bombwe South ore body as part of the KDMP. The No. 4 shaft lies approximately 130 metres due north of the No. 1 shaft. The mid-shaft loading station of the No. 4 shaft was commissioned in April 2010. The mid-shaft loading station of the No. 4 shaft was commissioned in April 2010. Construction of the bottom shaft sinking, which included the continued development of the No. 4 shaft to a design depth of approximately 1,500 metres, was completed during Fiscal Year 2012.

The Konkola mine commenced production in 1957. KCM acquired the mine in April 2000 from Zambia Consolidated Copper Mines Limited. At Konkola, KCM holds large-scale mining licence ("LML") number 7076-HQ-LML for its operations, which expires on 31 March 2025. The licence permits the mining of copper, gold, silver, sulphur, selenium, cobalt and tellurium within the leasehold area. KCM's mining licence is valid until 31 March 2025, but operating permits subjected to annual renewal.

The operating shafts at the Konkola mine are underground mine (No. 1 shaft, No. 3 shaft and new No. 4 shaft, along with a number of ventilation shafts as well as the pipe shaft) and the Konkola concentrators.

The dominant features of the mine are the Kirila Bombwe Anticline in the southeast and the Konkola Dome in the northwest. The ore body in the No. 1 shaft area lies on the southern flank of the Kirila Bombwe Anticline and has an average thickness of about nine metres. The No. 1 shaft ore body generally strikes to the northwest-southeast and dips steeply southwest. It has a strike length of approximately 4,000 metres with an average dip of 50 degrees. The ore body in No. 1 shaft area is traced to 1,800 mtr deep and is open-ended at that depth. The ore body at the No. 3 shaft lies across the axis of the Kirila Bombwe Anticline and has an average thickness of 13 metres. The dips at the No. 3 shaft generally range from 10 degrees to 65 degrees. The ore body at the No. 3 area has been traced to a depth of 1,150 metres where it flattens out and continuing in the neighbouring licence area.

Historically, the No. 1 and No. 3 shafts have been managed as two separate mines. Underground haulage connections between the two mines were developed mainly for cross tramming and de-watering purposes. The separate treatment of the two mines was due to their Ore Reserves being physically divided by the presence of a barren gap in the ore body that extended from the surface down to about 720 metres. Below that level the ore body is continuous along a strike length of approximately 10 km and this large ore body forms the basis of the KDMP. The total capacity of the Konkola underground mine has been expanded by the KDMP.

Mine developments consist of primary and secondary developments at both the No. 1 and No. 3 shafts. Primary developments involve mining haulages, drain drives, access ramps, footwall ventilation raises and rock passes on main levels. Secondary development includes the mining of drives, crosscuts and raises in ore and waste on the sublevel to prepare the ore body for stopping. The mining operations are constrained by the necessity to de-water from both hanging wall and footwall aquifers at an overall pumping rate of approximately 350,000 m^3 per day.

The ore body limits are defined by sampling cross cut as well as diamond drilling on approximately 30 metres by 30 metres pattern. The stope limits are contained within the ore body defined using a 1.0% total copper cut-off. Other stope dimensions are worked out using geotechnical properties of the rocks.

Appropriate actions are taken while designing the blast holes as well as during blasting to minimise dilution from the sub-economic areas outside the ore body limits. However, due to the stratified nature of the rocks some dilution does take place. Dilution generally ranges from 5.0% to 25.0%, depending on the rock condition.

Mining methods employed at the Konkola mine include sub level open stopping, post pillar cut and fill and panel stopping. The total rock hoisting capacity at the Konkola mine is 645 kilo tonnes per month ("ktpm") which comprises 160 ktpm from the No. 1 shaft, 135 ktpm from the No. 3 shaft and 350 ktpm from the No. 4 shaft. On reaching the surface run of the mine ("RoM") ore from the No. 1 and 4 shaft is conveyed via conveyor belt directly to the Konkola concentrator and the RoM ore from the No. 3 shaft is transported three km to the Konkola concentrator using 85 tonne off-highway trucks.

The 6 mtpa Konkola concentrator processes RoM ore sourced from the Konkola underground mine using froth flotation to produce copper concentrate for smelting at the smelter in Nchanga.

The 6 mtpa concentrator comprises two streams of 3 mtpa. KCM commissioned the first stream of 3 mtpa in October 2008 and the second stream of 3 mtpa in February 2010. The Konkola concentrator utilises SAG and Ball mill comminution and beneficiation by froth flotation processing. The nominal capacity of the milling circuit is 6.6 mtpa, which with a 10.0% design allowance yields a maximum milling capacity of 7.3 mtpa.

The crushed RoM ore is fed directly into the concentrator's SAG mill with final milling being performed in the Ball mill prior to flotation. The concentrates are thickened and filtered to produce a final concentrate with a grade of approximately 36.0% to 40.0%.

The concentrates are then transported 26 km southwest of Chililabombwe by road to the Nchanga smelter in Chingola. Approximately 60.0% of the residual tailings pumped straight to the Lubengele tailings dam situated approximately 4.5 km north of the plant, while approximately 40.0% of the tailings are pumped to the backfill plant to produce backfill for underground mining operations.

Power at the mine is supplied by Copperbelt Energy Corporation PLC ("CEC") with fixed rates subject to index adjustment based on the US Producer Price Indices until 2020. The maximum demand for Konkola is currently 90 MW, but Vedanta estimates that it will rise to 120 MW as it ramps up the KDMP. On-site emergency power is available from two 10 MW diesel generators owned and operated by CEC. This power is mainly utilised for running the de-watering pumps underground. Water pumped from underground is utilised for the plant. The power infrastructure at Konkola is being upgraded to meet the enhanced requirements of the KDMP project. In addition, in anticipation of any power failure, KCM has installed three diesel generator sets of 8 MW each to meet the power requirements of its Konkola mining operations and the KDMP project.

Mine water as well as water from the nearby Kafue river is utilised for domestic requirements.

Mulonga Water and Sewerage Company handles the domestic water supply.

Nchanga. The Nchanga mine is situated in the Copperbelt Province of Zambia, in the vicinity of the town of Chingola. Nchanga's operating units comprise two operational open-pit mines, a large underground mine (currently on suspended for care and maintenance), a TLP with the associated SX-EW facility, a sulphuric acid plant, copper concentrators comprising two main processing units and a recently commissioned direct blister flash smelter. At Nchanga, KCM holds LML number 7075-HQ-LML for its operations which expires on 31 March 2025. The licence allows KCM to mine copper, cobalt, gold, silver, sulphur, selenium and tellurium within the leasehold area. Under its mining licence, KCM is required to obtain an operating permit on an annual basis. The current mining licence is valid until 31 March 2025.

Following exploration in 1923, development in 1927 and the cessation of operations due to flooding and low copper prices in 1931, mining at the Nchanga underground mine recommenced in 1937. Surface mining operations from the Nchanga open-pit commenced in 1957.

Access to the underground operations is by a series of vertical and inclined primary and sub-vertical shafts. The combined rock hoisting capacity is 292 ktpm. The current operations are projected to extend to 920 metres below the surface. Mine de-watering at Nchanga requires pumping approximately 75,000 m^3 of water per day, a component of which is derived from inflow through the open-pit during the wet months. Underground operations, which were suspended for care and maintenance in November 2015, were restarted in June 2017. The Nchanga underground possess a vast ore material resource of 297 million tonnes with a grade of 1% total copper.

The Nchanga deposit is situated on the northern end of the southwest margin of the Kafue anticline in the vicinity of Chingola. The mineralisation is hosted within two stratigraphic horizons being the Lower Ore Body ("LOB") and Block "A". Block "A" lies to the southwest of LOB and has a similar deposit with a milder dip of about 20 degrees. The underground Mineral Resources are defined using an assay footwall and an assay hanging wall with a cut-off grade of 1.5% total copper.

The Nchanga mining licence areas also have stockpiles of Chingola Refractory One ("CRO") with a high refractory material content in mica which is not treatable by conventional methods.

The mining method currently employed at Nchanga is block carving using a continuous advancing long wall caving method. The ore body and the rocks above the areas where the long wall caving method is used are very weak and as a result no development takes place within it. Ore body limits are primarily defined by diamond drilling from the access established below the ore body. The drill holes are located on a 30 metres by 30 metres pattern. Extreme care is taken to ensure that core recovery from diamond drilling remains high (in excess of 85.0%) and contamination is avoided by use of double or triple tube core barrels. Logging, sampling and assaying are carried out in accordance with quality assurance/quality control procedures. An external cut-off of 1.5% total copper is taken to define the ore body limits. The cut-off is reduced to 1.0% total copper where the ore body is thin and richly mineralised. For the Nchanga open-pit ore bodies, a cut-off grade of 0.5% total copper is used.

Sub-economic dilution is practically zero at the initial stages, but it increases as the extraction increases. Depending upon the in situ grade, a dilution in excess of 50.0% may be recorded at the time when the grade of material from a finger raise has fallen below 1.0% exhausted finger raises are barricaded with timbers.

Open-pit mining has historically been exploited near surface ore bodies, including the LOB, UOB, River Lode, Luano and Chingola Ore Bodies. The mining operations are heavily mechanised using surface drilling techniques, electric shovel loading and hydraulic excavators for loading and 240 tonnes off-highway rear dump trucks. The mining operations at Nchanga are currently exclusively owner operated with the exception of stockpile dumps which are outsourced to meet mill requirements.

As part of growth projects for the Open pits, Mimbula II open pit which is located south — east of Chingola, about 12 km from the Chingola-Chilabombwe highway, and along the Mimbula Chabunyama syncline is being considered for exploitation. In Fiscal Year 2006, further exploration work was done at Mimbula II area indicating a north extension to the existing Mimbula II open pit and also led to the upgrade of the existing mineral resource. Viability of the resource is understudy and provides good potential for open pits.

The Nchanga concentrator comprises two main processing units; the east mill and the west mill. The east mill is a conventional comminution circuit with a RoM capacity of 6.5 mtpa which treats copper ore from the open-pits to produce a thickened product which is pumped to the west mill situated approximately two km away for further processing. The west mill comprises two distinct circuits: the copper comminution circuit for underground ore, the copper flotation circuit for open-pit and underground. The copper comminution circuit crushes and mills ore from the Nchanga underground mine ahead of the flotation circuit and has a RoM capacity of approximately 3.0 mtpa. The copper flotation circuit treats milled ore from the Nchanga underground mine (copper comminution circuit) and milled ore from the Nchanga open-pit (east mill) to produce concentrates. Residues from the concentrator are pumped to the TLP for hydrometallurgical processing. The concentrates are transported to the Nchanga smelters except bulk copper-cobalt concentrates which are sold in the market.

During Fiscal Year 2013, the west mill Nchanga underground mine concentrator was upgraded with the commissioning of a new 3.0 mtpa concentrator and the east mill Nchanga open-pit concentrator was upgraded with the commissioning of a new 6.5 mtpa concentrator. From 2014 through to 2015, the Nchanga underground mine was making losses entity due to high cost of production emanating from high power tariffs, low mine grade due to mining in the fringe and patchy lower ore body compounded with low copper price at LME. Hence, NUG was suspended for care and maintenance in November 2015.

Power at the mine is supplied by CEC with fixed rates subject to index adjustment based on the US Producer Price Indices until 2020. Nchanga's maximum demand is 97 MW.

Nampundwe. The Nampundwe mining operating assets are the Nampundwe pyrite underground mine and concentrator. These are located in the Central Province of Zambia, approximately 50 km west of Lusaka. Nampundwe exploits iron pyrite rich ore bodies containing 11.0% in situ sulphur and has capacity to produce 60,000 tpa of pyrite concentrate that is blended with copper concentrate for smelting.

Principal raw materials

The principal inputs of Vedanta's copper business are copper concentrate, rock phosphate, power, fuel and sulphuric acid. Other inputs include coke, lime, reagents and oxide ore. Vedanta has in the past been able to secure an adequate supply of the principal inputs for its copper production.

Copper concentrate. Copper concentrate is the principal raw material of Vedanta Limited's copper smelters. Vedanta Limited sourced 100% of its copper concentrate requirements from third-party suppliers, either through long-term contracts or on spot markets. Vedanta Limited purchases copper concentrate at the LME price less a TcRc that it negotiates with its suppliers but which is influenced by the worldwide prevailing market rate for the TcRc. It is expected that the purchased from third party suppliers to increase in future periods to the extent sought to increase the copper smelting and refining capacity. As smelting operations at Tuticorin have been halted since March 2018, Vedanta Limited has not procured copper concentrate in Fiscal Year 2020.

KCM purchases copper concentrate at the LME price less a TcRc that KCM negotiates with its suppliers, but which is influenced by the worldwide prevailing market rate for the TcRc.

In general, Vedanta Limited's long-term agreements run for a period of three to five years and KCM's agreements run for a period of one year, and are renewable at the end of the period. The quantity of supply for each contract year is fixed at the beginning of the year and terms like TcRc and freight differential are negotiated each year depending upon market conditions.

Vedanta Limited also purchases copper concentrate on a spot basis to fill any gaps in its requirements based on production needs for quantity and quality. These deals are struck on the best possible TcRc during the period and are specific for short-term supply. As smelting operations at Tuticorin have been halted since March 2018, Vedanta Limited has not procured copper concentrate in Fiscal Year 2020.

Copper Blisters: Copper Blister is the principal raw material for Vedanta Limited's Anode Casting Plants at Silvassa facility. Vedanta Limited sourced 100% of its Blister requirements from third-party suppliers, either through long-term contracts or on spot markets. Vedanta Limited purchases Blisters at the LME price less refining charges that it negotiates with its suppliers.

Rock phosphate. Vedanta Limited's rock phosphate is sourced primarily from Jordan at spot prices. Vedanta Limited is currently exploring the sourcing of rock phosphate from countries such as Morocco, Nauru, Togo, Algeria and Israel to diversify its supply base. As smelting operations at Tuticorin have been halted since March 2018, Vedanta Limited has not procured Rock Phosphate in Fiscal Year 2020.

Power. The electricity requirements of Vedanta Limited's copper smelter and refinery at Tuticorin are primarily met by the on-site captive power plants. The first 80 MW of a new 160 MW coal-fired thermal power plant was commissioned in the first quarter of Fiscal Year 2014. Vedanta Limited's other captive power plants at Tuticorin operate on furnace oil that is procured through long-term contracts with various oil companies. Vedanta Limited has outsourced the day-to-day operation and maintenance of its captive power plants at Tuticorin. Vedanta Limited's Silvassa facility relies on the state power grid for its power requirements.

KCM's Nkana, Nchanga and Konkola operations receive their electricity requirements pursuant to a long-term agreement with CEC. KCM also has an agreement with the national utility company of Zambia, Zambia Electricity Supply Corporation Limited ("ZESCO"), to provide power to Nampundwe on substantially the same terms as its agreement with CEC. ZESCO transmits power from hydroelectric generating stations at Kariba North, Kafue Gorge and Victoria Falls to the central switching station in Kitwe and at the Luano substation outside Chingola at 330 KV, which is sold in bulk to CEC. The 330 KV voltage is stepped down to 220 KV and 66 KV and distributed by CEC throughout the Zambian Copperbelt. ZESCO also supplies electricity directly to the mining operations at Nampundwe in the Central Province of Zambia. In addition, in anticipation of any power failure, KCM has installed a diesel generator set of 24 MW to meet the power requirements of its Konkola mining operations and the KDMP project.

KCM agreed to a 33.0% increase in its tariff under the terms of its electricity supply agreement with CEC. This increase became effective on 1 January 2008 and remained fixed for a period of three years. A 50.0% tariff increase effective from 2011 and spread over a period of five years was signed with CEC. Effective from 1 January 2016, Zambia has increased power tariffs for mining companies in a bid to lure companies to invest in power generation. The increase in prices by 25% comes as the country is facing severe electricity crisis, which has worsened by a drought. However, the drought conditions have improved since then.

Fuel. KCM's fuel supply is completely dependent on imports. In the past, Zambia has faced fuel shortages. KCM has addressed these fuel shortages by entering into a light fuel supply agreement with BP Zambia Limited on 1 September 2010, which expired on 31 December 2013. Fuel supplies through imports under spot market. In addition to the light fuel supply agreement with BP Zambia Limited, KCM is also party to a heavy fuel oil supply agreement with Kobil Zambia Limited.

Sulphuric acid. The sulphuric acid for KCM's TLP is largely supplied by the 1,850 TPD and 500 TPD sulphuric acid plants at the Nchanga smelter.

Distribution, logistics and transport

Copper concentrate from third parties is received at the port of Tuticorin and then transported by road to the Tuticorin facility.

Once processed at the Tuticorin facility, copper anodes are either refined at Tuticorin or transported by road to Silvassa. Copper cathodes, copper rods, sulphuric acid, phosphoric acid and other by-products are shipped for export or transported by road to customers in India.

Copper Blisters from third parties are received at Nhav Sheva port and Hazira Port and then transported by road to the Silvassa facility.

KCM's finished copper in the form of copper cathodes are mainly sold to overseas markets in the Middle East, Southeast Asia and the Far East with very little copper being sold locally in Zambia. The metal is transported to these markets by road and rail to the Indian Ocean ports of Dar-es-Salaam in Tanzania and Durban in South Africa and, more recently, Beira in Mozambique.

Sales and marketing

The ten largest customers of Vedanta's India copper business accounted for approximately 57.8%, 45.5% and 87.48% of the copper business revenue in Fiscal Years 2018, 2019 and 2020, respectively.

Vedanta Limited's copper sales and marketing head office is located in Mumbai, and it has field sales and marketing offices in most major metropolitan centres in India. Vedanta Limited sells copper rods and cathodes in both the domestic and export markets. In Fiscal Years 2018, 2019 and 2020 exports accounted for approximately 52.3%, 24.3% and 29.0% of the revenue Vedanta's copper business, respectively. Vedanta Limited's export sales were primarily to China, the UAE, Qatar, Belgium, Nepal and Taiwan. It also sells phosphoric acid and other by-products in both the domestic and export markets.

KCM does not maintain any significant sales offices as sales are effected mainly through contracts executed at its corporate offices in Chingola, Zambia. Vedanta Limited sells its copper rods and cathodes in both domestic and export markets. KCM primarily sells its products in export markets. Domestic sales in Zambia form an insignificant portion of KCM's sales. Vedanta's export sales were primarily to China, Japan, the Philippines, Singapore, South Korea, Taiwan, Thailand and various countries in the Middle East. Vedanta Limited also sells phosphoric acid and other by-products in both domestic and export markets. Vedanta's exports of copper anode slimes are predominately sold to Europe, the UAE, Belgium and Korea amongst others.

Domestic sales by Vedanta Limited in India are broadly based on the LME spot price plus regional premiums, as well as domestic supply and demand conditions. A majority of Vedanta's sales are made pursuant to existing supply agreements. The price for the copper Vedanta Limited sells in India is normally higher than the price it charges in the export markets due to the tariff structure on costs, smaller order sizes that domestic customers place and the packaging, storing and truck loading expenses that it incurs when supplying domestic customers.

Vedanta Limited's export sales of copper are made on the basis of both long-term sales agreements and spot sales. The prices of Vedanta Limited's copper exports include the LME price plus a producer's premium. Vedanta Limited does not enter into fixed price long-term copper sales agreements with its customers. Market share and competition.

Market share and competition

Vedanta Limited owns one of the two custom copper smelters in India though currently shut, it is running refining operations at its Silvassa unit by procuring copper anodes and blisters to make cathodes and rods and had a 13% primary market share by sales volume in India in Fiscal Year 2020, according to International Copper Association (India). The other major custom copper smelter in India was owned by Hindalco, while the remainder of the primary copper market in India was primarily served by imports and HCL in Fiscal Year 2020.

Copper is a commodity product and Vedanta Limited competes primarily on the basis of price and service, with price being the most important consideration when supplies of copper are abundant. Vedanta Limited's metal products also compete with other materials, including aluminium and plastics that can be used in similar applications by end-users. Copper is sold directly to consumers or on terminal markets such as the LME. Prices are established based on the LME price, though as a regional producer Vedanta Limited is able to charge a premium to the LME price which reflects the cost of obtaining the metal from an alternative source.

Projects and developments

Tuticorin.

Vedanta Limited undertook expansion projects to setup copper smelter plant II at Tuticorin costing ₹44,240 million ($591 million) to increase its total copper capacity to 800,000 tpa. Vedanta Limited had incurred ₹10,466 million ($140 million) on these projects as of 31 March 2020.

Vedanta's operations at Tuticorin, India are currently suspended due to ongoing litigation regarding the renewal of the consent to operate. See the section entitled "*Business — Litigation — Proceedings related to the existing copper smelting operations and the proposed expansion at the Tuticorin plant*." for more information.

Iron Ore Business

Introduction

Vedanta's iron ore business is carried out in the states of Goa and Karnataka through Vedanta Limited. Vedanta Limited's iron ore business includes exploration, mining and processing of iron ore. During Fiscal Year 2020, Vedanta Limited produced 4.4 million dmt of saleable iron production. The sales for Fiscal Year 2020 were at 6.6 million dmt.

Vedanta operates two metallurgical coke plants and a pig iron plant with an installed rated capacity of 522,000 tpa, 120,000 tpa and 832,000 tpa, respectively, in Goa and Maharashtra. The second metcoke plant was acquired in first half of Fiscal Year 2020 at Sindudhurg, Maharashtra, which became operational on 9 September 2019. Vedanta Limited manufactures pig iron through the blast furnace route. Vedanta Limited has a patent for the technology for the manufacture of energy recovery based metallurgical coke.

In addition, Vedanta Limited also operates two waste heat recovery plants of 30 MW each in Goa. In Fiscal Year 2020, Vedanta Limited produced approximately 681,000 tonnes of pig iron and 434,000 tonnes of metallurgical coke.

Vedanta's mining operations are carried out in the states of Goa and Karnataka, both of which became subject to suspension of mining activities due to alleged environmental and other violations by miners, which has adversely impacted the production of iron ore since August 2011. The suspension was imposed by the State Government of Goa and this suspension was upheld by the Supreme Court of India on the mining activities in the state of Goa from September 2012 to April 2014 and a suspension imposed by the State Government of Karnataka until April 2013. Although operations resumed in Karnataka after receiving the stage I forest clearance from the State Government of Karnataka and a temporary working permission from the MoEF, the temporary working permission expired on 31 July 2014. Karnataka operations were halted for the period from 1 August 2014 to 27 February 2015. Operations in Karnataka resumed after all statutory clearances were in place from 28 February 2015. Following the Supreme Court of India's order in April 2014, High Court of Bombay at Goa in August 2014 pronounced the order to renew mining leases in Goa. The MoEF and the state government also revoked their suspension orders subject to limits imposed by the Supreme Court of India, for renewal of the leases and consent to operate from the State Government of Goa. In August 2015, the mining operations resumed in the principal mines after completion of necessary statutory formalities and fulfilment of conditions annexed by Supreme Court of India and the State Government of Goa. The Supreme Court of India passed its final order in the matter on 7 February 2018 wherein it set aside the second renewal of the mining leases granted by the State of Goa. The Supreme Court of India directed all lease holders operating under a second renewal to stop all mining operations with effect from 16 March 2018 until fresh mining leases (not fresh renewals or other renewals) and fresh environmental clearances are granted under the Mines and Minerals (Development and Regulation) (MMDR) Act.

On 22 August 2011, Vedanta Limited acquired a 51.0% ownership interest in WCL, a Liberian iron ore exploration company which was a wholly-owned subsidiary of Elenilto Minerals and Mining LLC ("Elenilto"), for a cash consideration of $90.0 million. On 20 December 2012, Vedanta Limited acquired the remaining 49.0% of the outstanding common shares of WCL from Elenilto for a cash consideration of $34.0 million. However, due to the outbreak of Ebola in Liberia, Vedanta Limited's project was temporarily suspended in August 2014 as the staff had to be evacuated. Since then, iron ore prices have fallen significantly, due to which it was considered not viable to resume operations. Vedanta Limited is in discussions with the government to amend the Mineral Development Agreement to make this project more sustainable.

Goa Energy Limited, which merged into Vedanta Limited on 24 March 2015, owned one of the 30 MW waste heat recovery power plants in Goa which generates power from the waste gases of the metallurgical coke plant and blast furnace.

In October 2015, Vedanta Limited proposed to the State Government of Jharkhand to set up a one mtpa pig iron plant in Jharkhand, for Dhobil mining lease. On 6 May 2016, a memorandum of understanding for the first phase was signed between the State Government of Jharkhand and Vedanta Limited to set up a 1 mtpa hot metal plant. Further on 1 November 2017, the memorandum of understanding for the second phase was signed. The exploration drilling in the lease area commenced in May 2017 and a report was submitted to the State Government of Jharkhand in October 2017. The exploration report was examined by a technical committee comprising experts from Geological Survey of India, IBM and state geology and mining departments. In March 2018, the technical committee approved the report for issuing of letter of intent to Vedanta Limited for grant of a mining lease for Dhobil iron ore mine. Vedanta Limited is still awaiting the letter of intent to further carry on the process.

Revenue from Vedanta's iron ore business in Fiscal Year 2020 was $489 million.

Principal products

Iron ore. Vedanta Limited's iron ore Reserves consist of both lump and fine ore. As of 31 March 2020, the percentage of lump ore in the reserves was approximately 20.0% in Karnataka. The mines in Karnataka consists of average 49.1% deposits. Lump ore is sold from the mines in Karnataka primarily to domestic pig iron or steel producers. The majority of other iron ore produced by Goan mines was sold to purchasers in China, however during the Fiscal Year 2019 and Fiscal Year 2020, no iron ore were mined from Goa mine pursuant to the Supreme Court's order.

Pig iron. Vedanta Limited produces basic, foundry and nodular grade pig iron in various sub-grades for steel mills and foundries.

Metallurgical coke. Vedanta Limited also produces metallurgical coke, which is primarily used for captive consumption for producing pig iron in India.

Power. Electricity for Vedanta Limited's metallurgical coke and manufacturing operations is primarily supplied by its captive power plant which generates power from the waste gases of Vedanta Limited's metallurgical coke plant and blast furnace.

Production

The table below sets out Vedanta Limited's total production[(1)] for the periods indicated:

Mine/Mine Type	Product	For Fiscal Year, 2018	2019	2020
Goa (Open-Pit)	Iron ore	3.8	0.2	0.0
Sesa Resources Limited (open-pit)[(1)]		1.1	0.0	0.0
A. Narrain (Open-Pit)	Iron ore	2.2	4.1	4.4
Liberia	Iron ore	0.0	0.0	0.0
Total Iron Ore	Iron ore	**7.1**	**4.4**	**4.4**
Amona Plant	Metallurgical coke	0.44	0.50	0.53
	Pig iron	0.64	0.69	0.68

(1) No iron ore was mined from the Goa mines in Fiscal Year 2019 and Fiscal Year 2020, however, production is considered after processing of extracted ore from previous years.

As presented in the Audit report, the table below sets out Proved and Probable iron Ore Reserves as of 31 March 2020 at mines that Vedanta Limited owns or has rights to as set out to in the table below:

	Proved Reserve		**Probable Reserve**		**Total Proved and Probable Reserves**	
	Quantity	**Iron Grade**	**Quantity**	**Iron Grade**	**Quantity**	**Iron Grade**
	(Million tonnes)	**(%)**	**(Million tonnes)**	**(%)**	**(Million tonnes)**	**(%)**
Karnataka — A. Narrain	21.36	56.80	51.71	44.10	73.07	47.80
Total Iron Ore Reserves	**21.36**	**56.80**	**51.71**	**44.10**	**73.07**	**47.80**

Additional Information

For India

- The reserve estimates were prepared by the and mining engineers at Vedanta Limited and SRK Consulting (UK) Limited reviewed in accordance with JORC code. The estimates were independently audited by SRK in 2020.
- Ore reserves are estimated at a variable cut-off grade based on ore type; the minimum cut-off grade was 30% Fe iron for siliceous ore and 45% Fe iron for normal ore.
- The ore bodies are of relatively significant size with good continuity of the mineralised zones and little internal dilution, the contacts are well constrained, free digging and diluting material can also carry grade, a mining recovery of 98%; a mining dilution of 2%; is considered.

During the year ended 2016, Vedanta Limited recognised an impairment charge in respect of the exploratory assets in West Africa (Western Cluster, Liberia) on account of low iron ore prices, geo-political factors, and also due to the fact that there are no plans for any substantive expenditure given the continued uncertainty in the project. Therefore, Vedanta did not receive any certification of reserves and resources for the current period.

Description of operations

Production facilities

Amona plant. Vedanta Limited commenced operations at its Amona plant in Goa in 1992 and has been engaged in the manufacture and sale of pig iron since then. Vedanta Limited's metallurgical coke plant at Amona produces a range of coke fractions from over 70 mm for foundries, 20 mm to 60 mm for blast furnaces and six mm to 25 mm for the ferrous alloy industry. Approximately 80.0% to 90.0% of the total production of metallurgical coke is consumed by Vedanta Limited for its pig iron production and the remainder is sold to customers primarily located in India. The cost of the input coal blend is the single most important cost component to produce coke. Vedanta Limited's production consists mainly of low ash coking coal and it imports 100.0% of low ash coking coal each year. In order to ensure a stable raw material supply, Vedanta Limited has long-term supply contracts for the procurement of such coal. Vedanta Limited generates its own electric power from the waste heat of Vedanta Limited's metallurgical coke plant and the blast furnace gas.

Vazare Plant. On 28 July 2019, Vedanta Limited acquired the Sindhudurg plant of Global Coke Limited which was placed under liquidation as per the Bankruptcy Code (including all amendments for the time being in force) for a cash consideration of approximately ₹335 million ($4.48 million). The assets acquired mainly included land, building and plant and machinery of similar value as per the cash consideration. Vedanta Limited commenced operations at its Vazare plant on 9 September 2019 following the acquisition. The acquisition complements backward integration opportunity for Vedanta Limited's existing pig iron division and also increases Vedanta Limited's footprint in the met coke market in south western part of India.

The following table sets out the total rated capacities as of 31 March 2020 at Vedanta Limited's Amona and Vazare facilities:

	Capacity		
	Metallurgical Coke	**Pig Iron (tpa)**	**Power (mw)**
Amona Plant	522,000	832,000	60
Vazare Plant	120,000	–	–

Mines

Karnataka. Vedanta Limited's main operations in Karnataka is at the A. Narrain mine which is located approximately 200 km northwest of Bangalore. The open-pit mine is operated by Vedanta Limited and is well connected by rail, with the nearest stations, Sasalu and Amruthapura, and M/s Mineral Enterprises server by Chikkajajur (MMEC) railway siding located 16 km, 17 km and 4 km respectively, from the A. Narrain mine. The nearest port at Mangalore is approximately 430 km from the mine and the nearest airport is located at Bangalore, approximately 230 km from the mine.

The leasehold area of the mine is 160.6 hectares, which is classified into two blocks, namely the south block, which is 123.5 hectares, and the north block, which is 37.1 hectares. These two blocks are joined by a narrow stretch of land 30 metres in width and 660 metres in length along the eastern side of the leasehold area. Vedanta Limited has operated the mine since 1994. The MoEF had granted an environment clearance for 6 mtpa in Fiscal Year 2009 but due to conditions introduced by the Supreme Court of India, the production capacity of the mine was reduced to 2.29 mtpa. However, in April 2018, the district cap was induced on pro rata basis by the Supreme Court of India and the Central Empowered Committee enhanced the production capacity of the mine to 4.51 mmtpa. On 4 March 2020, Vedanta Limited's application to further enhance production capacity was favorably considered by the Central Empowered Committee. On 21 March 2020, the State Government of Karnataka granted Vedanta Limited an enhancement of production capacity to 4.81 mtpa on pro-rata basis to be within the district cap imposed by Supreme Court of India.

The geological formation of this region belongs to the Archean-Proterozoic age. The geology of the A. Narrain mine consists of Archean formations locally termed "Dharwars" which contain rich and large iron ore deposits. The leasehold area forms part of the Chitradurga-Tumkur schist belt and part of a regional isoclinal fold. The strike direction of the ore body dips westerly at an angle of about 60 degrees to 70 degrees. Haematite is the principal ore mineral and limonite, goethite and magnetite constitute the associated minor minerals of the mine. The mineralised horizon extends over a length of about two km. The footwall comprised decomposed quartzite and phyllite, and the stratigraphy is cross cut by late dolerite dykes and sills which are manifested by pink clayey zones in the mine area.

Currently, the north and the south block of the A. Narrain mine have mechanised mining operations. The open-pit mines have a bench height of seven metres, haulage roads of 12 metres to 15 metres in width and an overall pit slope of less than 26 degrees. The A. Narrain mine is equipped with dry process facilities for processing all grades of ore.

The lateritic overburden is removed either by blasting or ripping/dozing, loaded onto and transported by 30-tonne trucks. The ore mined is processed at the mine's processing facilities, which involves crushing and dry screening processes. The processed ore is then transported by road to the railway yard, for onward transport to customers in Karnataka, Goa and other places. Ore produced in Karnataka ranges from 56.0% to 60.0% iron content and comprises 82.0% fines and 18.0% lumps.

Since the mine was taken over by Vedanta Limited, exploration at the A. Narrain mine involved the drilling of a total of 73,951 metres in 660 boreholes as of 31 March 2020. The A. Narrain deposit is extensively sampled in vertical and inclined drill hole grid intervals in side direction of 50 metres and in cross section average of 25 metres with most of the holes covering a depth of 50 metres to 200 metres. Power at the mine is supplied by a 725 KV and 320 KV generator.

On 26 August 2011, the Supreme Court of India suspended mining activities in the Chitradurga and Tumkur districts of Karnataka. In view of this order, mining activities at this mine were stopped with immediate effect. On 18 April 2013, this suspension was lifted by the Court and in December 2013, the operations were resumed after getting necessary regulatory clearances. Although Vedanta Limited resumed operations in Karnataka based on the stage I forest clearance from the State Government of Karnataka and a temporary working permission from the MoEF, the temporary working permission expired on 31 July 2014. Karnataka operations were halted for the period from 1 August 2014 to 27 February 2015. Vedanta Limited resumed operations in Karnataka after all statutory clearances were in place from 28 February 2015. The economic cut-off grade at the A. Narrain mine is determined by the requirement to meet various sales contracts and the need to maintain stockpiles to meet the contract specifications.

The reserves in proved reserve category at the Karnataka mines are estimated based on drilled boreholes spaced at 50 metres along predefined section lines and occasionally off of the section lines, the probable reserves are estimated based on drilled boreholes spaced at 50 metres from the proved reserves and the possible reserves are estimated based on drilled boreholes spaced at 25 metres from the probable reserves. As the area is drilled at approximately 50 metre by 50 metre grids, the physical continuity of the ore is well demonstrated.

WCL. WCL comprises of three concession areas (Bomi Hills, Bea Mountain and Mano River). In consideration of the suspension of exploration in Liberia, due to an Ebola epidemic, low iron ore prices, geo-political factors and no plans for any substantive expenditure resulting in continued uncertainty in the project, an impairment charge was recognised in Fiscal Year 2016.

Principal raw materials

Iron ore operations. There are no direct raw materials used in Vedanta Limited's iron ore mining and processing operations. Indirect raw materials include power, fuel and lubricants. Vedanta Limited procures these indirect materials from various vendors. The electricity required for its operations is supplied by the government grid and supplemented by Vedanta Limited's owned and hired diesel generator sets. The prices of fuel and necessary lubricants are volatile and the price of power is dependent on tariffs imposed by State Governments.

Pig iron operations. The principal raw materials for the manufacture of pig iron are iron ore, metallurgical coke, limestone and dolomite.

Iron ore is largely sourced from mines in Karnataka and Goa. The iron ore is transported from Karnataka by truck and railway rakes and from Goa by truck/barges. Iron ore requirements are met by Vedanta Limited's own mines, and through purchases from other miners in Karnataka and Goa. Vedanta Limited's metallurgical coke requirements are met by its metallurgical coke division. Limestone and dolomite are purchased from mines in Karnataka and transported to Vedanta Limited by trucks.

Metallurgical coke. The principal raw materials for the manufacture of metallurgical coke are hard and semi-hard coking coals. These raw materials are imported from various international suppliers primarily from Australia.

Power. Electricity for Vedanta Limited's metallurgical coke and manufacturing operations is primarily supplied by its captive power plant which generates power from the waste gases of Vedanta Limited's metallurgical coke plant and blast furnace.

Distribution, logistics and transport

Sales from Vedanta Limited's Karnataka mines to Indian domestic customers take place on an ex-mine basis, and the transportation is handled by the customer.

Sales and marketing

Due to regulatory restrictions entire iron ore from Karnataka is sold domestically.

Pig iron. Currently, the majority of the pig iron produced by Vedanta Limited is sold within India to foundries and steel mills. The sale of pig iron is generally done on a spot basis with prices valid for a month. The prices of pig iron are fixed on a delivered basis, with material generally being sent on a freight-to-pay and prepaid basis.

Metallurgical coke. Approximately 80.0% to 90.0% of the metallurgical coke produced by Vedanta Limited is used for production of pig iron. The balance is sold in the domestic Indian market to foundries, pig iron producers, ferrous alloys producers and cement plants. The sale of metallurgical coke to other customers is done on a spot basis with delivery schedule over the month.

Vedanta Limited has a marketing office at Panaji in Goa with indenting agents to sell the pig iron and metallurgical coke products. The sales and chartering needs are managed from the office at Goa.

Vedanta Limited's ten largest customers accounted for approximately 44.0%, 42.7% and 45.28% of revenue for iron ore business in Fiscal Years 2018, 2019 and 2020, respectively. No customer accounted for greater than 10.0% of Vedanta Limited's revenue in Fiscal Year 2019. One customer accounted for greater than 10.0% of the revenue in Fiscal Years 2018 and 2020.

Market share and competition

The total sales of iron ore for Fiscal Year 2020 was 6.6 million dmt. Domestic sales of iron ore for Fiscal Year 2020 was 5.79 million dmt and the total exports for Fiscal Year 2020 was 0.83 million dmt. Out of the total sales in Fiscal Year 2020, 87.0% was from Karnataka mines and the remaining 13.0% was from Goa.

Vedanta's primary competitors in both the public and private sectors in India include National Mineral Development Corporation, Metals and Minerals Trading Corporation of India Limited, Rungta Mines Limited, Mineral Sales Private Limited and Essel Mining and Industries Limited. In addition, Vedanta's international competitors include Fortescue Metal Group, Sierra Leone, Vale, BHP Billiton Limited, and Rio Tinto.

Aluminium Business

Introduction

Vedanta operates its aluminium business in Chhattisgarh (through BALCO) and Odisha. Vedanta Limited has a 51.0% ownership interest as of 31 March 2020 and the remaining 49.0% is held by the GOI. Vedanta Limited had exercised its option to acquire the GOI's remaining 49.0% ownership interest which was disputed by the GOI and the matter is currently pending before the High Court of Delhi and the next date of hearing is scheduled for 11 August 2020. See the section entitled "*Business — Litigation — Vedanta Limited has commenced proceedings against the GOI, which the GOI has disputed Vedanta Limited's exercise of the call option to purchase its remaining 49.0% ownership interest in BALCO*." for more information. Vedanta's aluminium operations in Odisha were earlier operated through Vedanta Aluminium Limited, which has since merged with Vedanta Limited pursuant to the reorganisation transactions.

Since acquiring the interest in BALCO, Vedanta Limited has worked to improve BALCO's operating performance through expansion and by improving operational efficiencies and reducing unit costs of production. BALCO currently sources most of the alumina required for its smelters from third-party suppliers on the international markets. BALCO intends to further improve its operating performance by continuing to reduce unit operating costs at the Korba facility, including by lowering power consumption and improving the operating efficiency of the captive power plant. BALCO also intends to focus on the production of fabricated products with higher margins.

BALCO's aluminium operations are comprised of two bauxite mines, the Chotia coal block, a 1,710 MW captive power plants, an alumina refinery (operations of which had been suspended since September 2009), a 245,000 tpa aluminium smelter, a 325,000 tpa aluminium smelting and fabrication facilities in Chhattisgarh.

Pursuant to the re-auctioning of coal mines conducted by the GOI in February 2015, BALCO was successful in securing the Chotia coal block. The total reserves at the Chotia block is 17.9 million tonnes with an annual production capacity of 1 million tonnes and its mining operations commenced in November 2015. Mining production at the Chotia block restarted in October 2018. BALCO's total coal requirement at full capacity is approximately 7 million tons.

BALCO's Bodai-Daldali bauxite mines provide a portion of the bauxite required for BALCO's smelters. The bauxite is transferred to the alumina refinery in Lanjigarh, which converts bauxite to alumina and supplies the alumina back to BALCO, for payment of a conversion price by BALCO to us, which is based on the actual cost of production plus a reasonable margin. The remainder of BALCO's alumina requirements is sourced from third parties and from Vedanta Limited on sale basis at Arm's length price. The mining lease of the Mainpat bauxite mine has been renewed and it is valid up to 8 July 2042. During Fiscal Year 2020, mining operations at the Mainpat bauxite mines were suspended as low ore quality renders operations becoming uneconomical. Since 11 October 2019, mining operations at the Mainpat bauxite mines have been placed under temporary suspension.

Vedanta Limited's operations in Odisha include a 2.0 million tpa alumina refinery at Lanjigarh, with associated 90 MW captive power plant. The alumina refinery at Lanjigarh was commissioned in March 2010 and produced 1.5 mtpa in Fiscal Year 2020. In addition, Vedanta has a greenfield 500,000 tpa aluminium smelter, together with an associated 1,215 MW (nine units with a capacity of 135 MW each). This greenfield smelter project was implemented in two phases of 250,000 tpa each. Phase 1 was completed on 30 November 2009 and Phase 2 was completed on 1 March 2010.

Vedanta Limited also has another 1.25 mtpa aluminium smelter in Jharsuguda which is the SEZ unit, with associated 1,800 MW (three units of 600 MW) coal-based captive power plant. This facility initially commenced production on 1 December 2015. The first line of pots was commissioned by the end of July 2016 and the level of operating power on pots was 1,416 pots as on 31 March 2020. Currently, this facility is in the process of being ramped up to increase the total capacity to 1.75 mtpa.

In November 2019, Vedanta participated in coal block auction and was awarded the Jamkhani coal mine located in the State of Odisha, India. Vedanta entered into the coal mine production and development agreement with the GOI on 18 December 2019 and expect to dispatch coal from the mine in February 2021 with an expected capacity of a capacity of 2.6 mtpa.

Revenue from Vedanta's aluminium business for Fiscal Year 2020 was $3,746 million. Vedanta also continues to increase its aluminium and alumina production in order to achieve a total production capacity of approximately 2.3 million tpa and 4.0 million tpa, respectively.

Principal products

Primary aluminium. Primary aluminium is produced from the smelting of metallurgical grade alumina. Vedanta produces primary aluminium in the form of ingots, primary foundry alloys, billets, slabs and wire rods for sale. Ingots are used extensively for aluminium castings and fabrication in the construction and transportation industries. Primary foundry alloys are mainly used in the automotive industries. Wire rods are used in various electrical applications especially in the form of electrical conductors and cables. Billets are used extensively in constructions (such as windows and door frames), transportation, engineering, consumer durables, automotive forgings and many other applications. Slabs are used generally in rolling mills for manufacturing aluminium foil and sheet products.

Rolled products. Rolled products, namely coils and sheets, are value-added products that BALCO produces from primary aluminium. Rolled products are used for a variety of purposes in different industries, including aluminium foil manufacturing, printing, transportation, consumer durables, building and architecture, electrical and communications, packaging and general engineering industries.

Production

The following table sets out Vedanta's total production[(1)] from its Korba, Lanjigarh and Jharsuguda facilities for the periods indicated:

Facility	Product	Fiscal Year 2018	Fiscal Year 2019	Fiscal Year 2020
			(Tonnes)	
Korba	Ingots	318,585	320,979	360,506
	Rods	223,983	224,133	172,002
	Rolled products	26,483	26,119	28,831
	Total	**569,051**	**571,231**	**561,338**
Lanjigarh	Alumina[(2)]	1,209,436	1,500,670	1,810,702
Jharsuguda	Ingots	590,375	785,988	814,501
	Rods	155,865	143,364	161,694
	Hot metal sold	44,257	33,924	30,713
	Billets	315,537	414,119	309,088
	Slab	–	10,388	26,648
	T-Ingot	–	–	–
	Castbar	–	–	–
	Total	**1,106,034**	**1,387,783**	**1,342,644**
Total	**Alumina[(2)]**	**1,209,436**	**1,500,670**	**1,810,702**
	Ingots	**908,960**	**1,106,967**	**1,175,007**
	Rods	**379,848**	**367,497**	**333,696**
	Rolled products	**26,483**	**26,119**	**28,831**
	Hot metal sold	**44,257**	**33,924**	**30,713**
	Billets	**315,537**	**414,119**	**309,088**
	Slab	**–**	**10,388**	**26,648**
	T-Ingot	**–**	**–**	**–**
	Castbar	**–**	**–**	**–**

(1) See the section entitled "*Presentation of Information — Basis of Presentation of Reserves and Resources — Reserves and Production*" for an explanation of the basis of preparation of production amounts.

(2) Alumina is used to produce aluminium and rolled products. Approximately two tonnes of alumina are required to produce one tonne of aluminium. Additional alumina needed to produce aluminium is purchased from third parties and is not reflected in alumina production numbers.

The following table sets out the total bauxite ore production[(1)] for each of Vedanta's mines for the periods indicated:

Facility	Product	Fiscal Year 2018	Fiscal Year 2019	Fiscal Year 2020
			(Tonnes)	
Mainpat (Open-pit)	Bauxite ore mined	589,320	–	55,700
	Ore grade	43.5%	–	42.60%
Bodai-Daldali (Open-pit)	Bauxite ore mined	581,920	462,000	469,800
	Ore grade	45.5%	45.7%	44.56%
Total	Bauxite ore mined	1,171,240	462,000	525,500

(1) See the section entitled "*Presentation of Information — Basis of Presentation of Reserves and Resources — Reserves and Production*" for an explanation of the basis of preparation of production amounts.

Ore Reserve base

The table below sets out BALCO's proved and probable bauxite Ore Reserves as of 31 March 2020:

	Proved Reserve			**Probable Reserve**			**Total Proved and Probable Reserves**		
	Quantity	**Alumina**	**Silica**	**Quantity**	**Alumina**	**Silica**	**Quantity**	**Alumina**	**Silica**
	(in million tonnes)	**(%)**	**(%)**	**(in million tonnes)**	**(%)**	**(%)**	**(in million tonnes)**	**(%)**	**(%)**
Mainpat	–	–	–	4.6	43.6	3.8	4.6	43.6	3.8
Bodai-Daldali	–	–	–	1.9	43.1	4.7	1.9	43.1	4.7
Total	–	–	–	6.5	43.4	4.1	6.5	43.4	4.1

Description of operations

Smelters and Refineries

The following table sets out the total capacities as of 31 March 2020 at BALCO's Korba and Vedanta Limited's Lanjigarh and Jharsuguda facilities:

	Installed Capacity		
	Alumina	**Aluminium**	**Captive Power(5)**
	(tpa)		**(MW)**
Korba	2,00,000	245,000	1,710(4)
Korba II	–	325,000(2)	–
Lanjigarh	2,000,000	–	90
Jharsuguda.	–	500,000	3,015
Jharsuguda (SEZ Plant)	–	1,250,000(3)	–
Total	2,200,000	2,320,000	4,815

(1) Alumina is used to produce aluminium and rolled products. Approximately two tonnes of alumina are required to produce one tonne of aluminium.

(2) For the 325,000 tpa smelter, 84 pots became operational during Fiscal Year 2015. An additional 84 pots became operational during Fiscal Year 2017 and the remaining 168 pots became operational from 1 May 2017.

(3) For the 1,250,000 tpa smelter, until 31 March 2020, the third, fourth and fifth lines are operational and out of 1,322 pots, 1,008 pots were capitalised.

(4) BALCO — One unit of 300 MW was converted from IPP to CPP from Fiscal Year 2019 onwards.

(5) In addition to captive power capacity, Jharsuguda and BALCO operate an additional 600 MW and 300 MW independent power facilities that supply commercial power.

Korba aluminium complex. BALCO's aluminium complex is located at Korba in the State of Chhattisgarh in central India. The aluminium smelter at Korba, which uses pre-baked Guiyang Aluminium Magnesium Design Research Institute technology or GAMI technology and has a capacity of 245,000 tpa, was fully commissioned in November 2006 at a cost of $543.2 million. The Korba alumina refinery was commissioned in 1973, used the conventional high-pressure Bayer process and has a capacity of 200,000 tpa of alumina.

BALCO has set up a 325,000 tpa smelter at the Korba facility, first 84 pots of which commenced commercial production in September 2014 and the second set of 84 pots started commercial production in August 2016. The remaining 168 pots started commercial production in May 2017. BALCO's 100,000 tpa and 200,000 tpa smelters are no longer in operation since June 2009 and November 2009, respectively.

The fabrication facility at Korba has two parts, a cast house and a sheet rolling shop. The cast house uses Properzi CCR copper rod technology and has a foundry which has twin-roll continuous casters with a SNIF degasser and hydraulically driven semi-continuous ingot casting machine to produce ingots and wire rods. The sheet rolling shop has three parts: a hot rolling mill with a capacity of 75,000 tpa, an older cold rolling mill with a capacity of 30,000 tpa and a cold rolling mill commissioned in 2004 with a capacity of 36,000 tpa. Molten metal is cast into slabs and then either hot-rolled and sold as hot-rolled sheets or converted into cold-rolled sheets in the cold rolling mills. Alternatively, molten metal is directly used in strip casting and then fed to the cold rolling mills to be converted into cold-rolled sheets or coils.

Smelting requires a substantial continuous supply of power. Any interruption can cause molten metal to solidify and damage or destroy the pots. Power for the Korba Smelter (245,000 TPA smelter) for the most part is provided by the coal-based 540 MW captive power plant commissioned in March 2006. The surplus generation from the power plant is supplied to the State Electricity Board and other customers. Following the shutdown of the aluminium smelter, power from associated 270 MW unit of the 540 MW captive power plant was transferred to the aluminium business on 1 April 2016 whilst the remaining 270 MW unit is under suspension. BALCO has constructed a CPP 900 MW coal-based thermal power facility at Korba in the state of Chhattisgarh. The power generated from CPP 900 MW units is being utilised in the 325,000 tpa smelter. One of the three units of 300 MW was converted to CPP from 1 January 2019.

Coal mining operations

Thermal coal is a key raw material required for the operation of BALCO's captive power plants. In September 2014, the Supreme Court of India cancelled all the coal blocks that were awarded by the Ministry of Coal between 1992 and 2012 to all companies in India. Consequently, in February 2015, the GOI conducted an auction to award mining rights to successful bidders for all such coal blocks. Pursuant to the re-auctioning of coal mines conducted by the GOI in February 2015, BALCO was successful in securing the Chotia coal block, in the state of Chhattisgarh. The total reserves at the Chotia block is 17.9 million tonnes with the annual production capacity of one million tonnes. Mining operations at the Chotia coal block commenced in November 2015 and stopped due to pending renewal of environment clearances and consent to operate. The Chotia coal block commenced operations again in October 2018. BALCO was also successful in its bid for the Gare Palma IV/1 coal block, but the GOI challenged and rejected the award. In response to this, BALCO does not intend to file any further petitions to appeal for its bid on the coal block.

The following tables contain details of Vedanta's coal mining operations.

(1) The Chotia coal mine is divided into two sub-blocks, Chotia I and Chotia II. Both of these blocks are assigned to the existing captive power facilities at the BALCO operations. The estimates provided below are based on the DMT report.

Blocks	Gross CV range (Min – Max)	Sulphur
	Kcal/kg	(%)
Chotia-I	3,565-6,476	0.30-0.60(Total)*
Chotia II	3,860-6,152	0.30(Total)*

* Sulphur data is not available for all seams. Total is based only on available seam data.

(2) This coal, which is thermal grade coal, would be blended with low GCV coal before being fed to the Boiler.

(3) The extractable coal indicated is considering all losses. This number reflects the final tonnage of the mine. There is no plan of putting wash plant either at the mine site or at the plant as the coal is of high GCV.

Lanjigarh alumina refinery. The Lanjigarh alumina refinery is located in the Lanjigarh district in the state of Odisha. In March 2007, Vedanta Limited began the progressive commissioning of a 1,000,000 tpa Greenfield alumina refinery, which expanded to 1.4 mmtpa of installed capacity in Fiscal Year 2017, and the debottlenecked capacity has reached 1.7-2.0 mtpa as of 31 March 2020, (which is contingent on the quality of bauxite). Lanjigarh alumina refinery also has associated 75 MW captive power plant, which can be expanded to 90 MW. The captive power plant is fully operational and can meet the power requirements of the Lanjigarh alumina refinery. Vedanta Limited remains in discussions with government authorities for sourcing adequate supply of bauxite. Production at the Lanjigarh alumina refinery does not affect production at the smelters.

In 2008, Vedanta Limited planned to expand the refining capacity of Lanjigarh alumina refinery to 6 mtpa and construct an associated 210 MW captive power plant. The environmental clearance for the proposed expansion plans of the Lanjigarh alumina refinery have however been challenged before the NGT and the matter remains pending before NGT Kolkata where the NGT Kolkata has not stayed the grant of the environmental clearance. See the section entitled "*Business — Litigation — Challenge relating to the environmental clearance granted for the expansion plans of refinery in Lanjigarh*." for more information.

Vedanta Limited continues to explore the feasibility of expanding the Lanjigarh alumina refinery subject to availability of bauxite and regulatory approvals. Currently, the project has been resumed to increase the Lanjigarh alumina refinery capacity, with a vision to take it beyond 4 mtpa, reaching up to a capacity of 6 mtpa in stages. As of 31 March 2020, Vedanta Limited has spent ₹47,160 million ($630 million) on the Lanjigarh alumina refinery expansion project (up to 6 mtpa) out of the estimated project cost of ₹115,780 million ($1,548 million).

On 20 April 2018, Vedanta Limited has entered into a supply agreement with OMCL where the supply of bauxite were being delivered to the Lanjigarh refinery since the first quarter of Fiscal Year 2019. This supply agreement entails 70.0% of the saleable stock being sold privately between OMCL and Vedanta Limited for a period of five years, whilst the remaining 30.0% will be sold through auction held every six months. Vedanta Limited received 2.6 million tons from OMCL for fiscal 2020.

Jharsuguda aluminium smelter. The Jharsuguda aluminium smelter is located in Jharsuguda in the state of Odisha, India. Vedanta has a greenfield 500,000 tpa aluminium smelter, together with an associated 1,215 MW (nine units with a capacity of 135 MW each). Vedanta has 1,800 MW (three units of 600 MW) coal-based captive power plant in Jharsuguda. Vedanta also has another 1.25 mtpa aluminium smelter in Jharsuguda, which is the SEZ unit, with associated 1,800 MW (three units of 600 MW) coal-based captive power plant. This facility initially commenced production on 1 December 2015. The first line of pots was commissioned by the end of July 2016 and the level of operating power on pots was 1,416 pots as on 31 March 2020. Currently, this facility is in the process of being ramped up to increase the total capacity to 1.75 mtpa.

BALCO Korba

On 7 October 2006, BALCO entered into a memorandum of understanding with the State Government of Chhattisgarh and the Chhattisgarh State Electricity Board, under which, among other things, feasibility studies were undertaken to build a thermal coal-based 1200 MW power facility, along with an integrated coal mine in the state of Chhattisgarh at an estimated cost of ₹46,500 million ($622 million). The project was disrupted in September 2009 due to the collapse of a chimney under construction during heavy rains and lightning at Korba. There were 40 fatalities in the accident and SEPCO Electric Power Construction Corporation, the contractor and the sub-contractor Gamon Dunkerley and Company Limited, are the subject of an investigation by the Chhattisgarh government. The next hearing will be listed in due course. BALCO had instituted an enquiry with Indian Institute of Technology Roorkee, and the project was resumed in January 2010. The project was resumed in January 2010. BALCO had constructed 1,200 MW (300 MW x 4) thermal power plant. Three of the four units were commissioned during Fiscal Year 2016 and the last unit was commissioned and commenced commercial production on 1 May 2016.

On 8 August 2007, BALCO entered into a memorandum of understanding with the State Government of Chhattisgarh for a potential investment to build an aluminium smelter with a capacity of 650,000 tpa at Chhattisgarh at an estimated cost of ₹81,000 million ($1,083 million). BALCO has received environmental clearances for both phases of the project. The first phase commenced with the construction of a 325,000 tpa aluminium smelter using pre-baked GAMI technology. Trial production started in February 2014 from the 325,000 tpa aluminium smelter and 84 pots started commercial production from September 2014. The second 84 pots started commercial production in August 2016 and balance 168 pots in May 2017. Currently, the 325,000 tpa Aluminium Smelter is fully operational.

As of 31 March 2020, the estimated cost of building the 325,000 tpa aluminium smelter and 1,200 MW power facility is ₹107,500 million ($1,437 million) and ₹100,251 million has been spent.

Mines

Chhattisgarh. BALCO has two captive bauxite mines, namely, the Mainpat bauxite mine and the Bodai-Daldali bauxite mine, in the state of Chhattisgarh in central India. Mainpat is an open-pit bauxite mine located in the Surguja district of the state of Chhattisgarh. The Mainpat mine has been in production since 1993 and has a leased hold area of 6.39 km^2. The bauxite extraction limit for the mine granted by MoEF is 750,000 tpa. The mining lease of Mainpat mine is valid until 8 July 2042. Environmental clearance for the Mainpat mine has been renewed by the MoEF and is valid up to 16 September 2038. BALCO applied for renewal of the forest clearance for the entire forest land co-terminus with the Mining Lease period, which is valid until 8 July 2042. During Fiscal Year 2019 mining operations were disrupted as ore quality rendered operations uneconomical. Since 11 October 2019 up to the date of this Offering Circular, mining operations are under temporary suspension due to low ore quality rendering operations uneconomical.

The Bodai-Daldali deposits are located approximately 260 km from Korba in the Kawardha district of the state of Chhattisgarh. Bodai-Daldali was commissioned in 2004 and the mining lease with a lease hold area of 6.3 square kilometers that is valid until 26 March 2047. The bauxite extraction limit for Bodai-Daldali Mines granted by MoEF is 1,250,000 tpa.

The Chhattisgarh bauxite deposits are situated over a plateau with steep scarps on both sides, at an elevation of approximately 1,040 metres above sea level, for Mainpat, and approximately 940 metres above the surrounding land, for Bodai-Daldali. Bauxite is generally one metre to three metres thick and lies within a laterite sequence overlying thick tertiary basalts of the Deccan Traps. The cover of laterite and thin top soil is up to five metres thick but is generally less than two metres. Bauxite outcrops around much of the plateau rims.

A typical profile of the Chhattisgarh deposits comprises topsoil and soft overburden above the laterite. The upper laterite consists of hard, lose or indurated bauxite pebbles and boulders with a clear contact with the underlying hard bauxites. The bauxite occurs in discontinuous lenses up to four metres in thickness with laterite infilling joints and fractures with the bauxite. The contact with the softer lower laterite is usually gradational and irregular.

The bauxite ranges from hard to very hard with a natural moisture content of 3.0% to 10.0%, with an in-situ density of 2.3 tonnes per metre. It comprises primarily gibbsite with boehmite and minor diaspore. The reactive silica content is low, and iron is present in the form of haematite and aluminous goethite. The average grade of the bauxite is approximately 43.41% aluminium oxide and 4.1% of silica as of 31 March 2020.

All mining and transportation at both mines are undertaken by contractors. One thin top soil layer is removed by an excavator and is either transported to an adjacent storage point or an area that is being backfilled. The laterite layer is drilled and blasted. The overburden is then removed by backhoe excavators and 15 tonne dumpers. Broken ore is hand-sorted, leaving waste material behind. Ore productivity is around two to three tonnes per person per day in the dry season which decreases to 1.25 to 1.75 tonnes per person per day in the wet season.

The exploration drilling programme has been completed with a coverage based on a 50-metre square pattern and is reduced to a 25-metre centres for detailed mine planning. Sampling is normally in 0.4 metre lengths and core is currently split and retained for future reference. Bauxite samples are tested for silica and aluminium oxide at laboratories situated on site and at the Korba plant. Selected sample are re-assayed as part of a quality control programme.

Since commencement of operations, the Mainpat mine has produced approximately 8.13 million tonnes of bauxite. During Fiscal Year 2020, the mine produced 55,700 tons of bauxite. However, mining operations were temporarily suspended since October 2019, as mining has become uneconomical given the macroeconomic conditions.

As reported in the audit report as of 31 March 2020, BALCO estimated Probable Ore Reserves at Mainpat to be 4.6 million tonnes grading 43.6% aluminium oxide and 3.8% silica. The cut-off grade used to define the reserves at BALCO's mines was more than 38.0% Al2O3 content.

Total production at the Bodai-Daldali mine since the commencement of production has been 8.47 million tonnes of bauxite, with production in Fiscal Year 2020 totalling to approximately 469,800 tonnes with 44.53% Aluminium oxide. Power is supplied on-site by state electricity board (Chhattisgarh State Power Distribution Company Limited) and diesel generators. Water requirement for mines is fulfilled by surface water from rainwater harvesting, and pond developed at mines.

As reported in the audit report as of 31 March 2020, BALCO estimates the Probable Ore Reserves at Bodai-Daldali to be 1.9 million tonnes grading 43.1% aluminium oxide and 4.7% silica. The cut-off grade used to define the reserves at BALCO's mines was more than 38.0% Al2O3 content.

In Fiscal Year 2020, all mining and transportation of the bauxite was done by contractors and the total cost for this was ₹2,962 ($40) per tonne of bauxite.

Vedanta believes that the deposits at the Mainpat and Bodai-Daldali mines fulfil the requirements of being classified as reserves. The reserves as of 31 March 2020 at BALCO's mines at Mainpat and Bodai-Daldali have been determined by verifying that the integrated operation is economic at an aluminium price of $1,776 per ton.

The mining recovery factors applied to determine the reserves for both mines are 65.0%. The grade dilution factor is reconciliation between the actual mined/dispatched grades obtained and in-situ grade values. The grade correction/dilution factors applied for Mainpat and Bodai-Daldali mines are Al2O3 -3%, SiO_2 +3%. The parameters for Mainpat are derived from the reconciliation of actual production against the geological model, while the parameters for Bodai-Daldali are based on estimates.

In Fiscal Year 2020, stripping ratio at the Mainpat mine was 1:1.03, while the stripping ratio at the Bodai-Daldali mine was 1:1.72. The stripping ratio for the remaining reserves at Mainpat is 2.14 tons of waste per ton of ore, while at the Bodai-Daldali mine, it is 2.03 tons of waste per ton of ore.

Shevaroy. The Shevaroy bauxite mine is located eight km northeast of Yercaud town in the state of Tamil Nadu in India, which is approximately 85 km east of the Mettur Dam complex, where Vedanta Limited's aluminium operations were located when they were operational. Work at the Shevaroy mine has been suspended since Vedanta Limited's aluminium operations ceased in November 2008. Vedanta Limited estimates the balance reserves of the portion of the Shevaroy mine which Vedanta Limited is permitted to mine was 0.04 million tonnes as of 31 March 2016. If mining recommences at this mine, its life is estimated by Vedanta Limited to be approximately three months.

Kolli Hills. The Kolli Hills bauxite mine is located in the state of Tamil Nadu in India, approximately 150 km southeast of the Mettur Dam complex, where Vedanta Limited's aluminium operations were located when they were operational. Work at the Kolli Hills mine has been suspended since Vedanta Limited's aluminium operations ceased in November 2008. It is estimated the balance reserves of the portion of the Kolli Hills mine which Vedanta Limited is permitted to mine was 0.11 million tonnes as of 31 March 2016. If mining recommences at this mine, its life is estimated by Vedanta Limited to be approximately seven months.

Principal raw materials

The principal inputs for Vedanta's aluminium operations are bauxite, alumina, power, water, carbon, caustic soda and certain other raw materials. Vedanta has been able to secure an adequate supply of the principal inputs for its aluminium business.

Bauxite. Bauxite is the primary raw material used in the production of alumina. Currently, bauxite is being sourced through OMCL (49.0%), imports (42.0%), and BALCO's captive mines (9.0%). BALCO supplies bauxite to the Lanjigarh refinery, on per job basis and receives alumina produced from the supplied bauxite.

Alumina. Alumina is the primary raw material used in the production of aluminium. Vedanta's aluminium business currently sources alumina largely from third-party suppliers in international markets. The alumina sourced externally is metallurgical grade calcined alumina with a minimum alumina content of 98.6% on a dry basis. In Fiscal Years 2018, 2019 and 2020, BALCO purchased 766,457 tonnes, 770,470 tonnes and 811,475 tonnes of alumina at an average price of $425, $500 and $375 per tonne, respectively, on a cost, insurance and freight or CIF basis at the port of Vizag, Kakinada and Gangavaram, India.

Currently for the Jharsuguda operations, alumina is being sourced from Lanjigarh (58.0%) and remaining (42.0%) through imports from Indonesia, Australia, Vietnam and other countries. In Fiscal Years 2018, 2019, and 2020, Vedanta Limited purchased 1.38 million tonnes, 1.56 million tonnes and 1.08 million tonnes of alumina at an average price of $388 per mt, $506 per mt, and $391 per mt respectively, on a cost, insurance and freight basis at the port situated in the state of Andhra Pradesh.

Power. Smelting primary aluminium requires a substantial, continuous supply of electricity. As a result, power is a key input at BALCO's Korba facility, where it is provided by two coal-based captive power plant of 540 MW and CPP 900 MW. The captive power plant has historically been dependent upon coal allocations from Coal India. Vedanta acquired the Chotia coal block through an e-auction and an annual production capacity of 1 million tons.

Chotia Captive Coal Block. The Coal Mineral Resources and Coal Reserves for Chotia were audited by SRK Consulting (UK) Limited. The Coal Reserves were estimated at 10.4 million tons, grading at 4,742 GCV, as on 31 March 2020.

BALCO's total coal requirement at full capacity is approximately 7 million tons for power generation for smelting. Power for BALCO's mines is provided by on-site diesel generators. BALCO has constructed a 1,200 MW coal-based thermal power facility three out of four units of which were commissioned during Fiscal Year 2016 and the forth unit has commenced operations during May 2016. Of the 1,200 MW facility, power generated from three 300 MW units is being utilised in the 325,000 tpa smelter being set up and the power from the balance 300 MW units will be sold to third parties in Fiscal Year 2020.

Vedanta Limited's power requirements are met by nine coal-based captive power plant of 135 MW each and three units of 600 MW each at Jharsuguda facility. All power plants are coal-based thermal plants. The three 600 MW units were converted to captive power plants as required by the Odisha Electricity Regulatory Commission ("OERC") on 1 April 2015.

The power plant at Jharsuguda sources coal from sources such as the GOI's coal mining companies (such as Coal India and its subsidiaries (e.g. Mahanadi Coalfields Limited and South Eastern Coalfields Limited)), long-term coal supply agreements with various state governments under PPAs, from spot auctions and from imports. As a whole for Jharsuguda's 3015 MW CPP, in Fiscal Year 2018, the total coal consumed was 15.2 million tonnes and for the Fiscal Year 2019 it was 16.12 million tonnes and for the Fiscal Year 2020, it was 14.35 million tonnes.

The total volume of coal consumed annually by coal-fueled power plants is largely dependent on the amount of generation. For Fiscal Year 2020, total coal consumed by the nine 135 MW power plants and the three 600 MW power plants were 6.95 million tonnes and 7.40 million tons respectively.

Vedanta also recently secured the Jamkhani coal block in the captive coal block auctions conducted by the GOI. The coal block is expected to cater for the power generation for Jharsuguda smelting operations. Vedanta have signed a coal mine production and development agreement with the GOI and have received the vesting order for the coal block. The mine currently has a capacity of 2.6 mtpa.

Water. Water is also an important input for BALCO's captive power plants. BALCO sources its water requirements at Korba from a nearby canal, with the water transported by pipelines. BALCO is currently in a dispute with the National Thermal Power Corporation ("NTPC") regarding the right of way for its water pipeline that supplies water to its 270 MW captive power plant, which has been built through National Thermal Power Corporation premises. Arbitration proceedings commenced in 2009 and the order was reserved on 30 June 2014. BALCO and National Thermal Power Corporation submitted a joint survey report to the Arbitrator. On the issue of easementary rights, the Arbitrator issued its award dated 11 January 2016 in favour of BALCO and rejected all counter claims of the NTPC. The NTPC has challenged the said award by filing an application under section 34 before the High Court of Delhi which was listed for admission on 5 May 2016 and the court has ordered for issuance of notice. The next hearing will take place on 21 September 2020. BALCO has also filed the application under section 34 before the High Court of Delhi with respect to claims which were rejected by the Arbitrator which is to be listed in due course.

Vedanta Limited's Jharsuguda facility sources its water requirements at Jharsuguda from Hirakud Dam situated over a distance of 33 km, with the water transported by pipelines. Water from the dam is stored at water reservoir inside the plant, from where the water is purified in a demineralised plant to make it fit for use in the power plant.

Carbon. Carbon is an important raw material to the aluminium smelting process. Carbon is used in the process of electrolysis, in the form of cathodes and anodes, with the latter being the biggest component of Vedanta Limited's carbon costs. Anodes are made up of carbonaceous material of high purity. For pre-baked anodes, green carbon paste made of calcined petroleum coke and coal tar pitch is compacted or pressed into the required form. These anodes are baked before their use in electrolytic cells or pots. Both BALCO and Vedanta Limited has in-house facilities to manufacture carbon anodes to meet their entire carbon anode requirements at Korba and Jharsuguda facility, respectively. Calcined petroleum coke, coal tar pitch and fuel oil, which are the key ingredients for the manufacture of carbon anodes, are sourced primarily from the Indian market. There is an adequate supply of these raw materials in India, though their prices are generally determined by movements in global prices and local regulations. These raw materials are sourced from several domestic and/or international suppliers based on commercial comparison.

Caustic soda. Caustic soda is a key raw material used to dissolve the bauxite in the alumina refining process. The caustic soda requirement varies significantly depending on the silica content of the bauxite and the technology employed.

Other raw materials. Vedanta Limited and BALCO uses other raw materials such as fluorides and other chemicals. For these raw materials, there are several sources of supplies in the domestic/international markets and Vedanta does not currently foresee any difficulty in securing supplies when needed.

Distribution, logistics and transport

Bauxite mined from the Mainpat and Bodai-Daldali mines is transported by road and rail to the Alumina Refinery at Lanjigarh of Vedanta Limited for conversion into Alumina and Alumina from Vedanta Lanjigarh is transported through Rail to BALCO's Korba facility. Alumina purchased from third-party suppliers is obtained from a combination of domestic sources and imports, and is transported to the Korba facility by sea freight and rail and the Jharsuguda facility by road from ports. BALCO's and Vedanta Limited's aluminium products are transported from the Korba facility and the Jharsuguda facility, respectively to domestic customers through a combination of road and rail, and shipped for export.

Sales and marketing

BALCO's aluminium businesses' ten largest customers accounted for 65.4%, 53.1%, 53.6% of its revenue from the aluminium business in Fiscal Years 2018, 2019 and 2020, respectively. Two of BALCO's customers accounted for greater than 28% of BALCO's revenue in Fiscal Years 2020, two of BALCO's customers accounted for more than 14% of BALCO's revenue in Fiscal Year 2019 and one of BALCO's customers accounted for more than 11% of BALCO's revenue in Fiscal Year 2018.

Vedanta Limited's 10 largest customers of the Odisha aluminium business accounted for 70%, 66% and 59% of its Odisha aluminium business in Fiscal Years 2018, 2019 and 2020, respectively.

Vedanta's aluminium sales are both on spot and long-term basis, and follows an LME-based pricing and product-wise premiums for both domestic and global customers. Vedanta's aluminium business's key customers include conductor manufacturers, state road transport corporations, railways, defence contractors and electrical equipment and machinery manufacturers.

Projects and developments

Lanjigarh

In 2008, Vedanta Limited planned to expand the refining capacity of Lanjigarh alumina refinery to 6 mtpa and construct an associated 210 MW captive power plant. The environmental clearance for the proposed expansion plans of the Lanjigarh alumina refinery have however been challenged before the NGT and the matter remains pending before NGT Kolkata where the NGT Kolkata has not stayed the grant of the environmental clearance. See the section entitled "*Business — Litigation — Challenge relating to the environmental clearance granted for the expansion plans of refinery in Lanjigarh*." for more information.

Vedanta Limited continues to explore the feasibility of expanding the Lanjigarh alumina refinery subject to availability of bauxite and regulatory approvals. Currently, the project has been resumed to increase the Lanjigarh alumina refinery capacity, with a vision to take it beyond 4 mtpa, reaching up to a capacity of 6 mtpa in stages. As of 31 March 2020, Vedanta Limited has spent ₹47,160 million ($630 million) on the Lanjigarh alumina refinery expansion project (up to 6 mtpa) out of the estimated project cost of ₹115,780 million ($1,548 million).

Market share and competition

BALCO and Vedanta Limited are two of the four primary producers of aluminium in India and together with the Jharsuguda smelter, had a 47% market share by sales volume in India for Fiscal Year 2020 according to public market information.

Aluminium ingots, wire rods and rolled products are commodity products and BALCO and Vedanta Limited compete primarily on the basis of price and service, with price being the most important consideration when supplies are abundant. Aluminium competes with other materials, particularly plastic, steel, iron, glass, and paper, among others, for various applications. In the past, customers have demonstrated a willingness to substitute other materials for aluminium.

Commercial Power Generation Business

Introduction

Vedanta has been building and managing captive power plants in India since 1997, and currently operates multiple power plants across locations in India. Vedanta's commercial power generation business in India leverages its experience in building and managing captive power plants that support its primary businesses. As of 31 March 2020, the total power generating capacity of Vedanta Limited's thermal power plants, wind power plants and gas based plants was 9,055.1 MW. As of 31 March 2020, the total power generating capacity of Vedanta's non-captive thermal power plants and wind power plants was approximately 3,530.5 MW.

Vedanta owns and operates several commercial power plants, namely Vedanta Limited's 600 MW coal-based thermal power plant in Jharsuguda, Odisha, MEL's 106.5 MW coal-based thermal power plant in Mettur Dam, Tamil Nadu, HZL's wind power plants in Gujarat, Karnataka, Maharashtra, Tamil Nadu and Rajasthan aggregating 274.2 MW, BALCO's 300 MW coal-based thermal power plant, and TSPL's 1,980 MW coal-based thermal power plant in Mansa, Punjab.

Vedanta Limited currently, operate a 600 MW thermal coal-based commercial power facility at Jharsuguda and it has a power purchase agreement with GRIDCO Limited, a nominee of the State Government of Odisha ("GRIDCO").

BALCO used to operate 600 MW of independent power plants. BALCO now just operates a 300 MW unit as an independent power plant. The other 300 MW unit has been converted to a captive power plant, as per order received from Chhattisgarh State Electricity Regulatory Commission ("CSERC") for conversion of 300 MW capacity from independent power plant ("IPP") to captive power plant ("CPP").

In July 2008, Sterlite Energy Limited succeeded in an international bidding process and was awarded the project for the construction of a 1,980 MW (comprising three units of 660 MW each) coal-based commercial thermal power plant at Talwandi Sabo in the State of Punjab in India. The power plant was set up through Vedanta Limited's wholly owned subsidiary TSPL. All three units have been fully commissioned now.

Our power business also includes 274 MW of wind power plants operated by HZL and 106.5 MW power plant at MALCO situated at Mettur Dam in southern India. The operations of the MALCO plant has been suspended for care and maintenance from 26 May 2017.

Sales of units of power decreased from 13,515 million units in Fiscal Year 2019 to 11,162 million units of power in Fiscal Year 2020. The revenue from Vedanta's commercial power generation business decreased from $924 million in Fiscal Year 2019 to $827 million in Fiscal Year 2020.

The following table sets out information relating to Vedanta's power plants:

Fiscal Year Commissioned	**Capacity (MW)**	**Location**	**Fuel Used**
1988[(1)]	270.0	Korba	Thermal Coal
1997	24.0	Tuticorin	Liquid fuel
1999	75.0	Mettur Dam	Thermal Coal
2003	14.8	Debari	Liquid fuel
2003	6.0	Zawar	Liquid fuel
2003	14.8	Chanderiya[(2)]	Liquid fuel
2003	4.8	Cambay	Gas based
1999 and 2003	10.0	Ravva	Gas based
2005	7.5	Tuticorin	Liquid fuel
2010	15.0	Pantnagar	Liquid fuel
2005	154.0	Chanderiya	Thermal coal
2006	540.0	Korba	Thermal coal
2008	90.0	Lanjigarh	Thermal coal
2007	107.2	Gujarat and Karnataka	Wind[(3)]
2007	30.0	Amona	Gas based
2008	80.0	Chanderiya	Thermal coal
2009	80.0	Zawar	Thermal coal
2009	16.0	Gujarat and Karnataka	Wind[(3)]
2009	675.0	Jharsuguda	Thermal coal
2009	25.0	Mettur Dam	Thermal coal
2010	540.0	Jharsuguda	Thermal coal
2010	3.3	Rajasthan Raageshwari Gas terminal	Gas based
2010	14.4	Gujrat Viramgam Terminal	Gas based
2010	33.8	Pipeline Above Ground Installations	Gas based
2011	1,200.0	Jharsuguda	Thermal coal
2011	48.0	Rajasthan and Karnataka	Wind[(3)]
2011	160.0	Dariba	Thermal coal
2012	103.0	Karnataka, Maharashtra, Rajasthan and Tamil Nadu	Wind[(3)]
2012	600.0	Jharsuguda	Thermal coal
2012	30.0	Amona	Gas based
2013	600.0	Jharsuguda	Thermal coal
2013	80.0	Tuticorin	Thermal coal
2013	6.5	Mettur Dam	Thermal coal
2014	80.0	Tuticorin	Thermal coal
2010 and 2014	60.0	Rajasthan Mangala Processing terminal	Thermal coal
2015	39	Gujrat Bhogat terminal	Thermal coal
2015	660.0	Mansa-Talwandi Sabo Road, Mansa, Punjab	Thermal coal
2016	660.0	Mansa-Talwandi Sabo Road, Mansa, Punjab	Thermal coal
2016	600.0	Korba	Thermal coal
2017	600.0	Korba	Thermal coal
2017	660.0	Mansa-Talwandi Sabo Road, Mansa, Punjab	Thermal coal
2017	12.0	Debari	Solar
2017	4.0	Dariba	Solar
2018	22.0	Agucha	Solar
Total	**9,055.1**		

Note: At HZL, Vedanta also has 34.4 MW of power capacity through waste heat recovery from roasters and Steam Turbo Generator

(1) Commissioned by BALCO prior to the acquisition of BALCO in 2001. The 270 MW power plant was transferred from power business to aluminium business on 1 April 2016.

(2) Transferred from Debari to Chanderiya in March 2009.

(3) The wind power plants are not for captive use.

The following table sets out the total power sales in MU for the Fiscal Years 2018, 2019 and 2020.

	For the Fiscal Year		
Facility	**2018**	**2019**	**2020**
Jharsuguda coal based thermal power plant	1,172	1,039	776
TSPL	7,915	9,858	8,223
BALCO 270 MW (i.e. CPP)	–	–	–
BALCO 600 MW[2]	1,536	2,168	1,726
HZL — Wind Power Plant	414	449	437
MALCO — 106.5 MW coal based thermal power plant[1]	4	–	–
Total	11,041	13,515	11,162

(1) Suspended for care and maintenance since 26 May 2017.

(2) BALCO operated 600 MW IPP in the first half of Fiscal Year 2019. From 1 January 2019, BALCO only operates 300 MW as IPP, after the other 300 MW unit was converted to CPP.

Commercial power plants

Vedanta Limited, Jharsuguda. Vedanta Limited has a 2,400 MW coal based thermal power plant facility (comprising of four units of 600 MW each) in Jharsuguda in the state of Odisha. The three units of 600 MW each of coal-based thermal power plants in Jharsuguda have been converted from commercial power plants to captive power plants from 1 April 2016 and is now part of the aluminium business and one unit is an independent power plant for commercial power generation. Operations of the first three units are captured in Commercial Power Sector for the period up to 31 March 2017 and in the aluminium sector thereafter.

The power plant was earlier operated through Sterlite Energy Limited and is now a part of Vedanta Limited pursuant to the reorganisation transactions. The plant has been built with an investment of approximately ₹82,000 million ($1,096 million). The first unit of commercial operation commenced in November 2010. The second unit was operational on 30 March 2011, the third unit was operational on 19 August 2011. The fourth unit was operational on 26 April 2012. On 17 June 2015, Vedanta petitioned to the OERC to convert 2,400 MW IPP into captive generating plant to cater the power needs of 1.25 mtpa smelter at Jharsuguda and consequently, the OERC issued an order of conversion of three units into captive generating plants with effect from 1 April 2015, while retaining the IPP status of one unit to fulfil the obligations under the power purchase arrangements (PPA) with GRIDCO. As a result, three out of four 600 MW units were converted to captive generating plants.

In January 2008, the Ministry of Coal jointly allocated the coal blocks in the Rampia and Dip Side Rampia in the state of Odisha to six companies, including Vedanta Limited. The six companies entered into an agreement to jointly promote a new company, Rampia Coal Mine and Energy Private Limited ("RCMEPL") which was incorporated in India in February 2008.

Vedanta Limited invested in RCMEPL that was set up for the purpose of developing coal blocks. Vedanta Limited acquired ₹27.2 million equity shares of ₹1 each, representing 17.39% of the total equity shares of RCMEPL. However, due to the cancellation of coal blocks by the Supreme Court of India, an impairment loss of ₹27.2 million was recognized in Fiscal Year 2015 in respect of such investment.

IPP's in Odisha source coal from GOI's coal mining companies, long-term coal supply agreements with various state government under PPAs and from imports. During Fiscal Year 2020, 0.45 million ton coal was purchased from these sources towards Vedanta Limited's Jharsuguda IPP as compared to 1.87 million tons and zero tons purchased during Fiscal Years 2018 and 2019, respectively.

The typical coal volume required for full scale operations of 600 MW IPP ranges between 2.0 million to 3.5 million tons. However, actual coal consumption is largely dependent on the amount of power generation.

Additionally, Vedanta Limited has been allotted a coal linkage of 2.6 mmtpa for the 600 MW Jharsuguda IPP to meet the coal requirements, for which Mahanadi Coalfields Limited ("MCL") has signed fuel supply agreement for supplying up to 90% of the letter of assurance quantity. The facility is also designed to include a water reservoir, railway marshalling yard, coal stockpile, ash pond and other required facilities, which is shared amongst the 2,400 MW (4 units of 600 MW each).

In September 2006, Vedanta Limited entered into a power purchase agreement with GRIDCO, under which GRIDCO was granted the right to purchase up to 25.0% of the power sent out from the power plant after adjustments for our auxiliary consumption by Vedanta Limited. Further, if the coal block is allocated within the state, GRIDCO shall at all the time have right on behalf of the State Government of Odisha to receive additional 7.0% of the power generated (after adjustments for auxiliary consumption by the power plant) from the Jharsuguda power project at variable cost, otherwise, if no coal block is allocated within the state, then additional 5.0% of the power generated (after adjustments for auxiliary consumption by the power plant) at variable cost. GRIDCO will have the right to purchase power from Vedanta Limited for a period of 25 years from the date of commercial operation of the last unit i.e. 26 April 2012. The tariff for the PPA is revised once every five years.

Power from the power plant to be purchased by GRIDCO will be evacuated by GRIDCO from the bus bar (which is the discharge point of power plant) of the project.

The tariff for the sale of power by Vedanta Limited to GRIDCO will be determined by the OERC as follows:

- for the sale of power up to 25.0%, (a) a fixed capacity charge which shall be determined by the OERC as per the terms and conditions of tariff regulations issued from time to time and will be related to target availability. Recovery of fixed capacity charges below the level of target availability shall be done on a pro rata basis and calculated proportionately to the capacity requisitioned to by GRIDCO; and (b) a variable energy charge, which shall comprise fuel cost. The energy charges shall be calculated as per the methodology prescribed by the OERC from time to time; and

- for the sale of power for 7% or 5% depending on the allocation of coal blocks within the state of Odisha a variable energy charge is applicable, which shall comprise fuel cost and shall be calculated — on the basis of the ex-bus energy scheduled to be sent out from the generating station. The energy charges shall be calculated as per the methodology prescribed by the appropriate commission, from time to time.

Up until December 2019, Vedanta Limited was not able to supply power to GRIDCO due to non-supply of linkage coal from MCL despite the continuous follow-up from GRIDCO and Vedanta Limited. In January 2020, Vedanta Limited recommenced power supply to GRIDCO following to the resumption of linkage coal supply from MCL.

Disputes have arisen between Vedanta Limited and GRIDCO in respect of the power purchase agreement between them. These include disputes pertaining to pronouncements made by the OERC and interpretations with respect to minutes of meetings between Vedanta Limited and GRIDCO. See the section entitled "*Business — Litigation — Proceedings relating to the GRIDCO Power purchase agreement.*" for more information.

For Fiscal Years 2018, 2019 and 2020, the ten largest customers of Vedanta Limited's Odisha power business accounted for 100.0% of its power business.

BALCO. BALCO's power business includes only one unit of 300 MW power plant at BALCO's Korba facility. The 270 MW power plant was transferred from power business to aluminium business on 1 April 2016 and is non-operational now. BALCO had constructed an IPP 600 MW coal-based thermal power facility in the state of Chhattisgarh which had received approval to operate on 14 January 2015 from the regulatory authorities. One unit of 300 MW was commissioned during Fiscal Year 2016, and the second unit was commissioned and commenced commercial production on 1 May 2016. One unit of 300 MW has been converted from IPP to CPP from 1 January 2019.

MEL. Mettur power plant is a 106.5 MW coal based thermal power plant operated by MALCO Energy Limited or MEL in the state of Tamil Nadu. The plant has been set up in stages, with the first 75 MW set up in the year 1999 to cater to the requirements of the aluminium smelter operated by MEL. The aluminium operations were closed since November 2008. An additional 25 MW unit was added in the year 2009. Further, a 6.50 MW steam turbine generator was added in the year 2013 taking capacity to 106.5 MW.

MEL entered into an energy purchase agreement with Tamil Nadu Electricity Board in January 2009 for supply of power until April 2009 and entered with Power Trading Corporation Limited for supply of power to Tamil Nadu Electricity Board from April 2009 until May 2011, which was subsequently re-entered with Tamil Nadu Electricity Board from June 2011 until May 2016. MEL had entered into an agreement with NTPC Vidyut Vyapar Nigam Limited for supply of power (66.3 MW) to Telangana State Southern Power Distribution Company Limited (TSSPDCL) from June 2016 to May 2017. Currently MEL does not have any energy purchase agreement for supply of power.

HZL. As of 31 March 2020, wind power plants with a combined power generation capacity of 273.5 MW have been commissioned in the States of Gujarat, Karnataka, Tamil Nadu, Maharashtra and Rajasthan in India at a total cost of ₹14,540 million ($193 million). The electricity from these wind power plants is sold to State Electricity Boards. During their meeting on 21 January 2016, the HZL's Board of Directors approved the sale of the its wind power assets subject to the final approval of the price by the board. HZL is in the process of identifying a buyer.

Talwandi Sabo

In July 2008, Sterlite Energy Limited succeeded in an international bidding process and was awarded the project for the construction of a 1980 MW coal-based thermal commercial power plant at Talwandi Sabo in the state of Punjab in India. The project was bid as Case-2 tariff based competitive bidding, implying that the developer had to quote for capacity charges and efficiency. Fuel costs subject to quoted efficiency was to be a pass-through. All necessary approvals for the project have been obtained and commissioning of this project was carried out in stages. The estimated cost of the project was ₹115,460 million ($1,543 million). The boiler light up and synchronization of the first unit was achieved in Fiscal Year 2014, and coal logistics were established in Fiscal Year 2014.

The first and second 660 MW units of the Talwandi Sabo power plant were capitalized in Fiscal Years 2015 and 2016 respectively. The third 660 MW unit was capitalized on 1 September 2016 after successful completion of trial runs.

In May 2008, Sterlite Energy Limited entered into an on-shore and offshore engineering, procurement and construction contract with SEPCO Electric Power Construction Corporation ("SEPCO"), for Sterlite Energy Limited's Talwandi Sabo thermal power project for ₹66,560 million ($890 million). A novation agreement in favor of TSPL was executed in November 2009. The contract was revised upwards by $74 million on 15 November 2012 to reflect the set-up and commissioning of three units of power at the Talwandi Sabo thermal power plant.

SEPCO's obligations under the contract include testing and delivery of plant and equipment, system design and engineering of plant and equipment in accordance with technical specifications, supervision of civil, structure and manufacturing work, custom clearance, port clearance, inland transportation of offshore as well as onshore plant and equipment, unloading, storage and preservation for all equipment and material required, ash disposal among others within the period specified in the contracts. The fixed contract price is payable in multiple installments according to a fixed payment schedule. SEPCO has provided performance guarantees with respect to various parameters, for instance, net unit heat rate of 2,222.80 kwph/kcal and net unit electric output of 611.82 MW. On 3 February 2016, TSPL terminated the SEPCO's engineering and procurement contract ("SEPCO EPC"), due to delays in setting up the project, and for certain defects and deviations not being resolved in a timely manner. However, on 16 April 2016, the parties reached an agreement for the settlement of the SEPCO EPC issues. As of 31 March 2020, the revised value of the SEPCO EPC stands at $1,041.8 million for offshore supply and service, and ₹21,371 million for onshore supply and service.

As of 31 March 2020, ₹116,837 million ($1,562 million) was spent on this project. This project was financed by internal sources and through debt financing.

After commencing all units, TSPL requires around 10 million tpa of coal. TSPL has been allotted the linkages from MCL, Odisha for 7.72 million tpa. According to the fuel supply agreement with MCL, out of the 80.0% (6.17 million tpa) of the letter of assurance quantity, 5.01 million tpa of which is to be supplied through domestic sources whilst the remaining 1.16 million tpa is supplied through imported sources. The balance coal shall be procured through other sources. The linkage coal quantity will be transported from a distance of approximately 1,600 km by rail.

TSPL also sources coal from sources such as the GOI's coal mining companies and imports. In Fiscal Year 2020, the total coal purchased from these sources was 6.05 million metric tons. The total volume of coal consumed annually by Vedanta's coal-fueled power plants is largely dependent on the amount of generation and ranges between 6.99 million to 8.16 million metric tons for PLF ranging from 60.0% to 70.0%.

For Fiscal Years 2018, 2019 and 2020, one customer accounted for 100.0% of TSPL power business.

Electrosteel business

Overview

ESL's manufacturing facility is a greenfield integrated steel plant located near Bokaro, Jharkhand, India, which has a current capacity of 1.5 mtpa and the potential to increase to 2.5 mtpa. It primarily consists of one sinter plant, a vertical coke oven plant, two blast furnaces, an oxygen plant, a lime calcination plant, a steel melting shop, a wire rod mill, a bar mill, a captive power plant and a DI pipe plant. ESL is selling primarily TMT bars, Wire rods, DI pipes, Pig iron and Steel billets in open market and has established its presence in the domestic market.

Vedanta Limited through its wholly owned subsidiary, VSL, acquired management control over ESL on 4 June 2018. Pursuant to the allotment of shares to VSL on 15 June 2018 and further acquisition of shares through a buyback offer, Vedanta holds 95.49% of the paid up share capital of ESL through VSL (as at 31 March 2020). The acquisition of ESL complements Vedanta's existing iron ore business through the vertical integration of steel manufacturing capabilities. ESL, under the Bankruptcy Code was subject to insolvency proceedings. The NCLT on 17 April 2018 approved the resolution plan submitted by Vedanta for acquiring ESL. National Company Law Appellate Tribunal ("NCLAT") also upheld the NCLT order on 30 May 2018 and allowed Vedanta Limited to acquire ESL by depositing an upfront payment to the Committee of Creditors. A total cash consideration of $788 million was paid for the acquisition.

ESL's consent to operate the greenfield integrated steel plant at Bokaro was not renewed by the JSPCB following its expiry in December 2017. A writ petition was filed by ESL before the Jharkhand High Court against the orders issued by the JSPCB of rejecting ESL's application for the renewal of its consent to operate. The MoEF issued an order on 20 September 2018 revoking the environment clearance of ESL which was also challenged before the Jharkhand High Court in a separate writ petition. The Jharkhand High Court has granted a stay against orders on MoEF and JSPCB and allowed the plant operations to continue till the next date of hearing which was originally scheduled for 26 February 2020. However, owing to the nation-wide lockdown situation in India, the Jharkhand High Court hearing has since been postponed and the next scheduled hearing date is on 4 September 2020. On 17 December 2019, ESL's Forest Diversion Proposal received Stage I clearance from the Forest Advisory Committee.

Total Saleable Production from ESL was 1,231 KT in Fiscal Year 2020 and 1,199 KT in Fiscal Year 2019. For Fiscal Year 2020, Vedanta EBITDA from ESL segment was $83 million compared to $113 million for Fiscal Year 2019

Principal Products

TMT Bars

TMT Bars are basically a thermo mechanically treated steel bars which are produced by controlled quenching and self-tempering process. ESL TMT bars are produced in Fe500, Fe500D and Fe500D CRS variety as per IS 1786/2008 grade. Vedanta sells TMT Bars primarily to construction industry.

Wire Rod

Steel wire rod is rolled from steel billet in a wire rod mill and is used primarily for the manufacture of wire. The steel for wire rod is produced by all the modern steelmaking processes, including the basic oxygen and electric furnace processes. Steel wire rod is usually cold drawn into wire suitable for further processing such as cold rolling, cold heading, cold upsetting, cold extrusion, cold forging or hot forging. Vedanta sells wire rod primarily to automobile and white goods industries.

DI Pipe

DI pipe is a pipe made of ductile cast iron commonly used for potable water transmission and distribution. The ductile iron used to manufacture the pipe is characterised by the spheroidal or nodular nature of the graphite within the iron. Protective internal linings and external coatings are often applied to DI pipes to inhibit corrosion, the standard internal lining is cement mortar and standard external coatings include bonded zinc, asphalt or water-based paint. The DI pipe is primarily used in sanitation, sewerage and irrigation.

Pig Iron

Pig iron is an intermediate product of the iron industry, also known as crude iron, which is first obtained from a smelting furnace in the form of oblong blocks. Pig iron has a very high carbon content, typically ranging from 3.8% to 4.7%, along with silica and other constituents of dross, which makes it very brittle and not useful directly as a material except for limited applications. Pig iron is made by smelting iron ore into a transportable ingot of impure high carbon-content iron in a blast furnace as an ingredient for further processing steps. Pig iron is further processed and is used in steel plants.

Steel Billet

A billet is a length of metal that has a round or square cross-section. Billets are created directly via continuous casting or extrusion or indirectly via hot rolling an ingot or bloom. Billets are further processed via profile rolling and drawing. Final products include TMT and Wire rod.

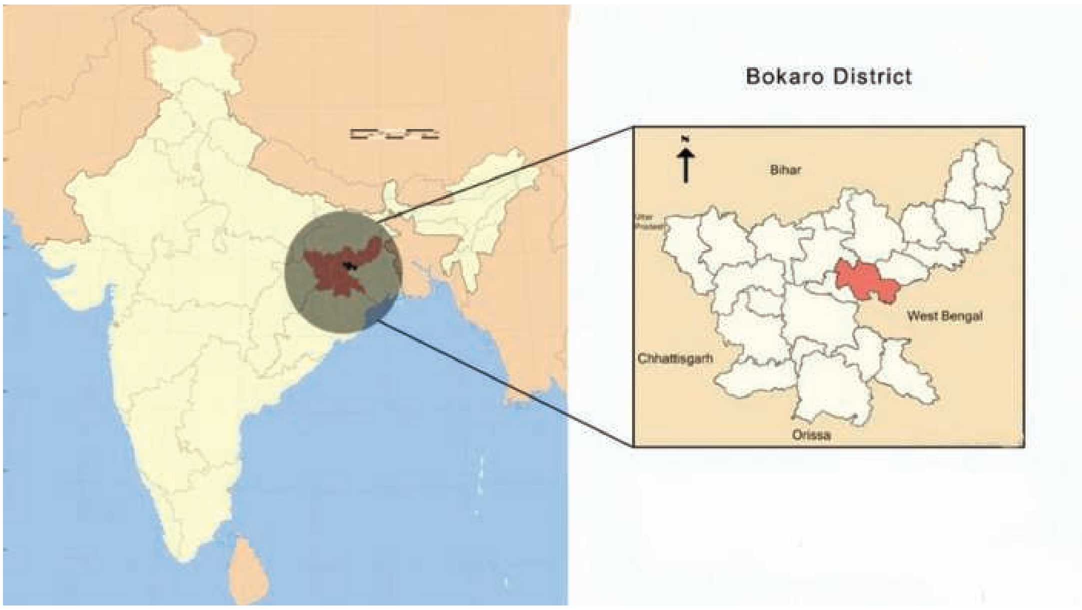
By Product

Granulated Slag

Granulated blast-furnace slag is obtained by quenching molten iron slag from a blast furnace in water or steam, to produce a glassy, granular product that is then dried and grounded into a fine powder. Granulated slag is used in the production of quality-improved slag cement by cement industry.

Principal Facilities

The following map shows details of the locations of ESL's facilities in the State of Jharkhand:



Coke Oven

Coke is prepared from coking coal or bituminous coal by heating it strongly in the absence of air. As a result, the volatile matter and moisture escapes out. The resulting coke is a hard, strong, porous and coherent mass. Coke plant is often described as a process of destructive distillation since it involves the separation of volatile matter based on the difference of boiling point. For the purpose of coking, two coke ovens have been designed, i.e. vertical coke oven of 0.5 mtpa and horizontal coke oven of 0.5 mtpa. Currently only vertical coke oven has been commissioned. It is of non-recovery/waste-heat recovery type i.e. heat is recovered from the flue gases for power generation in the captive power plant.

Coke is preferred to coal in the blast furnace operation because it is stronger and can take the burden of blast furnace charge, it creates a permeable bed for the flow of hot gases and molten metal, and it acts a better source of heat and reducing agent. The vertical coke oven has four batteries having 35 ovens each. The annual capacity of coke oven is 0.5 mtpa.

Sinter Plant

Sintering is agglomeration of iron ore fine particles (ranging from 0mm to 8mm) along with flux fine particles at high temperature (ranging from 1200°C to 1300°C) using coke fine particles as solid fuel to raise the temperature. During agglomeration at high temperature all constituent materials fuse together and become a porous heterogeneous solid mass (lump) called Sinter. The formation of such lumps is caused by an incipient fusion of ore particles at the contact surface which binds together and formation of diffusion bond through recrystallization and crystal growth of haematite and magnetite which keeps the particles together without melting. There are two sets of 105 square metre sintering machines with annual output of 2.25 mt of sinter. Sinter produced is transferred to blast furnace for hot metal production.

Blast Furnace

The blast furnace is a furnace lined with refractory brick, where iron ore, coke and fluxes are alternately charged and hot blast at 1000°C to 1200°C is blown into the furnace to chemically reduce iron oxides into liquid iron called hot metal. The end products are usually molten metal and slag phases tapped from the bottom, and flue gases exiting from the top of the furnace. Vedanta has three blast furnaces (two operational) for production of hot metal, namely BF-2 having furnace size of 1050 cubic metre, BF-3 having furnace size of 350 cubic metre and BF-1 having furnace size of 1,050 cubic metre (semi-constructed). Vedanta is producing at the run rate of 1.5 mt of hot metal annually.

Steel Melting Shop

Steel is an alloy of iron and carbon. Carbon percentage in steel is less than 2.0%. The molten hot metal coming from the blast furnace is oxidised in the basic oxygen furnace. The scrap is charged into the furnace first since it may contain moisture. Then the molten metal from the blast furnace is added. Fluxes like limestone and dolomite are also added. The oxygen is blown from top and the resulting hot metal after removal of slag is taken to argon rinsing station where ferro-alloys and aluminium are added to adjust the chemistry and to remove oxygen respectively. The molten metal is sent to ladle refining furnace if required in order to produce different grades of steel. The steel from ladle is taken to ladle turret and poured onto the tundish. Tundish pours the molten metal onto the mould and cast into steel billet.

Rolling Mills

There are two types of rolling mills, i.e. bar mill and wire rod mill. ESL's bar mill is a continuous mill with horizontal-vertical combination. Bar mill is having annual production capacity of 0.7 mtpa. At the bar mill, slit rolling process is adopted for 10mm, 12mm and 16mm of TMT bars.

The designed maximum finishing rolling speed is 18 m/s. The mill is designed to make TMT bars of size ranging from 10 mm to 40 mm but TMT bars of diametre 8 mm are also being made using the 125x125 mm steel billets. TMT bar mill has 18 number of stands having horizontal vertical combination.

ESL's wire rod mill is a tandem rolling mill with stands in horizontal-vertical combination. Wire rod mill has annual production capacity of 0.5 mtpa. The designed maximum rolling speed is 110m/s. The mill is designed to make wire rods of size ranging from 5.5 mm to 16 mm using the 150x150x12000 mm steel billets. The billets after being de-scaled are sent to mills via output roller table. At the wire rod mill, Vedanta has 30 stands in a horizontal-vertical combination.

DI Pipe Plant

The molten metal is taken from blast furnace and stocked in mixer. From the mixer the liquid metal is taken by ladle and transferred to induction furnace where the composition of the liquid metal is corrected to desired level. The composition depends upon the size and thickness of the ductile pipe to be made. After attaining the metal composition, the temperature is risen to a desired level based on the type of pipe to be made. From induction furnace the molten metal is transferred to magnesium-converter which enhance the ductility of iron. Then it is fed to centrifugal casting machine. After the pipe is cast, it is soon transferred to annealing furnace for stress relieving. As soon as the pipes come out of annealing furnace, it is fed in zinc coating machine for zinc coating. After zinc coating it is passed for hydro-testing for checking the leakage of water from cast and annealed pipe. The tested pipes are checked surface wise and cleared for cement mortal lining, thereafter passed for bitumen or epoxy coating and finally dispatched after 12 hours of curing.

Power Plant

ESL has its own captive thermal power plant of 80 MW capacity of current capacity, expandable to 120 MW. Captive power plant has three centralised fluorised bed commercial boiler of coal based and two steam turbo generator of 60 MW each. Vedanta also has two waste heat recovery boilers of 75 tons each which is fired by coke oven flue gases. The power requirement is met partially by captive power plant and remaining is purchased through grid.

Production Volumes

The following table sets out ESL's total production from Bokaro facility for Fiscal Years 2018, 2019 and 2020.

	Fiscal Year		
Product	**2018**	**2019[(1)]**	**2020**
TMT	300,384	441,251	468,396
Wire Rod	365,460	426,873	412,948
DI Pipe	129,887	149,946	154,721
Pig Iron	179,464	141,548	167,305
Steel Billet	50,273	39,478	27,456
Total	**1,025,468**	**1,199,097**	**1,230,825**

(1) Includes production for April 2018 to March 2019.

Principal Raw Materials

The principal inputs of ESL's operations are iron ore, coking coal. In the past ESL has been able to secure an adequate supply of the principal inputs for its business.

Iron ore

Iron ore is sourced from merchant mines in Odisha and Jharkhand and is transported by railway and road.

Coking Coal

Vedanta's metallurgical coke requirements are met by captive metallurgical coke plant and the principal raw materials for the manufacture of metallurgical coke are hard-high fluidity coals, semi-hard and pulverised coal injection coking coals. These raw materials are imported from various international suppliers primarily from Australia and US. The availability is subject to seasonal supply constraints on specific mines and grades. The prices are subject to volatile index movements of international coking coal prices.

Distribution, Logistics and Transport

Raw material mainly coking coal and pulverised coal injection are imported by vessel and then transported through rail from Indian port to plant. Domestic raw materials which is mainly iron ore is transported through rail and road. Finished and semi-finished goods are transported by road only.

Sales and Marketing

The 10 largest customers of Vedanta's steel business accounted for approximately 32.8% and 34.6% of its steel business revenue in Fiscal Year 2019 and Fiscal Year 2020, respectively. None of Vedanta's customers accounted for greater than 10.0% of steel business revenue in Fiscal Year 2019 or Fiscal Year 2020.

The 10 largest customers are mainly from construction and original equipment manufacturing industry and are spread across India. Vedanta has marketing office in Kolkata, West Bengal, as well as Vedanta has two sales office in Delhi and Mumbai, along with regional managers for sales in four regions across India. In Fiscal Year 2019 and 2020, the export sale accounted for 0.7% and 0.4%, respectively. Currently, sales are majorly focused on the domestic market and the decision to export is taken only where prices are lucrative. Pricing is fixed as per the domestic market trend and is at par with major producer's month on month Vedanta supplies on an order to order basis, with delivery schedule defined in purchase orders.

Market Share and Competition

The total crude steel production of all producers of crude steel in India for Fiscal Year 2020 stood at 108.5 mt with a 58.1% share, Steel Authority of India Limited, Rashtriya Ispat Nigam Limited, Tata Steel Limited, ArcelorMittal, JSW Steel Limited, Jindal Steel and Power Limited together produced 63.06 mt of crude steel in Fiscal Year 2020. Vedanta's total production in Fiscal Year 2020 stood at 1.34 mt.

Vedanta's primary competitors are in both public and private sectors including Steel Authority of India, Tata Steel, JSW Steel Limited and Jindal Steel and Power Limited.

Other Activities

Port business

Vedanta has 100.0% interest in Vizag General Cargo Berth Private Limited ("VGCB") as of 31 March 2020, a consortium between Vedanta Limited and Leighton which won the bid to mechanise the coal handling facilities and upgrade the general cargo berth for handling coal at the outer harbour of Vishakhapatnam port, on the east coast of India.

The capacity of the upgraded berth is 10.18 mtpa VGCB had entered into an agreement on 10 June 2010 with the port authority, Vishakhapatnam Port Trust, to mechanise the coal handling facilities and upgrade the general cargo berth on a design-build-finance-operate-transfer basis for 30 years commencing on the date of award of concession. Vishakhapatnam Port Trust receives a royalty of 38.1% of the gross revenue as per TAMP tariff from the cargo handling activities as set out in the concession agreement.

Construction was completed on 8 April 2013 and commercial operations started in same year. The project cost was approximately ₹6,228 million (approximately $83 million). As of 31 March 2020, the total cost (Gross block) was ₹6,861 million including interest capitalisations.

During the Fiscal Year 2020, VGCB had handled a volume of 5.91 million tonnes i.e. 16% higher in volumes compared to Fiscal Year 2019 due to an increase in cargo from the steel sector. The EBITDA for VGCB for Fiscal Year 2020 is ₹418 million.

Sterlite Ports Limited, a 100.0% subsidiary of Vedanta Limited has received an award of letter dated 31 March 2016, for redevelopment of berths 8, 9, barge berths and mechanical ore handling plant at the Port of Mormugao, Goa on a design-build-finance-operate-transfer basis for 19 mmtpa capacity multi-cargo port terminal. A special purpose company, Goa Sea Port Private Limited, was incorporated on 5 July 2016 as a wholly owned subsidiary of Sterlite Ports Limited. Goa Sea Port Private Limited entered into an agreement on 22 September 2016 with the Mormugao Port Trust, to operate the berth on a build-finance-operate transfer basis for 30 years commencing on the date of award of concession (the "MPT Concession Agreement").

On 15 February 2020, Goa Sea Port Private Limited received a letter from the Mormugao Port Trust terminating the MPT Concession Agreement (the "Termination Letter") on the basis that both Goa Sea Port Private Limited and the Mormugao Port Trust had not fulfilled the conditions precedent required of them under the MPT Concession Agreement. Under the MPT Concession Agreement, the Mormugao Port Trust was required to obtain the relevant environmental clearance approvals for the project along with the handover of the project site whilst Goa Sea Port Private Limited was required to, *inter alia*, provide the relevant financing arrangements including a performance bank guarantee in respect of the project. As a result of a delay in obtaining the environmental clearance approvals, the Mormugao Port Trust was not able to hand over the project site to Goa Sea Port Private Limited. In turn, Goa Sea Port Private Limited was not able to fulfil its certain financing arrangement responsibilities as the project site was not handed over to it.

Pursuant to the Termination Letter, the Mormugao Port Trust had offered to return the performance bank guarantee to Goa Sea Port Private Limited unconditionally and to also allow Goa Sea Port Private Limited to participate in future public-private partnership projects with respect to the development or redevelopment the Port of Mormugao. Goa Sea Port Private Limited has engaged in further discussions with the Mormugao Port Trust and regulatory authorities in respect of the Termination Letter and is continuing to explore further legal remedies in respect of the termination of the MPT Concession Agreement by the Mormugao Port Trust.

Seasonality

Vedanta's iron ore mining operations are affected by changes in weather conditions, particularly heavy rains. Goa, where the majority of Vedanta's iron ore mining operations are located, experiences monsoon seasons, which usually occurs from early June to early October. During the monsoon season, restricted barge movements result in significantly lower exports through the Mormugao port in Goa, where Vedanta's iron ore is shipped to customers. Vedanta attempts to mitigate the effects of the monsoon season by concentrating on mine development and extracting larger quantities of overburden waste during the monsoon season in order to permit speedier extraction of iron ore during the dry season. In addition, during the monsoon season, Vedanta typically conducts annual maintenance at its processing plants and its other mining machinery.

Vedanta's oil and gas, zinc, copper, aluminium and commercial power business segments are not subject to seasonality.

Intellectual Property

Vedanta owns a number of trademarks that are used to identify its businesses and products. Vedanta also has a number of patents in the process of being granted in India related to mining, refining and smelting processes. Vedanta has also acquired certain intellectual property rights under licences from third parties for use in its businesses. Cain India has entered into various agreements with Cairn Energy and its subsidiaries (the "Cairn Energy Group") in connections with trademarks and corporate logos, which are registered in EU, UK, India and Benelux. Although Vedanta's patents, licences and trademarks constitute valuable assets. Vedanta does not depend on any single patent, licence or trademark in a material manner in the conduct of its sales and operations viewed as a whole.

Litigation

Save as disclosed below, there are no outstanding governmental, legal or arbitration proceedings, including any such proceedings which are pending or threatened of which Vedanta is aware, which Vedanta believes could reasonably be expected to have a material adverse effect on its results of operation and financial condition.

Vedanta Limited has commenced proceedings against the GOI, which the GOI has disputed Vedanta Limited's exercise of the call option to purchase its remaining 29.5% ownership interest in HZL.

Under the terms of the shareholders' agreement between the GOI and Vedanta Limited, Vedanta Limited was granted two call options to acquire all the shares in HZL held by the GOI at the time of exercise. Vedanta Limited exercised the first call option on 29 August 2003. Arbitration is ongoing in relation to a dispute between the GOI and Vedanta Limited, with respect to Vedanta Limited's exercise of its second call option to acquire the remaining shares in HZL held by the GOI, pursuant to the shareholders' agreement between the parties. The GOI has refused to act upon the second call option, stating that Vedanta Limited's second call option violates the provisions of the Indian Companies Act, 1956, by restricting the right of the GOI to transfer its shares. The next date of hearing by the arbitral tribunal is still to be notified.

Separately, a writ petition was filed in March 2014 in the Supreme Court of India by the National Confederation of Officers Association questioning the decision of GOI to disinvest its 29.54% residual shareholding in HZL. The Supreme Court of India on 19 January 2016 ordered the status quo to be maintained with respect to the proposed disinvestment of the government's interest in HZL until further orders are passed by the Supreme Court of India. On 9 January 2020, Vedanta Limited filed an early hearing application for the matter pending before the Supreme Court of India. On 13 August 2020, the Supreme Court passed an order removing the status quo order in place and has allowed the arbitration proceedings to continue. The matter will now be listed before the Supreme Court in 4 weeks' time.

Vedanta Limited has commenced proceedings against the GOI, which the GOI has disputed Vedanta Limited's exercise of the call option to purchase its remaining 49.0% ownership interest in BALCO.

Arbitration proceedings have been concluded in relation to a dispute between the GOI and Vedanta Limited, with respect to Vedanta Limited's exercise of its call option to acquire the remaining shares in BALCO held by the GOI, pursuant to the shareholders' agreement between the parties. On 25 January 2011, the arbitration tribunal formed under the directions of the High Court of Delhi declared an award rejecting Vedanta Limited's claims regarding the exercise of its second call option. According to the award, certain clauses of the shareholders' agreement including the clauses relating to the call option, the right of first refusal, the "tag-along" rights and the restriction on the transfer of shares were held to be void, ineffective and inoperative as being in violation of the provisions of the Indian Companies Act, 1956. In April 2011, Vedanta Limited filed an application under section 34 of the Arbitration and Conciliation Act, 1996 in the High Court of Delhi to set aside the award dated 25 January 2011 to the extent that it holds these clauses ineffective and inoperative. The GOI also filed an application before the High Court of Delhi to partially set aside the arbitral award dated 25 January 2011 in respect of certain matters involving valuation. The High Court of Delhi passed an order dated 10 August 2011 directing Vedanta Limited's application and the application by the GOI to be heard together as they arise from a common arbitral award. The matter is currently pending before the High Court of Delhi and the next date of hearing is scheduled for 11 August 2020.

Appeal proceedings in the High Court of Bombay brought by SEBI to overrule a decision by the Securities Appellate Tribunal of India that Vedanta Limited has not violated regulations prohibiting fraudulent and unfair trading practises.

In April 2001, SEBI ordered prosecution proceedings to be brought against Sterlite (now Vedanta Limited), alleging that it violated regulations prohibiting fraudulent and unfair trading practises, and also passed an order prohibiting Sterlite (now Vedanta Limited) from accessing the capital markets for a period of two years. SEBI's order was overruled by the Securities Appellate Tribunal of India on 22 October 2001 on the basis of a lack of sufficient material evidence to establish that Sterlite (now Vedanta Limited) had, directly or indirectly, engaged in market manipulation and that SEBI had exercised its jurisdiction incorrectly in prohibiting Sterlite (now Vedanta Limited) from accessing the capital markets. In November 2001, SEBI appealed to the High Court of Bombay. No further action or procedures have taken place since 2001. SEBI's order was based on its finding that Sterlite (now Vedanta Limited) had manipulated the price of its shares in connection with its proposed acquisition of shares in Indian Aluminium Company Limited ("INDAL") and its proposed open offer to the shareholders of INDAL in 1998. SEBI also alleged that MEL provided funds to an entity Vedanta allegedly controlled to enable its associate to purchase Sterlite's (now Vedanta Limited's) shares, as part of a connected price manipulation exercise.

In addition to the civil proceedings, SEBI also initiated criminal proceedings in 2001 before the Court of the Metropolitan Magistrate, Mumbai, against Sterlite (now Vedanta Limited), Vedanta's Executive Chairman, Mr. Anil Agarwal, Sterlite's Director of Finance, Mr. Tarun Jain, and the chief financial officer of MEL at the time of the alleged price manipulation. When SEBI's order was overturned in October 2001, Sterlite (now Vedanta Limited) filed a petition before the High Court of Bombay to defend those criminal proceedings on the grounds that the Securities Appellate Tribunal of India had overruled SEBI's order on price manipulation. An order was passed by the High Court of Bombay on 2 December 2005 in Sterlite's (now Vedanta Limited's) favour, granting an interim stay of the criminal proceedings. The next date of hearing has not been fixed.

Criminal proceedings against former directors of SIL.

Ms. Krishna Bajaj filed a complaint against the former directors of Sesa Industries Limited ("SIL") (which has since been amalgamated with Sesa Goa) before the Magistrate at Mumbai in 2000, in relation to shares issued on a preferential basis by Sesa Industries Limited in 1993 to Sesa Goa's shareholders, alleging that the shares of Sesa Industries Limited were not listed within 12 to 18 months of the offer as stated in the offering document. The four directors appeared before the court on 16 June 2009 and pleaded not guilty to the charges. The four directors filed a criminal application in the High Court of Bombay challenging the Magistrate's order of framing charges, before the High Court of Bombay. The High Court of Bombay admitted the criminal application and stayed the proceedings pending before Magistrate at Mumbai. The next date of hearing has not been fixed.

Criminal proceedings against certain directors and employees of BALCO.

Criminal proceedings were initiated by Mr. Ajay Padia before the Court of the Judicial Magistrate First Class, Pune against Mr. Anil Agarwal, Mr. Navin Agarwal, Mr. Tarun Jain and certain of the other former directors and employees in 2002 alleging that an assurance that was given by the above mentioned directors regarding payment of all amounts owed to him for the damaged material supplied by BALCO was not honoured. An application under was filed in the High Court of Bombay for quashing the proceedings in the Judicial Magistrate First Class and to dispose the matter directing that alternative remedies were available before the Sessions Court, Pune, which was the appropriate court. The High Court of Bombay stayed the criminal proceedings and the application was listed for disposal.

BALCO is involved in litigation in relation to the illegal felling of trees situated on forest land.

Petitions have been filed in public interest before the Supreme Court of India by various individuals and Sarthak, a non-governmental organisation alleging that illegal possession and use of forest land, which has been proposed to be leased by Chhattisgarh Government, for non-forest activities by BALCO. The Supreme Court of India referred the matter to the Central Empowered Committee, which recommended an ex post-facto diversion of forest land with payment of net present value on land for which forest compensation was not paid prior to the year 1980. Subsequently, it was alleged that BALCO had cut trees in violation of the Supreme Court of India order and one of the petitioners filed a contempt petition and the matter was again referred to the Central Empowered Committee. The Central Empowered Committee submitted its report on 30 June 2012 to the Supreme Court of India recommending that a detailed survey should be conducted through the Forest Survey of India MoEF using high quality remote sensing technique to find out whether any tree felling and/or non-forest use has taken place after

29 February 2008 in the revenue forest land and/or deemed forest in possession of BALCO. In order to expedite the proceedings, BALCO filed an application in the Supreme Court of India seeking direction to pay the net present value on forest land as per the recommendation of the Central Empowered Committee providing an ex-post facto diversion of the 1,751 acres forest land held by BALCO. The CEC has submitted its report dated 22 February 2019 on the ground truthing exercise conducted by the Forest Survey of India (FSI) jointly with BALCO between 29 October 2019 to 31 October 2019. The matter is being heard before the Supreme Court of India.

Writ petitions filed against Vedanta Limited alleging violation of certain air, water and hazardous waste management regulations at Vedanta's Tuticorin plant.

On 24 March 2013, the TNPCB issued a show cause notice to Sterlite (now Vedanta Limited) alleging violation of environmental laws and conditions imposed by the TNPCB and releasing of pollutants from the Tuticorin plant. Further, TNPCB issued an order dated 29 March 2013 ordering the closure of the Tuticorin plant. On 1 April 2013, Sterlite (now Vedanta Limited) filed a petition before the NGT against the order of closure by the TNPCB on the basis that the plant's emissions were within permissible limits. The matter was transferred to the NGT Principal Bench at New Delhi and in a hearing in May 2013, Sterlite (now Vedanta Limited) was directed to provide certain information to the NGT.

The NGT passed an interim order in 31 May 2013 allowing the smelter to recommence operations subject to certain conditions, and consequently Sterlite (now Vedanta Limited) recommenced operations on 16 June 2013. The expert committee constituted by the NGT submitted a report on the operation of the plant on 10 July 2013 stating that the plant's emissions were within the prescribed standards. Based on this report, the NGT on 15 July 2013 ordered that the interim order dated 31 May 2013 shall continue to operate. On 8 August 2013, the NGT confirmed its 31 May 2013 order with directions to comply with the recommendations made by the committee to further improve the working of the plant within a time bound schedule.

Sterlite (now Vedanta Limited) implemented all the recommendations during Fiscal Year 2013. However, the TNPCB filed civil appeals in 2013 against the NGT's interim order dated 31 May 2013 and final order and judgement dated 8 August 2013. V Gopalaswamy, General Secretary of a political party, MDMK, also filed Civil Appeals in 2013. The appeals were allowed by the Supreme Court of India in February 2019 and the NGT judgement dated 8 August 2013 was set aside on grounds of maintainability. However, the Supreme Court gave Vedanta Limited the liberty to approach the High Court of Madras challenging the orders of TNPCB. Vedanta Limited then approached the High Court of Madras, Principal Bench challenging the impugned orders of TNPCB passed in 2013. This writ petition is now reserved for orders.

Proceedings related to the existing copper smelting operations and the proposed expansion project at the Tuticorin plant.

The consent to operate for the existing 400,000 TPA copper smelter plant at Tuticorin was due to expire on 31 March 2018. Vedanta Limited filed an application on 31 January 2018 with the TNPCB for renewal of the consent to operate, as per procedure established by law. The TNPCB rejected the said renewal application on dated 9 April 2018 (the "Rejection Order"). Vedanta Limited had filed an appeal before the TNPCB Appellate Authority challenging the Rejection Order which Vedanta Limited withdrew after the NGT Order dated 15 December 2018 on account of redundancy of proceedings before this (TNPCB Appellate Authority) forum.

During the pendency of the appeal, TNPCB on 23 May 2018 ordered the disconnection of electricity supply and closure of the existing copper smelter plant with immediate effect. TNPCB passed the said closure order without any prior notice to Vedanta, which was due to be served as per the requirements under Section 21(4) of the Air (Prevention and Control of Pollution) Act, 1981 and Rule 34 of the Water (Prevention and Control of Pollution) Rules 1975. Thereafter, the State Government of Tamil Nadu, proclaiming and endorsing TNPCB's Rejection Order, issued dated 28 May 2018, with a direction to seal the existing copper smelter plant unit permanently ("TN Government Order"), without providing any prior notice to Vedanta Limited. Subsequently, the Directorate of Industrial Safety and Health issued orders dated 30 May 2018, directing the immediate suspension and revocation of the factory licence and the registration certificate for the existing smelter plant.

Vedanta Limited filed an appeal before NGT, Principal Bench at New Delhi challenging the closure order passed by TNPCB as well as the TN Government Order for sealing of the existing plant and the appeal was allowed vide NGT's judgement dated 15 December 2018 by which the NGT had also directed TNPCB to renew the consent to operate. The NGT judgement was challenged by the State of Tamil Nadu and TNPCB before the Supreme Court of India. On 18 February 2019, the Supreme Court of India set aside the NGT order on the grounds of maintainability and gave Vedanta Limited the liberty to challenge the earlier impugned orders passed by TNPCB and the State of Tamil Nadu before Madras High Court under Article 226 and indicated for an expeditious hearing of the matter.

Based on the said order, Vedanta Limited filed a writ petition before the Principal Bench of the High Court of Madras on 1 March 2019 seeking interim relief for care and maintenance of the plant. The High Court of Madras did not grant any interim relief but proceeded to hear the matter on a regular basis as a specially ordered case. The petition was heard by the High Court of Madras from June 2019 to January 2020. The matter was last heard on 8 January 2020 and the arguments in the matter have concluded. As of the date of this Offering Circular, the matter is reserved for orders. Based on Vedanta Limited's internal assessment, Vedanta Limited remains in compliance with the applicable regulations and anticipates a favorable judgment from the High Court of Madras.

The application for renewal of the environmental clearance in respect of the expansion project which was due to expire on 31 December 2018 was rejected by the MoEF. Thereafter, a fresh application was made by Vedanta Limited on 12 March 2018, before the Expert Appraisal Committee of the MoEF wherein a sub-committee was directed to visit the expansion project site prior to prescribing the terms of reference.

In the meantime, the Madurai Bench of the High Court of Madras in a public interest litigation filed against Vedanta held through its order dated 23 May 2018, that the application for renewal of the environmental clearance for the expansion project shall be processed after a mandatory public hearing and the said application shall be decided by the competent authority on or before 23 September 2018. In the interim, the High Court of Madras ordered Vedanta Limited to cease construction and all other activities on site for the proposed expansion project with immediate effect. The MoEF had updated on its website that Vedanta Limited's environmental clearance for expansion project will be considered for ToR either upon verdict of the NGT case or upon filing of a Report from the State Government/District Collector, Thoothukudi.

Separately, SIPCOT through its letter dated 29 May 2018, cancelled 342.22 acres of the land allotted to Vedanta for the proposed expansion project. Further, the TNPCB issued orders on 7 June 2018, directing the withdrawal of the consent to establish for the expansion project, which is valid until 31 December 2022. In a writ filed before Madras High Court Madurai Bench challenging the lease cancellation order, Madras High Court vide its order dated 3 October 2018 has granted an interim stay in favour of Vedanta Limited against the subject order of SIPCOT (State Industries Promotion Corporation of Tamil Nadu) dated 29 May 2018, cancelling 342.22 acres of the land allotted to Vedanta Limited.

Further, on 7 June 2018, TNPCB withdrew the consent to establish granted for the expansion project for a period of five years. Vedanta Limited filed an appeal before the TNPCB Appellate Authority challenging withdrawal of the consent to establish by the TNPCB and the matter is currently pending for the next hearing. Vedanta Limited continues to engage with the GOI and the relevant authorities to enable the restart of operations.

For Fiscal Year 2020, Vedanta Limited has recognised a provision on impairment on its expansion project of ₹6,692 million ($89 million).

The Enforcement Directorate has levied penalty of approximately ₹347 million on Vedanta Limited.

The Enforcement Directorate ("ED") by an order in August 2004 alleged that Sterlite (now Vedanta Limited) and MALCO had remitted approximately $49 million to Twin Star Holdings Ltd. without prior permission from the Reserve Bank of India ("RBI"). By this order, the ED levied penalties on Vedanta Limited and certain directors of Vedanta Limited of approximately ₹347.0 million.

Vedanta Limited filed an appeal against the order of ED before Appellate Tribunal of Foreign Exchange seeking waiver of pre-deposit, which was allowed by the Appellate Tribunal of Foreign Exchange. The ED challenged this order before Delhi High Court. The Delhi High Court remanded the matter back to the Appellate Tribunal of Foreign Exchange for deciding the issue of waiver of pre-deposit afresh.

The Appellate Tribunal on 6 August 2019 granted Vedanta Limited a stay on the pre-deposit of the penalty amount on the basis of its strong prima facie case. The ED has mentioned their intent to file an appeal against judgement before the Bombay High Court. The matter is pending to be heard on merits before the Tribunal.

Challenge relating to the environmental clearance granted for the expansion plans of refinery in Lanjigarh.

In 2008, Vedanta Limited planned to expand the refining capacity of Lanjigarh alumina refinery to 6 mtpa and construct an associated 210 MW captive power plant. The proposed expansion of Lanjigarh alumina refinery and related mining operations in and around the Niyamgiri was put on hold pursuant to an MoEF order dated 20 October 2010 instructing Vedanta Limited to hold from such expansion (the "MoEF Order dated 20 October 2010").

Vedanta Limited filed a writ petition in the High Court of Odisha against the MoEF Order dated 20 October 2010 which was dismissed by the High Court of Odisha. Vedanta Limited subsequently made an application to the MoEF to reconsider the grant of the environmental clearance for the Lanjigarh alumina refinery. Pursuant to its letter dated 2 February 2012, the MoEF issued fresh terms of reference to Vedanta Limited for the preparation of the Environment Impact Assessment report. Vedanta Limited submitted the Environment Impact Assessment report to the Odisha Pollution Control Board and simultaneously submitted various representations to the MoEF as well as the Project Monitoring Group established under the Cabinet Committee on Investments. The Expert Appraisal Committee of the MoEF reconsidered the project and revalidated the terms of reference for 22 months which was to take effect from January 2014, thereby lifting the ban imposed on the Lanjigarh alumina refinery was lifted. The public hearing was held on 30 July 2014 subsequent to which the Expert Appraisal Committee, in its meeting held on 9 January 2015, recommended the project for environmental clearance and for the further expansion of the Lanjigarh alumina refinery.

On 20 November 2015, the MoEF granted an environmental clearance in line with the Expert Appraisal Committee's recommendation for the Lanjigarh alumina refinery expansion up to 4 mtpa and environmental clearance of up to 6 mtpa, which will be received as an amendment to the existing environmental clearance after the completion of land acquisition of the balance area of 666.03 HA. Further, a consent to establish for the 4 mtpa and consent to operate for the 2 mtpa has also been granted. Following approvals for the expansion of the Lanjigarh alumina refinery, Vedanta Limited commenced its second stream operations at the Lanjigarh alumina refinery from April 2016 and the debottlenecked capacity has reached 1.7-2.0 million tonnes per annum (although this is contingent on the bauxite quality). Vedanta Limited continues to explore the feasibility of expanding the Lanjigarh alumina refinery subject to availability of bauxite and regulatory approvals.

On 18 February 2016 an individual challenged the environmental clearance granted for the expansion of the Lanjigarh alumina refinery before the NGT Kolkata wherein MoEF, Odisha State Pollution Control Board and Vedanta Limited have been made parties. Meantime, another individual filed an interlocutory application for being impleaded in the matter before NGT Kolkata. The matter is still pending before NGT Kolkata where the NGT Kolkata has not stayed the grant of the environmental clearance.

Demands against HZL by the Department of Mines and Geology and Ministry of Mines.

The Department of Mining and Geology, Rajsamand of the State of Rajasthan issued several show cause notices in August, September and October 2006, aggregating ₹3,339 million ($45 million) to HZL, claiming unlawful occupation and unauthorised mining of associated minerals other than zinc and lead at HZL's Rampura Agucha, Rajpura Dariba and Zawar mines in Rajasthan, during the period from July 1968 to March 2006. In response, HZL filed a writ petition against these show cause notices. In October 2006, the High Court of Rajasthan issued an order granting a stay and restrained the Department of Mines and Geology from undertaking any coercive measures to recover the penalty. In January 2007, the High Court of Rajasthan issued another order granting the Department of Mines and Geology additional time to file their reply and also ordered the Department of Mines and Geology not to issue any orders cancelling the lease. The matter is currently pending and no date for hearings has been fixed.

Demands against HZL by the State of Rajasthan.

The State of Rajasthan issued a notification in February 2008 notifying the Rajasthan Environment and Health Cess Rules, 2008, imposing environment and health cess on major minerals including lead and zinc. HZL and other mine operators resisted this notification and the imposition thereunder before the High Court of Rajasthan on the ground that the imposition of such cess and all matters relating to the environment fall under the competence of the central government as opposed to the state government. In October 2011, the High Court of Rajasthan disposed the writ petitions and upheld the validity of the Rajasthan Environment and Health Cess Rules, 2008. HZL challenged this order by a special leave petition in December 2011 before the Supreme Court of India. The Supreme Court of India issued a notice for stay. Further direction was issued by the Supreme Court on 23 March 2012 not to take any coercive action against HZL for recovery of cess. The matter is still pending and is not yet listed for hearing. The State Government of Rajasthan has rescinded the prospective liability towards environment and health cess by notification dated 6 January 2017.

Vedanta is involved in proceedings related to mining operations in the State of Goa.

Pursuant to findings in the Justice M.B. Shah Commission Report dated 15 March 2012 on the allegations of illegal mining in the State of Goa, the state government had banned iron ore mining operations in Goa on 10 September 2012 and the MoEF had suspended environmental clearances of all mining leases within the State of Goa. A writ petition was filed before the Supreme Court of India to initiate action based on the Justice M.B. Shah Commission Report and an interim order was passed by the Supreme Court of India on 5 October 2012 suspending mining operations within Goa.

The Supreme Court of India passed an interim order on 11 November 2013 directing that the inventory of the excavated mineral ores be verified by the Directorate of Mines and Geology ("DMG") and the Monitoring Committee was constituted to sell the materials through an e-auction. The Monitoring Committee is e-auctioning the ore and the proceeds from the auction will go to the state government.

On 21 April 2014, the Supreme Court of India passed judgement in the matter lifting the ban with certain stipulations including directions on mining by the lessees after 22 November 2007 as being illegal, dumping outside the leased area as being impermissible; interim buffer zone fixed at one kilometre from the boundaries of National Parks and Sanctuaries, ad-hoc cap on annual excavation at 20 million tonnes other than from dumps until the final report of Expert Committee is submitted, appropriation of the sale value of e-auctioned inventorised ores by the state government as per stipulated conditions, payment of 10% of the sale proceeds to the Goan Iron Ore Permanent Fund. The Supreme Court of India has held that all mining leases in the State of Goa, including those of Vedanta, had expired in 2007 and consequently, no mining operations can be carried out until renewal/execution of mining lease deeds by the state government. The petition filed by Vedanta in May 2014 for the review of the aforesaid judgement in the Supreme Court of India on certain limited issues was subsequently withdrawn by Vedanta in September 2014.

On 13 August 2014, the High Court of Bombay, Goa Bench passed a common order directing the State of Goa to renew the mining leases for which stamp duty was collected in accordance with the Goa Mineral Policy (2013) and to decide the other applications for which no stamp duty was collected within three months thereof.

In January 2015, the State Government of Goa revoked the order suspending mining operations in the State of Goa and MoEF revoked suspension of environmental clearances in March 2015. Subsequently, the lease deeds for all working leases were executed and registered as of August 2015. Vedanta obtained consent to operate under the Air Act and Water Act from the Goa State Pollution Control Board ("GSPCB") and mining plan approval from the Indian Bureau of Mines for these leases, and Vedanta resumed operations of its mines on 10 August 2015.

On 10 September 2014, the Goa Foundation challenged the High Court order directing the renewal of mining by way of a special leave petition before the Supreme Court of India, challenging the judgement of the High Court dated 13 August 2014 directing renewal of mining leases. Another set of special leave petitions on an identical issue were filed by Rama Velip. Two writ petitions have also been filed before the Supreme Court of India by Goa Foundation and Sudip Tamankar in September 2015 for setting aside the second renewal of iron ore mining leases in Goa made under section 8(3) of MMDR Act and challenging the revocation of suspension on mining in State of Goa. The Supreme Court of India passed its final order in the matter on 7 February 2018 wherein it set aside the second renewal of the mining leases granted by the State of Goa. The Supreme Court of India directed all lease holders operating under a second renewal to stop all mining operations with effect from 16 March 2018 until fresh mining leases (not fresh renewals or other renewals) and fresh environmental clearances are granted in accordance with the provisions of the MMDR Act. The State Government of Goa filed a review petition against the said judgment dated 7 February 2018.

Subsequent to the aforesaid judgement, Vedanta filed a representation before the State Government of Goa seeking an extension on the validity of leases in consonance with provisions of MMDR Amendment Act which provided that all leases granted prior to the commencement of MMDR Amendment Act were deemed to be granted for a tenure of 50 years. The State Government of Goa did not consider the representation citing the Supreme Court of India's judgment in place in respect of the issue. Vedanta challenged State Government of Goa's stance before the High Court of Bombay at Goa by way of a writ petition which was also rejected on the same basis as per the earlier Supreme Court of India's judgment. Vedanta has now challenged the order of High Court of Bombay before the Supreme Court of India. The State Government of Goa and the Goa Foundation have filed their reply, to which Vedanta had filed its rejoinder. The Supreme Court of India has also allowed the impleadment of Goa Foundation and Sudip Tamankar directing the parties to file their replies.

Separately, the Expert Committee on Iron ore filed their reports on dump handling and ceiling on annual extractions before the Supreme Court of India recommending the immediate enhancement of the annual extraction ceiling to 30 million MT, and subsequently to 37 million MT after the development of infrastructure. The Expert Committee on Iron ore's report is yet to be accepted and the matter is pending before the Supreme Court of India.

Proceedings against Vedanta challenging environmental consents received for expansion project of pig iron, metallurgical coke, sinter plants and power plant in Goa.

On 6 March 2012, the High Court of Bombay dismissed a public interest litigation filed by Mr. Ramachandra Vaman Naik and others for quashing an approval issued by the MoEF and the GSPCB for the expansion project of a pig iron plant, sinter plant, metallurgical coke plant and power plant in Goa. On 26 July 2012, Mr. Naik challenged this order by filing a special leave petition before the Supreme Court of India for an interim stay of the order and for a stay on the construction and operation of the plants in Goa. No stay has been granted in these matters and all respondents have filed their pleadings. The Supreme Court of India, on 7 November 2016, transferred the matter to the National Green Tribunal, New Delhi for de novo hearing and disposal in accordance with the law. The Supreme Court of India also set aside the order passed by the High Court of Bombay without expressing any opinion on the merits of the contention open to the parties. The matter before the National Green Tribunal, New Delhi was heard on 4 December 2017 and the Tribunal has disposed the matter with directions to the MoEF to examine, if any, additional conditions are to be added to the environmental clearance. Applicants were given liberty to submit suggestions, if any, to MoEF within two weeks and MoEF was directed to pass orders expeditiously thereafter. The MoEF has now completed its site inspection and passed an order on 7 January 2020 imposing certain additional conditions in the environmental clearance.

Separately, an application was filed by the village panchayat head of Navelim, Goa before the National Green Tribunal against the GSPCB, MoEF, State of Goa, others and Vedanta alleging that (i) GSPCB had issued its approval in a piecemeal manner to Vedanta, even though the environmental clearance order issued by the MoEF and the approval are for all four plants thereby violating the MoEF order, (ii) the no-objection certificate issued in relation to this project in 2007 was forged and fabricated, and (iii) the CN5 bridge at Maina-Navelim junction falls outside the notified industrial area. The application sought cancellation of the approval and the order of the MoEF. On 1 March 2013, the National Green Tribunal gave directions to issue notices to all the parties. Vedanta responded on 11 April 2013, denying all contentions and submissions made by the village head and requested that the application be dismissed. Pleadings in the matter have been completed. Subsequently on 10 February 2014 the matter was transferred from the Principal Bench of the National Green Tribunal at New Delhi to the Western Bench of the National Green Tribunal at Pune, where it is currently pending.

Vedanta has challenged the imposition of forest development tax by State Government of Karnataka.

In October 2008, Vedanta filed a writ petition in the High Court of Karnataka against the State Government of Karnataka and others, challenging the imposition of a forest development tax at a rate of 8.0% (a subsequent demand was made for the payment of tax at the rate of 12.0%) on the value of iron ore sold by Vedanta from the mining leases in the forest area, pursuant to the notification by the State Government of Karnataka and the memorandum/common order issued by the Deputy Conservator of Forests. In August 2009, the High Court of Karnataka permitted the State Government of Karnataka to levy the forest development tax and ordered that the demand be restricted to 50.0% of the forest development tax as an interim arrangement pending disposal of the writ petition.

Vedanta filed an application before the High Court of Karnataka, seeking modification of the order in August 2009. However, the application was not taken up for hearing. Subsequently, Vedanta filed a special leave petition before the Supreme Court of India against the High Court's order. In November 2009, the Supreme Court of India ordered the High Court of Karnataka to dispose the application for modification of the order given in August 2009 and ordered Vedanta to furnish a bank guarantee towards payment of the forest development tax. In April 2010, High Court of Karnataka ordered to pay 25.0% of the demand in cash and furnish a bank guarantee for the remaining 25.0%.

On 3 January 2016, the High Court of Karnataka passed its final order quashing the forest development tax notification, holding that the rate of forest development tax levied to be 8% and directing a refund of the amount collected from mining leases other than state government owned companies. The State Government of Karnataka appealed against the order before the Supreme Court of India, and another mining lessee also filed a counter appeal in the matter. The matter is pending before the Supreme Court of India. In the interim, the Supreme Court of India has stayed the refund of the forest development tax amount as ordered by the High Court.

Meanwhile, the State Government of Karnataka issued the Karnataka Forest Development (Amendment) Act, 2016 (the 'Amendment Act') to validate the earlier law, making certain amendments with retroactive effect. The Amendment Act has also changed the nomenclature of "Forest Development Tax" ("FDT") to "Forest Development fee ("FDF")" with retroactive effect, since the court had previously declared that FDT was a tax and not a fee, as claimed by State Government of Karnataka. The validity of the Amendment Act was challenged by way of a writ petition before the High Court of Karnataka. The High Court of Karnataka, on 4 October 2017, struck down the Amendment Act directing refund of the amounts collected. On 13 March 2018, the Supreme Court of India, in the appeal filed by state of Karnataka against the order of the High Court of Karnataka, has stayed the refund of the amount collected as FDF. On 21 March 2018, the Supreme Court of India directed that appeals against both the FDT and FDF matters will be heard together. The matter will be listed for hearing in due course.

Vedanta is involved in a tax dispute with the Indian Tax Department.

Vedanta through its subsidiaries Richter Holdings Limited and Westglobe Limited ("Westglobe") in 2007 acquired the entire stake in Finsider International Company Limited ("Finsider") based in the United Kingdom which was holding 51 percent shares of Sesa Goa Ltd, an Indian company. In October 2013, the Indian Tax Authorities (Tax Authorities) have served an order on Richter and Westglobe for alleged failure to deduct withholding tax on capital gain on the indirect acquisition of shares in April 2007.

The Tax Authorities determined the liability for such non-deduction of tax as ₹8,751.8 million ($117 million) in the case of Richter and ₹5,834.5 million ($78 million) in the case of Westglobe, comprising tax and interest. Being aggrieved, Richter and Westglobe filed appeals before the first appellate authority. Writ petitions were filed in the High Court of Karnataka challenging the constitutional validity of retrospective amendments made by the Finance Act 2012 and in particular the imposition of obligations to deduct tax on payments made against an already concluded transaction. The Karnataka High Court passed interim orders and directed that the adjudication of liability (TDS quantum and interest) shall no more remain in force since the Indian Tax Department passed the orders on merits travelling beyond the limited issue of jurisdiction. The Karnataka High Court will hear on jurisdiction issue. The next hearing is awaited.

The Cairn India Group is involved in a special leave petition relating to income tax.

Cairn India Energy West BV filed a writ petition with the High Court of Gujarat in December 2008 challenging the restriction of section 80-IB(9) of the Indian Income Tax Act, 1961 ("Section 80-IB(9)") to the production of oil. Section 80-IB(9) allows the deduction of 100% of profits from the commercial production or refining of mineral oil. The term "mineral oil" is not defined but has always been understood to refer to both oil and gas, either separately or collectively. The 2008 Indian Finance Bill appeared to remove this deduction by stating (without amending section 80-IB(9)) that "for the purpose of section 80-IB(9), the term 'mineral oil' does not include petroleum and natural gas, unlike in other sections of the Act". Subsequent announcements by the Indian Finance Minister and the MoPNG have confirmed that a tax holiday would be available on production of crude oil but have continued to exclude gas. The High Court of Gujarat, by its order dated 29 July 2009 did not admit the writ petition on the ground that the matter needs to be first decided by the lower tax authorities. A special leave petition has been filed before the Supreme Court of India against the decision of the High Court of Gujarat. If this challenge is unsuccessful, the potential liability for tax and related interest on the tax holiday claimed on gas production for all periods to 31 March 2016 is approximately ₹3,201 million.

Separately, the Commissioner of Income Tax (Appeals) has understood natural gas as falling within the ambit of the term "mineral oil" in the assessee's own cases.

Vedanta Limited has filed certain writ petitions relating to sales tax.

Vedanta Limited filed two writ petitions before the Rajasthan High Court seeking to set aside the letters and show cause notice issued by the Rajasthan Sales Tax Department and others demanding 4% VAT on sales of crude oil on the basis of an intra-state sale (as opposed to an inter-state sale). A 2% Central States Tax is currently being paid. A stay against the show cause notices has been issued. The potential liability for tax and related interest for all periods until 31 March 2020 is approximately ₹69,507 million ($929 million) (Tax ₹43,346 million ($579 million) and Interest ₹26,161 million ($350 million). The High Court via an order dated 13 July 2016 allowed the petition and held that sale of crude oil should be regarded as interstate sale subject to central states tax and that Rajasthan VAT should not be applicable. The Rajasthan Sales Tax Department filed a writ petition before the division bench of the Rajasthan High

Court against the order dated 13 July 2016 which was dismissed by division bench on 4 April 2018. Thereafter, the Rajasthan Sales Tax department filed a special leave petition before Supreme Court of India against the judgement of the Division Bench of the Rajasthan High Court, the said special leave petition of the department was dismissed due to failure of the department to cure the defects in filing despite specific order from the Supreme Court. However, on the request of the Rajasthan Sales Tax Department, the special leave petition was restored pursuant to vide order dated 5 July 2019. On 13 February 2020, all the defects have been removed. The matter will be listed for hearing in due course.

Claim against BALCO for energy development cess.

In December 2006, the High Court of Chhattisgarh on a writ filed by BALCO and others, declared the provisions relating to imposition of energy development cess of ₹6,102 million ($82 million) on the captive power plants to be unconstitutional and ordered refund of the cess already collected by the state government. The State of Chhattisgarh filed a special leave petition in the Supreme Court of India against the order of the High Court of Chhattisgarh. The Supreme Court of India has issued notice and stayed the refund of the cess already collected, pending the disposal of the special leave petition and restrained the Indian Tax Department from taking any corrective step for the collection of the cess. The matter will be listed for hearing in due course.

The Amalgamation and Reorganisation Scheme has been challenged by the Indian tax authorities and others.

Subsequent to the effectiveness of the Amalgamation and Reorganisation Scheme, special leave petitions challenging the orders of the High Court of Bombay at Goa were filed before the Supreme Court of India by the Commissioner of Income Tax, Goa and the Ministry of Corporate Affairs in July 2013 and in April 2014, respectively. Further, a creditor and a shareholder have challenged the Amalgamation and Reorganisation Scheme in the High Court of Madras in September 2013. Further, the Ministry of Mines, GOI has challenged the Amalgamation and Reorganisation Scheme before the High Court of Madras and the High Court of Bombay, Goa Bench, respectively. The Supreme Court of India has admitted the special leave petitions and the matter is currently pending for hearing.

Proceedings related to the Imposition of Entry Tax.

Vedanta Limited and other group companies challenged the constitutional validity of the local statutes levying entry tax on the entry of goods brought into the states from outside and other notifications, as being in violation of certain provisions of the Indian Constitution. BALCO paid the entry tax of ₹2,410 million ($32 million) under protest to the State Government of Chhattisgarh until 30 June 2017. By its order dated 10 September 2009, the Chhattisgarh High Court upheld the constitutional validity of the impugned statute. Following some contradictory orders of High Courts across India adjudicating on similar challenges, the Supreme Court of India referred the matters to a nine judge bench. The Supreme Court of India in its order rejected the compensatory nature of tax as a ground for challenge and left all other issues open for adjudication by regular benches hearing the matter.

Following the order of the nine judge bench, the regular bench of the Supreme Court of India proceeded with hearing the matters. The regular bench remanded the entry tax matters relating to the issue of discrimination against domestic goods from other States to the respective High Courts for final determination but retained the issue of jurisdiction on levy on imported goods, for determination by regular bench of the Supreme Court of India. Following the order of the Supreme Court of India, Vedanta Limited filed a writ petition in the High Court of Rajasthan and Odisha. Hindustan Zinc Limited and BALCO have also filed writ petitions in the High Court of Rajasthan and High Court of Chhattisgarh, respectively.

On 9 October 2017, the Supreme Court of India held that States have the jurisdiction to levy entry tax on imported goods. With this Supreme Court of India judgement, imported goods will rank *pari passu* with domestic goods for the purpose of levy of entry tax. Vedanta and its subsidiaries have appropriately amended their appeals (Writ Petitions) in Orissa and Chhattisgarh to include imported goods as well. With respect to Rajasthan, the State Government filed a counter petition in the Rajasthan High Court, whereby it has admitted that it does not intend to levy the entry tax on imported goods. The issue of discrimination has been remanded back to the High Courts for final adjudication.

In a related matter, the issue pertaining to levy of entry tax on movement of goods into a SEZ remains pending before the High Court of Odisha. Meanwhile, the State Government of Odisha further through its SEZ Policy 2015 and the operational guidelines for administration of this policy dated 22 August 2016, exempted entry tax levy on SEZ operations.

Arbitration proceedings on issues related to the cost recovery of the Ravva Block.

Vedanta Limited along with other Ravva Joint Operating Partners (the "Contractor Parties") are involved in a dispute against the GOI relating to the recovery of contractual costs in terms of calculation of payments that the Contractor Parties were required to make in connection with the Ravva field.

The Ravva PSC obliges the Contractor Parties to pay a proportionate share of ONGC's exploration, development, production and contract costs in consideration for ONGC's payment of costs related to construction and other activities it conducted in Ravva prior to the effective date of the Ravva PSC (the "ONGC Carry"). The question as to how the ONGC Carry was to be recovered and calculated, along with other issues, was submitted to an International Arbitration Tribunal in August 2002 which rendered a decision on the ONGC Carry in favour of the Contractor Parties whereas four other issues were decided in favour of GOI in October 2004 (the "Partial Award").

The GOI then proceeded to challenge the ONGC Carry decision before the Malaysian courts, as Kuala Lumpur was the seat of the arbitration. On 11 October 2011, the Federal Court of Malaysia adjudicated the matter and upheld the Partial Award. Per the decision of the International Arbitration Tribunal with regards to Partial Award, the Contractor Parties and the GOI were required to arrive at a quantification of the sums relating to each of the issues under the Partial Award. Also, the International Arbitration Tribunal retained the jurisdiction for determination of any remaining issues in the matter.

Pursuant to the decision of the Federal Court, the Contractor Parties approached the Ministry of Petroleum and Natural Gas ("MoPNG") to implement the Partial Award while reconciling the statement of accounts as outlined in the Partial Award. GOI failed to implement the Partial Award by way of reconciling accounts as provided in the Partial Award.

However, on 10 July 2014, MoPNG issued a show cause notice alleging that since the Partial Award had not been enforced the profit petroleum share of the GOI had been short-paid. MoPNG threatened to recover that amount from the sale proceeds payable by the oil marketing companies to the Contractor Parties. The Contractor Parties replied to the show cause notice taking various legal contentions. On 9 March 2015, a personal hearing took place between MoPNG and the Contractor Parties whereby the Contractor Parties expressed their concerns against such alleged unilateral recoveries and filed further written submissions on 12 March 2015.

As the Partial Award did not quantify the sums, the Contractor Parties approached the same International Arbitration Tribunal to pass a final award in the subject matter since the International Arbitration Tribunal had retained the jurisdiction to do so. The International Arbitration Tribunal was reconstituted the final award was passed on 26 October 2016, in Vedanta Limited's favour upholding that no further amounts are due from the claimants. The final award specifies that each party should bear the arbitration costs equally.

The GOI's had, in parallel, challenged the final award that was dismissed by the High Court of Malaysia on 27 September 2018. The GOI further appealed against the decision of the Court of Appeal before the Federal Court of Malaysia which was also dismissed on 28 February 2019.

Meanwhile, Vedanta Limited filed a petition before the High Court of Delhi for the enforcement of the partial award and final award on 22 May 2017.

The GOI has also filed an interim application seeking deposit by the said OMCs of an amount of \$87 million (Vedanta Limited's oil and gas business share being of approximately \$56 million) towards interest on the alleged short payment of profit petroleum. The Delhi High Court through its order dated 19 February 2020 allowed the petition for enforcement of the arbitration award including declaratory relief and rejected the objections of the GOI. Then, in its order dated 28 May 2020, the Delhi High Court directed that all future sale proceeds of Ravva Crude with effect from 5 June 2020 are to be paid directly to Vedanta by the OMCs. The GOI filed a special leave petition against this order before the Supreme Court of India which was listed for hearing on 22 July 2020. The Supreme Court directed the OMC to pay the revenue directly to Vedanta. The Supreme Court of India has also directed the parties to maintain status quo till any further orders in the matter. Separately, the ONGC Carry matter has been listed for hearing on 17 August 2020.

Vedanta Limited's oil and gas business, Videocon Industries and Ravva Oil Singapore filed an application for enforcement of the said award before the High Court of Delhi, to which an enforcement judgment was received on 22 May 2017. Vedanta Limited's oil and gas business and Videocon Industries also initiated an arbitration proceeding against the GOI to determine the costs to be considered for cost recovery purposes, in connection with the ONGC Carry under the Ravva PSC.

Ravva Joint Venture Arbitration Proceedings: Base Development Cost.

The Ravva joint venture had received a notice from Ministry of Petroleum and Natural Gas, GOI for the period from 2000-2005 for \$129 million for an alleged underpayment of profit petroleum to the Indian Government, out of which, Vedanta Limited's share is \$29 million plus potential interest at applicable rate (LIBOR plus 2% as per Ravva PSC).

This claim relates to the GOI's allegation that the Ravva joint venture had recovered costs in excess of the Base Development Costs ("BDC") cap imposed in the Ravva PSC and that the Ravva joint venture had also allowed these excess costs in the calculation of the Post Tax Rate of Return ("PTRR"). The Ravva Joint Operating Partners (excluding ONGC) initiated arbitration proceedings and the arbitral tribunal announced its award on 18 January 2011, broadly allowing companies including Vedanta Limited to recover base development cost spent amounting to \$278 million and disallowed an over-run of \$22.3 million spent in respect of base development cost and directed 50.0% legal cost on the GOI (the "BDC Award"). The High Court of Kuala Lumpur, on 30 August 2012, dismissed the GOI's application for setting aside the award with costs. The GOI further filed an appeal before the Court of Appeal which was dismissed on 27 June 2014. The GOI thereafter filed an application for a leave to appeal against the Court of Appeal's order before the Federal Court, which was dismissed by the Federal Court of Malaysia on 17 May 2016 exhausting GOI's legal remedies to challenge the BDC Award rendering the BDC Award to be final and binding. Meanwhile, the GOI issued a show-cause notice in this matter which Vedanta Limited replied to and subsequently also filed an application for enforcement of the award before the Delhi High Court as an additional measure of caution. Additionally, a suit was filed by the GOI challenging the cost proceedings in respect of the BDC award before the Single Bench in the Delhi High Court. The Single Bench of the Delhi High Court restrained the arbitral tribunal from proceeding on quantification of arbitration costs and accordingly ruled in favour of the GOI. On appeal, the Division Bench of the Delhi High Court, set aside the order of the Single Bench. The GOI subsequently challenged the order of the Division Bench of the Delhi High Court by way of special leave petition in the Supreme Court of India, and the matter is currently pending for hearing.

While the enforcement petitions were still pending in the High Court of Delhi, the GOI issued a notice, dated 22 October 2018, directing the OMCs (who are the offtakers for Ravva) to divert the sale proceeds to the GOI's account. The GOI alleged that the Ravva Joint Operating Partners had short paid profit petroleum of \$314 million (Vedanta Limited's oil and gas business share being approximately \$93 million of which \$29 million pertained to Vedanta Limited's share in respect of the BDC). Against an interim application filed before the Delhi High Court (where enforcement petitions for both matters were pending) by Vedanta Limited and another Ravva Joint Operating Partner which sought the stay of such action from the GOI, the Delhi High Court directed the said OMCs to deposit the sale proceeds in the Delhi High Court. However, Vedanta Limited and the other Ravva Joint Operating Partner have been given the liberty to seek withdrawal of the proportionate amounts from the Court upon furnishing a bank guarantee of commensurate value. On 17 June 2020, the Supreme Court of India issued a notice to Vedanta Limited in respect of the GOI's plea seeking a stay on the Delhi High Court's order and asked Vedanta Limited to file its response dated 19 February 2020. The GOI has contended that the sale proceeds should still be deposited in the Delhi High Court which has been contested by Vedanta Limited and the matter is now to be heard on 10 August 2020.

Proceedings, notices and enquiries initiated by the Central Excise.

The Central Excise department of the GOI had issued in June 2010 an ex-parte notice for reversal of Cenvat credit of ₹3,150 million ($42 million) along with interest of ₹88 million ($1.2 million) for the non-compliance of Rules 4(5a) and 4(6) of the Cenvat Credit Rules, in respect of non-return of job work challans for the period 1 March 2009 to 30 September 2009 within a stipulated time. In addition, it also alleged that Vedanta violated the advance licence conditions from 2005 to 2009. In 2010, Vedanta filed four writ petitions WP No. 8123, 8135, 9744 and 9755 in the High Court of Madras against the Central Excise department along with an associated contempt petition. All the above petitions were heard on 29 July 2010 and pursuant to the order dated 8 June 2010, the High Court of Madras in relation to WP No. 8123, remanded the matter to be heard and determined afresh by a new set of officers of the Central Excise department. The High Court of Madras further granted a stay in relation to WP No. 8135 in so far as relates to job work challan matter and until a fresh enquiry was made. Further, pursuant to the order dated 29 April 2011 the High Court of Madras dismissed WP No. 9744, 9755 and the contempt petition.

The Central Excise department deputed the Assistant Commissioner of Central Excise to conduct an enquiry for the alleged non-compliance of Rules 4(5a) and 4(6) of the Cenvat Credit Rules in respect of non-return of job work challans. The Assistant Commissioner of Central Excise served a show cause notice on 9 September 2011. Vedanta filed a response before the Assistant Commissioner of Central Excise. After conducting a personal hearing, the Assistant Commissioner passed a favourable order on 1 January 2012 and dropped the entire demand for duty and interest. The department went into appeal before the Commissioner (Appeals) against this order, but the appeal was restricted only to the demand of interest. The Commissioner (Appeals) allowed the appeal on 25 February 2013 on the condition that interest would become applicable only in those cases where goods have not been sent back or cleared from the premises within 180 days from the date of dispatch from the Tuticorin unit. The verification whether any interest is payable or not has been completed and department raised the interest liability of ₹2.4 million which Vedanta has challenged before Tribunal on 7 April 2015 and the case has yet to be listed for hearing.

Vedanta filed two writ appeals no. 704 and 705 of 2011 in the High Court of Madras, Division Bench challenging the orders passed with respect to the writ petitions no. 8135 and 9744 of 2010. The writ petitions were admitted on 1 August 2011 and the Court ordered other party to maintain the status quo. In the meanwhile, the Commissioner of Customs Tuticorin issued a show cause notice in January 2015 based on alleged violation of advance licence conditions from 2005 to 2009 expressly mentioning that this show cause notice shall be kept pending and not be adjudicated unless and until directions are obtained from the High Court enabling such adjudication. The show cause notice also sought explanation as to why (i) a sum of ₹3,996.08 million along with interest for alleged violation of condition of export obligation should not be demanded as duties of customs; and (ii) the quantity of 77,241.0 metric tonnes of copper should not be held liable for confiscation for violation of export obligation. Vedanta filed writ petition no. 626 of 2015 against this show cause notice, which was tied up with writ appeals no. 704 and 705 of 2011 and heard together. Thereafter, regular hearings took place in the High Court, and on 12 March 2015 the High Court gave an interim order, allowing one of the prayers in writ in form of injunction to the Directorate General of Foreign Trade actions in pursuit of the show cause notice received from customs department. During the course of the hearings, writ appeal no. 704 was withdrawn as it has become infructuous as it relates to the job work challan matter which has already been concluded.

Writ appeal no. 705 of 2011 and writ petition no. 626 of 2015 were heard on 11 March 2016, and were both dismissed in terms of the final judgement of the High Court dated 1 August 2016. The court held that it did not find any impediment to custom authorities issuing show cause notice on basis of material gathered/input received from excise authorities. The court also held that company shall respond to the show cause notice dated 13 January 2015 within two weeks from receipt of the order and directed the Commissioner of Customs to conduct proceedings as expeditiously as possible. Vedanta filed a Special Leave Petition against the High Court's order before the Supreme Court of India. The final hearing before the Supreme Court of India on the Special Leave Petition, as well as the accompanying stay application is awaited. The stay hearing before the Supreme Court of India on the special leave petition, took place on 21 April 2017 wherein the Supreme Court of India held that the commissioner of customs, Tuticorin may pass a final order against the notice but that it had to be kept in sealed cover. The tax authorities have taken on record the statements made by the employees of Vedanta prior to the issuance of a show cause notice. These recorded statements were then made part of the show cause notice in support of the allegations of the department. The Commissioner of Customs has allowed a personal hearing to adjudicate upon the show cause notice wherein Vedanta asked for cross examination of the concerned persons who have given and recorded the statements in the show cause notice. Further, Vedanta Limited requested for certain documents which the Commissioner of Customs refused to provide. Thereafter, Vedanta Limited filed an appeal against refusal order before the Customs, Excise and Service Tax Appellate Tribunal at Chennai wherein the Tribunal allowed for the request of cross examination but dismissed appeal with respect to the request for documents.

Vedanta filed CMA 649 and 650 of 2018 in the High Court of Madras, Madurai Division Bench challenging the order passed by CESTAT and meantime cross examination of two witness has been done by Customs Commissioner, Tuticorin and considering Vedanta's submissions final order has been passed but kept in sealed cover as per the directions of Supreme Court. Matter will be listed before Supreme Court in due course.

Assessment proceedings for VAT and CST.

A VAT audit was conducted of Vedanta Limited (Sterlite Copper) for the years 2007 to 2008 to 2014-15 during the months of February and March 2015. Based upon the audit report submitted to Assistant Commissioner, a demand notice was issued to pay tax amounting to ₹32,140 million (including a VAT amount aggregating to 22,100 million and CST ₹10,040 million). Writ Petitions were filed before Madras High court (Madurai Bench) wherein the High Court remanded the matter to the AC to reassess the matter. The Madras High Court further held that the Assistant Commissioner shall not be influenced by the audit report and shall act independently. The Company furnished its replies to all the notices received for the years 2007-08 to 2014-15 by 31 March 2016. AC, Tuticorin began the reassessment proceedings for two years 2007-08 and 2008-09 after providing a personal hearing on 18 May 2016. The Company attended the hearing and put forth its submissions in addition to the submissions made in the reply filed with the Assistant Commissioner.

The re-assessment order dated 14 March 2017 was passed and the Assistant Commissioner held that a CST demand of ₹1,080 million was payable. The Company filed a writ petition before the Madras High Court. On 6 April 2017, the Madras High Court sent back the matter to the AC for further verification and directed a report to be furnished within eight weeks. The court granted a stay for recovery of dues. Another re-assessment order dated 31 August 2017 was passed by the AC in relation to Fiscal Year 2009 with a CST demand aggregating to ₹3,234 million against which the Company filed a writ petition before the Madras High Court. The court passed an order of stay dated 22 September 2017 and directed the Assistant Commissioner to file a counter within four weeks of the order. However, the Assistant Commissioner and the department have not filed a counter reply.

For Fiscal Year 2008 the re-assessment order of the CST has been passed in May 2019 reducing the demand from ₹1,080 million to ₹16 million. Similarly, for Fiscal Year 2009, the re-assessment order of the CST has been passed in July 2019 reducing demand from ₹3,230 million to ₹32 million. As a result, all major contentions of Vedanta have been accepted. An appeal has been filed with the Tamil Nadu Sales Tax

Tribunal against both these re-assessment orders. Further, it is expected to get relief of balance demand for these two years as major part of demand is on account of inaccessible documents with respect to drenched files of 2015 floods and corroborative evidences like Metal account reconciliation to prove that there is no loss of revenue have already been filed. Assessment orders by the CST for Fiscal Years 2015 to 2018 have been completed. As of the date of this Offering Circular, the assessment for Fiscal Years 2010 to 2014 remains pending for re-assessment by the CST and VAT assessments for Fiscal Years 2008 to 2014 is also pending with the relevant assessment authority.

Writ petition filed in the Delhi High Court by Vedanta Limited relating to extension of tenure of the Rajasthan Block PSC.

Vedanta Limited filed a writ petition before the High Court of Delhi against the MoPNG, the DGH and ONGC regarding the extension of the tenure for the Rajasthan Block PSC for the Rajasthan Block.

The Rajasthan Block PSC is valid until 14 May 2020. Consistent with the terms of the Rajasthan Block PSC, given that the Rajasthan Block is also producing natural gas, Vedanta Limited has been requesting an extension of the tenure of the Rajasthan Block PSC for a period of up to 10 years, i.e., until 14 May 2030. ONGC, Vedanta Limited's joint venture partner in the Rajasthan Block, is technically aligned on the recoverable resources' potential of the Rajasthan Block beyond the Rajasthan Block PSC period, until the proposed extension period up to 2030. Vedanta Limited has been making regular requests to the MoPNG for extension of the tenure of the Rajasthan Block PSC since the past few years. However, apart from seeking further technical and financial details, the MoPNG has not yet made a final decision in the matter.

In view of MoPNG's delay, a writ petition was filed by Cairn India (now Vedanta Limited) on 11 December 2015, seeking relief from the High Court of Delhi.

The High Court of Delhi on 31 May 2018 allowed the writ petition, directing GOI to extend the Rajasthan Block PSC for a period of ten years beyond the current contract term in accordance with Article 2.1 of the Rajasthan Block PSC on the same terms and conditions. The GOI appealed the decision of the Single Bench before the Division Bench High Court of Delhi. The High Court of Delhi ordered that the application filed by Vedanta Limited in May 2018 for seeking extension of the Rajasthan Block PSC for ten years shall be decided/processed by the GOI under the Pre-NELP Extension Policy dated 7 April 2017 within a period of two months, notwithstanding the time prescribed in the Pre-NELP Extension Policy. The High Court of Delhi also stayed the order passed by the Single Judge and placed on record that the question of applicability of the Pre-NELP Extension Policy was presently left open.

Against this backdrop, the GOI granted its approval for a ten-year extension of the Rajasthan Block PSC pursuant to it's vide letter dated 26 October 2018 under the Pre-NELP Extension Policy, subject to certain conditions.

Due to the extenuating circumstances surrounding the COVID-19 pandemic and pending the execution of the Rajasthan Block PSC addendum for extension of the tenure of the Rajasthan Block upon compliance with all stipulated conditions therein, the GOI has permitted Vedanta Limited to continue its operations in the Rajasthan Block with effect from 15 May 2020 until an extension formally agreed or for a period of three months therefrom, whichever is earlier. As of the date of this Offering Circular, the Rajasthan Block PSC addendum for extension of the tenure of the Rajasthan Block has not been executed.

The applicability of the Pre-NELP Extension Policy however, remains sub judice before the High Court of Delhi. The matter is currently pending and the GOI has proposed that they would not seek the incremental profit on the petroleum reserves until the matter is finally argued. The next hearing for this matter is scheduled for 20 August 2020.

Cairn DGH arbitration issue

The GOI granted its approval for a ten-year extension of the Rajasthan Block PSC vide letter dated 26 October 2018 under the Pre-NELP Extension Policy, subject to certain conditions. The conditions relate to the completion of certain technical activities in the Rajasthan Block before the expiry of the primary tenure of the Rajasthan Block PSC, prescribes mechanism and criteria for exploration cost recovery, submission of audited accounts/end of year statements and audit observations. The GOI has subsequently on 3 December 2019 removed the condition of the submission of audited accounts as imposed under the letter of extension dated 26 October 2018.

In connection with one of the conditions for the Rajasthan Block PSC extension, the DGH raised certain queries on 12 May 2020 relating to the notification of certain audit exceptions raised for Fiscal Year 2016 to 2017 relating to the share of Vedanta Limited and its subsidiaries. Vedanta Limited has disputed these queries together with the other audit exceptions for Fiscal Years 2016 to 2018 on the basis that such audit findings and exceptions are not in accordance with the Rajasthan Block PSC nor are they sustainable and thereby do not prevail not result in the creation of any liability on Vedanta Limited and its subsidiaries. Vedanta Limited is of the belief that it has reasonable grounds to defend its proposition and which are further supported by independent legal opinions on the same. Vedanta Limited has proposed for the relevant issues pertaining to these audit findings and exceptions to be referred for expert determination in accordance with the provisions of the Rajasthan Block PSC. On 14 May 2020, Vedanta Limited invoked the dispute resolution process in accordance with the Rajasthan Block PSC process and issued notice for arbitration. As of the date of this Offering Circular, the arbitration tribunal is in the process of being constituted.

Writ petition filed in the Delhi High Court by Vedanta Limited relating to export of crude oil from the Rajasthan Block.

Vedanta Limited filed a writ petition before the High Court of Delhi against the Directorate General of Foreign Trade ("DGFT"), the MoPNG, and Indian Oil Corporation Limited ("IOCL") for the export of crude oil from the Rajasthan Block.

Due to its nature and composition, Rajasthan Block crude has the potential to be valued higher by refineries in other markets, beyond the prices being received from the GOI nominated buyers and other domestic, private refiners. Since 2009, Vedanta Limited has been receiving bids from international buyers and refiners offering prices that are an additional $3 per bbl more than the domestic sale prices for Rajasthan Block crude.

In accordance with the provisions of the Rajasthan Block PSC and the applicable GOI policies for crude oil export, Vedanta Limited repeatedly requested IOCL and MoPNG to allow it to export Rajasthan Block crude oil, to which there has been no firm response. Vedanta Limited also made written requests to the DGFT to intervene in the matter, which again proved unsuccessful.

In view of the aforesaid, Vedanta Limited filed a writ petition in the High Court of Delhi on 11 December 2015 to obtain relief in the form of orders to the DGFT, MoPNG and IOCL for approvals and authorisations to permit and facilitate the export of Rajasthan Block crude oil, to the extent GOI nominated buyers are unable to cover the entire production. Through its order dated 14 December 2015, the High Court of Delhi ordered the MoPNG, DGFT and IOCL to obtain necessary instructions on whether the GOI was willing to pick up the entire crude oil production from the Rajasthan Block, or in the alternative was ready to grant permission to Vedanta Limited to directly export the crude oil not covered by the GOI nominees.

On 18 October 2016, the writ petition was dismissed by the High Court of Delhi. Vedanta Limited then filed an appeal against the said order before the division bench of the High Court of Delhi which was dismissed by the court by way of its order dated 28 November 2018. Vedanta Limited has now filed a special leave petition before the Supreme Court of India against the dismissal of the writ petition by the

High Court of Delhi. The matter was heard on 22 April 2019 by the Supreme Court of India which directed that notice be issued to GOI and has given four weeks' time for the GOI to revert with its response, post which the matter will be listed for hearing to decide upon the admission of the special leave petition. As of the date of this Offering Circular, the GOI has yet to file its response.

Shenzhen Shandong Nuclear Power Construction Co. Limited has commenced arbitration proceedings against Vedanta.

On 19 February 2012, Shenzhen Shandong Nuclear Power Construction Co. Limited ("SSNP") filed a petition before the Bombay High Court under section 9 of the Arbitration and Conciliation Act, 1996, that Vedanta had suppressed the fact that it had failed to obtain environmental clearances in relation to a 210 MW co-generation power plant for a refinery expansion project at Lanjigarh and further alleged the non-payment of dues for construction and other services in relation to the same. This was subsequent to SSNP's notice for termination of the contract dated 25 February 2011 and legal notice dated 23 February 2012 for recovery of its alleged dues. SSNP also made a request for interim relief. Under the petition, SSNP sought for a restraining order on encashment of the advance bank guarantee, injunction from disposing or creating third party right over plant and machinery at the project site and security for the amount due under the contract. During the pendency of the petition, SSNP invoked arbitration by way of a notice dated 18 April 2012. SSNP sought an award for the sums of ₹4,472.11 million, $2,380 million and Euro 121 million. On 25 April 2012, the High Court of Bombay dismissed SSNP's petition. SSNP appealed against this order before a division bench of the High Court of Bombay, which, by its order of 12 December 2012 ordered Vedanta to deposit a bank guarantee for an amount of ₹1,870 million ($25 million) until completion of the arbitration proceedings.

On 9 April 2013, Vedanta also filed a counterclaim for delays in operations caused arguing that SSNP was responsible. Subsequently SSNP filed an application for an interim award of ₹2,020 million ($27 million) before the arbitral tribunal, which was not allowed.

The arbitral award was pronounced on 9 November 2017, wherein the Tribunal awarded an aggregate amount of ₹2,210 million ($30 million) to SSNP payable within a period of 120 days carrying an interest at the rate of 9% from the date of filing of the claim along with a cost of ₹5 million. The tribunal further directed that beyond the said period of 120 days, the award amount shall carry an interest at the rate of 15% till the realisation of the award amount.

Vedanta challenged the award before the High Court of Delhi under section 34 of Arbitration Act. This was dismissed by the High Court of Delhi, post which Vedanta filed an appeal under section 37 before the division bench of the High Court of Delhi. The court granted a stay subject to the deposit of the award amount. Accordingly, Vedanta deposited an amount of ₹1,522.2 million with the court, requesting the court to direct SSNP to return the bank guarantee post which the balance amount shall be deposited.

The division bench, on 30 August 2018, dismissed the appeal under section 37 of Act and vacated all interim orders passed by the High Court of Delhi. Vedanta challenged the said order of the High Court of Delhi before Supreme Court of India by way of a special leave petition. In the meantime, SSNP also filed an execution application before the High Court for appropriation of money which was deposited with the court, against which Vedanta filed an appeal to get a stay of execution.

The Supreme Court of India disposed of the special leave petition passing its final order, on 11 October 2018, partially modifying the Arbitral Award on the interest aspect as under: (i) A uniform rate of 9% will be applicable for the Indian Rupee component of the award amount in entirety till the date of realisation (ii) The interest payable on the EUR component of the award amount will be as per LIBOR + 300 basis points on the date of Award, till the date of realisation.

SSNP had filed a clarification application before the Supreme Court of India seeking the arbitral award pronounced by the Tribunal on 9 November 2017 which was subsequently withdrawn by SSNP foland now stands disposed of. Vedanta subsequently filed a reply to the Execution Petition filed by SSNP in High Court of Delhi for giving effect to the above order and handing over the drawings, documents and the Bank Guarantee by SSNP. Through an order in August 2019, the registry has been directed to release a sum of ₹347 million to SSNP out of the deposit of ₹920 million with the Registry. The High Court of Delhi has accepted Vedanta's argument that the Euro component can be paid in Indian Rupee. The matter has been disposed of with the liberty to the decree holder to file fresh application for payment of balance amount. ₹347 million has been released out of the deposit made with the Registry in November 2019. Vedanta filed a petition to recover the surplus deposit amount lying with the Registry and it will be heard in due course. In the meantime, SSNP also approached Vedanta for a settlement which was rejected, stating that the same shall not be accepted unless the settlement offer is made by SSNP in writing.

On 6 January 2020, the High Court of Delhi recorded Vedanta's submissions on refund of excess security deposited with the Registry by Vedanta and on the issue of release of drawings and documents as sought by Vedanta. The High Court of Delhi directed SSNP to file an affidavit within two weeks to show that such drawings and documents have been supplied by them, thereafter two weeks' time was given to Vedanta to file a reply to the same. Vedanta filed a petition to recover the surplus deposit amount lying with the Registry. In the same order, accounts officers of the High Court of Delhi were directed to examine the calculation filed by the parties and submit the report to the High Court of Delhi. In the meantime, SSNP filed an Execution First Appeal in the same enforcement petition before the High Court of Delhi which is yet to registered for hearing.

The aggregate award amount now stands revised at ₹2,943.6 million ($39 million) as of 31 March 2020.

Proceedings against TSPL relating to its delay in commissioning various units of the power plant.

TSPL entered into a long term power purchase agreement with PSPCL for supply of power. TSPL has a contractual obligation to commence commercial operation of various units of the power plant according to the scheduled timelines agreed in terms of the agreement. However, there were delays in implementing the project as compared to the scheduled timelines under the agreement. TSPL received letter from PSPCL, seeking payment of liquidated damages of ₹3,176 million ($42 million) for each delay in commissioning of Units I, II and III totalling ₹9,529 million ($127 million).

Subsequently, PSPCL invoked the bank guarantee of ₹1,500 million ($20 million) towards payment of the liquidated damages on account of delay in completion of the commissioning of Unit I. TSPL filed a petition with the Punjab State Electricity Regulatory Commission ("PSERC") for quashing of the claim of liquidated damages and grant of extension of time to complete the commissioning of various units of the power plant. It claimed that the highlighted delays arose due to PSPCL's delay in the fulfilment of certain obligations under the power purchase agreement, such as those in relation to procuring interconnection and transmission facilities and arranging supply of adequate quantity of fuel for the project, as well as other force majeure reasons. On 22 October 2014, PSERC ordered the matter to be settled through arbitration and the Punjab and Haryana High Court allowed the stay on encashment of bank guarantee until further orders. PSPCL submitted an appeal in Appellate Tribunal for Electricity ("APTEL") against the PSERC order and on 12 May 2015, APTEL disposed the appeal by directing that the matter will be adjudicated by an arbitral tribunal. The proceedings before the arbitral tribunal have concluded and the award has been passed in TSPL's favour. Meanwhile, PSPCL filed an application challenging the award under section 34 of the Arbitration and Conciliation Act, 1996 which is scheduled for hearing on 29 September 2020.

Proceedings against TSPL relating to mega power project benefits.

Sterlite (now Vedanta Limited) submitted its bid for setting up a 1980 MW thermal power plant in the state of Punjab under a tariff based international competitive bidding process under a Case-II competitive bidding mechanism on June 2008, which was ultimately awarded to Sterlite (now Vedanta Limited). A power purchase agreement (PPA) was entered between TSPL and PSEB on September 2008, which is now known as PSPCL. According to the power purchase agreement, any increase or decrease in the capital cost of the project on the occurrence of any "Change in Law" (as defined therein) after the cut-off date of 16 June 2008, had to be passed on to PSPCL, if it resulted in change in economic position of TSPL.

Because TSPL intended to sell all of the generated electricity to the state of Punjab, it did not meet one of the requirements for the mega power project at the time of bidding, namely that the project had to sell electricity to more than one state. However, the said requirement was amended in October 2009, making TSPL eligible for the mega power project status. Accordingly, TSPL was given the mega power project status in 2010 and thereafter has been receiving the customs and excise exemption.

In July 2013, PSPCL filed a petition before the PSERC, alleging that a TSPL had become entitled to the mega power project status after the cut-off date, the mega power project benefits received by TSPL had to be passed on to PSPCL pursuant to the power purchase agreement's "Change in Law" clause. TSPL in its reply stated that as of the cut-off date, similar benefits were available to it under India's foreign trade policy as a non-mega power project and accordingly, that its economic position had not altered pursuant to the grant of mega power project status to warrant the passing on of such benefits to PSPCL. TSPL has also produced a number of approval letters issued by various Director General of Foreign Trade offices across India, which extended such benefits to non-mega power projects including government power projects or other public sector undertakings.

PSERC passed an order dated 2 December 2014, holding against TSPL. TSPL thereafter filed an appeal on January 2015 along with a stay application before the APTEL, challenging the order of PSERC. The stay application was rejected by APTEL without considering the submissions of TSPL. TSPL then filed a stay application before the Supreme Court of India, appealing against APTEL's order on the stay application. The Supreme Court of India granted a stay on 24 April 2015 and subsequently on 28 July 2015, the Supreme Court of India ordered the stay to continue until given any further orders. Stay granted by the Supreme Court of India was later vacated on 6 February 2017 which led to a deduction of ₹2,140 million whereas basis a subsequent Supreme Court order ₹500 million was later refunded. Post this order APTEL granted a stay for further deductions from the monthly billing cycle against a bank guarantee furnished by the Company.

APTEL dismissed the appeal filed by TSPL and disallowed TSPL's contentions in its final judgement order dated 4 July 2017. TSPL filed an appeal before the Supreme Court of India against the adverse final judgement of APTEL. This appeal was admitted by Supreme Court of India on 10 July 2017 and a stay order was granted against PSPCL's proposed deduction of ₹900 million ($12 million) from TSPL's bills and against the encashment of bank guarantee amounting to ₹380 million ($5 million) which was furnished by TSPL to PSPCL under APTEL's order. TSPL filed a clarification application before the Supreme Court of India, which was allowed and PSPCL was directed to refund ₹500 million ($7 million). However, the ongoing monthly deductions on account of mega benefit claim has not been stayed by the Supreme Court of India. The appeal is pending for further hearing and next date is yet to be notified.

TSPL: Proceedings related to determination of energy changes.

Upon PSPCL's refusal to pay energy charges to TSPL as per provisions of power purchase agreement ("PPA") between PSPCL and TSPL, TSPL filed a petition in PSERC against PSPCL claiming charges for washing, unloading, surface transportation, transit loss, finance charges and Gross Calorific Value ("GCV") loss related to procurement of coal. PSPCL's contention was that fuel charges should only include charges billed by fuel supply company namely MCL whereas TSPL contended that all costs of fuel procurement are to be considered by PSPCL under PPA since obligation to supply fuel for the project is that of PSPCL under Case II Scenario IV bidding procedure of Ministry of Power. PSPCL's obligation of signing fuel supply agreement with MCL and to supply fuel for project was later upheld by APTEL in another case between TSPL and PSPCL and that judgement is subsisting since its operation has not been disturbed in PSPCL's appeal to Supreme Court of India.

PSERC gave the final order on 23 November 2015 denying all the claims made by TSPL. TSPL later filed an appeal before APTEL challenging the order of PSERC. On 3 July 2017, APTEL partially allowed the appeal awarding unloading and shunting charges to TSPL whilst it ruled against TSPL on other claims. TSPL filed an appeal against the APTEL order before the Supreme Court of India. In a similar matter before the Supreme Court of India, it has granted substantial relief allowing costs for washing and road transportation besides directing measurement of GCV at plant site. Accordingly, the Supreme Court *vide* its order dated 7 March 2018 upheld the claims of TSPL. However, PSPCL misinterpreting the Supreme Court of India order, paid only ₹160 million on account of washing charges. On 24 September 2018, TSPL filed a contempt petition in the Supreme Court of India. The Supreme Court in August 2019, directed PSPCL repay the amounts deducted from energy charge by taking notional figures related GCV and Cost of Coal within eight weeks. PSPCL has paid approximately ₹10,000 million on this account and withheld the balance amount due on account of yield loss and interest etc.

The Supreme Court of India also dismissed the cross appeal filed by PSPCL, thereby affirming APTEL's order allowing unloading and shunting charges to be paid by PSPCL. PSERC remand proceedings have commenced pursuant to APTEL's order dated 3 July 2017, for computation of unloading and shunting charges allowed to TSPL. In the remand proceedings on 3 April 2019, PSERC reserved its order in this matter.

Proceedings relating to the cost pass through of the installation and operating costs of flue gas desulphurization units.

There is an ongoing litigation where the MoEF issued Environment (Protection) Amendment Rules to implement new emission norms in all thermal power plants in India. The timeline of TSPL to implement these guidelines was 31 December 2019. For this, TSPL approached PSPCL since change in law costs are to be transferred to PSPCL as per PPA, but no positive response received from PSPCL in cost pass through matter. The amount involved is estimated at ₹10,000 million ($134 million) on account of capital cost for the FGD installation and operating costs ₹700 million per year ($9 million). PSERC has passed an adverse order in the matter considering that the said notification is not a change in law event. TSPL filed its appeal in APTEL. The Appeal was heard on over several hearings during Fiscal Year 2020 and the order was reserved on 22 November 2019. On 23 June 2020, the APTEL has listed the matter again for clarification and TSPL has submitted its synopsis of the matter. The matter has been listed for further clarification on 29 September 2020.

In the meantime, TSPL has applied to the Central Pollution Control Board ("CPCB"), Ministry of Power and the Central Electricity Authority ("CEA") to grant an extension of the deadline to implement new emission norms. Separately, the Punjab State Government has also written to the central government requesting for extension of deadline for power plants in Punjab including TSPL's plant. Further, the Supreme Court in a related matter, has also recorded the submissions made by the central government as well as the affidavits filed by various power plants that a more feasible date for FGD installations would be December 2022.

The State Pollution Control Board had issued a show cause notice dated 21 November 2019 for non-compliance of directions issued by CPCB under section 5 of the Environment (Protection) Act 1986 and accorded a personal hearing to TSPL. Upon TSPL's hearing submission, the SPCB vide its letter dated 27 November 2019 disposed of the said show cause notice with recommendations to the CPCB to accept TSPL's request for granting the extension for the installation of the FGD up to 31 December 2022.

On 31 January 2020, the CPCB issued a show cause notice for non-compliance with its directions u/s 5 of Environment (Protection) Act, 1986. TSPL has replied to the notice and submitted that the timelines issued were not feasible in nature as technical specifications were issued only in June 2018. TSPL, in its reply, has also requested for an extension of timeline for installation of FGD up till 31 December 2022.

On 8 May 2020, the CPCB issued a notice imposing imposed environmental compensation on TSPL in the amounts of ₹1,800,000 per unit per month. On 5 June 2020, TSPL responded to the notice and deposited an environmental compensation of one month as protest.

Claim for contributions towards the District Mineral Foundation.

The District Mineral Foundation was introduced by MMDRA Amendment Act, whereby all the mining lease holder have been made liable to pay contribution towards District Mineral Foundation, which shall be such percentage of royalty as prescribed by the Central Government. The Section 9B of the MMDRA Amendment Act, providing this levy was introduced and made effective from 12 January 2015. In September 2015, a notification was issued by the Ministry of Mines prescribing the rate for the District Mineral Foundation contribution.

Subsequently, state rules were formulated for Rajasthan with effect from May 2016 and HZL received demand notices for the deposit of contributions to the District Mineral Foundation from 12 January 2015. In its order dated 8 August 2016, the High Court of Rajasthan stayed the demand retroactively for the period under challenge.

On 16 December 2015, the Federation of Indian Mineral Industries also filed a writ petition before the High Court of Delhi, obtaining an order for no coercive action. The writ petition was subsequently transferred to the Supreme Court of India.

In October 2015, another notification was issued by the Ministry of Coal whereby rates were prescribed for certain minerals such as coal and lignite, although an additional provision also required for the application of such rates from the earlier date of the notification or the respective state rules. Vedanta Limited and BALCO challenged the notifications for liability on account of fuel before the High Court of Delhi.

The Supreme Court of India through order dated 13 October 2017, held that contribution to DMF in case of minerals other than coal shall take effect from 17 September 2015 and in the case of coal from 20 October 2015 or from the date on which the DMF was established by the state, whichever is later. Pursuant to the Supreme Court of India order, HZL has challenged the demand for payment between the disputed period i.e. from the date when the State of Rajasthan established DMF until the date when the High Court of Rajasthan has granted a stay. In parallel, BALCO has filed a writ petition before the High Court of Delhi challenging the constitutionality of section 9B(5) and section 9B(6) of the MMDR Act. HZL has also filed an intervention application in the said petition. The matter was listed for hearing on 12 April 2019. HZL filed another writ petition in the same matter in November 2019 which has now been clubbed with the older writ. It is listed before the High Court of Rajasthan for hearing and will be heard in due course.

HZL has also filed another writ petition before the High Court of Jodhpur challenging the discriminatory rates of contribution for major and minor minerals as well as mining leases granted post and prior to the date of amendment of the Act. Both the writ petitions have been clubbed by the court. The next date in the matter is yet to be notified.

Vedanta Limited received a show cause notice from the Indian tax authorities for not withholding tax on payments made while acquiring a subsidiary.

In March 2015, Vedanta Limited received a notice from the Indian Tax Authorities ("Tax Authorities") alleging failure by Vedanta Limited to withhold tax on the consideration paid to Cairn UK Holdings Limited ("CUHL") on a transaction which took place in the year 2007-08. The said transaction relates to the acquisition of the shares of CIHL, a 100% subsidiary of Vedanta Limited as of 31 March 2017, from CUHL during Fiscal Year 2007 as a part of group reorganisation by the then ultimate parent company Cairn Energy. Based upon the retrospective amendment(s) made in the year 2012 by inserting explanation 5 of section 9(1)(i) of the Income Tax Act, 1961, the Tax Authorities vide its order dated 11 March 2015, raised a demand of approximately ₹204,947 million ($2,740 million) comprising tax of approximately ₹102,480 million ($1,370 million) and interest of an equivalent amount for not withholding tax on the consideration paid to CUHL, for shares of CIHL. The Tax Authorities stated in the said order that a short-term capital gain of ₹245,035 million ($3,275 million) accrued to CUHL on transfer of the shares of CIHL to Vedanta Limited in Fiscal Year 2007, on which tax should have been withheld by Vedanta Limited.

Vedanta understands that a tax demand has also been raised by the Tax Authorities on CUHL with respect to taxability of alleged capital gain earned by CUHL on whom the primary liability of tax lies, CUHL received an order from the ITAT on 9 March 2017 holding that the disposal of shares of CIHL is taxable in view of the clarification made in the Act but also acknowledged that being a retrospective transaction, interest would not be levied. Hence affirming a demand of ₹102,480 million ($1,370 million) excluding the interest portion that had previously been claimed. The Indian Tax Department has appealed this order before the Delhi High Court. As a result of the above order from ITAT, Vedanta now considers the risk in respect of the interest portion of claim to be remote. Further, as per the recent recovery notice dated 12 October 2018 received from the TRO appointed for CUHL, the outstanding tax demand of CUHL is approximately ₹49,960 million ($668 million) together with interests accrued. Further, in the said notice, the Indian Tax Department has also instructed to remit the preference shares redemption amount including dividend payable thereon to the TRO. An amount aggregating to ₹6,070 million ($81 million) has been paid to the TRO on the 26 October 2018 thus reducing the liability to ₹43,890 million ($587 million). Vedanta has also paid interim dividend of ₹40 million ($0.53 million) for Fiscal Year 2019 and ₹10 million ($0.13 million) for Fiscal Year 2020 to the TRO. Accordingly, Vedanta has revised the contingent liability to ₹43,840 million ($586 million) as of 31 March 2020.

In this regard, on 27 March 2015, the Company filed a Notice of Claim against the GOI under the UK-India bilateral investment treaty in order to protect its legal position and shareholder interests. Management was advised that the Company has a good case to defend as per the provisions of the UK-India bilateral investment treaty. The International Arbitration Tribunal passed a favourable order on jurisdiction and Transparency and hearing on merits have been completed in May 2019 and order will be passed in due course. The GOI challenged the jurisdiction and Transparency orders of Arbitration Tribunal before the High Court of Singapore where the High Court of Singapore heard the matter on 24 February 2020 and passed an order in favour of Vedanta on the same day. The GOI has appealed the decision and the matter is pending before the Singapore Supreme Court. In respect of the matter relating to jurisdiction, the High Court of Singapore held that it will take up the jurisdiction issue after receiving the International Arbitration Tribunal's award on merits. Further, Vedanta Limited has sought independent advice on this issue and has been advised that there could be no liability on Vedanta Limited for the failure to withhold the taxes in the year 2006-07 based on provisions of law prevailing at the time of transaction as the aforesaid retrospective amendment has cast an impossible obligation on Vedanta Limited to deduct tax by having to predict and anticipate that the retrospective amendment will be made by the legislature on a future date. Vedanta Limited has approached the Delhi High Court against the said order and also filed an appeal before the Commissioner of Income Tax (Appeals). The Commissioner of Income Tax (Appeals) has confirmed the tax demand and interest against Vedanta Limited. The order has been challenged before Income Tax Appellate Tribunal, Delhi and the matter is next listed for hearing on 28 September 2020 before the Delhi High Court.

Proceedings relating to the challenge against the consent to operate and environmental clearance for ESL.

ESL's consent to operate the greenfield integrated steel plant at Bokaro was not renewed by the JSPCB following its expiry in December 2017. A writ petition was filed by ESL before the Jharkhand High Court against the orders issued by the JSPCB of rejecting ESL's application for the renewal of its consent to operate. The MoEF issued an order on 20 September 2018 revoking the environment clearance of ESL which was also challenged before the Jharkhand High Court in a separate writ petition. The Jharkhand High Court has granted a stay against orders on MoEF and JSPCB and allowed the plant operations to continue till the next date of hearing which was originally scheduled for 26 February 2020. However, owing to the nation-wide lockdown situation in India, the Jharkhand High Court hearing has since been postponed and the next scheduled hearing date remains to be determined. The Jharkhand High Court also allowed ESL to apply for statutory clearance without prejudice to its rights and contentions. Pursuant to this order ESL has applied for forest diversion proposal on 4 October 2018 without prejudice to its rights and contentions.

The MoEF vide its letter dated 17 December 2019 granted an ex-post facto in-principle approval for diversion under Forest Conservation Act, 1980 with certain penal and other conditions for compliance. ESL has also made an application for restoration/revision of environmental clearance, which is pending consideration of MoEF. On 17 December 2019, ESL's Forest Diversion Proposal received Stage I clearance from the Forest Advisory Committee. The Jharkhand High Court has extended the interim protections granted in the pending writ petitions until 5 September 2020.

Proceedings relating to the challenge against Vedanta Limited's acquisition of ESL under the Bankruptcy Code.

Renaissance Steels India Pvt. Ltd ("RSIPL"), an unsuccessful resolution applicant, had challenged the resolution plan submitted by Vedanta Limited which was approved by the NCLT and the challenge was rejected by the NCLT vide order dated 17 April 2018. RSIPL had further approached the NCLAT wherein the NCLAT upheld the approval of the resolution plan submitted by Vedanta Limited vide order dated 10 August 2018. Further to this, RSIPL approached the Supreme Court of India against the NCLAT order. However, RSIPL has since submitted an application dated 10 July 2020 for withdrawal of their appeal before the Supreme Court in this matter. The matter is currently pending before the Supreme Court of India.

Proceedings relating to the claims of the operational creditors in respect of Vedanta Limited's acquisition of ESL under the Bankruptcy Code.

The resolution plan submitted by Vedanta Limited for the acquisition of ESL under the Bankruptcy Code was approved by NCLT, Kolkata with nil payment to the operational creditors (the "Operational Creditors"). The Operational Creditors unsuccessfully challenged NCLT's approval of the plan before the NCLAT prior to approaching the Supreme Court of India in a further appeal. The Supreme Court of India vide its order dated 27 November 2019, without staying the implementation of the resolution plan, remanded the matter back to NCLT, Kolkata for it to assess solely on the issue of whether the matter should be sent back to the Committee of Creditors to reconsider the nil payment to all Operational Creditors. The matter is currently pending before NCLT, Kolkata.

Arbitration proceedings related to ONGC's obligation to share contract costs in respect of the Rajasthan Block PSC.

The dispute pertains to inter-party issues between ONGC, Vedanta Limited ("Operator") and CEHL (ONGC, Vedanta Limited and CEHL collectively referred to as "Contractor Parties") in relation to key components of the parties' contractual relationships, including their respective right to recover Contractor's Contract Costs incurred as a result of petroleum operations and ONGC's contractual obligation to contribute its participating interest share of such costs in the Rajasthan Block and the subsequent finalization of accounts for the Rajasthan Block. The GOI has taken the position, among other things, that the Operator's annual accounts and statements are not final. The same is due to the Contractor Parties' divergent views on the Rajasthan Block accounts and non-adoption of the accounts by the management committee of the Rajasthan Block. The GOI has directed the Contractor Parties to "finalize Cost Oil", in the absence of which disputed profit petroleum payments should be payable to GOI. These issues arise from the interpretation and application of the Rajasthan Block PSC.

On 1 March 2019, Vedanta Limited served a notice of arbitration in accordance with the dispute resolution mechanism prescribed in the Rajasthan Block PSC and the operating agreement to ONGC and ONGC has responded to the same on 12 April 2019. The arbitral tribunal has been constituted in accordance with and pursuant to the Rajasthan Block PSC. ONGC has also filed an application under Section 9 of the Arbitration and Conciliation Act, 1996 seeking interim relief before the High Court of Delhi which will be listed for hearing in due course.

Proceedings relating to the GRIDCO Power purchase agreement.

Vedanta Limited has set up a 4x600 MW Thermal Power Plant (TPP) at Jharsuguda, Odisha. In 2012, Vedanta Limited executed an amended power purchase agreement with GRIDCO vide Consolidated PPA dated 19 December 2012 (the "GRIDCO PPA") whereby it was obligated to supply certain quantum of power from its TPP to GRIDCO. In 2015, Vedanta Limited had filed a petition before the OERC seeking conversion of its 4 IPP units into CGPs. The said petition was partly allowed by the OERC by its order dated 27 January 2016 with retrospective effect from 1 April 2015 and the parties were directed to make necessary changes to the GRIDCO PPA incorporating the directions thereof and submit the revised PPA for approval of the OERC.

On 12 June 2013, the OERC pronounced a decision and working methodology on tariff determination in relation to the procurement of power by GRIDCO for the period from November 2010 to March 2014 (the "OERC Tariff Order dated 12 June 2013"). In response, Vedanta Limited filed a review petition before the OERC which was dismissed by the OERC on 25 September 2013. Separately, GRIDO had filed an appeal against the OERC Tariff Order dated 12 June 2013 in respect of issues pertaining to transmission constraints. Vedanta Limited subsequently filed an appeal with the Appellate Tribunal for Electricity (APTEL) on 28 October 2013. On 10 May 2016, while the appeal was dismissed by the APTEL, the APTEL had directed the OERC to consider the post-merger debt equity related claim of Vedanta Limited on merits. The APTEL also dismissed GRIDCO's appeal and upheld the decision on transmission constraints as set out in the OERC Tariff Order dated 12 June 2013.

On 17 April 2017, the OERC issued an order (the "OERC Order dated 17 April 2017") which permitted for the carrying capacity of the line at 400 MW in a sustainable mode to be taken into consideration when calculating the plant availability factor achieved during the month ("PAFM") of the IPP. Accordingly, the calculation of the PAFM of the installed capacity of Unit-II of IPP should be taken as 400 MW or actual injection whichever is higher and the aforesaid mechanism should be adopted for the period from November 2010 until the transmission line constrain was resolved. The OERC Order dated 17 April 2017 confirmed the findings of transmission line constraint and provided for a mechanism for calculating PAFM and thus allowing Vedanta Limited to claim higher annual fixed charge. GRIDCO filed an application for review of the OERC Order dated 17 April 2017. The hearings in respect of the review petition concluded and on 16 May 2018, the OERC dismissed the review petition of GRIDCO. In response, GRIDCO filed an appeal before the APTEL on 27 July 2018. On 6 March 2019, the appeal was admitted and proceedings for the matter were subsequently concluded and judgment remains awaited. Vedanta Limited is of the view that it has a good case for its defence on the basis that the order sought to be challenged is principally only an order fixing the modalities for calculation of PAFM due to capacity constraint and the decision on capacity constraint's existence has already achieved finality and any further challenge to it is barred by res-judicata. The entire amount payable by GRIDCO withheld beyond the due date shall accrue a late payment surcharge at the rate of 1.25% per month from the due date to the actual date of payment. Vedanta Limited has not made any accruals towards the said amount in the books.

On 12 September 2016, GRIDCO raised a demand for payment towards Environment Management Fund ("EMF") as per the data available to GRIDCO. The State Government of Odisha notified the levy of a contribution towards EMF by Thermal Power Plant ("TPP") at the rate of 6 paisa per unit of energy sold outside the state. On 28 July 2017, Vedanta Limited has challenged such notification on the ground that it has not been backed by any legislation and is a policy decision of the government that has no legal basis. GRIDCO has started recovering ₹30 million ($0.4 million) per month from December 2016 onwards towards arrears of EMF. From December 2016 to August 2017, GRIDCO kept ₹270 million ($4 million) on hold. Vedanta Limited has made a provision of ₹270 million in this respect. Further, in interim order dated 7 November 2017, the High Court of Odisha has granted a stay on the payment of the EMF levy.

The OERC through its order dated 27 February 2018 (the "OERC Order dated 27 February 2018") has approved the claim of Vedanta Limited in relation to the revised debt equity structure post its merger with Sesa Goa in 2013. The OERC Order dated 27 February 2018 permitted GRIDCO to pay the total amount in six half yearly instalments without interest. In May 2018, Vedanta Limited filed a review petition with OERC primarily on the limited issue of non-grant of interest to it. Vedanta Limited, based on legal advice, firmly believes that its right to interest (time value of money) is protected under the Electricity laws and that the OERC has erred in allowing interest-free payment to GRIDCO.

Vedanta Limited also filed Multi Year Tariff ("MYT") petition for fixation of tariff for the period starting Fiscal Year 2015 to Fiscal Year 2019. The hearing on the matter has concluded with the OERC issued an order on 29 June 2018. The tariff has been approved as per the CERC Tariff Regulation, 2014-2019 till 9 October 2014 and beyond this period based on OERC Tariff Regulation, 2014. The order does not have any significant impact on the basis of revenue recognition in the books except while allowing interest on working capital one month receivable has been considered instead of two months allowed as per PPA. On 24 September 2018, Vedanta Limited filed a review petition on the limited issue of interest on working capital and rate of interest. The final hearings were concluded on 30 June 2020 and final order has been reserved in the matter.

Separately, a meeting was held between the parties on 1 November 2016 whereby it was agreed *inter alia* that in case there is a shortfall in supply of power by Vedanta Limited to GRIDCO, then GRIDCO shall be entitled to levy penalty on Vedanta Limited at such rate as agreed in the minutes. In furtherance to the said minutes, GRIDCO started raising debit notes on Vedanta Limited for such shortfall in supply of power and has as such raised the debit notes on Vedanta Limited until the month of April 2020 amounting to a total value of ₹30,820 million. Vedanta Limited has disputed these debit notes on various grounds.

In October 2018, Vedanta Limited initiated another meeting with GRIDCO primarily to set off the current accumulated short supply of power with excess supply of power in the past and in future beyond the agreed volume and the penalty charging mechanism for short supply. GRIDCO filed the present petition in the 2018 seeking amendment to the GRIDCO PPA in compliance with the OERC order dated 27 January 2016. GRIDCO sought to include a penalty clause in line with the minutes dated 1 November 2016. Vedanta Limited filed its preliminary reply *inter alia* submitting that there are certain issues which need to be resolved between the parties mutually and accordingly, the OERC may direct the parties to convene a meeting to sort out the issues and submit the revised GRIDCO PPA to the OERC for its approval. GRIDCO acknowledged the quantity of power supplied in excess in the past.

The OERC permitted the relevant submissions and a meeting was held between Vedanta Limited and GRIDCO in the presence of Director (RA), OERC on 7 June 2019. In the said meeting, certain modalities for payment of compensation by Vedanta Limited for short supply of power on the principle of no profit and no loss were agreed between the parties. In particular, the benchmarking price was decided for short supply penalty (highest of Indian Energy Exchange ("IEX") landed price for GRIDCO or Interstate generation system ("ISGS") — Energy Charge rate ("ECR") plus incentive) and it was agreed to give credit for Vedanta Limited's tariff while calculating short supply penalty. The minutes were signed, resulting in the minutes dated 1 November 2016 being superseded by the minutes dated 7 June 2019. The minutes were presented before the OERC on 9 July 2019. However, subsequently GRIDCO disputed the minutes dated 7 June 2019 as being non-implementable and raised additional issues as well.

GRIDCO is not making payment of clean outstanding receivables of Vedanta Limited towards monthly energy bills on account of the fact that that it has an alleged a counter claim of ₹27,780 million towards debit notes being raised by it in accordance with the earlier minutes dated 1 November 2016. However, Vedanta Limited has disputed the said minutes and has also maintained that these minutes stand superseded by minutes dated 7 June 2019 which were signed between both the parties in presence of Director (RA), OERC. Vedanta Limited in its preliminary reply had also sought a direction from OERC seeking payment of 100% payment of undisputed invoices and at least 75% of disputed invoices as per the provisions of the GRIDCO PPA. Post signing of the minutes dated 7 June 2019, Vedanta Limited also submitted before the OERC that it was committed to complying with the modalities agreed in the said minutes dated 7 June 2019. The total clean receivables of Vedanta Limited as on 31 March 2020 stands at ₹9,020 million. The final hearings in the matter were concluded on 15 October 2019 and the OERC has passed its final order on 22 June 2020. Accordingly, Vedanta Limited and GRIDCO have been directed to amend the GRIDCO PPA in line with the terms laid out within the judgement by the OERC. Additionally, OERC has directed GRIDCO to reconcile the arrear amounts due to Vedanta Limited and settle the payments within two months from date of the judgement.

Proceedings relating to demands against HZL by the Department of Mines and Geology of the State of Rajasthan.

The Department of Mines and Geology of the State of Rajasthan issued a show cause notice to HZL vide an office order dated 31 January 2020 wherein HZL was called upon to present its case against the DMG's demand for royalty for associated minerals (i.e. Silver and Cadmium), by-product Sulphur, waste tailing and demand for DMFT and NMET contributions. Earlier, in a separate matter, HZL had challenged the arbitrary action of the DMG implementing online self-generated demand of royalty without considering disputed arrears of royalty demand wherein the Rajasthan High Court had passed a favorable order directing no coercive action. HZL has challenged the said notice before the Rajasthan High Court at Jaipur and the Rajasthan High Court has passed an interim order in HZL's favour on 19 February 2020. The matter is to be listed for hearing in due course.

Proceedings relating to HZL's transfer of mining leases.

On 25 February 2020, the State of Rajasthan issued orders to HZL alleging that the disinvestment of HZL and various other mergers amounts to transfer of HZL's leases in favour of Vedanta. HZL has been directed to regularise the lease under section 12A(6) of the MMDR Act read in conjunction with Mineral Transfer Rules 2016 applicable to captive mines, failing which the leases would be terminated. HZL has since filed revision applications before the Central Government under Section 30 of the MMDR Act challenging the State of Rajasthan's orders dated 25 February 2020. HZL also approached the Rajasthan High Court for necessary protection orders until the matter is heard by the Revisionary Authority, Ministry of Mines. The revision is currently being processed and the next date of hearing is two months from 17 July 2020. The State of Rajasthan has been directed by the Revisionary Authority, Ministry of Mines not to take coercive action until final disposal of the matter.

Proceedings related to KCM.

On 21 May 2019, ZCCM, a company majority owned by the Government of Zambia, which owns 20.6% of the shares in KCM, filed a petition in the High Court of Zambia to wind up KCM on "just and equitable" grounds. ZCCM also obtained an ex parte order from the High Court of Zambia appointing a provisional liquidator of KCM pending the hearing of the petition. On 11 June 2019, without any prior notice, ZCCM amended the petition to include an additional ground for winding up KCM based on allegations that KCM is unable to pay its debts. As a result of the appointment of the provisional liquidator following ZCCM's ex parte application, the provisional liquidator is currently exercising almost all the functions of the board of directors of KCM, to the exclusion of the board. Vedanta not only disputes the allegations and opposes the petition, but also maintains that the complaints brought by ZCCM are in effect "disputes" between the shareholders. Pursuant to the shareholders' agreement (the "KCM Shareholders' Agreement"), the parties (including ZCCM and the Government of Zambia) have agreed that any disputes must be resolved through international arbitration seated in Johannesburg, applying the United Nations Commission on International Trade Law Rules, and not by the Zambian courts. Consequently, Vedanta maintains that the action brought by ZCCM before the Zambian High Court should not be heard until the dispute has been resolved in arbitration in accordance with the KCM Shareholders' Agreement.

Arbitration Application

Following the filing of the abovementioned petition, VRHL and Vedanta initiated arbitration proceedings in accordance with the KCM Shareholders' Agreement and maintain that ZCCM is in breach of the KCM Shareholders' Agreement by reason of its actions in seeking to wind up KCM before the Zambian High Court and applying for the appointment of the provisional liquidator. On 23 July 2019, VRHL obtained injunctive relief from the High Court of South Africa requiring ZCCM to withdraw the petition such that the provisional liquidator is discharged from office, and declaring ZCCM to be in breach of the arbitration clause in the KCM Shareholders' Agreement. ZCCM was further prohibited from taking any further steps to wind up KCM until the conclusion of the arbitration. On 22 November 2019, ZCCM was been granted leave to appeal to the Supreme Court of South Africa and the matter is pending to be heard. Vedanta believes the prospects of a successful appeal by ZCCM are low. ZCCM is obliged to comply with the order given that the South African courts' jurisdiction derives from the arbitration agreement, which provides for Johannesburg as the seat of the arbitration. However, in the absence of a Zambia-South Africa treaty on the mutual recognition and enforcement of judgements, there are low prospects of enforcing the order of the High Court of South Africa through the Zambian courts if ZCCM chooses to breach a South African court order. The arbitration proceedings against ZCCM are proceeding and a sole arbitrator has been appointed. An arbitration award would be enforceable in Zambia under the New York Convention.

On 23 March 2020, the arbitral tribunal constituted denied Vedanta's application seeking interim relief. The arbitral tribunal reserved the position as to costs. ZCCM delivered a challenge to the Arbitral Tribunal's jurisdiction. ZCCM is to submit its defence and counterclaims whilst Vedanta will be required to submit its reply and defence to ZCCM's counterclaims thereafter.

Proceedings in the Zambian Courts

VRHL has also made a number of applications before the Zambian High Court in connection with the abovementioned petition, including an application for a stay of the petition, pending the determination of the arbitration. While such application was initially dismissed at first instance by the Zambian High Court, on 7 August 2019, VRHL appealed to the Zambian Court of Appeal. The petition remains stayed pending either the outcome of the appeal or an appeal filed by ZCCM against the stay of the petition. Hearings in the Zambian Court of Appeal is listed for 25 August 2020 and there could be some months delay in any decision being handed down. An order given by the Zambian High Court staying certain of the provisional liquidator's powers (i.e. those relating to the provisional liquidator's ability to sell assets and make compromises with creditors) was set aside until the petition returns to the Zambian High Court, subject to the outcome of the appeals to the Zambian Court of Appeal. The provisional liquidator has given evidence in the Zambian High Court that he would not be able to sell assets (beyond that which is necessary to carry on KCM's ordinary business) without seeking the court's approval. Notwithstanding this, on 10 September 2019, the provisional liquidator caused KCM to enter into a consent order disposing of certain surface rights owned by KCM. On 28 November 2019, VRHL and KCM (acting through the lawyers appointed by the directors of KCM) obtained an ex-parte injunction restraining the provisional liquidator from taking action to implement the consent order, halting the sale of surface rights and preventing any sale of the land itself. A challenge to the ex-parte injunction has been heard and the ruling has been reserved. In connection with the response to the petition, VRL has provided to the board of KCM a commitment to provide certain financial support to KCM. This commitment is subject to certain conditions, including the dismissal of the petition and discharge of the provisional liquidator. Additionally, since the conditions to the funding support were not satisfied by 30 September 2019, VRL has reserved the right to withdraw the offer set out in the letter.

The winding-up proceedings have been stayed by the High Court, Zambia until the hearing of the combined appeal in the Court of Appeal, Zambia, which will be delivered post the COVID-19 pandemic. A date for the hearing of the combined appeal will be set by the Court of Appeal in due course. As of the date of this Offering Circular, the provisional liquidator remains in office and the petition remains stayed.

Notice of Deemed Transfer of Shares

On 14 July 2020, ZCCM served a notice entitled "*Notice of Deemed Transfer of Shares*" on VRL and VRHL (the "ZCCM Notice"). The ZCCM Notice is stated to be given pursuant to the KCM Shareholders' Agreement, notifying VRL and VRHL of various alleged breaches of the KCM Shareholders' Agreement having a Material Adverse Effect (as defined in the KCM Shareholders' Agreement) or other material breaches of the KCM Shareholders' Agreement, and requiring VRL and VRHL to remedy the notified breaches within 30 days, and reserving its rights in the event VRHL does not or cannot remedy the breaches within that time period to treat the event as deemed service by VRHL of an irrevocable offer under the KCM Shareholders' Agreement to sell its shares in KCM to ZCCM at 'Fair Value'. Fair Value is to be determined in accordance with a mechanism set out in the KCM Shareholders' Agreement. If ZCCM thereafter notifies VRHL that it wishes to exercise these rights, VRHL will be deemed to have served an exit notice pursuant to the KCM Shareholders' Agreement, giving rise to the application of a number of the exit provisions under the KCM Shareholders' Agreement, including the requirement to make payment of budgeted capex for the succeeding 12 month period and any capital expenditure underspend in previous financial years on a cumulative basis, as determined by KCM's auditors.

VRL and VRHL intend to challenge the ZCCM Notice in accordance with the provisions of the KCM Shareholders' Agreement, and note that the effectiveness and validity of the ZCCM Notice is to be determined by the arbitrator as part of the arbitration proceedings referred to above before any further steps can be taken by ZCCM to acquire VRHL's shares in KCM pursuant to the mechanism in the KCM Shareholders' Agreement.

Class actions against Vedanta and KCM on behalf of Zambian nationals.

Two separate proceedings were issued in the UK on behalf of Zambian nationals who allege that they have suffered loss and damages as a result of KCM's operations in Zambia. The claims are for damages for personal injury, property damage and other damages arising out of allegations of pollution. Vedanta and KCM in the first instance challenged the jurisdiction of the UK courts to hear and adjudicate these claims.

The procedural proceedings on jurisdiction were initially brought before the English High Court of Justice, Queen's Bench Division, Technology and Construction Court, which on 27 May 2016 ruled that the English courts have jurisdiction to hear and adjudicate the claims. This judgement was upheld by the English Court of Appeal in a judgement released on 13 October 2017.

Vedanta and KCM had sought permission from the Supreme Court of London to appeal the Court's decision, which was granted by the Supreme Court on 23 March 2018.

The UK Supreme Court hearing on jurisdiction of the UK courts to adjudicate the substantive claims took place on 15 and 16 January 2019. Both parties presented their arguments and submissions on the days. On 10 April 2019, the UK Supreme Court delivered its decision on jurisdiction matter and held that the English Court has jurisdiction to try such claims. The Supreme Court, however, agreed with arguments put forward by Vedanta and KCM that England is not the proper place for the trial of these claims and consequently overturned the lower courts on this point. The Court further added that the High Court was entitled to conclude on the evidence before it that there is a real risk that "substantial justice" will not be obtainable in Zambia and because of this, the claims may nonetheless be heard in the English Court.

Owing to the ZCCM action of initiating liquidation proceedings against KCM and the Provisional Liquidator taking over control, the English class action proceedings have not moved. The date for the trial in the English trail court has been tentatively set for 11 October 2021. Vedanta and KCM filed an extention with respect to the proceeding and further timeline after taking into account such extention have yet to be determined.

Sustainability

In Fiscal Year 2012, Vedanta introduced a series of policies and technical and management standards (the "Vedanta Sustainability Framework") aligned to international sustainability standards, such as the International Finance Corporation Performance Standards, the International Council on Mining and Metals Sustainable Development Framework and the United Nations Global Compact Principles. In Fiscal Year 2013, Vedanta took further steps to implement the Sustainability Framework by requiring its operating subsidiaries to have clear action plans in place with supporting documentation to guide them to further implement the Sustainability Framework, based on self assessment. In addition to the self assessment requirement, Vedanta has also adopted an evaluation and internal assurance process and programmes to train and develop its employees and contractors in the Sustainability Framework.

In Fiscal Year 2015, Vedanta introduced safety performance standards, formal safety risk assessment, industrial hygiene baseline assessment and safety leadership coaching. In Fiscal Year 2016, Vedanta incorporated safety performance standards into executive remuneration. These standards now form integral part of internal assurance process, known as Vedanta Sustainability Assurance Programme (VSAP) and the businesses performance is tracked against these standards on regular basis.

Vedanta's Board, particularly the Sustainability Committee, is responsible for ensuring the implementation of the Sustainability Framework and to otherwise assist the Board in meeting its responsibilities in relation to sustainability related matters arising out of the activities and operations of Vedanta. See the section entitled "*Management — The Board — Sustainability Committee*" for more information. The committee which is headed by independent director meets on a quarterly basis and takes stock of Vedanta's sustainability performance and provides guidance on related strategic and policy decisions.

As of 31 March 2020, close to 100% of the running operations are certified to ISO 14001 and OHSAS 18001 standards. Further 35 plants are certified to ISO 9001, 15 plants are certified to ISO 50001 and 7 plants are certified to SA 8000. Vedanta procures required approvals from suppliers and the local community, before it sources its raw materials for its operations.

In its effort to promote health and safety, Vedanta has adopted the Experience Based Risk Quantification and Bow Tie and Making Better Risk Decision approach to enhance its risk assessment, incident investigations and decision-making capabilities. Additionally, Vedanta has adopted Consequence Management technique to instil discipline amongst people and avoid repeat incidents. The seven fatalities recorded during Fiscal Year 2020 have heightened Vedanta's resolve to create a zero harm culture across the organisation and raise the profile of health and safety by reviewing safety incidents at the board, business segment and operational levels. The business units have implemented behavioural based and technical programmes to avoid the reoccurrence of these incidents. Further safety investigations and follow ups have been improved and quantitative risk assessments have been introduced for all critical areas. Vedanta has also taken additional KPIs to drive its safety culture. These include (i) Visible Felt Leadership programmes that require the management teams to spend more time of the field undertaking safety interactions, (ii) Managing Critical Safety Tasks to ensure that high risk activities are performed safely and in accordance with its safety standards consistently, and (iii) Proactively engaging Vedanta's Business Partners on safety.

During Fiscal Year 2019, Vedanta engaged an independent agency to conduct a stability assessment of its tailing dams and fly ash ponds. Vedanta has a tailing dam related business risk as a part of its group risk register and its businesses regularly provide updates. The company also introduced a Tailings Dam Management Standard in alignment with ICMM requirements. All Vedanta's businesses are required to adhere to these standards.

Further, Vedanta is committed to mitigating its impact on climate change and seeks to reduce its GHG emissions intensity by 16% by 2020 against a 2012 baseline. At the end of Fiscal Year 2020, Vedanta achieved its end-of-cycle target and has managed to reduce its GHG emissions intensity by 13.81%. This is equivalent to approximately 9 million Tonnes in avoided GHG emissions. The next set of targets for Fiscal Year 2025 are being discussed and developed by Vedanta.

Vedanta's operations are aligned with regulatory requirements, as applicable, and the policies and standards of the Vedanta Sustainability Framework are aligned to global frameworks, such as the IFC performance standards, ICMM guidelines, GRI, etc. Vedanta also engages with third party consultants to effectively mitigate, manage and resolve environment pollution, if any, in locations where it operates.

As of 31 March 2020, Vedanta employed, directly or through contractors, nearly 80,000 people. Making a positive contribution to local communities in India and Africa remains a high priority for Vedanta, with around 3.26 million beneficiaries of community development programmes during Fiscal Year 2020, in partnership with NGOs, local governments, academia and private hospitals. Vedanta's social investment reached $41 million and is aligned with its social vision and community need based approach, which includes developing infrastructure, including roads, sanitation, education and medical facilities, in the communities where it operates.

Additionally, Vedanta paid $4.6 billion to the various governments during Fiscal Year 2020 through direct and indirect taxes, royalty and oil tax.

Vedanta Limited's Dow Jones Sustainability Index ranking has improved, moving up four ranks to the 20th (out of a total 61 metals and mining companies). In addition, HZL ranked 3rd in the environment category and 5th overall in the metals and mining sector globally and ranked 1st in the environment category and 1st overall in the metals and mining sector in the Asia Pacific region.

Indian Regulatory Matters

Vedanta's mining business is subject to mining laws and regulations. The MMDR Act, the Mineral Concession Rules, 1960 of India, as amended, and the Mineral Conservation and Development Rules, 2017 (which was notified on 27 February 2017) which has replaced Mineral Conservation and Development Rules, 1988 (the "MCD Rules"), as amended governs the mining rights and operations of mines in India. The MCD Rules outline the procedures for obtaining a prospecting licence or the mining lease, the terms and conditions of such licences and the model form in which they are to be issued. The GOI announced the National Mineral Policy in 1993 which was replaced by the National Mineral Policy of 2008 ("NMP 2008"). Thereafter, the National Mineral Policy of 2019 was approved by the GOI on 28 February 2019 ("NMP 2019"). NMP 2019 provides for incentives for private sector investment in exploration and mining by encouraging merger and acquisition of mining entities, creation of dedicated mineral corridors to boost private sector mining areas, and for ensuring level playing field and transparency in the grant of concessions and promotion of scientific mining within a sustainable development framework so as to protect the interest of local population in mining areas. Further, NMP 2019 focuses on improving the regulatory mechanism by incorporation of e-governance, including satellite and remote sensing applications. The NMP 2019 has introduced the right of first refusal for reconnaissance permit/prospecting licence holders, encouraging the private sector to take up exploration of a sections in prospective areas. The NMP 2019 also proposes to grant the status of an 'Industry' to mining activity to boost financing of mining for private sector and for acquisitions of mineral assets in other countries by the private sector entities. The MMRD Act was amended on 27 March 2015 and has brought about significant changes in the legal regime for the mining sector including defining bauxite, iron ore, limestone and manganese ore as notified minerals, creation of a new category of mining licence i.e. the prospecting licence-cum-mining lease, grant of mining lease for a period of 50 years for all minerals other than coal, lignite and atomic minerals, establishment of District Mineral Foundation for the benefit of persons in districts affected by mining related operations, auction of notified and other minerals by competitive bidding, including e-auction etc. The MMDR Act was further amended by the Mines and Minerals (Development and Regulation) Amendment Act, 2016 (which received presidential assent on 6 May 2016) which permits the transfer of captive mine leases (granted before 12 January 2015) without having to go through an auction processed and also allows the dumping of waste outside of the mining area by including dumping sites within the definition of lease area.

The Mines and Minerals (Development and Regulation) Amendment Act, 2015 ("Amendment Act") and the Mines and Minerals (Development and Regulation) Amendment Act, 2016 ("MMDR Act 2016") have been repealed by the Repealing and Amending Act, 2019 ("Repealing Act") passed on 8 August, 2019. As a consequence of the Repealing Act, the earlier legal position has been restored to what it was prior to enactment of Amendment Act and MMDR Act 2016.

Section 4 of the Repealing Act is in the nature of a 'savings *clause'* and *inter alia* stipulates that the enactment of the Repealing Act would not *inter alia* affect (i) any other enactment in which the repealed enactment has been applied/incorporated/referred to; (ii) the validity of anything that has already been done or any right that has already accrued; (iii) the validity of any remedy/proceedings in respect of an accrued right; or (iv) any existing principle/rule of law even if such principle was affirmed/recognised from the enactment that has been repealed.

The MLAA brought forth amendments in the MMDR Act and the Coal Mines (Special Provisions) Act, 2015. The MLAA has (i) liberalised the eligibility requirement to participate in coal auctions; (ii) removed the requirement for State Governments to obtain prior approval of Central Government to grant mining concessions; (iii) enabled the transfer of approvals, licenses and clearances (other than coal, lignite and atomic minerals), whereby a successful bidder is now deemed to acquire all rights, approvals, clearances and licences vested with the previous lessee for a period of two years within which, the allottee is required to obtain the same; and (iv) removed the restriction of end-use of coal for certain activities only thereby giving companies the liberty to conduct any coal mining operation either at a personal capacity or for any other purpose as the direction given by the Central Government.

Coal Mines (Special Provisions) Act, 2015 ("CSMP")

Following the Supreme Court's judgement dated 25 August 2014 and order dated 24 September 2014, allocation of coal blocks by the Government, based on the recommendations made in 36 screening committee meetings between 1993 and 2011 and through the government dispensation route, were declared illegal and ordered to be cancelled. CMSP was enacted to provide for the process of allocation of the cancelled coal blocks by way of public auction in accordance with rules to be prescribed and on payment of such fees not exceeding ₹50 million. The CMSP *inter alia*, provides that prior allottees may participate in the public auction, subject to certain conditions. However, any prior allottee who is convicted of an offence relating to the coal block allocation and sentenced with imprisonment for more than three years is not eligible to participate. Further, prior allottees for the land in relation to the coal blocks are eligible for compensation in accordance with the registered sale deed in addition to 12% interest from the date of acquisition of the coal block till the date of vesting or allotment order. Proceeds raised from land and mine infrastructure of coal blocks are utilised for (i) payment to the secured creditors for the unpaid amount and (ii) compensation to the prior allottee.

The Government can allot coal blocks to a government company or a joint venture company or a company with a power project. Government joint venture companies are prohibited from transferring any interest except for any loans from a financial institution or bank. A successful bidder or allottee may negotiate with a prior allottee to own or utilise movable property and adopt and continue with any contracts for coal mining operations. If the prior allottee is a successful bidder or an allottee, then the secured creditors of such allottee can continue with their loans and security and if not, then the security shall only be satisfied from the compensation and outstanding debt be recovered from the prior allottee.

The CMSP also amends the MMDR Act and allows joint ventures between (i) a Government company or corporation and the central and state government or any other company and (ii) a company or a joint venture company between two or more companies, to mine coal blocks, either for its own consumption or for sale or for any other purpose in accordance with the reconnaissance permit, prospecting licence or mining lease.

The MLAA has also brought forth amendments in the CSMP, whereby the (i) end-use restriction for bidding in the auction of mining concessions have been removed; (ii) use of coal is permitted in the allottees subsidiary/holding company provided the specific end-use remains common; and (iii) enabling compensation for land and mine infrastructure for instances of termination of allocation of the coal mines.

Coal Mines (Special Provisions) Amendment Rules, 2020

In light of the amendments effected by the MLAA, the Ministry of Coal vide a gazette notification dated 29 May 2020 published the Coal Mines (Special Provisions) Amendment Rules, 2020 to further amend the Coal Mines (Special Provisions) Rule, 2014 hereby bringing the rules to be in parity with the changes made by the MLAA.

Other Mining laws

Working conditions of mine labourers are regulated by the Mines Act and it sets forth standards of work, including number of hours of work, leave requirements, medical examination, weekly days of rest, night shift requirements and other requirements to ensure the health and safety of mine workers. The Mines (Amendment) Bill, 2011 proposes several amendments to the Mines Act, including significant enhancement to the monetary penalties and terms of imprisonment for violations.

Other mining laws and regulations that may be applicable to the company include the following: Mining Lease (Modification of Terms) Rules, 1956; The Mines Rules, 1955; and Metalliferous Mine Regulations, 1961. The Ministry of Coal has also issued various guidelines including Guidelines for Preparation of Mining Plan for the Coal and Lignite Blocks issued on 4 April 2011, further modified by Guidelines for Preparation of Mining Plan for coal blocks issued on 8 May 2018, further modified Guidelines for Preparation of Mine Closure Plan issued on 7 January 2013, and the Guideline for Preparation of Mining Plan for the Coal dated 15 July 2015, and further modified by Guidelines for Preparation of Mining Plan for the Coal and Lignite Blocks issued on 16 December 2019.

Oil and Gas Laws

Vedanta's oil and gas business is governed by various oil and gas laws and is regulated by the MoPNG. The MoPNG is the principal regulator of oil and natural gas exploration and production in India. The MoPNG established the Directorate General of Hydrocarbons in 1993 to promote the sound management of Indian petroleum and natural gas resources with due regard to the environmental, safety, technological and economic aspects of petroleum activities. The Directorate General of Hydrocarbons is responsible for, *inter alia*, ensuring correct reservoir management practises, reviewing and monitoring exploratory programmes, the development plans of oil companies, and monitoring the production and the optimal utilisation of gas fields.

The MoPNG oversees the Oil Industry Safety Directorate, which develops standards for safety, fire-fighting, training programmes and information dissemination, and conducts periodic safety audits of all petroleum-handling facilities. It also oversees the Oil Industry Development Board, which provides financial and other assistance for the conductive development of the oil industry. The safety standards prescribed by the Oil Industry Safety Directorate, and the safety regulations prescribed by the Directorate General of Mines Safety in respect of onshore petroleum mining installations, must be complied with.

Oil and natural gas exploration activities are governed by the Oilfields (Regulation and Development) Act, 1948, as amended ("ORDA Act"). This legislation provides for the regulations of oilfields and for the development of mineral oil resources, including natural gas and petroleum. The ORDA Act empowers the GOI to frame rules on the granting of mining leases and petroleum exploration or prospecting licences, the conservation and development of mineral oils, the production of oil, and the regulation of oilfields.

The Petroleum and Natural Gas Rules, 1959, as amended ("PNG Rules") provides the framework for the granting of petroleum exploration licences and petroleum mining leases. The PNG Rules prohibits the prospecting or exploitation of any oil or gas unless a licence or lease has been granted under the PNG Rules. A petroleum mining lease entitles the lessee to an exclusive right to extract oil and gas from the relevant contract area. Petroleum exploration licences and petroleum mining leases are granted by the MoPNG for offshore areas and by the relevant state governments, with the prior approval of the GOI, for onshore areas. A notification dated 24 July 2018 amended the PNG Rules to redefine the term "petroleum" to mean any naturally occurring hydrocarbon in the in the form of natural gas or in a liquid, viscous or solid form, or a mixture thereof, in order to open exploration of hydrocarbons in existing fields, in line with the Hydrocarbon Exploration Licensing Policy, 2016.

The Territorial Waters, Continental Shelf, Exclusive Economic Zone and other Maritime Zones Act, 1976, as amended regulates the exploration and exploitation of resources of the continental shelf and exclusive economic zone.

The Essential Commodities Act, 1955, as amended makes provisions controlling the production, supply and distribution of certain essential commodities, which include petroleum and petroleum products.

The Petroleum Act, 1934, as amended ("Petroleum Act") provides that no person shall produce, refine, blend, store or transport petroleum except in accordance with the rules framed by the GOI under the Petroleum Act. The Petroleum Rules, 2002, as amended now regulate these activities.

The Petroleum and Natural Gas Regulatory Board Act, 2006, as amended provides for the establishment of the Petroleum and Natural Gas Regulatory Board. The board regulates the refining, processing, storage, transportation, distribution, marketing and sale of petroleum products and natural gas (excluding production of crude oil and natural gas).

The Petroleum and Minerals Pipelines (Acquisition of Right of User in Land) Act, 1962, as amended provides the framework governing the acquisition of right of user in land for laying pipelines for the transportation of petroleum and minerals and other matters connected therewith. This law is limited to the acquisition procedure, restrictions on use of land and compensation payable to the persons interested in the land.

The MoPNG through its notification no. O-32011/4/2013-ONG-I dated 30 March 2016 introduced a new exploration and licencing policy named Hydrocarbon Exploration and Licensing Policy ("HELP"). This is a fundamental change in the Indian oil and gas sector, which introduces a new contractual and fiscal model for the award of hydrocarbon acreages. Four main facets of HELP are: single licence, open acreages, revenue sharing model and marketing and pricing freedom.

The MoPNG through its notification no. O-22013/27/2012-ONG-D-V(Vol-II) dated 21 March 2016 introduced the policy for marketing including pricing freedom for the gas to be produced from discoveries in deepwater, ultra-deepwater and high-pressure temperature areas. This policy is applicable to all discoveries in deep water/ultra-deep water/high temperature-high pressure areas which are yet to commence commercial production as of 1 January 2016 and to all future discoveries in such areas. As per the policy the producers will be allowed marketing freedom including pricing freedom subject to a ceiling price on the basis of landed price of alternative fuels. The MoPNG has by way of notification no. O-32011/4/2013-ONG-I dated 30 June 2017 has introduced the Open Acreage Licensing Policy (Modalities for operationalisation-Hydrocarbon Exploration and Licensing Policy) for the bidding process for exploration and development of oil and gas blocks in India under the HELP. Further, the MoPNG has by way of notification no. O-22013/6/2016-ONG-D-V(Part)(FTS-44334) dated 25 June 2018 has introduced the Policy framework for streamlining operations, relaxation of timelines and delegation of powers to DG, the DGH under PSCs for streamlining the operations under the production sharing contracts.

Power Sector

Vedanta's power sector is regulated by laws relating to power and electricity generation. Under the Electricity Act, 2003, as amended from time to time (the "Electricity Act"), transmission and distribution of, and trading in, electricity require licences from the appropriate Central or State Electricity Regulatory Commissions (respectively, "CERCs" and "SERCs", and collectively, "ERCs"), unless exempted in accordance with the Electricity Act. CERC has jurisdiction over generating companies owned or controlled by the GOI or which have a composite scheme for generation and sale in more than one State. SERCs have jurisdiction over generating stations within State boundaries, except those under CERC's jurisdiction. The respective ERC determines the tariff for supply of electricity from a generating company to a licensee, transmission, wheeling, and retail sale of electricity. The Electricity Act was amended in 2007 to exempt captive power generation plants from licencing requirements.

The Electricity Act allows generating companies open access to transmission lines. The provision of open access is subject to the availability of adequate transmission capacity as determined by the Central or State Transmission Utility. Under the Electricity Act, ERCs determine tariff for supply of electricity by a generating company (as well as for transmission, wheeling and retail sale of electricity).

The Electricity (Amendment) Bill 2014 ("2014 Bill") seeks to segregate the distribution network business and the electricity supply business, and introduce multiple supply licensees in the market. The Bill introduces a supply licensee who will supply electricity to consumers. The distribution licensee will maintain the distribution network and enable the supply of electricity for the supply licensee. Further, the Electricity (Amendment) Bill 2016 ("2016 Bill") which was introduced on 11 July 2016, in addition to the amendments sought to be introduced by the 2014 Bill, seeks to enhance the use of non-conventional energy systems using renewable sources of energy in rural areas and formulate policies accordingly.

The draft Electricity (Amendment) Bill 2020 which was introduced on 17 April 2020, seeks to *inter alia* (i) delegate the Central Government with the power to prepare and notify a National Renewable Energy Policy for *inter alia* promotion of generation of electricity through renewable sources and prescribe rules and guidelines to facilitate cross border trade of electricity and (ii) creation and functioning of the Electricity Contract Enforcement Authority, who shall have the authority to adjudicate upon matters on performance of obligations under a contract regarding sale, purchase and transmission of electricity.

Additionally, the Electricity Rules, 2005 (the "Electricity Rules") prescribe a regulatory framework for developing captive generating plants. Pursuant to the Electricity Rules, a power plant shall qualify as a captive power plant only if not less than 26% of ownership is held by captive users and not less than 51% of the aggregate electricity generated in such plant, determined on an annual basis, is consumed for captive use. In case of a generating station owned by a company formed as a special purpose vehicle, the electricity required to be consumed by captive users is to be determined with reference to such unit or units identified for captive use and not with reference to the generating station as a whole and equity shares to be held by the captive users must not be less than 26% of the proportionate equity interest of the company related to the generating unit or units identified as the captive generating plant.

Environmental Laws

Vedanta's business is subject to environmental laws and regulations. The applicability of these laws and regulations varies from operation to operation and depends on jurisdiction in which Vedanta operates. Vedanta's operations require environmental and other permits covering, amongst other things, water use and discharges, stream diversions, solid waste disposal and air and other emissions. Major environmental laws applicable to Vedanta's operations, as amended from time to time, include the Environment (Protection) Act, 1986 as amended, Forest (Conservation) Act, 1980 of India as amended, and the Forest Conservation Rules, 2003 as amended, Hazardous Wastes (Management and Transboundary Movement) Rules, 2016, Water Act, as amended, Air Act as amended, The Coal Mines (Nationalisation) Act, 1973 as amended, or Coal Nationalisation Act as amended, Coking Coal Mines (Nationalisation) Act, 1972 as amended, Coal Mines (Taking Over of Management) Act, 1973 as amended, Coking Coal Mines

(Emergency Provision) Act, 1971 as amended, Coal Bearing Areas (Acquisition and Development) Act, 1957 as amended, Coal Mines (Conservation and Development) Act, 1974 as amended and the New Coal Distribution Policy, 2007 as amended.

The Environmental Protection Act, 1986 as amended from time to time, the Water (Prevention and Control of Pollution) Act, 1974 as amended from time to time and the Air (Prevention and Control of Pollution) Act, 1981 as amended from time to time provide for the prevention, control and abatement of pollution. Pollution control boards have been set up in states in India to exercise the powers under these statutes to prevent and control pollution. Companies must obtain the clearance of state pollution control boards before emitting or discharging effluents into the environment.

In case the project value exceeds ₹1 billion for a new project or ₹500 million for the expansion of existing oil and gas exploration and production project, the project would also require the approval of the MoEF.

The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 ("HWMTM Rules 2016"), as amended, encourages disposal of waste farther away from the source of generation. It promotes transboundary movement of hazardous wastes. Further, the Hazardous and Other Wastes (Management and Transboundary Movement) Amendment Rules, 2019 has prohibited the import of solid plastic wastes and provides that industries that do not require consent under Water (Prevention and Control of Pollution) Act 1974 and Air (Prevention and Control of Pollution) Act 1981, will be exempted from requiring authorisation also under the HWMTM Rules 2016.

Employment and Labour Laws

Vedanta is subject to various labour, health and safety laws which govern the terms of employment of Vedanta's labourers at the mining and manufacturing facilities, their working conditions, the benefits available to them and the general relationship between the management and such labourers. These employment laws applicable to Vedanta, as amended from time to time, include the Industrial Disputes Act, 1947 as amended, Factories Act, 1948 as amended, Contract Labour (Regulation and Abolition) Act, 1970 as amended, Employee State Insurance Act, 1948 as amended, Payment of Wages Act, 1936 as amended, Minimum Wages Act, 1948 as amended, Workmen's Compensation Act, 1923 as amended, Payment of Gratuity Act, 1972 as amended, Payment of Bonus Act, 1965 as amended, and Employees' Provident Funds and Miscellaneous Provisions Act, 1952 as amended.

Corporate Laws

In addition to the above, Vedanta is required to comply with the provisions of the Companies Act, 2013, as amended, Companies Act, 1956, to the extent applicable, and rules framed thereunder, and other applicable statutes imposed by the central or the state government and authorities for the day-to-day business and operations. Vedanta is also subject to various central and state tax laws.

Moreover, there are various rules and regulations which are framed and amended from time to time by the SEBI in order to regulate the functioning of the securities market, which Vedanta is required to comply with.

The Insolvency and Bankruptcy Code, 2016 (Bankruptcy Code) as amended was notified on 5 August 2016. The Bankruptcy Code offers a uniform and comprehensive insolvency legislation encompassing all companies, partnerships and individuals (other than financial firms). It allows creditors to assess the viability of a debtor as a business decision, and agree upon a plan for its revival or a speedy liquidation. The Bankruptcy Code creates a new institutional framework, consisting of a regulator, insolvency professionals, information utilities and adjudicatory mechanisms, which will facilitate a formal and time-bound insolvency resolution and liquidation process.

Under the Bankruptcy Code, upon initiation of an insolvency resolution process, a committee of creditors is constituted by the interim resolution professional, wherein each financial creditor (except related party of the corporate debtor) is given a voting share proportionate to its admitted claim against the company. Any decision of the committee of creditors must be taken by a vote of either 50% or 66% of the voting share of all financial creditors (other than for withdrawal of an application by which corporate insolvency resolution process was initiated, which requires 90% of the total voting share of the committee of creditors). Any resolution plan approved by committee of creditors is binding on the corporate debtor and its employees, members, creditors, including the Central Government, any State Government or any local authority to whom a debt in respect of the payment of dues arising under any law for the time being in force, such as authorities to whom statutory dues are owed, guarantors and other stakeholders involved in the resolution plan. In case the corporate debtor is subjected to liquidation process, the Bankruptcy Code provides for a fixed order of priority in which proceeds from the sale of the debtor's assets are to be distributed. In this order of priority, the insolvency resolution and liquidation process costs rank higher than the admitted claims of secured creditors. Secured creditors may decide to opt out of the liquidation process, in which case they are permitted to realise their security interests separately should they choose to do so. As per the Reserve Bank of India's annual report for the Fiscal Year 2019, the Insolvency and Bankruptcy Code has aided and gradually improved the recovery process in relation to stressed assets.

However, in light of to the outbreak of the COVID-19 pandemic, by a notification dated 24 March 2020 issued by the Ministry of Corporate Affairs, the minimum amount of default to initiate insolvency proceedings has been increased from to ₹0.1 million to ₹10 million.

The Bankruptcy Code has further been amended by Insolvency and Bankruptcy Code (Amendment) Ordinance, 2020 ("Bankruptcy Code Ordinance") promulgated on 5 June 2020 whereby no application for initiation of corporate insolvency resolution process of a corporate debtor shall ever be filed for any default arising on or after 25 March 2020 for a period of six months or such further period, not exceeding one year from such date, as may be notified in this behalf.

Payment of dividends

Section 51 of the Companies Act, 2013, as amended, states that a company can pay dividend to its shareholders in proportion to the amount paid up on each of its shares, provided the articles of association of the company authorize the company to pay such dividend to its shareholders. The Companies Act, 2013 recognises two types of dividend, i.e. interim dividend and final dividend. Interim dividend is declared and paid by a company (a) during any financial year; or (b) at any time during the period from closure of the financial year till holding of the annual general meeting ("AGM"); or (c) out the surplus in profit and loss account or out of the profits of the current financial year in which such dividend is sought to be declared; or (d) out of the profits generated in the current financial year till the quarter preceding the date of declaration of such dividend. Final dividend implies the dividend recommended by the board of directors, at the company's AGM, after the closure of financial year and the release of the final version of a company's financial statements.

Section 123 *inter alia* states that an Indian company can declare and pay dividend only out of its free reserves. Thus, a company cannot declare and pay dividend funded by loans or borrowings. Further, Section 123 provides that dividends shall only be declared and paid, subject to satisfaction of the following conditions:

a. A company can declare and pay dividend for any financial year only out of the profits earned by the company in that financial year after providing for depreciation or out of the profits of the company of any previous financial year after providing for depreciation in that financial year. The aforesaid profits earned by the company which are not distributed as dividend may be transferred to the free reserves of the company.

b. If a company desiring to declare and pay dividend to its shareholders has inadequate profits or has incurred losses in that financial year, it can declare and pay dividend out of its free reserves generated from profits earned by it in the previous financial years, subject to satisfaction of the conditions specified in Rule 3 of the Companies (Declaration and Payment of Dividend) Rules, 2014, as amended.

c. A company can declare and pay dividend only from its free reserves

d. If the company desires to declare interim dividend and has incurred losses in the current financial year up to the quarter immediately preceding the date of declaration of dividend, it can declare and pay interim dividend to its shareholders at a rate not higher than the average dividend declared by the company in the preceding 3 (three) financial years.

e. The amount of dividend declared by the company is to be deposited in a designated account of a scheduled bank within 5 (five) days from the date of declaration of the dividend and

f. The dividend declared by the company is to be paid only in cash and such cash can be paid to shareholder entitled to dividend vide cheque or warrant or in any electronic mode.

Additionally, if equity shares of any company are listed on a recognised stock exchange, the provisions of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, as amended ("SEBI LODR") are also applicable, in addition to the provisions of the Companies Act, 2013. The SEBI LODR stipulates conditions and timeframe for a company's declaration and payment of dividend to its shareholders. Regulation 43A of SEBI LODR provides for top the 500 listed companies in India, based on market capitalisation, as calculated as on 31 March of every financial year, including Vedanta Limited and HZL, to adopt a dividend distribution policy which shall include *inter alia* the following parameters:

a. the circumstances under which the shareholders of the listed companies may or may not expect dividend;

b. the financial parameters that shall be considered while declaring dividend; and

c. policy as to how the retained earnings shall be utilized.

The SEBI LODR also provides that if the listed company proposes to declare dividend on the basis of parameters in addition to the aforesaid or proposes to change such additional parameters or the dividend distribution policy contained in any of the parameters, it shall disclose such changes along with the rationale for the same in its annual report and on its website.

Disclosures of encumbrances under the Indian Takeover Code

As per the Indian Takeover Code inter alia, the promoter of an Indian listed company is required to disclose the details of encumbrance (as defined under the Indian Takeover Code) on shares created by it or persons acting in concert with it ("PAC") in the listed company. The promoter required to disclose the specified details within seven Working Days from the date of creation or invocation or release of such encumbrance, as the case may be, to: (a) the stock exchanges where the shares of the Indian listed company are listed; and (b) the Indian listed company at its registered office.

Further, the Indian Takeover Code requires that a disclosure be made: (a) when a person acquires shares or voting rights in Indian listed company, which taken together with the shares or voting rights, if any, held by it and by PAC if any, aggregating to 5% or more of the shares of a Indian listed company; and (b) a person, who together with PAC, if any, holds shares or voting rights entitling them to 5% or more of the shares or voting rights in a Indian listed company, is required to disclose a change in shareholding if such change exceeds 2% from the last disclosure made by such person (and PAC, if any). For such disclosure, shares taken by way of encumbrance are required to be treated as an acquisition and shares given upon release of encumbrance are required to be treated as a disposal. This disclosure is required to made within two Working Days from the date of acquisition of disposal of shares or voting rights of an Indian listed company, to (a) the stock exchanges where the shares of the Indian listed company are listed; and (b) the Indian listed company at its registered office.

Restrictions on financial assistance

Vedanta is subject to certain restrictions under Indian laws, in relation to Take Private Transaction, and financing thereof (including by way of Bonds, the Bridge Facility Agreement or otherwise). Regulation 4(4) of Delisting Regulations restrict the promoters of a company proposed to be delisted to directly/ indirectly employ funds of the company to provide an exit to its shareholders. Further, Section 67 (2) of the Indian Companies Act, 2013 restricts public companies from providing any financial assistance by way of loans, guarantee, security or otherwise (directly or indirectly) for purchase of its shares or shares of its holding company.

Capital infusion in public sector banks

The Government of India on 23 August 2019 announced capital infusion of up to ₹700 billion in public sector banks with the intention of boosting lending and improving liquidity in the Indian public sector banking circle. This infusion is expected to generate an additional lending and liquidity in the financial system to the tune of ₹5 trillion.

Regulatory measures on account of COVID-19

On 27 March 2020, the GOI announced a ₹1,700 billion relief package to boost economic activities during the COVID-19 pandemic. The RBI has issued circulars, the Statement of Developmental and Regulatory Policies dated 27 March 2020 and 22 May 2020 and Monetary Policy Statement, 2020-2021: Resolution of Monetary Policy Committee dated 22 May 2020 announcing certain regulatory measures with an aim to mitigate the burden of debt servicing brought about by disruptions on account of the COVID-19 pandemic and revive growth on business and financial institutions in India. The RBI's Statement sets out various developmental and regulatory policies that directly address the stress in financial condition caused by the COVID-19 pandemic. They consist of: (i) expanding liquidity in the system to ensure that financial markets and institutions are able to function normally in the face of COVID-19 related dislocations; (ii) reinforcing monetary transmission so that bank credit flows on easier terms are sustained to those who have been affected by the pandemic; (iii) easing financial stress caused by the COVID-19 pandemic disruptions by relaxing repayment pressures and improving access to working capital; and (iv) improving the functioning of markets in view of the high volatility experienced with the onset and spread of the pandemic. The significant features of this package are *inter alia* as below:

(a) restriction from declaring any further dividend payouts from the profits pertaining to Fiscal Year 2020 until further instructions;

(b) permitting banks to grant a moratorium of six months on all term loan instalments and working capital facilities sanctioned in the form of cash credit/overdraft ("CC/OD"), falling due between 1 March 2020 and 31 August 2020, subject to the fulfilment of certain conditions;

(c) modifying the RBI (Prudential Framework for Resolution of Stressed Assets) Direction, 2019 (Prudential Framework) for accounts which were within the review period/resolution period as on 1 March 2020, such that the entire moratorium period from 1 March 2020 till 31 August 2020 would be excluded from the calculation of the 30 day review period and 180 day resolution period.

(d) permitting the recalculation of 'drawing power' of working capital facilities sanctioned in the form of cash/credit overdraft facilities by reducing the margins till the extended period, being 31 August 2020, and permitting lending institutions to restore the margins to the original levels by 31 March 2021;

(e) permitting the increase in the bank's exposures to a group of connected counterparties from 25% to 30% of the eligible capital base of the bank, up to 30 June 2021;

(f) deferring the recovery of the interest applied in respect of all working capital facilities sanctioned in the form of cash/credit overdraft facilities during the period from 1 March 2020 to 31 August 2020;

(g) permitting lending institutions to convert the accumulated interest on working capital facilities up to the deferment period (up to 31 August 2020) into a funded interest term loan which shall be repayable not later than the end of the current Fiscal Year (being 31 March 2021);

(h) permitting the lending institutions to exclude the moratorium period wherever granted in respect of term loans as stated in (ii) above, from the number of days past-due for the purpose of asset classification under the asset reclassification norms, in respect of accounts classified as standard as on 29 February 2020, even if overdue;

Taxation Laws (Amendment) Act 2019

The general corporate tax rate in India is 25% (plus surcharge and cess) and 30% (plus surcharge and cess). However, to promote economic growth, the Taxation Laws Amendment Act, 2019 introduced a concessional tax regime for Indian companies pursuant to which (a) Indian companies incorporated on or after 1 October 2019 commencing manufacturing on or before 31 March 2023, can opt to offer the income to tax at an effective tax rate 17.16% and (b) other Indian companies can opt to offer the income to tax at the effective rate of 25.17%; subject to certain prescribed conditions and after foregoing certain benefits/exemptions. In both these cases, the provisions of MAT would not be applicable.

Under this new enactment the company can choose to opt for the new tax rates in the financial year 2019-20 (i.e. assessment year 2020-21) or in any other financial year in the future. Once the company exercises this option, the chosen provision will apply for all subsequent years.

Additionally, the Taxation Laws (Amendment) Act, 2019 reduced the MAT rate from 18.5% (plus surcharge and cess) to 15% (plus surcharge and cess) with effect from the financial year 2019-20 (not relevant for companies which opt to be taxed under the concessional tax regime as discussed above).

Regulation of Foreign Investment

Foreign investment in India is governed primarily by the provisions of the Foreign Exchange Management Act, 1999, as amended ("FEMA") which relates to regulation primarily by the Reserve Bank of India (RBI) and the rules, regulations and notifications thereunder, and the policy prescribed by the Department of Industrial Policy and Promotion, GOI, which is regulated by the Foreign Investment Promotion Board. The FEMA regulates transactions involving foreign exchange and provides that certain transactions cannot be carried out without the general or specific permission of the RBI. Vedanta is also required to comply with FEMA and the rules and regulations made thereunder as amended from time to time, which primarily governs foreign investment in India.

Dividends are freely repatriable without any restrictions (net after tax deduction at source or DDT, if any, as the case may be). The repatriation is governed by the provisions of the Foreign Exchange Management (Current Account Transactions) Rules, 2000, as amended from time to time.

Further, RBI has placed certain restrictions and conditions for the use of debt funds in India which are raised in the overseas market by overseas holding/group companies of Indian companies where such Indian companies account for sole/major operations of the Group. Under the Foreign Exchange Management (Borrowing or Lending in Foreign Exchange) Regulations, 2018 read together with the Master Direction on External Commercial Borrowings, Trade Credits and Structured Obligations, FED Master Direction No. 5/2018-19 dated 26 March 2019, issued by the RBI, as amended, modified or replaced from time to time by any rules, regulations, notifications, circulars, press notes or orders issued by the RBI or other Indian governmental agency in relation to external commercial borrowings ("ECB Guidelines"). ECBs can be accessed under two routes: (i) the automatic route; and (ii) the approval route. The automatic route does not require a borrower to obtain any RBI approvals, whereas the approval route requires prior RBI approval. Under the ECB Guidelines, foreign currency denominated ECB and Rupee denominated ECB can be availed. ECBs up to $750 million or equivalent can be raised under the automatic route in each financial year:

a. The ECB should be in compliance with applicable minimum average maturity period, all-in-cost, end use restrictions and other applicable limits under the ECB Guidelines;

b. The loan agreement should have a security clause requiring the ECB borrower to create/cancel charge, in favour of overseas lender/security trustee, on immovable assets/movable assets/ financial securities/issuance of corporate and/or personal guarantee; and

c. No objection certificate from the existing lenders in India has to be obtained for creation of charge.

Once the aforesaid conditions are met, the AD Bank can allow creation of charge on immovable assets, movable assets, financial securities and issue of corporate and/or personal guarantee during the currency of the ECB in compliance with the conditions laid down in respect of kinds of security created under the revised ECB framework. Indian companies are also not allowed to use funds raised abroad unless it is in compliance with the general or specific permissions that are stipulated under ECB Guidelines.

DESCRIPTION OF THE ISSUER

The Issuer, Vedanta Holdings Mauritius II Limited, is a company incorporated in Mauritius on 29 June 2020. The registered office of the Issuer is at c/o Amicorp (Mauritius) Limited, 6th Floor, Tower 1, Nexteracom Building, Ebene, Mauritius, and the telephone number is +230 4040200. The Issuer is a wholly owned subsidiary of Vedanta Jersey, which is a wholly owned subsidiary of the Company.

Business Activity

The Issuer is a finance vehicle for Vedanta. Other than issuing the Bonds, holding investments and activities incidental thereto, it has not engaged in any other material business activities.

The issuance of the Bonds was approved by the Board of Directors of the Issuer at a meeting of the Board of Directors held on 7 August 2020.

Management

The directors of the Issuer are:

- Rajiv Mangar, Accounts Manager, having its registered address at c/o Amicorp (Mauritius) Limited, 6th Floor, Tower 1 Nexteracom Building, Ebene, Mauritius; and

- Shakill Ahmad Toorabally, Managing Director, having its registered address at c/o Amicorp (Mauritius) Limited, 6th Floor, Tower 1 Nexteracom Building, Ebene, Mauritius.

Capitalisation

The Issuer has an issued and paid up share capital of $1,000, comprising 1,000 ordinary shares of $1.00 per share each.

DESCRIPTION OF THE INITIAL SUBSIDIARY GUARANTORS

Vedanta Holdings Jersey Limited ("Vedanta Jersey")

Vedanta Jersey is a company incorporated in Jersey on 15 January 2020. The registered office of Vedanta Jersey is at 47 Esplanade, St Helier, Jersey JE1 0BD, and the telephone number is +44 1534 835743. Vedanta Jersey is a wholly owned subsidiary of the Company.

Business Activity

Vedanta Jersey is a finance vehicle and investment holding company for Vedanta. Other than being a finance vehicle and investment holding company and performing activities incidental thereto, it has not engaged in any other material business activities.

The guarantee of the Bonds was approved by the Board of Directors of Vedanta Jersey at a meeting of the Board of Directors held on 7 August 2020.

Management

The directors of Vedanta Jersey are Danny Cole and Stephanie Rose Marriott.

Capitalisation

Vedanta Jersey has an issued and paid up share capital of $1, comprising 1 ordinary share of $1.00 per share each.

Vedanta Holdings Mauritius Limited ("Vedanta Mauritius")

Vedanta Mauritius is a company incorporated in Mauritius on 29 June 2020. The registered office of Vedanta Mauritius is at c/o Amicorp (Mauritius) Limited, 6th Floor, Tower 1, Nexteracom Building, Ebene, Mauritius, and the telephone number is +230 4040200. Vedanta Mauritius is a wholly owned subsidiary of Vedanta Jersey, which is a wholly owned subsidiary of the Company.

Business Activity

Vedanta Mauritius is a finance vehicle and investment holding company for Vedanta. Other than being a finance vehicle and investment holding company and performing activities incidental thereto, it has not engaged in any other material business activities.

The guarantee of the Bonds was approved by the Board of Directors of Vedanta Mauritius at a meeting of the Board of Directors held on 7 August 2020.

Management

The directors of Vedanta Mauritius are Ashwanee Ramsurrun and Shakill Ahmad Toorabally.

Capitalisation

Vedanta Mauritius has an issued and paid up share capital of $1,000, comprising 1,000 ordinary shares of $1.00 per share each.

TAKE PRIVATE TRANSACTION

Background to the Take Private Transaction

The Equity Shares are listed on the Indian Stock Exchanges. Vedanta Limited has also issued ADS which are listed on the NYSE. As of 30 June 2020, the Company along with other members of the promoter and promoter group of Vedanta Limited held 50.13% of the total issued and paid-up equity share capital of Vedanta Limited (including through Twin Star Holdings Ltd. ("Twin Star"), Finsider International Company Limited ("Finsider"), Westglobe Limited ("Westglobe") and Welter Trading Limited ("Welter"), which hold 37.1%, 10.8%, 1.2% and 1.0% respectively), including the ADS issued by Vedanta Limited.

The Company has expressed its intention to, either individually or along with one or more subsidiaries, to undertake the Take Private Transaction. The Take Private Transaction will be considered successful if the Company (and/or its subsidiaries, as the case may be) accepts the final offer price (which will be determined in accordance with the reverse book building process as per the Delisting Regulations). The final offer price will be determined as the price at which the Equity Shares accepted through the offer takes the shareholding of the Acquirers (along with other members of the promoter and promoter group of Vedanta Limited) to at least 90% of the total issued and paid-up equity share capital of Vedanta Limited, excluding the Equity Shares which are then held by a custodian and against which ADS have been issued, in accordance with the Delisting Regulations. If the Take Private Transaction is successful, the Company intends to delist the ADSs from the NYSE and deregister Vedanta Limited from the SEC, subject to the requirements of the NYSE and the SEC.

The Group has been pursuing a process of corporate simplification for several years. The Take Private Transaction is another step taken by the Group to simplify its corporate structure. The merger of Sterlite with SGL to form Sesa Sterlite Limited (subsequently renamed as Vedanta Limited) in 2012, the merger of Cairn India with Vedanta Limited in 2017 and the delisting of the Company from the London Stock Exchange and re-registering as a private limited company in 2018 were all steps taken towards the simplification of the Group's corporate structure. The Take Private Transaction is in continuation of the corporate structure simplification process of the Group to achieve enhanced operational and financial flexibility in a capital-intensive business. The Take Private Transaction will align the Group's capital and operational structures, streamline the process of servicing its financial obligations and significantly improve a range of important credit metrics.

Sequence of Events in relation to the Take Private Transaction

On 12 May 2020, the Company sent a letter to the board of directors of Vedanta Limited wherein it expressed its intention to undertake the Take Private Transaction. On 18 May 2020, the Company sent a letter to Vedanta Limited communicating the floor price of the Take Private Transaction to be ₹87.25 per Equity Share (determined in accordance with the Delisting Regulations). This floor price was certified by Price Waterhouse & Co. LLP pursuant to its certificate dated 18 May 2020. The board of directors of Vedanta Limited, at its meeting held on 18 May 2020, approved the Take Private Transaction and authorised Vedanta Limited to seek the approval of its shareholders and the Indian Stock Exchanges with respect to the Take Private Transaction in accordance with the Delisting Regulations. On 25 May 2020, Vedanta Limited dispatched a postal ballot notice along with an explanatory statement to its shareholders seeking their approval in respect of the Take Private Transaction. The voting period commenced on 26 May 2020 and expired on 24 June 2020. The shareholders of Vedanta Limited approved the Take Private Transaction with the requisite majority and the voting results were announced by Vedanta Limited on 25 June 2020.

As a next step, Vedanta Limited is required to seek in-principle approval to delist the Equity Shares from the Indian Stock Exchanges in accordance with the Delisting Regulations (the "Approval In Principle"). Vedanta Limited intends to apply for Approval In Principle prior to the Closing Date. Under the Delisting Regulations, the Indian Stock Exchanges are required to dispose of the application seeking Approval In Principle within five Working Days from the date of receipt of the application complete in all respects. Upon receipt of the Approval In Principle, the Acquirers will be required to make a public announcement within one Working Day (the "Public Announcement") from the receipt of the Approval In Principle, and within two Working Days of the Public Announcement, to dispatch a letter of offer (containing material information in relation to the delisting offer) (the "Letter of Offer") along with a bid form to the Public Shareholders. The Public Announcement and the Letter of Offer will contain relevant details such as schedule of activities, details relating to determination of the final offer price, bid opening and closing dates, details relating to the minimum acceptance of Equity Shares and success conditions and the procedure for tendering of Equity Shares during the RBB Period. The Public Announcement and the Letter of Offer are expected to be made after the Closing Date. Before the Public Announcement, the Acquirers will open the India Escrow Account and deposit funds required to acquire the Equity Shares outstanding with the Public Shareholders at the floor price. Prior to the release of the Public Announcement, the Acquirers will fund the India Escrow Account by way of a cash deposit or bank guarantee issued by the Issuing Bank in favour of the manager to the Take Private Transaction, in accordance with the Delisting Regulations or a combination of both a cash deposit and a bank guarantee.

Not later than seven Working Days of the Public Announcement, the bidding period is required to commence, and it is required to remain open for five Working Days, during which period the Public Shareholders may tender their bids (the "RBB Period"). The final offer price will be the price at which Equity Shares accepted through eligible bids at such price takes the shareholding of the Acquirers (along with other members of the promoter and promoter group of Vedanta Limited) to at least 90.0% of the total issued and paid-up equity share capital of Vedanta Limited, excluding the Equity Shares which are then held by a custodian and against which ADSs have been issued. Upon the discovery of the final offer price (determined as per reverse book building mechanism as specified under the Delisting Regulations), the Acquirers will have the option either to accept or reject the final offer price. Within five Working Days from the closure of the RBB Period, the Acquirers will be required to make a post-offer public announcement regarding: (a) the success of the Take Private Transaction along with the final offer price; or (b) the failure of the Take Private Transaction.

If the final offer price is not acceptable to the Acquirers, they may either reject the offer or make a counter offer to the Public Shareholders in accordance with the Delisting Regulations. If the Acquirers opt to make a counter offer, they will be required to publish a counter offer public announcement within 2 Working Days from the date of closure of the RBB Period and dispatch the counter offer letter of offer within 4 Working Days from the date of closure of the RBB Period. The counter offer bidding period is required to commence not later than 7 Working Days from the date of publication of the counter offer public announcement. The counter offer bidding period is for five Working Days. If a counter offer is made and is successful in accordance with the Delisting Regulations, the final offer price would be the counter offer price in accordance with the Delisting Regulations. After the acceptance of the final offer price (i.e., either the price determined as per the reverse books building mechanism, or, if a counter offer has been made, the counter offer price) in accordance with the Delisting Regulations, the Acquirers will be required to forthwith deposit additional funds in the India Escrow Account (as necessary) and will be required to pay the consideration to the Public Shareholders within ten Working Days of the closure of the RBB Period (or the counter offer bidding period, as the case may be) in accordance with Delisting Regulations. After paying the consideration for the Equity Shares tendered, Vedanta Limited will make the final application to the Indian Stock Exchanges for delisting of the Equity Shares from the Indian Stock Exchanges. Upon receipt of their approval, the Equity Shares will be delisted from the Indian Stock Exchanges. If the bids are not accepted during the RBB Period (or the counter offer bidding period, as the case may be), the Equity Shares shall be returned or released to the Public Shareholders within ten Working Days from the closure of the RBB Period (or the counter offer bidding period, as the case may be)

For a period of one year from the date of delisting of Vedanta Limited, those Public Shareholders who continue to hold Equity Shares have the option to tender their Equity Shares to the Acquirers at the final offer price (i.e., either the price determined pursuant to the reverse book building mechanism or a counter offer price, as the case may be). The Acquirers are obligated to accept such Equity Shares.

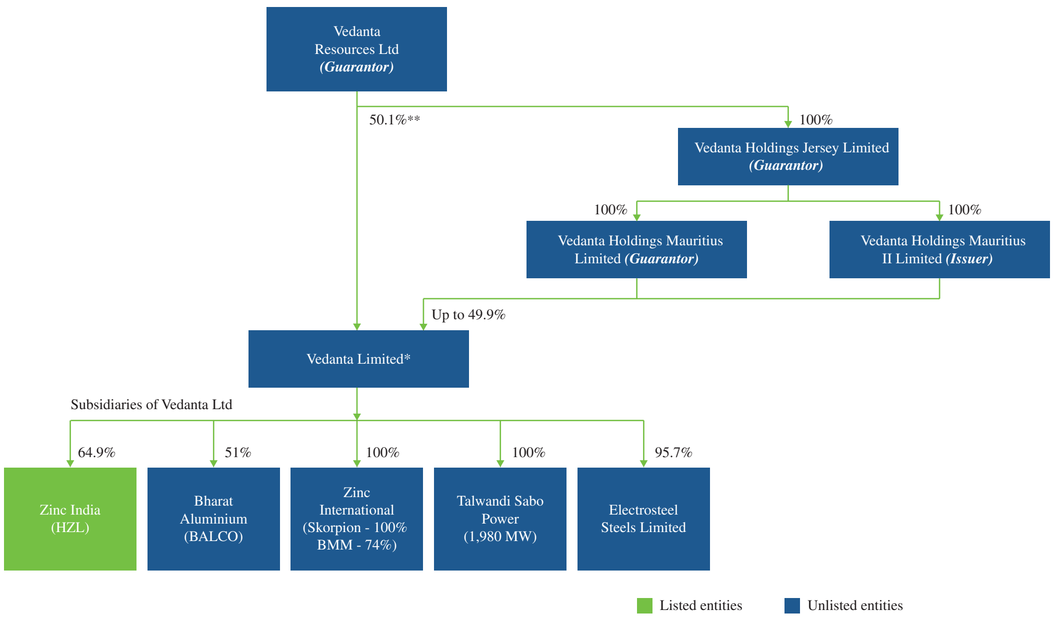
Proposed Financing in connection with the Take Private Transaction

Vedanta intends to finance the Take Private Transaction through the combination of (a) loan financing under the Bridge Facility Agreement where Vedanta has received commitments from the respective lenders of up to $1,750 million; and (b) proceeds from the issuance of the Bonds.

If the final offer price (i.e., either the price determined as per the reverse book building mechanism or, if a counter offer has been made, the counter offer price) is accepted in accordance with the Delisting Regulations: (a) to the extent not already done so, Vedanta Mauritius will draw the amount under the Bridge Facility Agreement and arrange for such proceeds to also be transferred to the India Escrow Account. In addition, Vedanta Mauritius also has further flexibility to enter into a second term loan facility agreement which would consist of a facility available to be drawn by way of term loan and bank guarantee (as may be required) and if such facility is availed, Vedanta Mauritius will draw the amount and arrange to transfer the same to the India Escrow Account, if required; and (b) to the extent not already done so, the Issuer will then transfer proceeds from the offering of the Bonds in the Bond Escrow Account into the India Escrow Account, in each case, as may be required, to pay the Public Shareholders in accordance with the Delisting Regulations.

Pro Forma Group Structure if the Take Private Transaction is Successful

The most likely pro forma Group structure, post the completion of the Take Private Transaction (assuming that (i) all ADS holders convert their ADS into Equity Shares and tender their Equity Shares; and (ii) all Equity Shares outstanding with the Public Shareholders are acquired pursuant to a successful completion of the Take Private Transaction in terms of the Delisting Regulations) is set out below:



* 50% of the share in the RJ Block is held by a subsidiary of Vedanta Ltd

** includes the ADS issued by Vedanta Limited

Current Status of the Take Private Transaction

The Take Private Transaction remains subject to approval from the Indian Stock Exchanges, any other regulatory and government authority in India and/or other jurisdictions, as may be required, and lender consents in relation to the Take Private Transaction.

DESCRIPTION OF CERTAIN FINANCING ARRANGEMENTS

The following is a summary of the material terms of certain financing arrangements in relation to the Take Private Transaction in addition to the Bonds. The following summaries do not purport to describe all of the applicable terms and conditions of such arrangements and are qualified in their entirety by reference to the actual agreements.

Capitalised terms used in the following summaries and not otherwise defined in this Offering Circular have the meanings ascribed to them in their respective agreements.

Bridge Facility Agreement

For the purpose of securing part of the financing of the Take Private Transaction, Vedanta Mauritius (as borrower) (the "Bridge Borrower") and the Issuer, the Company, Vedanta Jersey and certain other members of the Group as guarantors (the "Bridge Guarantors") will enter into a facility agreement on or about the Closing Date with the various parties thereto as lenders (the "Bridge Facility Agreement").

The Bridge Facility Agreement, the terms of which remain subject to change, shall consist of a facility of up to $1,750,000,000 available to be drawn by way of term loan and may also include the option to be available by way of bank guarantee ("Facility A").

Facility A shall be made available to the Bridge Borrower.

Facility A will be made available for the purpose of, *inter alia* (i) financing the acquisition of the Equity Shares (including by way of depositing the proceeds of the loan and guarantees with the escrow agent) and (ii) paying related, fees, costs and expenses.

No utilisation will be permitted under the Bridge Facility Agreement unless the Bonds have been issued in aggregate principal amount of at least a minimum amount to be agreed and the Bridge Borrower has satisfied other conditions precedent in form and substance satisfactory to the Agent.

The proceeds of the loans incurred under the Bridge Facility Agreement may be deposited into the Bridge Escrow Account.

Maturity and Repayment Requirements

A utilisation of Facility A (whether by way of loan or bank guarantee) will be repaid by the maturity date for Facility A, being the date falling three months from the date of initial utilisation of Facility A.

Prepayment

The Bridge Facility Agreement will allow for voluntary prepayments on three business days' prior notice and for voluntary cancellations on five business days' prior notice.

The Bridge Facility Agreement will require mandatory prepayment of Facility A in certain circumstances (subject to agreed materiality thresholds, qualifications and other exceptions) and is expected to include but not be limited to: (a) lender or issuing bank illegality; (b) change of control; (c) the sale of all or substantially all the assets or business of the Group; and (d) amounts refunded from the escrow account in which the offer consideration will be held and that were funded by the proceeds of Facility A.

If the Company fails to undertake the acquisition of the Equity Shares, then all amounts due under the Bridge Facility Agreement shall be mandatorily prepaid.

Interest Rate and Fees

The Loan under Facility A will bear interest at the aggregate of the applicable (a) margin; and (b) LIBOR, to include a floor, such that if LIBOR is less than zero, it shall be deemed to be zero.

The margin for Facility A will be 4.00% per annum.

A bank guarantee fee of 4.00% per annum will be payable on any Bank Guarantees issued under Facility A, if bank guarantees are available under the terms of the Bridge Facility Agreement.

Guarantee and Security

Each of the Bridge Guarantors will guarantee the obligations of the obligors under the Bridge Facility Agreement.

The Transaction Security will secure the obligations of the Bridge Borrower and the Bridge Guarantors under the Bridge Facility Agreement and will also secure the Bonds as set forth in "*Common Collateral*".

The obligations of the Bridge Borrower and the Bridge Guarantors under the Facility Agreement may also be secured by a first priority pledge over the Bridge Escrow Account.

Representations and Warranties

The Bridge Facility Agreement will contain certain representations which subject to agreed materiality thresholds, qualifications and other exceptions, are expected to include, but not be limited to: (i) status; (ii) binding obligations; (iii) non-conflict with other obligations; (iv) power and authority; (v) validity and admissibility in evidence; (vi) immunity; (vii) governing law and enforcement; (viii) no filing or stamp taxes; (ix) deduction of tax; (x) no default; (xi) no misleading information; (xii) financial statements; (xiii) *pari passu* ranking; (xiv) no proceedings pending or threatened; (xv) compliance with applicable laws; (xvi) title; (xvii) environmental laws and licences; (xviii) environmental releases; (xix) group structure; (xx) taxation; (xxi) labour disputes; (xxii) sanctions; (xxiii) anti-money laundering and anti-terrorism laws; (xxiv) anti-bribery; (xxv) solvency; (xxvi) intellectual property; (xxvii) no other business; (xxviii) insurances; and (xxix) transaction security assets.

Certain representations will be made on date of the Bridge Facility Agreement and will be repeated on the date of each utilisation and on the first day of each interest period, in each case, by reference to the facts and circumstances then existing.

Undertakings

The Bridge Facility Agreement shall require the obligors and material subsidiaries of the Company to observe certain positive and negative undertakings which, subject to agreed thresholds, qualifications, grace periods and other exceptions, are expected to include, but not be limited to: (i) authorisations; (ii) compliance with laws; (iii) no encumbrances; (iv) disposals; (v) acquisitions; (vi) preservation of assets; (vii) *pari passu*; (viii) merger; (ix) change of business; (x) insurance; (xi) environmental and social; (xii) arm's length terms; (xiii) dividends and intra-group debt; (xiv) amendments to constitutional documents; (xv) material subsidiaries; (xvi) auditors; (xvii) sanctions; (xviii) anti-money laundering and anti-terrorism laws; (xix) publicity; (xx) taxation; (xxi) the company; (xxii) use of proceeds; (xxiii) no other business; (xxiv) further assurance; (xxv) the offer; and (xxvi) conditions subsequent.

Events of Default

The Bridge Facility Agreement will contain certain events of default which, subject to agreed materiality thresholds, qualifications, carve-outs, baskets, grace periods and other exceptions, are expected to include, but not be limited to: (i) non-payment; (ii) financial covenants; (iii) other obligations; (iv) misrepresentation; (v) cross-default; (vi) insolvency; (vii) insolvency proceedings; (viii) creditors' process; (ix) intercreditor agreement; (x) unlawfulness and unenforceability; (xi) repudiation; (xii) cessation of business; (xiii) nationalisation; (xiv) audit qualification; (xv) litigation; (xvi) final judgement; (xvii) authorisation; (xviii) subordination; and (xix) material adverse change.

Governing Law

The Bridge Facility Agreement will be governed by English law.

Intercreditor Agreement

To establish the relative rights of certain of our creditors under our financing arrangements of the Issuer, the Company and each other Guarantor (as defined in the Bridge Facility Agreement and the Permitted Senior Secured Facility Agreement (as defined below)) (each a "Debtor" and together, the "Debtors") will on or around the date of the Bridge Facility Agreement enter into an intercreditor agreement (the "Intercreditor Agreement") with, among others:

(a) the Common Security Agent;

(b) the lenders and issuing banks under the Bridge Facility Agreement (the "Bridge Lenders");

(c) the agent under the Bridge Facility Agreement (the "Bridge Agent");

(d) the arrangers and bookrunners under the Bridge Facility Agreement (the "Bridge Arrangers");

(e) the lenders and issuing banks under the Permitted Senior Secured Facility Agreement (the "Permitted Senior Secured Facility Agreement Lenders");

(f) the agent under the Permitted Senior Secured Facility Agreement (the "Permitted Senior Secured Facility Agent");

(g) the arrangers and bookrunners under the Permitted Senior Secured Facility Agreement (the "Permitted Senior Secured Facility Arrangers");

(h) the Trustee (on its own behalf and on behalf of the holders of the Bonds; and

(i) the hedging counterparties under secured hedging provided to the Issuer and the Guarantors, if any (the "Hedge Counterparties").

The Bridge Lenders, the Bridge Agent, the Bridge Arrangers, the Permitted Senior Secured Facility Agreement Lenders, the Permitted Senior Secured Facility Agent, the Permitted Senior Secured Facility Arrangers, the Trustee, the Hedge Counterparties, the holders of the Bonds, the Intra-Group Lenders (as defined in the Intercreditor Agreement) and the Common Security Agent are together the "Creditors".

The Intercreditor Agreement will set out, among other things:

(a) the relative ranking of certain indebtedness and security of the Debtors;

(b) when payments can be made in respect of certain indebtedness of the Debtors;

(c) when enforcement actions can be taken in respect of that indebtedness;

(d) when enforcement action can be taken in respect of the Transaction Security;

(e) the terms pursuant to which that indebtedness will be subordinated;

(f) turnover provisions;

(g) when security and guarantees will be released to permit a sale of any assets subject to transaction security; and

(h) the order for applying proceeds from enforcement action and other amounts received by the Common Security Agent.

The Intercreditor Agreement shall contain provisions relating to obligations that may be incurred including obligations to the Hedge Counterparties in respect of interest rate and foreign exchange hedging liabilities in relation to the facility made available under the Bridge Facility Agreement and the Permitted Senior Secured Facility Agreement, and not for speculative purposes (such obligations, the "Hedging Liabilities", and each finance document relating thereto, a "Hedging Agreement").

The Intercreditor Agreement will provide, for the inclusion of certain further indebtedness by way of a facility agreement that shall rank *pari passu* in right of payment and security with the Bridge Facility Agreement and the Bonds (the "Permitted Senior Secured Facility Agreement").

By accepting the Bonds, holders of the Bonds will be deemed to have agreed to, and accepted the terms and conditions of, the Intercreditor Agreement.

The following description is a summary of certain provisions that will be contained in the Intercreditor Agreement. It does not restate the Intercreditor Agreement in its entirety, and potential investors are urged to read that document because it, and not the description that follows, defines certain rights of the holders of the Bonds and of the Trustee.

Ranking and Priority

The Intercreditor Agreement will provide that the liabilities owed to the Creditors will rank in right and priority of payment in the following order and are postponed and subordinated to any such prior-ranking liabilities as follows:

(a) *first*, indebtedness under the Bridge Facility Agreement (if any) (the "Bridge Lender Liabilities"), indebtedness under the and the Permitted Senior Secured Facility Agreement (together with the Bridge Liabilities, the "Senior Lender Liabilities", indebtedness under the Bonds (the "Bond Liabilities"), amounts payable to the Hedge Counterparties in respect of the Hedging Liabilities, amounts payable to the Bridge Arrangers and the Permitted Senior Secured Facility Arrangers (collectively, the "Arranger Liabilities") and amounts payable to the Bridge Agent in connection with its duties under the Senior Finance Documents (as defined below) to which it is party, to the Permitted Senior Secured Facility Agent in connection with its duties under the Senior Finance Documents to which it is party and amounts payable to the Trustee in connection with its duties under the Bond Documents (as defined below) (collectively, "Agent Liabilities") *pari passu* and without any preference between them; and

(b) second, any present and future liabilities and obligations including any loan or other financial liabilities owed by any Debtor to any other Debtor (the "Intra-Group Liabilities").

Ranking and Priority of Security

The Intercreditor Agreement will provide that the Transaction Security shall rank and secure the Senior Lender Liabilities, the Bond Liabilities, the Arranger Liabilities, the Agent Liabilities, the Hedging Liabilities and liabilities owed to the Common Security Agent in connection with its duties under the Debt Documents (as defined in the Intercreditor Agreement), *pari passu* and without any preference between them.

Restrictions on Senior Lender Liabilities and Bond Liabilities

The Debtors may make payment in respect of the Senior Lender Liabilities and the Bond Liabilities at any time in accordance with the provisions of the applicable documents governing the terms of the Senior Lender Liabilities (the "Senior Finance Documents") and the Bond Liabilities (the "Bonds Documents") (collectively, the "Senior Secured Documents"), provided that following an acceleration event (which has not subsequently been cancelled and/or irrevocably revoked in writing) under the Senior Finance Documents or the Bond Documents, payments may only be made by the Debtors and received by Creditors in accordance with the provisions described under "*Application of Proceeds*", for Payments made in respect of guarantee liabilities owed to a creditor under the Senior Secured Documents by a Debtor or as agreed by each of the Bridge Facility Agent, Permitted Senior Secured Facility Agent and Trustee.

The Intercreditor Agreement will provide that the terms of the Senior Finance Documents and the terms of the Bond Documents may each be amended or waived in accordance with their respective terms (and subject to any consent required under them).

Restrictions on Hedging Liabilities

Prior to the later of (i) the Senior Lender Discharge Date (as defined in the Intercreditor Agreement) and the (ii) the Senior Secured Bonds Discharge Date (as defined the Intercreditor Agreement), the Debtors may not, and shall procure that no other member of the Group will, make (and no Hedge Counterparty may receive) payments in respect of the Hedging Liabilities except for certain permitted payments, which include payments as agreed under the Hedging Agreements so long as certain defaults or termination events have not occurred and those payments are not otherwise prohibited by the Intercreditor Agreement.

After an acceleration event in respect of the Senior Lender Liabilities or in respect of the Bonds Liabilities, no member of the Group may make (and no Hedge Counterparty may receive) any payment in respect of Hedging Liabilities except from enforcement proceeds or recoveries distributed in accordance with the provisions described under "*Application of Proceeds*" or as agreed by the Bridge Agent, the Permitted Senior Secured Facility Agent, the Trustee and the Hedge Counterparty.

Security and Guarantees

The Bridge Lenders, the Permitted Senior Secured Facility Lenders, the holders of the Bonds, the "Senior Secured Bondholders" (and together with the Trustee, the "Senior Secured Bond Creditors") and the Hedge Counterparties may take, accept or receive the benefit of:

(a) any security from members of the Group in respect of their liabilities in addition to the Transaction Security if (except for any security granted in respect of cash cover provided to an Issuing Bank or any security granted in favour of the Trustee (for itself and/or on behalf of the Senior Secured Bondholders) over any escrow account into which any portion of the proceeds of the Bonds are to be deposited), at the same time it is offered to secure the liabilities of the Debtors to the extent required or legally possible under the Senior Secured Documents and the Hedging Agreements; and

(b) any guarantee, indemnity or other assurance against loss from any member of the Group in respect of the Bridge Lender Liabilities, the Hedging Liabilities or the Bonds Liabilities in addition to those in the original form of the Bridge Facility Agreement, the Permitted Senior Secured Facility Agreement or the Trust Deed, the Intercreditor Agreement or any common assurance, if (except for any guarantee, indemnity or assurance for loss provided to an issuing bank in respect of cash cover provided to that Issuing Bank) at the same time it is offered to secure the liabilities of the Debtors to the extent required or legally possible under the Senior Secured Documents and the Hedging Agreements.

Enforcement of Transaction Security, Enforcement Instructions and Consultation

Instructions to enforce — consultation

Subject to the next paragraph below, before giving any instructions to the Common Security Agent to enforce the Transaction Security or to take any other enforcement action to instigate or effect a Distressed Disposal, the Bridge Agent, the Permitted Senior Secured Agent and the Trustee (the "Agents") shall consult with the Bridge Lenders, the Permitted Senior Secured Lenders and the Senior Secured Bondholders in good faith about the instructions to be given by the Instructing Group (as defined below) for a period of not less than 10 Business Days (or such shorter period as each such Agent and the Common Security Agent shall agree) (the "Consultation Period"), and only following the expiry of a Consultation Period, shall the Instructing Group be entitled to give any instructions to the Common Security Agent to enforce the Transaction Security or to take any other enforcement action to instigate or effect a Distressed Disposal.

No Agent shall be obliged to consult in accordance with the immediately preceding paragraph and the Instructing Group shall be entitled to give any instructions to the Common Security Agent to enforce the Transaction Security or to take any other enforcement action to instigate or effect a Distressed Disposal prior to the end of a Consultation Period if:

(a) the Transaction Security has become enforceable as a result of an insolvency event in respect of any Debtor (other than an insolvency event that arose as a result of any action by the Creditors represented in the Instructing Group concerned); or

(b) Bridge Lenders and the Permitted Senior Secured Facility Lenders whose senior credit participations aggregate more than comprising 66⅔% (collectively, the "Majority Senior Lenders") or the Senior Secured Bondholders (acting through the Trustee in accordance with the Trust Deed) whose outstanding Bonds at that time aggregate more than 50% of the total outstanding Bonds at that time (the "Majority Senior Secured Bondholders") determine in good faith (and notify each Agent) that to enter into such consultations and thereby delay the commencement of enforcement of the Transaction Security could reasonably be expected to have a material adverse effect on:

   (i) the Common Security Agent's ability to enforce any of the Transaction Security; or

   (ii) the amount of proceeds likely to be realized from any enforcement of the Transaction Security; or

(c) the Instructing Group for this purpose is Majority Senior Creditors (as defined below) and the Majority Senior Secured Bondholders (the "Majority Senior Secured Creditors").

Enforcement Instructions

The Common Security Agent may refrain from enforcing the Transaction Security unless instructed otherwise by the Instructing Group following the Transaction Security having become enforceable in accordance with its terms.

The Instructing Group may give instructions to the Common Security Agent to enforce the Transaction Security as they see fit, provided that if the Instructing Group has given instructions to the Common Security Agent to refrain from enforcing the Transaction Security or any part of it (the "Relevant Transaction Security"), the Common Security Agent shall only give effect to instructions to refrain from enforcing the Relevant Transaction Security if those instructions are given by the Majority Senior Secured Creditors.

For the purposes of this section:

"**Instructing Group**" means:

(a) in relation to instructions to the Common Security Agent with respect to enforcement of Transaction Security:

(i) those Bridge Lenders, Permitted Senior Secured Lenders and Hedge Counterparties whose senior credit participations (as defined in the Intercreditor Agreement) at that time aggregate more than $66\frac{2}{3}\%$ of the total senior credit participations (as defined in the Intercreditor Agreement) at that time (the "Majority Senior Creditors"); or

(ii) the Majority Senior Secured Bondholders (acting through the Trustee),

subject to, for the avoidance of doubt, the proviso in the second paragraph under "— *Enforcement Instructions*" above and **further provided that**, if both the Majority Senior Creditors and the Majority Senior Secured Bondholders provide instructions to the Common Security Agent to enforce Transaction Security (including, for the avoidance of doubt, if such instructions are provided on or after the Consultation Period), the Instructing Group for the purposes of this paragraph shall be the Majority Senior Secured Creditors (through, where applicable, their respective Agents); or

(b) in relation to any other matters, the Majority Senior Secured Creditors (acting through their respective Agents).

The Common Security Agent, without further enquiry, is entitled to rely on and comply with instructions given, or deemed to be given, by an Instructing Group.

No Secured Party (as defined in the Intercreditor Agreement) shall have any independent power to enforce, or to have recourse to, any Transaction Security or to exercise any rights or powers arising under the Transaction Security Documents except through the Common Security Agent.

Release of the Guarantees and the Security — Non-distressed disposal

In circumstances in which a disposal to a person is permitted or not prohibited under the relevant financing documents and is *not* being effected:

(a) at the request of the Instructing Group in circumstances in which the security has become enforceable in accordance with the relevant debt documents,

(b) by the enforcement of security in accordance with relevant debt documents, or

(c) after an acceleration event in respect of the Senior Lender Liabilities or in respect of the Bonds Liabilities has occurred ((b) and (c), a "Distress Event" and a disposal in the circumstances of (a), (b) or (c), a "Distressed Disposal"), the Intercreditor Agreement will provide that the Common Security Agent is authorised to release the security interests over that asset and, if the relevant asset consists of shares in the capital of a Debtor, to release the security interests and any other claim including, without limitation, any guarantee or surety obligations owed to a

Creditor under the debt documents and other obligations (not being borrowing liabilities or guarantee liabilities) owed to the Bridge Agent, the Trustee, any Bridge Arranger under the debt documents or to an Intra-Group Lender (as defined in the Intercreditor Agreement) or Debtor, over that Debtor or its assets and (if any) the shares in and assets of any of its subsidiaries and to execute and deliver or enter into any release of the security or any claim in respect of the foregoing and issue any certificates or any consent to dealing with such release, provided that, in each case, the release of security interests will only be effective upon the making of the disposal.

Release of the Guarantees and the Security — Distressed Disposal and Appropriation

Where a Distressed Disposal or an Appropriation (as defined in the Intercreditor Agreement) of an asset is being effected, the Intercreditor Agreement will provide that the Common Security Agent is authorised:

(a) to release the security interests, or any other claim over the relevant asset and execute and deliver or enter into any release of that asset or claim and issue any letters of non-crystallization of any floating charge or any consent to dealing;

(b) if the asset that is disposed of consists of shares in the capital of a Debtor, to release that Debtor and any subsidiary of that Debtor from all or any part of the liabilities under the Senior Secured Documents and certain other liabilities, security granted by that Debtor (or any subsidiary of that Debtor) or any Intra-Group Liabilities;

(c) if the asset that is disposed of consists of shares in the capital of a holding company of a Debtor, to release that holding company and any subsidiary of that holding company from all or any part of the liabilities under the Senior Secured Documents and certain other liabilities, security granted by that holding company (or any subsidiary of that holding company) or any Intra-Group Liabilities;

(d) if the asset that is disposed of consist of shares in the capital of a Debtor (or a holding company of a Debtor) and the disposal is on the basis that the transferee will not be treated as a Senior Secured Creditor or secured party under the Intercreditor Agreement, to dispose of all or any part of the liabilities of such Debtor (or holding company or any subsidiary of such Debtor or holding company) under the Senior Secured Documents and certain other liabilities owed by such Debtor (or holding company or any subsidiary of such Debtor);

(e) if the asset that is disposed of consists of shares in the capital of a Debtor (or a holding company of a Debtor) and the disposal is on the basis that the transferee will be treated as a Senior Secured Creditor and secured party under the Intercreditor Agreement, to dispose of all but not part of the liabilities of such Debtor (or holding company of a Debtor or subsidiary of such Debtor) under the Senior Secured Documents and certain other liabilities owed by that Debtor or holding company or any subsidiary of that holding company; and

(f) if the asset that is disposed of consists of shares in the capital of a Debtor (or a holding company of a Debtor) (the "Disposed Entity") and the Common Security Agent decides to transfer to another Debtor all or any part of the Disposed Entity's obligations or any obligations of any subsidiary of the Disposed Entity in respect of the Intra-Group Liabilities or certain other liabilities owed by the Disposed Entity to another Debtor, to agree to transfer the obligations in respect of those liabilities to the other Debtor.

The net proceeds from each Distressed Disposal (and any disposal of liabilities pursuant to paragraphs (d), (e) and (f) above) shall be paid to the Common Security Agent for application in accordance with the provisions described under "*Application of Proceeds*" as if those proceeds were an enforcement of the security. If a Distressed Disposal is being effected such that borrowing liabilities, guarantee liabilities or security will be released, it is a further condition to such release that the Common Security Agent shall take reasonable care to obtain a fair market price in the prevailing market conditions (though the Common Security Agent shall not have any obligation to postpone any such Distressed Disposal or disposal of Liability in order to achieve a higher price and shall in any event not be liable to any party for the actual price obtained).

Turnover

The Intercreditor Agreement will provide that if any Creditor receives or recovers any payments or proceeds which are not permitted under the terms thereof or not permitted in respect of liabilities owed to such Creditor after a Distress Event, as a result of litigation or proceedings against a member of the Group (other than after the occurrence of an Insolvency Event in respect of that member of the Group) or by way of set-off or the proceeds of the enforcement of any security, in each case, except in accordance with the order described under "*Application of Proceeds*" it shall:

(a) in relation to receipts or recoveries not received or recovered by way of set-off (i) hold that amount on trust for the Common Security Agent and promptly pay that amount or an amount equal to that amount to the Common Security Agent for application in accordance with the terms of the Intercreditor Agreement, and (ii) promptly pay an amount equal to the amount (if any) by which receipt or recovery exceeds the relevant liabilities owed to such Creditor to the Common Security Agent for application in accordance with the terms of the Intercreditor Agreement; and

(b) in relation to receipts and recoveries received or recovered by way of set-off, promptly pay an amount equal to that recovery to the Common Security Agent for application in accordance with the terms of the Intercreditor Agreement.

Mandatory prepayments

If any proceeds of a non-Distressed Disposal or any other mandatory prepayment (including, for the avoidance of doubt, the net proceeds of any dividends, distributions, equity or debt issuance or borrowing) are required to be applied in mandatory prepayment (and whether or not such mandatory prepayment has been made on or prior to a Distress Event) under the Bridge Facility Agreement, the Permitted Senior Secured Facility Agreement and/or Bonds then those proceeds shall be applied in or towards payment of:

(i) *first*, to the extent required to be applied to the Facility (as defined in the Bridge Facility Agreement) in priority to the Facility (as defined in the Permitted Senior Secured Facility Agreement), the Facility (as defined in the Bridge Facility Agreement) in accordance with the terms of the Bridge Facility Agreement or otherwise, where not required to be applied in priority to the Facility (as defined in the Permitted Senior Secured Facility Agreement), the Facility (as defined in the Permitted Senior Secured Facility Agreement);

(ii) *second*, to the extent not required to be applied to the Facility (as defined in the Bridge Facility Agreement) in priority to the Facility (as defined in the Permitted Senior Secured Facility Agreement), the Facility (as defined in the Permitted Senior Secured Facility Agreement) in accordance with the terms of the Permitted Senior Secured Facility Agreement or otherwise, where required to be applied in priority to the Facility (as defined in the Permitted Senior Secured Facility Agreement), the Facility (as defined in the Bridge Facility Agreement); and

(iii) then, after the discharge date of the Bridge Facility Agreement and the Permitted Senior Secured Facility Agreement, the Senior Secured Bonds in

accordance with the terms of the Trust Deed, and the consent of any other party to the Intercreditor Agreement shall not be required for that application.

Application of Proceeds

The Intercreditor Agreement will provide that amounts received from the realisation or enforcement of all or any part of the security or other amounts paid to the Common Security Agent for application as described below will be applied in the following order of priority:

(a) *first,* in discharging any sums owing to each Agent (in respect of the Agent Liabilities), the Common Security Agent and any receiver or any delegate on a *pari passu* basis;

(b) *second,* in payment of all costs and expenses incurred by the Agents (other than, in each case Agent Liabilities paid pursuant to paragraph (a) above), the Common Security Agent, the Bridge Lenders, the Permitted Senior Secured Facility Lenders, the Hedge Counterparties or the Senior Bond Creditors in connection with any realisation or enforcement of the Transaction Security taken in accordance with the terms of the Intercreditor Agreement or any action taken at the request of the Common Security Agent;

(c) *third*, in payment or distribution to the Bridge Agent on its own behalf and on behalf of the Bridge Arrangers and the Bridge Lenders, the Permitted Senior Secured Facility Agent on its own behalf and on behalf of the Permitted Senior Secured Facility Arrangers and the Permitted Senior Secured Facility Lenders, the Trustee on its own behalf and on behalf of the other Senior Secured Bondholders and the Hedge Counterparties for application towards the discharge of (i) the Arranger Liabilities and the Senior Lender Liabilities under the Bridge Facility Agreement, (ii) the Arranger Liabilities and the Senior Lender Liabilities under the Permitted Senior Secured Facility Agreement, (iii) the Bond Liabilities and (iv) the Hedging Liabilities, on a *pro rata* basis ranking *pari passu* between items (i) through (iv) above;

(d) *fourth,* if none of the Debtors is under any further actual or contingent liability under any Senior Secured Documents, in payment of distribution to any other person to whom the Common Security Agent is obliged to pay under applicable law in priority to any Debtor; and

(e) *fifth*, in payment of the balance (if any) to the relevant Debtor.

Consents, Amendments and Override

In addition to customary minor, technical or administrative matter amendments by the Company, the Common Security Agent, the Agents, the Intercreditor Agreement will provide that it may be amended only with the consent of the requisite number of Bridge Lenders under the Bridge Facility Agreement, the requisite number of Permitted Senior Secured Facility Lenders under the Permitted Senior Secured Facility Agreement, the requisite number of creditors in respect of the Bonds, the Agents, the Common Security Agent and the Company unless it is an amendment, waiver or consent that has the effect of changing or that relates to: (i) any amendment to the order of priority or subordination set forth in the Intercreditor Agreement; or (ii) any amendment to the application of proceeds, redistribution, enforcement or amendment provisions set forth in the Intercreditor Agreement, which shall not be made without the consent of:

(a) the Common Security Agent;

(b) the Bridge Agent;

(c) the Bridge Lenders;

(d) the Permitted Senior Secured Facility Agent;

(e) the Trustee;

(f) the Senior Secured Bond Creditors (to the extent that the amendment or waiver would adversely affect such creditors);

(g) each Hedge Counterparty (to the extent that such amendment or waiver would adversely affect the rights of such Hedge Counterparty); and

(h) the Company.

Governing Law

The Intercreditor Agreement is governed by English law.

Bond Escrow Agreement

Following the settlement of the Bonds, the gross proceeds of the Bonds will be deposited directly into the Bond Escrow Account opened with an internationally recognised bank which has an investment grade rating with an affiliate licensed and regulated in Mauritius (the "Bond Escrow Account Bank") on the Closing Date under the terms of an escrow account agreement (the "Bond Escrow Agreement") between the Issuer and the Bond Escrow Account Bank. The Bond Escrow Agreement will provide, amongst other things for:

(a) the opening and maintenance of the Bond Escrow Account with the Bond Escrow Account Bank;

(b) the transfer of the gross proceeds from the Bonds into the Bond Escrow Account;

(c) any refund from the India Escrow Account, if available, or any surplus cash transferred from the Bond Escrow Account to the India Escrow Account. Such refunds shall only be paid into the Bond Escrow Account to the exclusion of any other account;

(d) the permitted withdrawals from the Bond Escrow Account;

(e) conditions to be satisfied and confirmed by an authorised officer of the Issuer for any authorised withdrawal from the Bond Escrow Account to occur (including but not limited to the Issuer providing a certificate (the form of which will be mutually agreed between the parties) to the Bond Escrow Account Bank and the beneficiaries of the Bond Escrow Charge, confirming the entry into and completion of the conditions precedents under the Bridge Facility Agreement and that the Approval In Principle have been received);

(f) if the Issuer elects to make a cash deposit in the India Escrow Account in accordance with the Delisting Regulations using the gross proceeds from the Bond Escrow Account, (i) the payment from the India Escrow Account into the Bond Escrow Account of any surplus from such deposit which may be available as soon as practically possible after the completion of payment obligations under the Delisting Regulations if the Take Private Transaction is successful in accordance with the Delisting Regulations or (ii) the refund of such cash deposit to the Bond Escrow Account as soon as practically possible in case (1) of failure of the Take Private Transaction in accordance with the Delisting Regulations, including on account of the Parent Guarantor and/or the Issuer and/or Vedanta Holdings Mauritius Limited not accepting the final offer price (as determined as per the reverse book building mechanism as specified in the Delisting Regulations) within five Working Days after the closure of the RBB Period or if a counter offer has been made in accordance with the Delisting Regulations, the counter offer price has not been accepted by the Public Shareholders in accordance with the Delisting Regulations; or (2) the Acquisition Date has not occurred within 90 days from the Closing Date, whichever is earlier; and

(g) the acknowledgment by the Bond Escrow Account Bank of the security rights created over the Bond Escrow Account under the Bond Escrow Charge by the Issuer in favour of (i) the Trustee; and/or (ii) the CG Issuing Bank in the event the Issuer elects to fund the India Escrow Account through a bank guarantee issued by the Issuing Bank in favour of the manager to the Take Private Transaction.

The Bond Escrow Agreement will be stipulated for the benefit of the Trustee and, in the event that the Issuer elects to fund the India Escrow Account through a bank guarantee issued by the Issuing Bank in favour of the manager to the Take Private Transaction, the CG Issuing Bank, in each case, who will be entitled, individually, to all rights and benefits under the Bond Escrow Agreement and to enforce any terms of thereof.

Payments

Subject to the receipt of a letter from the Issuer by the Trustee and the Bond Escrow Account Bank (the form of which will be mutually agreed between the Issuer and the Bond Escrow Account Bank) confirming the entry into and completion of the conditions precedents under the Bridge Facility Agreement and the receipt of the Approval In Principle, the Bond Escrow Account Bank will authorise payments out of the Bond Escrow Account, upon receipt of a withdrawal request (accompanied by such other confirmation or supporting documents as applicable) from the Issuer:

(a) if elected by the Issuer, deposit the cash into the India Escrow Account in accordance with the Delisting Regulations; or

(b) fund the Take Private Transaction (including completion of all payment obligations as specified under the Delisting Regulations) and to apply any balance available in the Bond Escrow Account after a completion of all payments obligations as specified under the Delisting Regulations, and in case the Take Private Transaction is successful in accordance with the Delisting Regulations, to fund a proposed tender offer of the 2021 Bonds or a repayment of the 2021 Bonds at maturity.

Discharge

If (i) Approval In Principle is not received by 5 October 2020 (being 45 days after the Closing Date), or (ii) the Parent Guarantor and/or the Issuer and/or Vedanta Holdings Mauritius Limited, as the case may be, do not accept the final offer price (as determined as per the reverse book building mechanism as specified in the Delisting Regulations) within five Working Days after the closure of the RBB Period or, if a counter offer has been made in accordance with the Delisting Regulations, the counter offer price has not been accepted by the Public Shareholders in accordance with the Delisting Regulations, or (iii) the Acquisition Date has not occurred by 19 November 2020 (being 90 days after the Closing Date), or (iv) Vedanta Holdings Mauritius Limited fails, having used commercially reasonable efforts, to enter into the Bridge Facility Agreement and the Permitted Senior Secured Facility Agreement or to satisfy the conditions to Incur Bridge Loans and PSSFA Loans in an amount sufficient, when taken together with the proceeds from the offering of the Bonds, to consummate the Take Private Transaction, the Bond Escrow Account Bank will authorise payments out of the Bond Escrow Account, upon receipt of a withdrawal request from the Issuer (accompanied by such other confirmation or supporting documents as applicable) to fund the Special Mandatory Redemption.

Enforcement

In case of enforcement of the Bond Escrow Charge, (i) an enforcement notice from the Trustee or, (ii) an enforcement notice from the CG Issuing Bank, in the event the Issuer elects to fund the India Escrow Account through a bank guarantee issued by the Issuing Bank in favour of the manager to the Take

Private Transaction, funds will be permitted to be withdrawn from the Bond Escrow Account to discharge any liabilities owed to the Trustee or the CG Issuing Bank (as the case may be) under the Bond Escrow Charge.

Termination

The Bond Escrow Agreement will be terminated, and the Bond Escrow Account closed when the Bond Escrow Account Bank will be under no actual or contingent obligation to make a payment under the terms of the agreement.

Governing Law

The Bond Escrow Agreement is governed by the laws of Mauritius.

Collateral Documents

Common Collateral

The obligations of the Issuer with respect to the Bonds and the performance of all other obligations of the Issuer and the Bridge Borrower under the Bridge Facility Agreement will be secured by the following security package (the "Common Collateral"):

(1) a first-priority share pledge and floating charge by Vedanta Jersey (the "Share Security Document") over the entire Capital Stock issued by the Issuer and the Bridge Borrower (the "Share Collateral"); and

(2) a first-priority bank accounts pledge by (i) the Issuer over its operative bank accounts held in Mauritius and (ii) by the Bridge Borrower over its operative bank accounts held in Mauritius and the Mandatory Prepayment Account (as described in the Bridge Facility Agreement), this security expressly excludes the Bond Escrow Account of the Issuer and the India Escrow Account (the "Accounts Pledge Document");

The Share Security Document and the Accounts Pledge Document are collectively referred to as the "Common Collateral Documents"), the Share Collateral and the accounts given as security under the Account Pledge Document are collectively referred to as the "Common Collateral").

Rights of the Common Collateral Agent under the Common Collateral Documents

The Common Security Agent in accordance with the Intercreditor Agreement (as defined below) will distribute funds distributed under the Common Collateral Documents in connection with the Common Collateral and received by the Common Security Agent for the benefit of the Senior Secured Bond Creditors, Bridge Arrangers, the Bridge Lenders, the Permitted Senior Secured Facility Arrangers, the Permitted Senior Secured Facility Lenders and the Hedge Counterparties.

The Common Security Agent has the exclusive right to manage, perform and enforce the terms of the Common Collateral Documents. The Common Security Agent has the exclusive right, with respect to the Common Collateral, to exercise and enforce all privileges, rights and remedies thereunder according to its direction, including to take or retake control or possession of such Collateral and to hold, prepare for sale, process, lease, dispose of or liquidate such Collateral, including, without limitation, following the occurrence of an Event of Default and acceleration of amounts due under the Bonds or Bridge Facility Agreement in accordance with the provisions described in the sections entitled "*Terms and Conditions of the Bonds — Events of Default*" and "*Description of Certain Financing Arrangements — Bridge Facility Agreement — Events of Default*", respectively.

Share Security Document

Vedanta Jersey will provide security by way of first ranking pledge and floating charge over 100% of the Capital Stock of the Issuer and Vedanta Mauritius in favour of the Common Security Agent to secure the Bonds and the Bridge Facilities.

Upon execution of the Share Security Document, Vedanta Jersey shall remit to the Common Security Agent, amongst other things (i) original share certificates and (ii) signed and undated blank share transfer instruments in respect of the Share Collateral.

Prior to an acceleration

So long as no acceleration of amounts due under the Bonds or the Bridge Facility Agreement in accordance with the provisions described in the sections entitled "*Terms and Conditions of the Bonds — Events of Default*" and "*Description of Certain Financing Arrangements — Bridge Facility Agreement — Events of Default*", respectively. has occurred, Vedanta Jersey will be entitled to receive all dividend payments or other distributions or interest payments in respect of the Share Collateral or of the proceeds of any claim it may have against the Issuer and/or the Bridge Borrower to the extent permitted by, and made in accordance with, the terms of the debt documents and to exercise any voting and other consensual rights pertaining to the Share Collateral.

Upon an acceleration

Upon the occurrence and during the continuance of an Event of Default and acceleration of amounts due under the Bonds or the Bridge Facility Agreement in accordance with the provisions described in the sections entitled "*Terms and Conditions of the Bonds — Events of Default*" and "*Description of Certain Financing Arrangements — Bridge Facility Agreement — Events of Default*", respectively:

(1) all rights of Vedanta Jersey to receive all dividend payments or other distributions or interest payments in respect of the Share Collateral and of the proceeds of any claim it may have against the Issuer and/or the Bridge Borrower will cease, and such cash dividends, interest and other payments will be paid to the Common Security Agent; and

(2) all voting or other consensual rights pertaining to the Share Collateral will become vested solely in the Common Security Agent, as applicable, and the right of Vedanta Jersey to exercise any such voting and consensual rights will cease;

Governing Law

The Share Security Document is governed by the laws of Mauritius.

Accounts Pledge Document

The Issuer and the Bridge Borrower will provide security over (i) the Issuer's operative bank accounts held in Mauritius (other than the India Escrow Account, Bridge Escrow Account and the Bond Escrow Account) and (ii) by the Bridge Borrower's operative bank accounts held in Mauritius and the Mandatory Prepayment Account (as described in the Bridge Facility Agreement), in favour of the Common Security Agent to secure the Bonds and the Bridge Facilities.

Upon execution of the Accounts Pledge Document, notices of pledge will be issued upon the relevant account banks.

Prior an acceleration

So long as no acceleration of amounts due under the Bonds or the Bridge Facilities in accordance with the provisions described in the sections entitled "*Terms and Conditions of the Bonds — Events of Default*" and "*Description of Certain Financing Arrangements — Bridge Facility Agreement — Events of Default*", respectively has occurred, the Issuer and the Bridge Borrower will be entitled to freely dispose of any amount standing to the credit of their operative bank accounts held in Mauritius.

No withdrawals will be permitted from the mandatory prepayment account (as described in the Bridge Facility Agreement) other than in accordance with the Bridge Facility Agreement.

The Bond Escrow Account does not fall under the scope of the Accounts Pledge Agreement.

Upon an acceleration

Upon the occurrence and during the continuance of an Event of Default and acceleration of amounts due under the Bonds or the Bridge Facility Agreement in accordance with the provisions described in the sections entitled "*Terms and Conditions of the Bonds — Events of Default*" and "*Description of Certain Financing Arrangements — Bridge Facility Agreement — Events of Default*", respectively the Issuer and the Bridge Borrower will not be permitted to make any withdrawals from their operative bank accounts held in Mauritius and the mandatory prepayment account (as described in the Bridge Facility Agreement) without the written consent of the Common Security Agent.

Governing Law

The Accounts Pledge Agreement is governed by the laws of Mauritius.

Bond Escrow Charge

The Bond Collateral comprises of a first priority pledge over the Bond Escrow Account, subject to the terms of the Bond Escrow Charge.

If the Issuer elects to fund the India Escrow Account through a cash deposit, subject to the receipt of a letter from the Issuer by the Trustee and the Bond Escrow Account Bank (the form of which will be mutually agreed between the Issuer and the Bond Escrow Account Bank) confirming the entry into and completion of the conditions precedents under the Bridge Facility Agreement and the Approval In Principle, a designated amount of the proceeds from the Bonds proceeds will be transferred from the Bond Escrow Account to the India Escrow Account which can be routed through designated hedging bank(s). The Bond Collateral will secure the Bonds solely in favour of the Trustee until (i) the funds in the Bond Escrow Account have been transferred to the India Escrow Account and applied to the Take Private Transaction and any surplus (whether standing in the Bond Escrow Account or returned into the Bond Escrow Account from the India Escrow Account) thereafter has been applied to the 2021 Bonds or (ii) proceeds transferred to the India Escrow Account have been return into the Bond Escrow Account and together with any amounts standing in the Bond Escrow Account have been paid back to the Bondholders pursuant to the Special Mandatory Redemption, whichever is the earlier.

If the Issuer elects to fund the India Escrow Account through a bank guarantee issued by the **Issuing Bank** in favour of the manager to the Take Private Transaction in accordance with the Delisting Regulations, such bank guarantee shall be secured by way of a counter bank guarantee from the **CG Issuing Bank** to which the counter bank guarantee shall be secured by the Bond Collateral via a Bond Escrow Charge, subject to the receipt of a letter from the Issuer by the Trustee and the Bond Escrow Account Bank (the form of which will be mutually agreed between the Issuer and the Bond Escrow Account Bank) confirming the entry into and completion of the conditions precedents under the Bridge Facility Agreement and the Approval In Principle. The Bond Collateral will then be granted by the Issuer in favour of the Trustee and the CG Issuing Bank as follows:

(a) in favour of the Trustee from the date of the Bond Escrow Charge until the date of issue of the Approval In Principle Date;

(b) in favour of the CG Issuing Bank from the Approval In Principle Date until the Bank Guarantee Release Date; and

(c) in favour of the Trustee from the Release Date until the funds in the Bond Escrow Account have been transferred to the India Escrow Account which can be routed through designated hedging bank(s) and applied to the Take Private Transaction and any surplus thereafter has been applied to the 2021 Bonds or proceeds have been paid back to the Bondholders under the Special Mandatory Redemption, whichever is the earlier.

Rights of the Trustee/the CG Issuing Bank under the Bond Escrow Charge

Subject to holding the benefit of the Bond Collateral at the relevant time, the Trustee or the CG Issuing Bank (as applicable), may appropriate, distribute or sell the Bond Collateral or any part of the Bond Collateral in accordance with the terms of the Bond Escrow Charge, subject to the provisions of applicable law.

The Bond Escrow Charge provide that:

(a) at any time while the Bonds are outstanding (except for the period of time when the bank guarantee will be in issue and the Bond Collateral will benefit only the CG Issuing Bank if the Issuer elects to fund the India Escrow Account through a bank guarantee issued by the Issuing Bank in favour of the manager to the Take Private Transaction), the Trustee will have the sole and exclusive right to manage, perform and enforce the terms of the Bond Escrow Charge, to exercise and enforce all privileges, rights and remedies thereunder according to its direction, including to take or retake control or possession of the Bond Collateral and to hold, prepare for sale, process, lease, dispose of or liquidate such Collateral, including, without limitation, following the occurrence of an event of default under the provisions of the Bond Escrow Charge. The CG Issuing Bank shall have no such rights during that period; and

(b) If the Issuer elects to fund the India Escrow Account through a bank guarantee issued by the CG Issuing Bank in favour of the manager to the Take Private Transaction, from the Approval In Principle Date until the Bank Guarantee Release Date, the CG Issuing Bank will have the sole and exclusive right to manage, perform and enforce the terms of the Bond Escrow Charge, to exercise and enforce all privileges, rights and remedies thereunder according to its direction, including to take or retake control or possession of the Bond Collateral and to hold, prepare for sale, process, lease, dispose of or liquidate the Bond Collateral, including, without limitation, following the occurrence of an event of default under the provisions of the Bond Escrow Charge. The Trustee shall have no such rights during that period.

Notwithstanding the Bond Escrow Charge, the transfer of proceeds from the Bond Escrow Account to the India Escrow Account for the purpose of the Take Private Transaction, shall be subject to the provisions of the Bond Escrow Agreement. For avoidance of doubt, no charge shall be created over the India Escrow Account or the deposits lying therein.

Prior to an acceleration

Prior to an event of default under the Bond Escrow Charge, only the Issuer shall operate the Bond Escrow Account in accordance with the Bond Escrow Agreement.

Upon an acceleration

Upon the occurrence and during the continuance of an event of default under the Bond Escrow Charge, the Issuer will not be permitted to make any withdrawals from the Bond Escrow Account. The Trustee or the CG Issuing Bank (if the Issuer elected to fund the India Escrow Account through a bank guarantee issued by the Issuing Bank in favour of the manager to the Take Private Transaction) as the case may be, will be entitled to enforce the Bond Collateral by appropriating the funds standing to the credit of the Bond Escrow Account and distribute them in accordance with the Bond Escrow Charge. If the Issuer has not elected to fund the India Escrow Account through a bank guarantee issued by the Issuing Bank in favour of the manager to the Take Private Transaction, only the Trustee will benefit of the above rights.

Governing Law

The Bond Escrow Charge is governed by the laws of Mauritius.

MANAGEMENT

The following table sets forth certain information regarding Company's Directors and executive officers and senior management as of 30 June 2020.

Name	Nationality	Age	Position
Board of Directors[(1)]			
Anil Agarwal	Indian	67	Executive Chairman
Navin Agarwal	Indian	59	Executive Vice Chairman
Geoffrey Green	British	70	Non-Executive Director
Deepak Parekh	Indian	75	Non-Executive Director
Ravi Rajagopal	British	65	Non-Executive Director
Edward Story	American	77	Non-Executive Director
Executive Committee			
Sunil Duggal	Indian	57	Chief Executive Officer, Vedanta Limited
Arun Kumar GR	Indian	47	Chief Financial Officer
Sharad Kumar Gargiya	Indian	47	Chief Commercial Officer, Group
Madhu Srivastava	Indian	46	Chief Human Resources Officer, Group
Dilip Golani	Indian	53	Director, Management Assurance
Arun Mishra	Indian	57	Deputy Chief Executive Officer, HZL
Laxman Shekhawat	Indian	52	Anchor, Zinc International Division and CMT
Pankaj Kumar	Indian	51	Chief Executive Officer, Vedanta Limited Copper
Andrew Lewin	Australian	60	Head, Group Health, Safety, Environment and Sustainability
James Cartwright	British	48	Head — Investor Relations
Sauvick Mazumdar	Indian	49	Chief Executive Officer, Iron Ore Business
Ajay Kapur	Indian	53	Chief Executive Officer, Aluminium and Power
Rahul Sharma	Indian	46	Chief Executive Officer, Alumina
Pankaj Malhan	Indian	46	Chief Executive Officer, ESL
Vikas Sharma	Indian	54	Chief Executive Officer, TSPL
Abhijit Pati	Indian	55	Chief Executive Officer, BALCO
Chhavi Nath Singh	Indian	58	Chief Executive Officer, Jharsuguda
Roma Balwani	Indian	61	Director, Communications & Brand
Dhiraj Nayyar	Indian	44	Director, Economics & Policy
Vineet Bose	Indian	43	SPOC, Group Legal
Leena Verenkar	Indian	49	Head — CSR

Note:

(1) On 31 March 2020, Ekaterina Zotova resigned from her position as Non-Executive Director of the Company. On 5 April 2020, Mr Srinivasan Venkatakrishnan resigned from his position as Chief Executive Officer and Director of the Company.

Directors and Senior Management

Other than those interests and relationships disclosed in "*Principal Shareholders*" and "*Related Party Transactions*", no conflicts of interest exist between the private interests of the management team and the interests of the Company.

Directors

The Company's Board is chaired by Mr. Anil Agarwal. The other members of the Board are Messrs. Navin Agarwal, Geoffrey Green, Deepak Parekh, Ravi Rajagopal and Edward Story. The business address of each of the Directors is 30 Berkeley Square, London WIJ 6EX.

Executive Directors

Mr Anil Agarwal was appointed to the Board in May 2003 and became the Executive Chairman in March 2005. He founded Vedanta in 1976 and under his stewardship, Vedanta has grown from an Indian domestic miner into a global natural resources group with a world-class portfolio of large, diversified and structurally low-cost assets. With over four decades of strategic experience, Mr Agarwal has led Vedanta which has grown its annual revenues from $1 million to over $11 billion. Vedanta has invested over $30 billion in India and South Africa on organic growth projects, and created a diversified portfolio of oil and gas, zinc, silver, copper, iron ore, aluminium and steel. His entrepreneurial style of identifying and turning around companies has led Vedanta's expansive and profitable growth. Mr Agarwal is committed to eradication of poverty through development initiatives within the communities in which Vedanta operates. He is passionate about safety and sustainable development and nurturing talent within the organisation. Mr Agarwal plays the role of chief mentor to a talent pool of over 100,000 direct and indirect employees.

Mr Agarwal created the philanthropic arm of Vedanta, The Vedanta Foundation, with a deep-seated belief that businesses must give back to the society and help them prosper. He has pledged 75% of his wealth for social good. He initiated the Nandghar project which aims to transform the lives of 20 million women and 85 million children by providing them holistic development opportunities. Mr Anil Agarwal is also the Chairman of Vedanta Limited, non-executive chairman of Sterlite Technologies Limited, chairman of Black Mountain Mining Limited and director of Conclave PTC Limited.

Mr Navin Agarwal joined the board in November 2004 and became Vice Chairman in June 2005. With more than 35 years of strategic executive experience, Mr Agarwal spearheads Vedanta's growth strategy through a mix of organic projects and acquisitions. He has led Vedanta's commitment to the highest standards of corporate governance and enhanced engagement with key stakeholders. Mr Agarwal is passionate about mentoring talent and has created a culture of excellence through use of advanced technologies and global best practices. He plays a pivotal role in providing direction for development of the top leadership talent at Vedanta. Mr Agarwal has been a votary of sustainable development and is committed to women empowerment and promotion of sports at all levels. Mr Agarwal was formerly the Chairman of Vedanta Limited and chairman of Cairn India Limited until its merger with Vedanta Limited.

Non-Executive Directors

Mr Geoffrey Green was appointed to the Board in August 2012. He is also the Chairman of the Company's Remuneration Committee and a member of the Audit Committee. Mr Green has a wealth of knowledge in respect of UK corporate governance, regulatory and strategic matters, with many years of legal and commercial experience advising major UK listed companies on corporate and governance issues, mergers and acquisitions and corporate finance. He was formerly a partner of the leading international law firm, Ashurst LLP from 1983 to 2013 and served as Ashurst's senior partner and chairman of its management board for 10 years until 2008. He was subsequently appointed as head of the firm's expanding Asian practice from 2009 to 2013, based in Hong Kong. Mr Green is currently also the non executive chairman of the Financial Reporting Review Panel, one of the main subsidiary bodies of the Financial Reporting Council and an independent non-executive director of Pharos Energy plc. He has a degree in law from Cambridge University and qualified as a solicitor at Ashurst LLP.

Mr Deepak Parekh is the chairman of Housing Development Finance Corporation, India's leading financial services conglomerate with a presence in banking, asset management, life insurance, general insurance, real estate, venture funds and education loans. He was appointed to the Board in June 2013. He is also the non-executive chairman of Siemens Ltd, India and serves as a director on the Boards of National Investment and Infrastructure Fund (NIIF), Fairfax Holdings Corporation and DP World. In addition, he is on the Indian advisory boards of Coca Cola India and Accenture and international advisory boards of Nomura Holdings Inc and Warburg Pincus LLC. Mr Parekh was the first international recipient of the Institute of Chartered Accounts in England and Wales outstanding achievement award in 2010. He received the Padma Bhushan in 2006, Knight in the Order of the Legion of Honour in 2010 and the Bundesverdienstkreuz. Mr Parekh is the Company's Senior Independent Director and also a member of the Company's Audit, Remuneration and Nominations Committees.

Mr Ravi Rajagopal joined the Board in July 2016 and is currently a member of Vedanta's Audit Committee. He is currently also an independent director of Airtel Africa plc and chair of its Audit Committee; chairman of Fortis Healthcare Limited and its subsidiary, SRL Diagnostics Ltd, an independent director of Fortis Malar Ltd, a listed company, chairman, JM Financial Services, Singapore, which is a wholly owned subsidiary of JM Financial and a trustee of the Science Museum Foundation, UK.

Prior to joining Vedanta, Mr Rajagopal was a member of Diageo's India advisory board, which he formed in 2008 and led until 2015; CFO for Europe and Group Financial Controller at Diageo plc; Global Head of M&A at Diageo plc (1996-2015), had business responsibility for Diageo plc's spirits business across sub-Saharan Africa; and held progressively senior roles from 1979 across five different businesses for ITC India (a BAT plc associate in India). He was also formerly a nominee non-executive director of United Spirits, India 2013-2016. Mr Rajagopal has a degree in Commerce from Madras University and is a fellow of the Institute of Chartered Accountants of India and the Cost and Works Accountants of India. He has also completed the Advanced Management Program at Harvard Business School.

Mr Edward Story was appointed to the Board in June 2017. He serves as a member of the Company's Audit Committee. Mr Story is the president and chief executive officer of Pharos Energy plc, an international oil and gas exploration and production company listed on the London Stock Exchange with operations in Vietnam, Israel and Egypt. He brings to the Board over 50 years of global experience in the oil and gas industry, having previously held a number of senior executive positions at various international oil and gas companies such as Snyder Oil Corporation, Conquest Exploration Company, Superior Oil Company, Exxon Corporation and Esso Standard Oil. He was formerly also a non-executive director of Cairn Energy and more recently, a non-executive director of Cairn India until its merger with Vedanta Limited. Mr Story holds a Bachelor of Science degree from Trinity University, San Antonio, Texas, a Master's degree in Business Administration from the University of Texas and an honorary Doctorate degree by the Institute of Finance and Economics of Mongolia.

Executive Committee

Sunil Duggal: Mr. Sunil Duggal was appointed as the Chief Executive Officer & Whole-time Director of HZL in 2015. He had worked in HZL since 2010 as Executive Director and thereafter became the Chief Operating Officer in the year 2012 and Deputy Chief Executive Officer in 2014. On 6 April 2020, he was appointed as the Chief Executive Officer of Vedanta Limited. Mr. Duggal is a result oriented professional with over 36 years of experience of leading high-performance teams and more than 20 years in leadership positions. He is known for his ability to calmly navigate through tough and challenging times, nurture and grow a business, evaluate opportunities and risks and successfully drive efficiency and productivity whilst reducing costs and inefficiencies and deliver innovative solutions to challenges. His thrust on adopting best-in-class mining and smelting techniques, state of art environment friendly technologies and mechanization, automation and digitalization of operational activities has added great value. Mr. Duggal was born in Amritsar and holds a bachelor's degree in electrical engineering from Thapar Institute of Engineering and Technology, Patiala. He has participated in leadership development and management development programmes at the International Institute for Management Development, Lausanne, Switzerland and the Indian Institute of Management, Kolkata, India. He is also serving as Vice Chairman — International Zinc Association, President — Federation of Indian Mineral Industries, President — Indian Lead Zinc Development Association. Recently, he has also been appointed as the Chair of Confederation of Indian Industry National Committee on Mining.

Arun Kumar GR: Mr Kumar was appointed as the Chief Financial Officer of the Company in September 2016. Arun joined the Company in 2013 as Chief Financial Officer for the Company's Aluminium and Power business. In 2014, he moved into the role of Executive Vice President Finance and Deputy Chief Financial Officer, as part of which he was responsible for enhancing the capability of the finance function in the areas of accounting, risk management, driving value creation, strategic planning, re-financing, board reporting and governance and direct taxation. As a Chartered Accountant, Arun has over 21 years of experience at global companies such as Hindustan Unilever and General Electric. Prior to joining the Company, Arun was the Chief Financial Officer for General Electric's Asia-Pacific Lighting and Appliances business based out of Shanghai.

Sharad Kumar Gargiya: Mr. Sharad Gargiya was appointed as Chief Commercial Officer of Vedanta on 5 April 2020. Previously, he was appointed as Chief Commercial Officer of HZL on February 2019. He has been working with Vedanta since October 1998 and has held key senior leadership roles in both finance and commercial functions across the Group. He has been an integral part of Group Ethics Committee since 2016 and is an active member of Group's insurance council for over five years. Mr. Sharad is a versatile leader and has over 21 years of experience in leading high-performance teams, developing and executing strategic initiatives, driving business excellence, and cultural transformation. He has contributed significantly in unlocking the business value through his leadership and strategic roles at Telecom Cable, Copper, Aluminium and Power business and Zinc. He is a result oriented professional and is extremely passionate about sustainability and resource productivity. His proven track record of adopting best-in-class technologies enables the Group to achieve an increased efficiencies and optimized cost with a focus on building automation and digitalisation of operational activities. He believes defining 'personal success' as his ability to make 'others successful'. Mr. Sharad is a qualified Chartered Accountant and Bachelor of Commerce. He was born in Rajasthan and came from a humble background. He also attended the General Management Program from Harvard Business School in 2011.

Laxman Shekhawat: Mr. Shekhawat was appointed as a member of the Management Committee of Vedanta Zinc International and CMT on 24 April 2020, where he will be anchoring the Management Committee of Vedanta's Zinc International Division and CMT to drive business growth. Previously, Mr. Shekhawat held the role of Director — Operations of HZL from February 2019. He holds a bachelor's degree in engineering in mining and has been working with HZL since 1990. With an experience of 28 years in mining and engineering, Mr Shekhawat has served in various leadership positions in mining and engineering companies for more than a decade. He is instrumental in developing and executing strategies to unlock the full potential of mines and bring the best practices in mining portfolio. In 2017, he was awarded with prestigious "National Geoscience Award" from the President of India.

Madhu Srivastava: Ms. Srivastava was appointed as the Chief Human Resource Officer of the Group in December 2018. She has been associated with the Group for more than seven years and previously, she was the Chief Human Resource Officer of the Cairn Oil and Gas business and was leading the Talent Acquisition and Diversity and Inclusion functions for the Group. Under her leadership, the Group has implemented robust human resource policies, progressive people practises and frameworks for talent acquisition and talent management across the Group. Ms. Srivastava has an overall experience of 20 years across human resource as well as sales, marketing and operations, spanning the Fast-Moving Consumer Goods (FMCG), telecom, Information Technology Enabled Service (ITES), Banking, financial services and insurance (BFSI) and natural resources industries. Ms. Srivastava had started her professional journey in 1999 with Godrej where she handled sales in Gujarat and Maharashtra and later moved to the corporate sales and marketing role. Post working with companies like GE Capital and Reliance in operations and marketing profiles, she started her Human Resources journey in 2006 by joining Genpact as Assistant Vice President, Talent Acquisition where she led the middle management hiring. She then went on to lead the recruitments for Citibank's India operations as Vice President, human resource before joining the Group in 2012. Madhu has completed her Post Graduate Diploma in Management (PGDM) in marketing and sales, from Indian Institute of Management, Ahmedabad.

Dilip Golani: Mr. Golani currently heads the Group's Management Assurance Services function. He previously headed the sales and marketing division for HZL and the Group's performance management function. Prior to joining the Group in April 2000, Dilip Golani was member of the Unilever corporate audit team responsible for auditing the Unilever group companies in Central Asia, Middle East and Africa region. Prior to that, he was responsible for managing operations and marketing functions for one of the exports businesses of Unilever India. He has over 31 years of experience and has previously worked with organisations such as Union Carbide India Limited and Ranbaxy Laboratories Limited. Dilip Golani holds a bachelor's degree in mechanical engineering and has completed his post-graduate studies in industrial engineering and management from National Institute of Industrial Engineering, Mumbai, India.

James Cartwright: Mr. Cartwright joined Vedanta on 15 October 2019 and was appointed as Head of Investor Relations for the Group. He is working towards enhancing the quality, depth and diversity of our shareholder base & investors to ensure optimum valuation for the Company. Mr. Cartwright has 25 years of rich leadership experience in capital markets, specifically across natural resources including oil & gas, utilities & handling of the environmental, social and corporate governance community. Prior to joining Vedanta, James was Managing Director of the Institutional Equities Division of Morgan Stanley. He also has worked with UBS Investment Bank & Merrill Lynch Europe. He holds a bachelor's degree with Honours in Geology from Bristol University.

Andrew Lewin: Mr. Lewin joined us as Group Health, Safety, Environment & Sustainability Head since February 2020. He has over 32 years of experience within mining and oil & gas industries. He was previously the Managing Director at Spectrum Risk Consulting, Australia. He also previously held a number of senior roles at BHP Billiton, Newmont Mining Corporation and other companies across the United States, Australia and the United Kingdom with responsibility for health, safety, environment and sustainability assurance. He has a Doctor of Philosophy in Chemistry from University of Waterloo and Postgraduate Diploma in Health and Safety from Aston University. He also holds a Master of Science in Physics from The University of Manchester, and a Bachelor of Science (Hons) in Chemistry from University of Bristol.

Sauvick Mazumdar: Mr. Mazumdar was appointed as Chief Executive Officer (Interim) of Sesa Goa Iron Ore Business on 12 July 2019. Prior to this role he was the Deputy Chief Executive Officer of Iron Ore Business and Vice President since 1 October 2016. Mr. Sauvick is a well-seasoned executive with 24+ years of extensive experience, having built a solid reputation for achieving business growth through strategic direction, diverse perspectives and positive leadership. He is presently responsible for the overall operations and expansion projects of the Iron Ore Business within India — Goa & Karnataka along with Value Added Business (Pig Iron, Met coke, and Power), Jharkhand, Bellary and overseas projects — Liberia. Mr. Sauvick holds a B. Tech degree in Mining Engineering from National Institute of Technology, Surathkal Karnataka and a First Class Mines Manager's Certificate of Competency from Directorate General of Mines Safety, Ministry of Labour & Employment, Govt. of India, Dhanbad.

Pankaj Kumar: Mr. Kumar was appointed the Chief Executive Officer of Vedanta's copper operations in Tuticorin, Silvassa and Fujairah Gold FZC and director of MEL in March 2019. In his career of over 26 years, Pankaj has worked with large conglomerates like Tata Steel, Mittal Steel, Adani ports, Gujrat Guardian Limited and United Breweries Limited. Prior to joining us, at Sterlite Copper as Chief Executive Officer he was the Chief Operating Officer of Hindustan Zinc Limited. Pankaj hold bachelor's degree in Technology (Hons.) from Indian Institute of Technology Kharagpur and Post Graduate diploma in Business Management specialised in Operations Management and Information Technology from XLRI-Xavier School of Management, Jamshedpur, India.

Arun Mishra: Mr. Mishra joined Vedanta on 20 November 2019 as Deputy Chief Executive Officer of HZL. Prior to Vedanta, Arun worked with Tata Steel as Vice President-raw materials. He has 31 years of rich and diverse experience in Tata Steel where he was instrumental in leading projects, plant and mining operations. He is Vice President of Indian Institute of Mineral Engineers. Mr. Mishra has done his bachelor's in electrical engineering from Indian Institute of Technology, Kharagpur, diploma in mining and beneficiation from University of New South Wales and diploma in general management from The European Centre for Executive Development (CEDEP), France.

Pankaj Malhan: Mr. Malhan is the Chief Executive Officer (Acting) & Whole Time Director of ESL and joined ESL in October 2018. Pankaj Malhan holds a Bachelor's in Technology in Instrumentation & Control from National Institute of Technology, Jalandhar, India, and also has done Post-graduate Diploma in Business Management from XLRI-Xavier School of Management, Jamshedpur, India. Pankaj Malhan joined ESL from Tata Steel, where he was the Head — Engineering and Project. He was responsible for leading Tata Steel's capital expansion programme in the area of iron making. He has been associated with Tata Group since 2000 and has held various senior management positions at Tata Steel, Tata Blue Scope Steel Limited and Tata power Limited. Prior to joining Tata Group, he has worked with Indian Acrylics Limited and Fisher Rosemount Limited.

Ajay Kapur: Mr. Kapur was appointed as Chief Executive Officer, Aluminium and Power in March 2019. Ajay leads the Aluminium and Power business for Vedanta comprising of 2.3 mtpa installed smelter capacity, 8 GW of Power and 2 mtpa of Alumina Refinery. Prior to his appointment at Vedanta Limited, Ajay was Managing Director and Chief Executive Officer for Ambuja Cements. He started his career as an Executive Assistant to then founder and Managing Director. He went on to handle various strategic positions at Ambuja cements with his last position as Managing Director and Chief Executive Officer. Ajay Kapur holds a graduate degree in economics from St. Xavier's College, Mumbai, MBA from KJ Somaiya Institute, Mumbai and is an alumnus of Wharton's Advanced Management Program.

Abhijit Pati: Mr. Pati was appointed as Chief Executive Officer of BALCO in July 2019, prior to this he was CEO of Vedanta's Aluminium business, Jharsuguda from March 2015. Earlier he was the president and Chief Operating Officer of Vedanta's Aluminium and power business at Odisha since April 2012. He has over 31 years of experience in Aluminium industry. Prior to joining us, he was the vice president with Hindalco Industries Limited. He started his career as a budding engineer with Indian Aluminium Company in the year 1989. He was awarded with the 'Exceptional Contributor Award' from the Aditya Birla Group Chairman, Mr. Kumar Mangalam Birla for significant contribution to turn around Hirakud Aluminium Smelter in the year 2006 and won the prestigious British Sword of Honour for the Hirakud Smelter in the year 1999. He is a member of the Bureau of Energy Efficiency under Ministry of Power, GOI. He is also holding the position of Vice President in Aluminium Association of India and member of Governing body. He is two times gold medallist from prestigious institutes like Calcutta University and International Management Institute, New Delhi. Abhijit Pati has a first class honours bachelor's degree in chemical engineering from Calcutta University and a master's in business administration from International Management Institute, New Delhi.

Chhavi Nath Singh: Mr. Singh is Interim CEO of Vedanta's Aluminium Business — Jharsuguda since July 2019. Prior to this role, he was COO of TSPL. Mr CN Singh has a rich experience of 37 years in Power Industry and played a pivotal role in stabilisation of TSPL operations. He has also been in leadership roles at some of India's leading corporates in the power sector like Hindustan Zinc, Essar and JSW Energy, having handled diverse key responsibilities in the domestic Power sector, from the concept to commissioning. A mechanical engineer from MLN Regional Engineering College, Allahabad. Mr. CN Singh also holds a Diploma in Business Management from Management Development Institute, Gurgaon.

Vikas Sharma: Mr. Sharma was appointed the Chief Executive Officer of Vedanta's power business TSPL in July 2019 prior to which he was CEO of BALCO in March 2017. Vikas Sharma has experience of over 31 years in various national and multi-national companies. He has experience of serving HMT Watches Limited, Su-Raj Diamonds India Private Limited, AMP India Private Limited, Praxair India Private Limited, Jindal Praxair Oxygen Company Limited and JSW Steel Limited in various key positions. Vikas Sharma joined as location head of Chanderiya of HZL in 2012 and was gradually elevated to the Chief Operating Officer of smelters division of HZL in June 2014. During his tenure at HZL, he played integral role in the growth of the company and made significant contribution in smelter production. Vikas Sharma holds bachelor's degree with honours in mechanical engineering from Engineering College Kota, University of Rajasthan and a master's in business administration in marketing from Sikkim Manipal University, Gangtok, India.

Rahul Sharma: Mr. Sharma joined the Group in 1998, and is currently Chief Executive Officer (Acting) of Alumina Business, effective April 2019, prior to which he was working as Director — Corporate Strategy (Aluminium and Power). Rahul Sharma has varied experience of over 25 years and has held leadership positions at Vedanta Limited and Sterlite Technologies Ltd. Prior to joining Vedanta he was Chief Marketing Officer (Domestic and International) and Business Head — Integrated Management System at Sterlite Technologies Ltd. He has played a significant role in driving various policies and creating a strategic framework for various government reforms for development of exploration, mining and non-ferrous metal sector in the country in the most sustainable manner. Rahul Sharma is an alumni of the Indian Institute of Management, Ahmedabad Executive General Management programme, has an MBA in Marketing and a B.E. in Electronics and Communication.

Roma Balwani: Ms. Balwani was appointed Director — Communications & Brand, since 11 October 2019. Previously, she was the Senior Advisor since April 2019 and was as President — Group Communications, Sustainability and Corporate Social Responsibility from April 2014 to August 2017. Prior to joining Vedanta, she was the Chief Communications Officer at Mahindra & Mahindra Limited. With over three decades of experience, she won several Indian and international awards and accolades and has spoken at several summits on sustainable development and communications in India and overseas. Ms. Balwani has the distinction of being included for three consecutive years in the Holmes Global Report, USA, a recognition in the Global Influence 100 listing of In-house Communicators. She is also a Director of Cockerill Maintenance & Ingénierie Flat Products Equipments (CMI FPE) and the Indian subsidiary of the Belgian company CMI. Roma also chairs the Corporate Social Responsibility Committee as a board member. She graduated from Mumbai University in Economics and has a Postgraduate Diploma in Marketing Management from Sasmiras Institute of Management Studies and Research. She also completed the Executive Management Program at Harvard Business School, the United States.

Dhiraj Nayyar: Mr. Nayyar was appointed as Director, Economics & Policy from 11 October 2019. Previously, he was the Chief Economist of Vedanta Limited since October 2018. Before joining Vedanta, he was the Officer on Special Duty and Head, Economics, Finance and Commerce at National Institution for Transforming India (NITI), Aayog, Government of India between October 2015 and October 2018. During this role, Mr. Nayyar was responsible for all policy matters related to the Departments of Economic Affairs, Revenue, Financial Services, Investment and Public Asset Management and Commerce. He was also the Secretary of the Inter-Ministerial Committee on Sick and Loss-Making Public-Sector Enterprises, Member-Secretary of NITI Aayog's Committee on Strategic Disinvestment and Member, Spices Board. Prior to joining the Government, Dhiraj spent several years in the media in senior positions. He was an India Columnist for Bloomberg View, the Managing Editor for The Quint, the Editor-at-large for Firstpost.com, the Deputy Editor for India Today and the Opinion Editor for Financial Express. Mr. Nayyar holds a Bachelor of Arts (Hons) in Economics from St. Stephen's College, Master of Arts in Philosophy, Politics and Economics from Merton College, Oxford and Master of Philosophy in Development Economics from Trinity College, Cambridge where he also pursued his doctoral research in economics and taught development economics.

Vineet Bose: Mr. Bose was appointed as the Corporate Counsel for legal matters across the Group, from 11 October 2019. In addition to this position, he also continues to hold charge as the Head — Legal of HZL. Mr. Bose joined Vedanta in February 2016 as Deputy Legal Head of HZL. He has nearly 20 years of experience in complex litigations, contract negotiations, regulatory issues, compliance assurance, advocacy and taxation matters. Prior to joining Vedanta, he worked with other organisations such as DuPont, Bharti Group, Vaish Associates (Law Firm), Bharat Sanchar Nigam Limited and Ministry of Corporate Affairs. Mr. Bose is a law graduate from Delhi University and holds a master's degree in business laws from National Law University, Bangalore. He is also a qualified company secretary and cost and management accountant.

Leena Verenkar: Ms. Verenkar was appointed as Group Head — CSR, from 11 October 2019. In addition to this position, she also holds charge as the Chief Advocacy & PR and Head — CSR for Sesa Iron Ore Business since 2015. Previously, she was the Head — CSR of Iron Ore Goa since 2010. Ms. Verenkar started her career with Vedanta in 1996, joining the environment management & compliance team and led the environment team for 12 years. She has more than 25 years of experience in environment management, community relations, advocacy and public relationship. Ms. Verenkar holds master's degree in microbiology from Goa University and in ecology & environment from Bhopal University. She obtained the Fulbright Scholarship from a U.S. foundation in India and the LEAD fellowship by Lead India. Ms. Verenkar is also recognised as "Women Leader of the Year" by Economic Times and is included in the "100 most impactful CSR leaders" by World CSR in 2017.

Corporate Governance

The Company's shares were listed on the London Stock Exchange in 2003. Following the successful takeover by its controlling shareholder, Volcan Investments Limited ("Volcan"), Vedanta was delisted from the Official List of the London Stock Exchange on 1 October 2018. Most of Vedanta's assets and management are located in India. Two of Vedanta's subsidiaries, namely Vedanta Limited and HZL, are listed on stock exchanges in India and maintain their own corporate governance arrangements in compliance with Indian regulations. Vedanta Limited also has ADSs listed on the NYSE and is thus subject to NYSE listing requirements. In addition, BALCO, HZL and KCM have government appointees on their boards of directors to represent wider shareholder interests.

The Company's Executive Chairman, Mr. Anil Agarwal, is Vedanta's original promoter and founder having built Vedanta from its inception in 1976. Volcan, and its wholly owned subsidiary, Volcan Investments Cyprus Limited, is the Company's sole shareholder with 100% voting share interests.

The Board

Role and Responsibilities of the Board

The role of the Board is to provide leadership to maximise opportunities to develop the Company's portfolio of businesses profitably while assessing and managing the associated risks. The boards of directors of Vedanta's individual businesses are responsible for managing their businesses profitably while controlling risks. The Board assesses the strategic objectives of each business, monitors performance, ensures the availability of financial, management and other resources required to meet the objectives, sets Vedanta's standards of conduct and ensures that effective controls are in place to manage risk and that the interests of shareholders and other investors are observed. Vedanta's "Code of Conduct and Ethics" provides overarching standards for Vedanta's individual businesses.

The Board has adopted a schedule of matters reserved for its consideration to ensure that it is in a position to assess strategy, monitor performance and maintain effective controls while delegating operational management to the Executive Committee and Vedanta's businesses. Such matters reserved to the Board include, amongst other things, approving Vedanta's overall strategy and annual budgets, major capital expenditures, acquisitions, appointments, disposals and changes to capital structure and dividend policy.

As part of its decision-making processes the Board considers the long-term consequences of its decisions, the interests of various stakeholders including employees, the impact of Vedanta's operations on the environment and the need to maintain high standards of business. This is achieved through a prudent and robust risk management framework and internal controls and strong governance processes. Vedanta's corporate governance framework involves coordination and cooperation amongst shareholders, the Board, Board Committees and management committees.

The Board meets on a regular basis throughout Fiscal Year 2020. The Executive Chairman also met with the Non-Executive Directors without the Executive Directors during this period. All of the Board Committees are authorised to obtain legal or other professional advice as necessary, to secure the attendance of external advisers at their meetings and to seek information from any employee of the Company in order to perform their duties.

There are four Board Committees: Nominations, Remuneration, Audit, and Sustainability. Each of the Board Committee reports directly to the Board.

Board Balance and Independence

The Board comprises the following members as of 30 June 2020:

Mr. Anil Agarwal	Executive Chairman
Mr. Navin Agarwal	Executive Vice Chairman
Mr. Geoffrey Green	Non-Executive Director
Mr. Deepak Parkh	Non-Executive Director
Mr. Ravi Rajagopal	Non-Executive Director
Mr. Edward Story	Non-Executive Director

All the Non-Executive Directors served throughout the Fiscal Year 2020 and up to the date of this Offering Circular.

The Company regards the above as an appropriate board structure. The Company considers all of its Non-Executive Directors as independent Non-Executive Directors within the meaning of "independent" and free from any business or other relationship which could materially interfere with the exercise of their independent judgement.

Executive Chairman and Group Management Committee

In an effort to continuously grow and expand with the best-in-class safety, benchmark technology and cost efficiency whilst ensuring having the right management in place to drive the business of the Group, Vedanta formed the Group Management Committee which is currently comprised of the Chief Executive Officer of Vedanta Limited and the Group's Chief Financial Officer, Chief Commercial Officer and Chief Human Resources Officer. The Group Management Committee will collectively be responsible for all key decisions taken for the growth of the Group and will handle the accountabilities which were earlier assigned to the Chief Executive Officer.

There is a clear division of the responsibilities between the running of the Board and executive responsibility for running the business, so that no one person should have undue power of decision. In 2005, the Board approved a policy to ensure a clear separation is maintained between the responsibilities of the Executive Chairman and the Chief Executive Officer (now the Group Management Committee), as detailed below:

Executive Chairman	**Group Management Committee**
• Leading the Board and ensuring that it has the resources required to function effectively;	• Ensuring effective implementation of Board decisions;
• Developing succession plans for Board appointments for Board approval;	• Developing operational business plans for Board approval;

Executive Chairman	Group Management Committee
• Helping to identify strategic priorities to enhance shareholder value;	• Providing leadership to the senior management team for the delivery of the Group's operational business plans following Board approval;
• Formulating strategic plans for the Board's consideration and approval;	• Providing oversight and management of all of the Group's operations, business activities and performance including environmental, social, governance, health and safety, sustainability, investor relations and external communications;
• Identifying new business opportunities in line with the strategic plans approved by the Board;	• Managing the Group's risk profile in line with the risk appetite set by the Board;
• Engaging with the Company's shareholders and other stakeholders such as governments, communities and employees to ensure that an appropriate balance is maintained between the various interests;	• Ensuring that prudent and robust risk management and internal control systems are in place throughout the Group;
• Providing leadership to the senior management team;	• Recommending annual budgets to the Board for approval;
• Upholding the highest standards of integrity, probity and governance at Board level and throughout the Group;	• Making recommendations to the Remuneration Committee on remuneration policy and executive remuneration;
• Facilitating active engagement by all Directors and fostering an environment in which Non-Executive Directors can freely provide constructive challenge;	• Supporting the Executive Chairman in maintaining effective communications with various stakeholders;
• Evaluating the performance of the Board, Board committees and individual Directors and acting on the results of such evaluation;	• Maintaining a close working relationship with the Chairman; and
• Reviewing the training needs of the Directors for the fulfilment of their duties; and	• Leading the Executive Team.
• Ensuring that new Directors participate in a full, formal and tailored induction programme.	

Executive Committee

The Executive Committee, comprising of the senior management team within Vedanta who head the principal businesses and corporate functions, meets on a monthly basis to consider the operating performance of each of the principal subsidiaries. The Group Management Committee jointly chairs the Executive Committee and keeps the Board informed of the Executive Committee's activities. The Board's role is to set Vedanta's values and standards, determine its strategic objectives and monitor operational performance.

The Executive Committee supports the Board in fulfilling this role and is essentially responsible for operational performance including: implementing and delivering the strategic plans formulated by the Board, monitoring operational and financial performance, prioritising and allocating resources and developing and reviewing objectives and budgets with subsidiary company boards to ensure that these fall within agreed targets and parameters set by the Board. In addition, the Executive Committee approves capital expenditure (within pre-defined limits) and reviews Vedanta's Human Resources Policy and Treasury Policy.

Nominations Committee

In conjunction with the consultation of Volcan, the Committee is responsible for leading the process for Board appointments and for keeping the balance of skills, experience, independence, knowledge and diversity, including gender on the Board under review to ensure the orderly evolution of the membership of the Board and its Committees. In identifying and nominating candidates for approval by the Board, the Committee continues to take account of the Board's aims in relation to diversity, whilst ensuring that the right people with the right range of skills and experience are on the Board and in senior management positions in the coming years.

Mr. Anil Agarwal is Chairman of the Nominations Committee. The other member is Mr. Deepak Parekh. The Group Company Secretary acts as the secretary to the Nominations Committee.

Remuneration Committee

The Remuneration Committee is responsible for setting the remuneration policy and remuneration packages for the Executive Directors and for maintaining an awareness of the overall remuneration of the key operational and financial heads within Vedanta. A significant proportion of the Executive Directors' remuneration is performance related through the annual bonus and long term incentive schemes. The fees of the Non-Executive Directors are independently reviewed and take into account the time commitments and responsibilities of the role. Mr. Geoffrey Green is Chairman of the Remuneration Committee. The other member is Mr Deepak Parekh.

Audit Committee

Strong corporate governance and risk management is a key part of Vedanta's business model and the Board and the Audit Committee continue to be focused on maintaining high standards of governance and risk management across Vedanta. The Audit Committee oversees the financial reporting process in order to ensure that that the information provided to its shareholders is fair, balanced and understandable and allows assessment of the Company's position, performance, business model and strategy.

In line with best practice, the Board has reviewed the internal control system in place for Vedanta up to 31 March 2020. During the course of its review of the system of internal control, the Board has not identified nor been advised of any weaknesses or control failure that is significant.

Certain of the Company's subsidiaries, by virtue of their listings on the Indian stock exchanges or the NYSE, have their own audit committees which are established in accordance with Indian or NYSE corporate governance requirements, as applicable. This provides a second level of financial oversight below Vedanta's Audit Committee which also monitors the discussions and findings of the audit committees of the Company's subsidiaries.

Mr Ravi Rajagopal is the Chairman of the Audit Committee. The other members are Mr. Deepak Parekh, Geoffrey Green and Edward Story. The Group Company Secretary acts as the secretary to the Audit Committee.

Directors' and Executive Officers' Compensation

The aggregate compensation the Company paid to its Executive Directors for Fiscal Year 2020 was \$7.94 million, which includes \$7.5 million paid towards short term benefits comprising salary, bonuses and allowances and \$0.40 million paid towards post-employment benefits. The total compensation paid to the Company's most highly compensated executive during Fiscal Year 2020 was \$3.4 million.

The aggregate compensation the Company paid its Non-Executive Directors in Fiscal Year 2020 was \$0.74 million.

The following table sets forth the pre-tax remuneration for Fiscal Year 2020 for individual Directors who held office in the Company during this period. Payment is generally made in UK pounds sterling although payments in India under service contracts with Vedanta Limited are paid in Indian Rupee.

	Base Compensation	Taxable benefits	Pensions	Annual Performance Bonus	Long Term incentives	Total for Fiscal Year 2018	Total for Fiscal Year 2019	Total for Fiscal Year 2020[9][10]
				($ million)				
Executive Directors								
Anil Agarwal[1]	2.11	0.008	–	1.26	–	4.98	5.81	3.37
Navin Agarwal[2][3][7]	1.51	0.12	0.08	0.82	–	3.54	3.82	2.54
Srinivasan Venkatakrishnan[4][5][7][11]	1.27	0.15	0.32	0.29	–	–	1.35	2.03
Non-Executive Directors[6]								
Geoffrey Green	0.15	–	–	–	–	0.15	0.15	0.15
Deepak Parekh	0.17	–	–	–	–	0.16	0.17	0.17
Ekaterina Zotova	0.16	–	–	–	–	0.16	0.16	0.16
Ravi Rajagopal	0.15	–	–			0.15	0.15	0.15
Edward Story	0.12					0.10	0.12	0.12
Total	**5.63**	**0.28**	**0.40**	**2.37**	**0.00**	**9.24**	**11.73**	**8.68**

Notes:

(1) Mr Anil Agarwal's taxable benefits in kind include provision of medical benefits; car and fuel in the UK for business purposes.

(2) Mr. Navin Agarwal is based out of India and is drawing the majority of his remuneration in Indian Rupee. For Fiscal Year 2020, Mr Navin Agarwal received a Vedanta Limited salary of ₹170,617,952 ($2.41 million), Vedanta Resources Limited fees of £85,000 ($0.10 million), Hindustan Zinc Limited fees of ₹250,000 ($0.0035 million) & commission of ₹1,500,000 ($0.02 million). Additionally, Mr. Navin Agarwal has been paid gratuity amounting to ₹70,665,923 ($0.99 million) and leave encashment amounting to ₹12,520,955 ($0.18 million) during the year upon attaining the age of 58 as per company policy.

(3) Mr Navin Agarwal's taxable benefits in kind include housing and related benefits, and use of a car and driver.

(4) Mr Srinivasan Venkatakrishnan's taxable benefits in kind include housing and related benefits, and medical benefits in the United Kingdom. Also, 80% of the remuneration mentioned above was charged in the form of reimbursements for the discharge of his responsibilities for Vedanta Limited.

(5) In addition to the above remuneration paid to Srinivasan Venkatakrishnan, the Company also paid ₹387,520 ($0.49 million) and ₹669,510 ($0.85 million) as part of buy-out awards under deferred cash bonus and long term incentive plan awards, respectively, which were forfeited by his previous employer at the time of leaving. This was part of the contract terms as approved by the committee at the time of joining.

(6) Non-Executive Directors are reimbursed for expenses incurred while on Company business. No other benefits are provided to Non-Executive Directors.

(7) All of the Group's pension schemes are based on cash contribution and do not confirm an entitlement to a defined benefit. Pension contributions are made into the Executive Vice Chairman and Chief Executive Officer's personal pension schemes (or local provident fund) and will become payable on the retirement, normally at age 58. The Executive Chairman do not receive pension benefits.

(8) The Annual Bonus relates to the payment for Fiscal Year 2020 computed as per the approved scheme and approved by the Remuneration Committee.

(9) NIC Contribution as per the statutory requirement is made for all Executive and Non-Executive Directors.

(10) The exchange rate applicable as at 31 March 2018 was ₹85.4732 to £1 & $1.3262 to £1, at 31 March 2019 was ₹91.7384 to £1 & $1.3126 to £1 and at 31 March 2020 was ₹90.1024 to £1 & $1.2715 to £1.

(11) With effect from the close of business hours of 5 April 2020, Mr. Venkatakrishnan resigned from his position as Chief Executive Officer and Director.

Limitations on Liability and Indemnification Matters

Section 201 of the Indian Companies Act provides that a company may indemnify any director, officer or auditor against any liability incurred by such director, officer or auditor in defending any civil or criminal proceedings, in which a judgement is given in favour of such director, officer or auditor or in which he or she is acquitted or discharged or in connection with application made by a director or an officer to the High Court of the relevant state for relief, because he or she has reason to apprehend that any proceeding will or might be brought against him in respect of any negligence, default, breach of duty, misfeasance or breach of trust, in which relief has been granted by the High Court of the relevant state.

Section 201 also provides that, except for such indemnity described above, any provision, whether contained in the articles of association of a company or in an agreement with the company or in any other instrument, for exempting any director, officer or auditor of the company from, or indemnifying him or her against, any liability which, by any rule of law, would otherwise attach to such director, officer or auditor in respect of any negligence, default, misfeasance, breach of duty or breach of trust of which he or she may be guilty in relation to the company, shall be void.

PRINCIPAL SHAREHOLDERS

Volcan Investments Limited and Volcan Investments Cyprus Limited have beneficial ownership of 100% of Vedanta's Ordinary Shares as of 31 March 2020. The following table sets forth information regarding beneficial ownership of Vedanta's Ordinary Shares as of 31 March 2020.

Each Ordinary Share is entitled to one vote on all matters that require a vote of shareholders, and none of the Vedanta shareholders have any contractual or other special voting rights.

As used in this table, beneficial ownership means the sole or shared power to vote or direct the voting or to dispose of or direct the sale of any security. A person is deemed to be the beneficial owner of securities that can be acquired within 60 days upon the exercise of any option, warrant or right. Ordinary Shares subject to options, warrants or rights that are currently exercisable or exercisable within 60 days are deemed outstanding for computing the ownership percentage of the person holding the options, warrants or rights, but are not deemed outstanding for computing the ownership percentage of any other person. The amounts and percentages as of 31 March 2020 are based upon 285,246,698 voting Ordinary Shares.

Shareholders	Number of Ordinary Shares	Percentage of Issued Voting Share Capital as at 31 March 2020
Volcan Investment Limited(1)	187,488,092	65.7%
Loyalist Plaza, Don Mackay Boulevard P O Box AB-20377 Marsh Harbour, Abaco Bahamas		
Volcan Investments Cyprus Limited(1) (wholly owned subsidiary of Volcan Investments Limited)		
221 Christodoulou Chatzipavlou, Helios Court, 3rd Floor, 3036 Limassol, Cyprus.	97,758,606	34.3%
Total	**285,246,698**	**100.0%**

(1) Volcan and its wholly owned subsidiary, Volcan Investments Cyprus Limited own 285,246,698 Ordinary Shares, or 100% of the issued voting share capital, of Vedanta as of 31 March 2020. Volcan is owned and controlled by the Anil Agarwal Discretionary Trust (the "Trust"). Conclave PTC Limited ("Conclave") is the trustee of the Trust and controls all voting and investment decisions of the Trust. As a result, shares beneficially owned by Volcan may be deemed to be beneficially owned by the Trust and, in turn, by Conclave. Mr. Anil Agarwal, the Executive Chairman of the Company, may be deemed to have beneficial ownership of shares that may be owned or deemed to be beneficially owned by Conclave.

RELATED PARTY TRANSACTIONS

The information below sets out transactions and balances between Vedanta and various related parties in the normal course of business for Fiscal Year 2020.

Holding Company

- *Volcan Investments Limited*
- *Volcan Investments Cyprus Limited*

Fellow Subsidiary

- *Sterlite Technologies Limited (STL)*
- *Sterlite Power Transmission limited (SPTL)*
- *Sterlite Iron and Steel Company Limited ('SISCOL')*
- *Sterlite Power Grid Ventures Limited*

Associates/Joint Ventures

- *RoshSkor Township (Pty) Ltd.*
- *Gaurav Overseas Private Limited*
- *Madanpur SouthCoal Company Limited*

Others

- *India Grid Trust*(1)
- *Cairn Foundation*(2)
- *Fujairah Gold Ghana*
- *Vedanta Foundation*
- *Sesa Goa Community Foundation Limited*
- *Vedanta Medical Research Foundation*
- *Sesa Goa Employees Provident Fund*
- *Sesa Group Employees Gratuity Fund and Sesa Group*
- *Sesa Group Executives Superannuation scheme*
- *Sesa Resources Limited Employees Provident Fund Trust*
- *Sesa Resources Limited and Sesa Mining Corporation*
- *Sesa Resources Limited Employees Gratuity Fund*
- *Sesa Mining Corporation Limited Employees Provident Fund Trust*

- *Sesa Mining Corporation Limited Employees Gratuity*
- *Sesa Resources Limited and Sesa Mining Corporation*
- *Hindustan Zinc Limited Employees Contributory Provident Fund Trust*
- *Hindustan Zinc Limited Employee group Gratuity Trust*
- *Hindustan Zinc Limited Superannuation Trust*
- *Balco Employees Provident Fund Trust*
- *Runaya Refinery LLP*

(1) *India Grid Trust ceased to be a related party with effect from 7 May 2019.*

(2) *Cairn Foundation, though not a related party as per the definition under IAS 24, has been included in the related party disclosure as a voluntary disclosure following the best corporate governance practices.*

Fiscal Year 2020

Details of transactions for Fiscal Year 2020 are as follows:

Particulars	**Holding Company/ Fellow Subsidiaries**	**Associates/ Joint Ventures**	**Others**	**Total**
		(in $ million)		
Income:				
(i) Revenue from operations	121	–	0	121
(ii) Dividend Income	0	–	1	1
(iii) Net interest received	2	–	0	2
Expenditure:				
(i) Purchase of goods/services	–	–	1	1
(ii) Stock option (recovery)	–	–	(0)	(0)
(iii) Management and brand fees paid/(recovered)	2	–	1	3
(iv) (Reimbursement) of for other expenses (net of recovery)	0	–	(0)	0
(v) Donation	–	–	15	15
(vi) Interest paid	1	–	–	1
(vii) Dividend paid	536	–	–	536
(viii) Contribution to post retirement employee benefit trust/fund	–	–	16	16
Transactions during the year:				
(i) Investments redeemed during the year[1]	639	–	–	639
(ii) Loans given/(repayment thereof	0	(0)	–	(0)
(iii) Guarantees given during the period (net of relinquishment)	–	–	(4)	(4)

(1) During the Fiscal Year 2019, as part of its cash management activities, Cairn India Holdings Limited (CIHL), a step-down subsidiary of the Company, entered into a tripartite agreement with Volcan and one of its subsidiaries. Under the agreement, CIHL purchased an economic interest in a structured investment for the equity shares of Anglo American Plc (AA Plc), a company listed on the London Stock Exchange, from Volcan for a total consideration of $541 million (of which $254 million

$64 million was paid up to 31 March 2019 and during the year ended 31 March 2020, respectively) determined based on an independent third-party valuation. The ownership of the underlying shares, and the associated voting interests, remained with Volcan and the investment were to mature in two tranches in April 2020 and October 2020. In addition, CIHL also received a put option from Volcan. In July 2019, the transaction was unwound and the investments were redeemed for a total consideration of $639 million, representing the actual price Volcan realised from selling the shares of AA Plc to an unrelated third-party net of applicable costs out of which $12 million is outstanding.

Details of balances as at 31 March 2020 are as follows:

Particulars	Holding Company/ Fellow Subsidiaries	Associates/ Joint Ventures	Others	Total
	(in $ million)			
Net amounts receivable at year end	14	–	–	14
Net amounts payable at year end	1	–	10	11
Investment in equity Share	5	0	–	5
Value of bonds	13	–	–	13
Interest payable	0	–	–	0
Dividend Payable	1	–	–	1
Net advance received at year end	0	–	–	0
Net advance given at year end	1	–	0	1
Financial guarantee(1)	15	–	3	18
Loans given	1(2)	1	–	2

(1) Bank guarantee has been provided by Vedanta on behalf of Volcan in favour of the Income Tax Department of India as collateral in respect of certain tax disputes of Volcan. The guarantee amount is $15 million (31 March 2019: $17 million).

(2) During the Fiscal Year 2019, Vedanta renewed a loan provided to Sterlite Iron and Steel Company Limited to finance a project in earlier years. The loan balance as at 31 March 2020 was $1 million (previously none as at 31 March 2019). The loan is unsecured and carries an interest rate of 8.50% per annum. The loan was due in March 2020. The loan was renewed for a further period of 12 months in March 2020 and is due in March 2021.

Fiscal Year 2019

Details of transactions for Fiscal Year 2019 are as follows:

Particulars	Holding Company/ Fellow Subsidiaries	Associates/ Joint Ventures	Others	Total
	(in $ million)			
Income:				
(i) Revenue from operations	131	–	–	131
(ii) Dividend Income	0	–	2	2
(iii) Net Interest Received	1	–	–	1
(iv) Management fees income	0	–	–	0
Expenditure:				
(i) Purchase of goods/services	0	–	0	0
(ii) Management fees paid	2	–	–	2
(iii) Recovery	0	–	–	0
(iv) Donation	–	–	19	19
(v) Interest paid	1	–	–	1
(vi) Dividend Paid	73	–	–	73
(vii) Contribution to Post Retirement employee benefit trust/fund	–	–	18	18

Particulars	Holding Company/ Fellow Subsidiaries	Associates/ Joint Ventures	Others	Total
		(in $ million)		
Transactions during the year:				
(i) Investments redeemed during the year	8	–	–	8
(ii) Loans given/(repaid (repayment thereof) during the year	0	0	–	0
(iii) Guarantees given during the period (net of relinquishment)	–	–	2	2
(iv) Purchase of structured investment	541	–	–	541

Details of balances as at 31 March 2019 are as follows:

Particulars	Holding Company/ Fellow Subsidiaries	Associates/ Joint Ventures	Others	Total
		(in $ million)		
Net amounts receivable at year end	3	–	–	3
Net amounts payable at year end	3	–	14	17
Investment in equity Share	17	–	15	32
Value of bonds held by Volcan	13	–	–	13
Net advance given at year end	–	–	0	0
Financial guarantee given	–	–	7	7
Loans given	0	1	–	1
Deferred Consideration payable	299	–	–	299
Fair Value of structured Investment	690	–	–	690

Remuneration of Key Management Personnel

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of Vedanta, directly or indirectly, including any director (whether executive or otherwise).

Particulars	Fiscal Year 2020	Fiscal Year 2019
	(in $ million)	
Short-term employee benefits	22	24
Post-employment benefits	2	1
Share-based payments	2	4
Total	**26**	**29**
Compensation for Non-Executive Directors	1	1
Commission/Sitting Fees to key management personnels	0	0

Other related party[1]

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of Vedanta, directly or indirectly, including any director (whether executive or otherwise).

Particulars	Fiscal Year 2020	Fiscal Year 2019
	(in $ million)	
Remuneration to relatives	2	2
Commission/sitting fees to relatives of key management personnels	0	0

(1) Close relatives of the Executive Chairman

Given that there is no specific requirement in IAS 24 to disclose transactions with each related party, the presentation has been revised during the year to aggregate the transactions based on categories of related parties. The disclosure of previous year has also been restated accordingly.

MATERIAL CONTRACTS

The following is a summary of Vedanta's material contracts (other than those in respect of its material indebtedness, which are discussed in the section entitled "*Description of Material Indebtedness*").

HZL call options

On 11 April 2002, Vedanta Limited acquired a 26.0% interest in HZL from the GOI through its subsidiary, SOVL (which has since merged into Vedanta Limited). Upon Vedanta Limited's acquisition of the 26.0% interest in HZL, the GOI and Vedanta Limited entered into a shareholders' agreement to regulate, among other things, the management of HZL and dealings in HZL's shares.

Under the shareholders' agreement, the GOI granted Vedanta Limited two call options to acquire all the shares in HZL held by the GOI at the time of exercise. Vedanta Limited exercised the first call option on 29 August 2003 and acquired an additional 18.9% on 12 November 2003, taking Vedanta Limited's interest in HZL to 64.9%.

The shareholders' agreement provides that prior to selling shares in HZL to a third party, either party must first issue a sale notice offering those shares to the other party at the price it intends to sell them to the third party. However, a transfer of shares, representing not more than 5.0% of the equity share capital of HZL, by the GOI to the employees of HZL is not subject to such right of first refusal by Vedanta Limited. The GOI has transferred shares representing 1.5% of HZL's share capital to the employees of HZL. The shareholders' agreement also provides that if the GOI proposes to make a sale of its shares in HZL by a public offer prior to the exercise of Vedanta Limited's second call option, then Vedanta Limited shall have no right of first refusal.

The second call option provides Vedanta Limited a right to acquire the GOI's remaining 29.5% shareholding in HZL, subject to the right of the GOI to transfer up to 3.5% of the issued share capital of HZL to employees of HZL, in which case the number of shares that Vedanta may purchase under the second call option will be reduced accordingly. The exercise price for the second call option will be equal to the fair market value of the shares as determined by an independent appraiser. By a letter dated 21 July 2009, Vedanta Limited exercised the second call option. See the section entitled "*Business — Litigation — Vedanta Limited has commenced proceedings against the GOI, which the GOI has disputed Vedanta Limited's exercise of the call option to purchase its remaining 29.5% ownership interest in HZL.*" for more information.

BALCO call option

On 2 March 2001, Vedanta Limited acquired a 51.0% interest in BALCO from the GOI. On the same day, Vedanta Limited entered into a shareholders' agreement with the GOI and BALCO to regulate, among other things, the management of BALCO and dealings in BALCO's shares. The shareholders' agreement provides that as long as Vedanta Limited holds at least 51.0% of the share capital of BALCO, it is entitled to appoint one more director to the board of BALCO than the GOI and is also entitled to appoint the managing director.

Under the shareholders' agreement, if either the GOI or Vedanta Limited wishes to sell its shares in BALCO to a third party, the selling party must first offer the shares to the other party at the same price at which it is proposing to sell the shares to the third party. The other party shall then have the right to purchase all, but not less than all, of the shares so offered. If a shareholder does not exercise its right of first refusal, it shall have a tag along right to participate in the sale pro rata and on the same terms as the selling party, except that if the sale is by the GOI by way of a public offer, the tag along right will not apply. However, a transfer of shares representing not more than 5.0% of the equity share capital of BALCO by the GOI to the employees of BALCO is not subject to such right of first refusal by Vedanta Limited. The GOI also granted to Vedanta Limited an option to acquire the remaining shares in BALCO held by the GOI at the time of exercise. See the section entitled "*Business — Litigation — Vedanta Limited has commenced proceedings against the GOI, which the GOI has disputed Vedanta Limited's exercise of the call option to purchase its remaining 49.0% ownership interest in BALCO.*" for more information.

Mineral Development Agreement executed relating to the rehabilitation and development of the Western Cluster iron ore deposits with the Government of Liberia

On 3 August 2011, Sesa Goa, Bloom Fountain Limited ("BFL"), Elenilto, WCL and the Government of Liberia entered into a Mineral Development Agreement relating to the exploration and development of the Western Cluster iron ore deposits (the "MDA"). The MDA became effective on 22 August 2011 (the "Effective Date").

The initial term of the MDA is 25 years from the Effective Date and will automatically be extended to match any extensions of the term of any mining licence granted by the Government of Liberia to WCL pursuant to the MDA.

The MDA provides that exploration licences are to be granted to WCL for the exclusive exploration of iron ore deposits in the Bomi, Mano River and Bea Mountain exploration areas. The MDA provides that WCL be granted land use rights in relation to the land subject to any exploration licence or mining licence; provided WCL pays reasonable compensation to landowners and occupants of the land for loss of or diminution in value of the land. These land use rights terminate at the end of the term of the MDA.

WCL must pay the Government of Liberia a royalty of 4.50% of the value of commercially shipped mineral, regardless of whether the shipment is a sale or other disposition, multiplied by the fair market value determined in accordance with the Liberian revenue code. WCL must also pay the Government of Liberia an upfront fee of $25 million. In addition, WCL is required to develop programmes for the development and maintenance of the communities that have formed and that may form as a result of its operations in the exploration areas and to also make annual contributions ranging from $2 million to $3.1 million to a specially managed fund for the benefit of communities in affected counties.

In the event of a transfer of an interest in WCL, WCL or the transferor of such interest must pay a withholding tax to the Government of Liberia of 15.0% of the value of all cash and other consideration received by the transferor or any other entity with respect to the transfer. No change of control of WCL is permitted by the MDA unless the prior written consent of the Government of Liberia is obtained or is otherwise permitted under the MDA. The MDA provides that a change of control of a shareholder of WCL (including Elenilto, BFL and any person who acquires an interest in WCL) will constitute a change of control of WCL. Due to a change in control of WCL pursuant to the share purchase agreement dated 20 December 2012 for the sale of Elenilto's 49% of the shares in WCL to BFL, the Legislature of Liberia is required to approve the amendment to the MDA which is currently in progress. On 5 July 2013 the first amendment to the MDA was executed by the parties to incorporate the change in shareholding. The amendment to the MDA is pending ratification from the Legislature of Liberia.

WCL agreed to indemnify the Government of Liberia and its officers and agents from all losses and liabilities incurred as a direct consequence of death or injury to persons or damage to property directly resulting from the conduct of WCL. Sesa Goa, BFL and Elenilto jointly and severally guaranteed the performance of the obligations of BFL and WCL under the MDA. Furthermore, Sesa Goa agreed to maintain a net worth of at least $100 million. The MDA is governed by Liberian law.

Rajasthan Block Production Sharing Contract

Vedanta Limited's oil and gas business along with CEHL are working in partnership with its joint operation partner, ONGC, in the RJ-ON-90/1 Block located in Barmer district, Rajasthan Block. The Rajasthan Block PSC was signed on 15 May 1995 between the GOI and a consortium consisting of ONGC and SIPD.

Vedanta Limited's oil and gas business acquired interest in the Block from SIPD in two tranches and held 100.0% interest on 20 June 2003. Under the Rajasthan Block PSC, the GOI has an option to acquire a participating interest of 30.0% in any development area containing a commercial discovery. The GOI exercised their right in all three development areas, specifically, DA 1 in 2005, DA 2 in 2007 and DA 3 in 2009, acting through its nominee ONGC, and acquired a 30.0% participating interest. As of 31 March 2020, ONGC holds 30.0% and Vedanta Limited's — oil and gas business holds 35.0% participating interest in the Rajasthan Block, with the remaining 35.0% interest being held by CEHL, which is a wholly owned subsidiary of Vedanta Limited.

As per the terms of the Rajasthan Block PSC and permissions from the GOI, the crude oil and condensate produced at Rajasthan Block is being sold to both public sector undertakings and private refineries. As of 31 March 2020, commercial sales arrangements were in place for over 250,000 bopd with public sector undertakings and private refineries.

The Rajasthan Block PSC established a Management Committee for the Rajasthan Block, which consists of four members, two of whom are nominated by and represent the GOI and the licensee, ONGC, taken together, and two of whom are nominated by and represent Vedanta Limited's — oil and gas business and CEHL. The Management Committee must unanimously approve annual work programmes, budgets, proposals for the declaration of a discovery as commercial, field development plans, and the delineation of or additions to a development area as provided in the Rajasthan Block PSC.

The Rajasthan Block PSC is valid until May 2020, unless it is terminated in accordance with its terms, but may be extended by mutual agreement among the parties for up to an additional term of five years, provided in case of commercial production of natural gas which is expected to continue beyond 2020, the production sharing contract shall be extended for a period of 35 years from 15 May 1995. There is also a provision to further extend the Rajasthan Block PSC by agreement of the parties if production of crude oil or of natural gas is expected to continue after the relevant period.

Vedanta Limited has filed a writ petition before the High Court of Delhi against the MoPNG, the DGH and ONGC regarding the extension of the tenure for the Rajasthan Block PSC for the Rajasthan Block. As of the date of this Offering Circular, the Rajasthan Block PSC addendum for extension of the tenure of the Rajasthan Block has not been executed. See the section entitled "*Business — Litigation — Writ petition filed in the Delhi High Court by Vedanta Limited relating to extension of tenure of the Rajasthan Block PSC.*" for more information.

Separately, Cairn has initiated arbitration and filed a Notice of Arbitration dated 1 March 2019 against ONGC with respect to the issue of cost oil finalisation. ONGC filed its response on 12 April 2019. The Arbitral Tribunal stands constituted. A Statement of Claim was filed by Vedanta on 31 January 2020, in accordance with the procedural timetable. Due to the COVID-19 pandemic restrictions, ONGC has been granted an extension to file its responses by 31 August 2020. In parallel, on 10 May 2019, ONGC filed an interim application before the High Court of Delhi under Section 9 of the (Indian) Arbitration Act in respect of their claims. No order has been passed in the matter and the matter will be listed in due course.

The Rajasthan Block benefitted from a tax holiday of seven years from the Fiscal Year 2009 (being the year of commencement of commercial production in the Rajasthan Block) to 31 March 2016. However, during this seven year period, minimum alternate tax rules applied resulting in a taxation of book profits calculated in accordance with the generally accepted accounting principles used in India. Any minimum alternate tax paid can be carried forward for a total period of 15 years from the year of payment and used to reduce corporate tax due in future years in excess of minimum alternate tax payable in those years.

Under the Rajasthan Block PSC, all crude oil sales made to the GOI or Government companies as well as private buyers are valued at a weighted average FOB selling price per barrel of a basket of international crude oil as agreed by all parties which is quoted in Platts, a provider of energy information. For any delivery period in which sales take place, the price is set at an average price per barrel determined by calculating the average for the month of such delivery period of the mean of the high and low FOB prices.

The crude oil produced at the Rajasthan Block is benchmarked to Bonny Light, an international low sulphur crude oil published in Platts Crude Oil Market wire on a daily basis. The pricing formula also adjusts for differences in yield and quality.

In the event of any dispute, difference or claim between the parties to the Rajasthan Block PSC arising out of or in connection with any of the terms and conditions of the said PSC or concerning any interpretation or performance thereof which cannot be settled amicably may be referred a sole expert, to be appointed by the parties to the dispute jointly, who is to be an independent and impartial person of international standing with relevant qualifications and experience. Under the provisions of the Rajasthan Block PSC, the decision of the sole expert is final and binding on the parties and not subject to arbitration. The Rajasthan Block PSC also provides for settlement of any dispute, difference or claim between the parties through arbitration.

Ravva Block Production Sharing Contract

The production sharing contract for the exploration, development and production of the Ravva Block (the "Ravva PSC") was signed on 28 October 1994 between the GOI and a consortium consisting of ONGC, Videocon Industries Limited (formerly Videocon Petroleum Limited), Ravva Oil and Cairn Energy India Pty Limited (formerly known as Command Petroleum (India) Pty Limited) ("Command Petroleum") with Command Petroleum being designated as the operator. In 1996, Cairn Energy acquired Command Petroleum, including its interest in the Ravva Block, and subsequently Vedanta Limited's oil and gas business (since merged with Vedanta) became the operator.

Currently, Vedanta Limited holds a 22.5% working interest in the Ravva Block with the remaining interests held by ONGC (40%), Videocon Industries Limited (25%) and Ravva Oil (12.5%) (together the "Ravva Joint Operating Partners"). The Ravva PSC was originally valid until 27 October 2019. The MoPNG, through a notification dated 28 March 2016, issued a policy for the grant of an extension to the production sharing contracts signed by the GOI awarding small, medium sized and discovered fields to private joint ventures (the "Ravva Extension Policy"). The Ravva Extension Policy defines the framework for granting of the extension and covers 28 small and marginal fields, including the Ravva field.

The Ravva Extension Policy, amongst others, provides for an increased share of profit petroleum of 10% for the GOI during the extended term of the Ravva PSC and payment of royalty and cess as per prevailing rate in accordance with PNG rules 1959 and OIDB Act. According to the terms of the Ravva Extension Policy, the joint operation partners applied to the GOI seeking extension of the Ravva PSC by ten years and the DGH vide 11 March 2019 has communicated to the GOI, approval of PSC extension for ten years with some conditions. All the joint venture parties have submitted the acceptance of these conditions to the DGH vide their letter dated 25 April 2019. All the parties including the GOI have executed the PSC amendment incorporating the period extension of 10 years and other terms and conditions of extension on 24 October 2019.

As per the terms of the Ravva PSC, the crude oil and condensate produced from the Ravva Block is being sold to the public sector undertakings and private refineries. As of 31 March 2020, commercial sales arrangements are in place for over 25,000 bopd with public sector undertakings. All sales to the GOI nominees are to be valued at a FOB selling price per barrel in US dollars based on a pricing formula based on Bonny Light ascertained on Platts.

Cambay Block Production Sharing Contract

Exploration, development and production of the Cambay block is governed by a production sharing contract between the GOI and a consortium consisting of ONGC, Tata Petrodyne and Vedanta Limited (the "Cambay Joint Operating Partners") which was signed on 30 June 1998 (the "Cambay PSC") and runs until 2023 unless the Cambay PSC is terminated earlier in accordance with its terms and may be extended for a further period not exceeding five years, provided that in the event of commercial production of non-associated natural gas the Cambay PSC may be extended for period not exceeding 35 years from the

30 June 1998. By way of a notification dated 7 April 2017, the MoPNG issued the Pre-NELP Extension Policy, which defines the framework for granting extensions for Pre-NELP blocks. The Pre-NELP Extension Policy, amongst others, provides for an increased share of profit petroleum of 10% for the GOI during the extended term of the Cambay PSC. The extension application for the Cambay block shall be due for filing in 2021. Vedanta Limited's oil and gas business's participating interest in the Cambay Basin joint operation consists of a 40% interest in the Lakshmi, Gauri and CB-X development areas. The remaining interests in these development areas are held by ONGC (50%) and Tata Petrodyne (10%).

Conflicts of Interest

From time to time, conflicts of interest have in the past and will in the future arise between the Company and its affiliates. With respect to transactions between the Company and its affiliates, Directors and executive officers that involve conflicts of interests, the Company has in the past undertaken and will continue to undertake such transactions in compliance with the rules for interested or related party transactions of the NYSE on which Vedanta Limited is listed and the Indian stock exchanges, for so long as Vedanta Limited is so listed.

As part of Vedanta Limited's listing on the NYSE, Vedanta Limited was required to confirm to the NYSE that it will appropriately review and oversee related party transactions on an ongoing basis. Such related party transactions include transactions between Vedanta Limited and the Company, and the Company's affiliates. The NYSE reviews the proxy statements and other public filings of its listed companies as to related party transactions. Under the rules of the NYSE, Vedanta Limited was required to have an independent audit committee comprised of a majority of independent directors within 90 days of listing and comprised entirely of independent directors within one year of listing. Vedanta Limited currently has an independent audit committee comprised entirely of independent directors and expects to continue to do so for as long as it is listed on the NYSE. One of the functions of its independent audit committee is to review any related party transactions by Vedanta Limited or any of its subsidiaries or affiliates. In addition, under the rules of the NYSE, Vedanta Limited is required to obtain shareholder approval for any issuance of its equity shares, or securities convertible into or exercisable for the Its equity shares, to any related party, except that such approval would not be required for sales of the Its equity shares to the Its controlling shareholder or its affiliates in an amount not to exceed 5% of the number of the Its equity shares outstanding prior to such issuance and at a price equal to or greater than the higher of the book or market value of the Its equity shares.

Under the listing agreements that the Company's Indian subsidiaries have entered into with the Indian stock exchanges, these subsidiaries are required to ensure that their disclosures in relation to material and significant related party transactions in their annual reports are in compliance with Indian Accounting Standards. Specifically, these subsidiaries are required to place before their audit committee and publish in their annual reports a statement in summary form of the related party transactions entered into by them during the previous Fiscal Year, providing details of whether such transactions were undertaken in the ordinary course of business and details of material individual transactions with related parties or others which were not on an arm's length basis, together with their management's justification for such transactions. Under the listing agreements, their audit committee is required to review and discuss with the management the disclosures of any related party transactions, as defined under Indian Accounting Standards, in the Company's annual financial statements.

The Company also has used and will continue to use independent appraisers in appropriate circumstances to help determine the terms of related party transactions. The Company has had and will continue to have an Audit Committee comprised entirely of independent directors which is responsible for reviewing any related-party transaction by the Company or any of its subsidiaries or affiliates. See also the section entitled "*Risk Factors — Risks Relating to Business — The equity shares of the Issuer and the Company are not listed and therefore the Issuer and the Company are not subject to the disclosure and corporate governance requirements that listed companies are required to comply with*" for more information.

DESCRIPTION OF MATERIAL INDEBTEDNESS

Set forth below is a summary of the terms and conditions of certain of Vedanta's debt instruments that Vedanta considers to be the most material as of 31 March 2020. The summary may not contain all of the information that is important to you. You should read the notes to the financial statements for additional information about the indebtedness of Vedanta.

As of 31 March 2020 Vedanta had $15,095 million of debt outstanding including bonds, term loans and working capital facilities. Set forth below is information regarding Vedanta's material debt outstanding as of 31 March 2020.

The Company

$1,000.0 million 6.125% bonds due 2024 (the "2024 Bonds")

On 9 August 2017, the Company issued $1,000.0 million 6.125% bonds due 2024. The interest on the bonds is payable semi-annually in arrear on 9 February and 9 August each year, at a rate of 6.125% per annum. The bonds will mature on 9 August 2024.

Under the terms and conditions of the bonds, the Company is subject to certain covenants restricting it and its material subsidiaries (as defined in the terms and conditions of the bonds) from creating or permitting to subsist any mortgage, charge, pledge, lien or other form of encumbrance or security interest upon the whole or any part of their respective undertaking or assets, present or future, to secure any indebtedness or debt, or any guarantee or indemnity in respect of the Company's indebtedness or any relevant debt (as defined in the terms and conditions of the bonds) of its material subsidiaries, unless the bonds are secured equally and rateably therewith or otherwise benefit identically or not materially less beneficial to the bondholders.

The 2024 Bonds were the subject of a consent solicitation exercise by Vedanta on 5 June 2020. For more information, please see the section entitled "*Summary — Recent Developments — Consent Solicitation in respect of the outstanding Company Bonds and Guaranteed Bonds*".

$1,000.0 million 6.375% bonds due 2022 (the "2022 Bonds")

On 30 January 2017, the Company issued $1,000.0 million 6.375% bonds due 2022. The interest on the bonds is payable semi-annually in arrear on 30 January and 30 July each year, at a rate of 6.375% per annum. The bonds will mature on 30 July 2022.

Under the terms and conditions of the bonds, the Company is subject to certain covenants restricting it and its material subsidiaries (as defined in the terms and conditions of the bonds) from creating or permitting to subsist any mortgage, charge, pledge, lien or other form of encumbrance or security interest upon the whole or any part of their respective undertaking or assets, present or future, to secure any indebtedness or debt, or any guarantee or indemnity in respect of the Company's indebtedness or any relevant debt (as defined in the terms and conditions of the bonds) of its material subsidiaries, unless the bonds are secured equally and rateably therewith or otherwise benefit identically or not materially less beneficial to the bondholders.

The 2022 Bonds were the subject of a consent solicitation exercise by Vedanta on 5 June 2020. For more information, please see the section entitled "*Summary — Recent Developments — Consent Solicitation in respect of the outstanding Company Bonds and Guaranteed Bonds*".

$500.0 million 7.125% bonds due 2023 (the "2023 Bonds I")

In June 2013, the Company issued $500.0 million 7.125% bonds due 2023. The interest on the bonds is payable semi-annually in arrear on 3 June and 3 December each year at a rate of 7.125% per annum. The bonds will mature on 31 May 2023.

Under the terms and conditions of the bonds, the Company is subject to certain covenants restricting it and its material subsidiaries (as defined in the terms and conditions of the bonds) from creating or permitting to subsist any mortgage, charge, pledge, lien or other form of encumbrance or security interest upon the whole or any part of their respective undertaking, assets or revenues, present or future, to secure any indebtedness or debt or any guarantee or indemnity in respect of the Company's indebtedness or relevant debt (as defined in the terms and conditions of the bonds) of its material subsidiaries, unless the bonds are secured equally and rateably therewith or otherwise benefit identically or not materially less beneficial to the bondholders.

The 2023 Bonds I were the subject of a consent solicitation exercise by Vedanta on 5 June 2020. For more information, please see the section entitled "*Summary — Recent Developments — Consent Solicitation in respect of the outstanding Company Bonds and Guaranteed Bonds*".

$900.0 million 8.25% bonds due 2021 (the "2021 Bonds")

On 7 June 2011, the Company issued $900.0 million 8.25% bonds due 2021. The interest on the bonds is payable semi-annually in arrear on 7 June and 7 December each year, at a rate of 8.25% per annum. The bonds will mature on 7 June 2021.

Under the terms and conditions of the bonds, the Company is subject to certain covenants restricting it and its material subsidiaries (as defined in the terms and conditions of the bonds) from creating or permitting to subsist any mortgage, charge, pledge, lien or other form of encumbrance or security interest upon the whole or any part of their respective undertaking, assets or revenues, present or future, to secure any indebtedness or debt or any guarantee or indemnity in respect of the Company's indebtedness or relevant debt (as defined in the terms and conditions of the bonds) of its material subsidiaries, unless the bonds are secured equally and rateably therewith or otherwise benefit identically or not materially less beneficial to the bondholders.

Following a tender offer by the Company in August 2017 for the bonds, the outstanding amount on the bonds as of 31 March 2020 was $670.2 million.

The 2021 Bonds were the subject of a consent solicitation exercise by Vedanta on 5 June 2020. For more information, please see the section entitled "*Summary — Recent Developments — Consent Solicitation in respect of the outstanding Company Bonds and Guaranteed Bonds*".

$400.0 million 8% bonds due 2023 (the "2023 Bonds II") and $600.0 million 9.25% bonds due 2026 (the "2026 Bonds")

In April 2019, Vedanta Resources Finance II Plc issued $400.0 million 8% bonds and $600.0 million 9.25% bonds. The bonds are guaranteed by the Company. The bonds mature in April 2023 and April 2026, respectively. The interest is payable semi-annually in arrear on 23 April and 23 October of each year.

Under the terms and conditions of the bonds, the Company is subject to certain covenants restricting it and its material subsidiaries (as defined in the terms and conditions of the bonds) from creating or permitting to subsist any mortgage, charge, pledge, lien or other form of encumbrance or security interest upon the whole or any part of their respective undertaking, assets or revenues, present or future, to secure any indebtedness or debt or any guarantee or indemnity in respect of the Company's indebtedness or relevant debt (as defined in the terms and conditions of the bonds) of its material subsidiaries, unless the bonds are secured equally and rateably therewith or otherwise benefit identically or not materially less beneficial to the bondholders.

The 2023 Bonds II and the 2026 Bonds were the subject of a consent solicitation exercise by Vedanta on 5 June 2020. For more information, please see the section entitled "*Summary — Recent Developments — Consent Solicitation in respect of the outstanding Company Bonds and Guaranteed Bonds*".

$350.0 million Term Loan Facility with SBI (London Branch)

In March 2015, the Company entered into a facility agreement with State Bank of India for $350.0 million. $250.0 million bears an interest rate of LIBOR plus 403 basis points repayable in two instalments of $100.0 million and $150.0 million in June 2021 and June 2022 respectively. As at 31 March 2020, the principal amount outstanding was $250.0 million under this facility.

$300.0 million Term Loan Facility with SBI (London Branch)

In January 2016, the Company entered into a facility agreement with State Bank of India for $300.0 million. Out of which $120.0 million bears an interest rate of LIBOR plus 450 basis points and is repayable in February 2022. Balance $180.0 million bears an interest rate of LIBOR plus 454 basis points and is repayable in February 2023. As at 31 March 2020, the principal amount outstanding was $300.0 million under this facility.

$575.0 million Term Loan Facility dated September 2017 between Twin Star as borrower, the Company as the guarantor and Barclays Bank Plc, Credit Suisse AG Singapore Branch, DBS Bank Ltd, National Bank of Abu Dhabi Pjsc Singapore Branch, Standard Chartered Bank Singapore Branch as Arrangers

In September 2017, the Company entered into a $575.0 million syndicated facility agreement with Barclays Bank Plc, Credit Suisse AG Singapore Branch, DBS Bank Ltd, National Bank of Abu Dhabi Pjsc Singapore Branch, Standard Chartered Bank Singapore Branch as Arrangers. The facility bears an interest rate of LIBOR plus 310 basis points. The facility was fully drawn in September 2017. The same is repayable as $17.25 million in September 2020, $34.5 million in March 2021, $172.5 million in September 2021, $172.5 million in March 2022 and $178.25 million in September 2022. As at 31 March 2020, the principal amount outstanding under this facility was $575.0 million.

$200.0 million Term Loan Facility from SBI (London Branch)

In January 2018, the Company entered into a $200.0 million facility with State Bank of India (London Branch). The facility bears an interest rate of LIBOR plus 338.57 basis points. The facility was fully drawn in March 2018 and is repayable in January 2025. As at 31 March 2020, the principal amount outstanding under this facility was $200.0 million.

$180.0 million Term Loan Facility between Vedanta Resources Jersey II Limited (wherein the Company is the guarantor) and Yes Bank Limited (IFSC Banking Unit)

In December 2017, the Company entered into a $150.0 million facility with Yes Bank Limited, which was amended to $180.0 million in January 2018. The facility currently bears an interest rate of LIBOR plus 289 basis points. The facility was fully drawn in January 2018. The facility is repayable in September 2020. As at 31 March 2020, the principal amount outstanding under this facility was $180.0 million.

$200.0 million Term Loan Facility from Bank of Baroda (London Branch)

In June 2018, the Company entered into a $200.0 million facility with Bank of Baroda. The facility bears an interest rate of LIBOR plus 300 basis points. The facility was fully drawn in June 2018 and is repayable in nine half-yearly instalments starting from June 2020. As at 31 March 2020, the principal amount outstanding under this facility was $200.0 million.

$200.0 million Term Loan Facility from ICICI Bank Limited (Bahrain Branch)

In September 2018, the Company entered into a $200.0 million facility with ICICI Bank Limited. The facility bears an interest rate of LIBOR plus 339 basis points. The facility was fully drawn in October 2018 and is repayable in six half-yearly instalments starting from March 2021. As at 31 March 2020, the principal amount outstanding under this facility was $200.0 million.

$120.0 million Revolving Credit Facility dated February 2020 between Twin Star as borrower, the Company as the guarantor and Emirates NBD Bank PJSC and Standard Chartered Bank as Arrangers

In February 2020, the Company entered into a $120.0 million Revolving Credit facility with Emirates NBD Bank PJSC and Standard Chartered Bank as Arrangers. The facility bears an interest rate of $LIBOR plus 325 basis points. The same is repayable in February 2021. As at 31 March 2020, the principal amount outstanding under this facility was $112.50 million.

$600.0 million Bridge Loan Facility between Twin Star (wherein the Company is the guarantor) from Standard Chartered Bank

In December 2019, Vedanta entered into a $600.0 million short term facility with Standard Chartered Bank. The facility bears an interest rate of LIBOR plus 400 basis points and further increased to 500 basis points in March 2020 and is repayable in June 2020. As at 31 March 2020, the principal amount outstanding under this facility was $589.0 million. The facility has been extended by 6 months from June 2020 and the amount outstanding under this facility as at 30 June 2020 was $414 million.

$200.0 million Term Loan Facility between Vedanta Resourced Limited from Syndicate Bank (London Branch)

In December 2019, Vedanta entered into a $200.0 million facility with Syndicate Bank. The facility bears an interest rate of LIBOR plus 375 basis points with an average maturity of 4.5 years. As at 31 March 2020, the principal amount outstanding under this facility was $200.0 million.

Vedanta Limited

$500.0 million Term Loan Facility with CIHL as borrower with a greenshoe option of $250.0 million

In September 2019, CIHL entered into a $500.0 million facility (with a greenshoe option of $250.0 million) with Axis Bank Limited (IFSC Unit), Citigroup Global Markets Asia Limited and ICICI Bank Limited (IFSC Unit) as arrangers. The facility bears an interest rate of LIBOR plus 265.5 basis points with an average maturity of 3.8 years from the date of first drawdown. As at 31 March 2020, the principle amount outstanding was $500.0 million.

Axis Bank Limited's Rupee corporate loan of ₹50 billion

In November 2015, Vedanta Limited entered into a common Rupee loan agreement with Axis Bank Limited to avail a Rupee term loan of ₹50 billion at an interest rate of Axis bank's base rate plus 30 basis points. The facility is secured by a first ranking *pari passu* mortgage and hypothecation over the fixed assets of Vedanta Limited in respect of the specific aluminium division assets in Odisha. The facility is repayable in 60 quarterly instalments up to 31 December 2030. As at 31 March 2020, the principal amount outstanding was ₹20.23 billion ($273.9 million) (including the amount outstanding on the portion of the loan novated to other banks). The interest rate was reset at Axis Bank's 1 year MCLR plus 65 basis points in May 2019.

Axis Bank Limited novated a part of facility to the following banks:

(i) Loan amount of ₹3.0 billion was novated to Canara Bank. The interest rate was reset at the bank's 1 Year MCLR plus 10 basis points in March 2019. As at 31 March 2020, the principal amount outstanding was ₹2.64 billion ($35.29 million).

(ii) Loan amount of ₹2.0 billion was novated to State Bank of India (erstwhile known as State Bank of Hyderabad). The interest rate was reset at the bank's 1 Year MCLR plus 50 basis points in November 2019. As at 31 March 2020, the principal amount outstanding was ₹1.76 billion ($23.52 million).

(iii) Loan amount of ₹5.0 billion was novated to Bank of Baroda (erstwhile known as Vijaya Bank). The interest rate was reset at the bank's 1 Year MCLR plus 15 basis points in June 2019. As at 31 March 2020, the principal amount outstanding was ₹4.40 billion ($58.8 million).

(iv) Loan amount of ₹3.0 billion was novated to State Bank of India (erstwhile known as State Bank of Patiala). The interest rate was reset at the bank's 1 Year MCLR plus 50 basis points in November 2019. As at 31 March 2020, the principal amount outstanding was ₹2.64 billion ($35.3 million).

State Bank of India's Rupee corporate loan of ₹12.5 billion

In December 2015, Vedanta Limited entered into a corporate loan agreement with State Bank of India to avail a corporate loan of ₹12.50 billion. The interest rate was reset at the bank's 1 year MCLR plus 50 basis points in July 2019. The facility is secured by a first *pari passu* mortgage and hypothecation over the fixed assets of aluminium division of Vedanta Limited in Odisha. The facility is repayable in 29 quarterly instalments up to 31 March 2025. As at 31 March 2020, the principal amount outstanding was ₹11.41 billion ($152.5 million).

State Bank of India's Rupee corporate loan of ₹50 billion

In July 2014, Vedanta Limited entered into a corporate loan agreement with State Bank of India to avail a corporate loan of ₹50 billion. The interest rate was reset at the bank's 1 Year MCLR plus 50 basis points in November 2019. The facility is secured by a first *pari passu* mortgage and charge over the specific fixed assets of aluminium division of Vedanta Limited in Odisha. The facility is repayable in 30 quarterly instalments up to 31 March 2022. As at 31 March 2020, the principal amount outstanding was ₹28.13 billion ($376.0 million).

Bank of Baroda Rupee Term Loan of ₹30 billion

In July 2018, Vedanta Limited entered into a corporate loan agreement with Bank of Baroda to avail a corporate loan of ₹30 billion. The facility was fully drawn in August 2018. The interest rate was reset at the bank's 1 year MCLR plus 20 basis points in August 2019. The facility is secured by a first *pari-passu* charge on fixed assets pertaining to the Aluminium Division of the company situated at Jharsuguda, Odisha. The facility is repayable in 32 consecutive structured quarterly instalments starting from June 2020 (post a two year moratorium). As at 31 March 2020, the principal amount outstanding was ₹30.0 billion ($401.0 million).

Talwandi Saboo Power Limited

State Bank of India's Rupee Term Loan facility of ₹20.0 billion

In December 2015, TSPL entered into a term loan facility agreement with State Bank of India to avail term loan of ₹20 billion. At present, this facility carries an interest rate of State Bank of India's 1 Year MCLR plus 105 basis points. The facility was secured by *pari passu* charge on the assets of TSPL pertaining to the project envisaging development of 1,980 MW coal based thermal power plant, both present and future, with an unconditional and irrevocable corporate guarantee by Vedanta Limited. The facility is repayable in 48 quarterly instalments starting in June 2018. As at 31 March 2020, the principal amount outstanding was ₹17.9 billion ($239.27 million).

Electrosteel Steels Limited (formerly Vedanta Star Limited)

Standard Chartered Bank Rupee Term Loan facility of ₹34.0 billion

In June 2018, VSL entered into an Indian Rupee loan agreement with Standard Chartered Bank to avail an Indian Rupee term loan of ₹34.0 billion for acquiring shares of ESL in furtherance of the approval of a resolution plan submitted to the NCLT under Section 31 of the Insolvency and Bankruptcy Code, 2016. On 31 January 2020, the NCLT approved the merger scheme between VSL and ESL. The facility is secured by a hypothecation on all fixed assets of Electrosteel Steels Limited, a corporate guarantee provided by Vedanta Limited in favour of the security trustee and a mortgage on all the immovable properties of ESL. The initial interest rate was set at the aggregate of Standard Chartered Bank's six-month MCLR plus 15 basis points per annum. The facility is repayable from 24 months from the date of utilisation in 33 instalments. In June 2018, loan amount of ₹15 billion was novated to ICICI Bank Limited with an interest rate of ICICI Bank Limited's 1 Year MCLR plus 70 basis points per annum. As at 31 March 2020, the principal amount outstanding under this facility was ₹34.0 billion ($454.48 million) (including the amount outstanding on the portion of the loan novated to other banks).

Standard Chartered Bank and ICICI Bank Limited further novated a part of the facility to the following banks and as of 31 March 2020, their principal amount outstanding was ₹2.4 billion ($32.08 million) and ₹5.6 billion ($74.86 million) respectively:

(i) Loan amount of ₹10 billion have been novated to Bank of Bardoa. As of 31 March 2020, the principal amount outstanding was ₹10 billion ($133.67 million) with an interest rate of Bank of Baroda's 1 Year MCLR plus 115 basis points per annum.

(ii) Loan amount of ₹5 billion have been novated to Punjab National Bank. As of 31 March 2020, the principal amount outstanding was ₹.5 billion ($66.84 million) with an interest rate of Punjab National Bank's 1 Year MCLR plus 105 basis points per annum.

(iii) Loan amount of ₹5 billion have been novated to Bank of India. As of 31 March 2020, the principal amount outstanding was ₹5 billion ($66.84 million) with an interest rate of Bank of India's 1 Year MCLR plus 75 basis points per annum.

(iv) Loan amount of ₹5 billion have been novated to Andhra Bank. As of 31 March 2020, the principal amount outstanding was ₹5 billion ($66.84 million) with an interest rate of Andhra Bank's 1 Year MCLR plus 80 basis points per annum.

(v) Loan amount of ₹1 billion have been novated to Karnataka Bank. As of 31 March 2020, the principal amount outstanding was ₹1 billion ($13.37 million) with an interest rate of Karnataka Bank's 6 Month MCLR plus 50 basis points per annum.

Non-Convertible Debentures

Vedanta Limited had non-convertible debentures ("NCDs") aggregating to $2,191 million principal outstanding as at 31 March 2020. These NCDs were issued between August 2015 and February 2020. The details of the material NCDs are as follows:

Issuer	Principal Outstanding as at 31 March 2020	Interest Rate	Maturity Date
Vedanta Limited	₹20 billion ($267 million)	9.45%	17 August 2020
Vedanta Limited	₹23.50 billion ($314 million)	8.50%	5 April 2021
Vedanta Limited	₹16.50 billion ($220 million)	8.50%	15 June 2021
Vedanta Limited	₹12.7 billion ($170 million)	8.75%	30 June 2022
Vedanta Limited	₹20 billion ($267 million)	9.20%	25 February 2030

In addition to the above indebtedness, Vedanta has entered into various arrangements with lenders in relation to its long-term and short-term borrowings (which includes commercial paper and credit lines) to fund its working capital requirements. Certain of these financing arrangements are secured by movable and immovable assets of the Company, including the capital stock of its subsidiaries and, in certain instances, guarantees by the Company.

TERMS AND CONDITIONS OF THE BONDS

*The following, other than the paragraphs in italics, is the text of the terms and conditions of the Bonds which will be endorsed on the individual certificates ("**Individual Certificates**") issued in respect of the Bonds.*

The issue of the U.S.$1,400,000,000 13.00 per cent. guaranteed senior secured bonds due 2023 (the "**Bonds**"), which expression shall, unless the context requires, include any bonds issued pursuant to Condition 15 and forming a single series with the Bonds issued on the Closing Date) was authorised by resolutions of the Board of Directors of Vedanta Holdings Mauritius II Limited (the "**Issuer**") on 7 August 2020. The Bonds are guaranteed jointly and severally by Vedanta Resources Limited (the "**Parent Guarantor**") and the Subsidiary Guarantors (as defined in Condition 1(c)) (collectively, the "**Guarantors**"). The Bonds have the benefit of the Security (as defined in Condition 1(d)) granted by the Issuer and the other Security Providers (as defined in Condition 1(d)). The Bonds are constituted by a Trust Deed (the "**Trust Deed**") dated on or about the Closing Date among the Issuer, the Guarantors and Citicorp International Limited as trustee for the Bondholders (as defined in Condition 1(b)) (the "**Trustee**", which expression shall include all persons for the time being acting as trustee or trustees under the Trust Deed). These terms and conditions (the "**Conditions**") include summaries of, and are subject to, the detailed provisions of the Trust Deed, which includes the form of the Bonds, the Security Documents (as defined in Condition 1(d)), the Intercreditor Agreement (as defined in Condition 1(d)) and the Bond Escrow Agreement (as defined in Condition 1(e)). Unless otherwise defined, terms used in these Conditions have the meaning specified in the Trust Deed. The Issuer has entered into an agency agreement dated on or about the Closing Date (the "**Agency Agreement**") among the Issuer, the Guarantors, the Trustee, Citibank, N.A., London Branch, as principal paying agent and transfer agent, Citigroup Global Markets Europe AG, as registrar, and the other paying and transfer agents appointed under it. The principal paying agent, transfer agent, registrar, paying agents and transfer agents for the time being are referred to herein as the "**Principal Agent**", the "**Registrar**", the "**Paying Agents**" (which expression shall include the Principal Agent) and the "**Transfer Agents**" (which expression shall include the Registrar), respectively, each of which expressions shall include the successors from time to time of the relevant persons, in such capacities, under the Agency Agreement, and are collectively referred to herein as the "**Agents**". Copies of the Trust Deed, the Agency Agreement, the Security Documents, the Intercreditor Agreement and the Bond Escrow Agreement are available for inspection during usual business hours at the specified office of the Principal Paying Agent. The Bondholders (as defined in Condition 1(b)) are entitled to the benefit of, are bound by, and are deemed to have notice of, all the provisions of the Trust Deed, the Security Documents, the Intercreditor Agreement and the Bond Escrow Agreement and are deemed to have notice of the provisions of the Agency Agreement applicable to them. Except where the context otherwise requires, all references herein to the Trust Deed, the Agency Agreement, the Security Documents, the Intercreditor Agreement and the Bond Escrow Agreement shall be deemed to refer to such documents as amended, restated, novated and/or supplemented from time to time (to the extent such amendment, restatement, novation and/or supplement is permitted by these Conditions and the Trust Deed).

1 Form, Denomination, Title, Guarantee, Status and Bond Escrow

(a) Form and denomination

The Bonds are in registered form in the minimum denomination of U.S.$200,000 each and in integral multiples of U.S.$1,000 in excess thereof, without coupons attached. A bond certificate (each, a "**Certificate**") will be issued to each Bondholder in respect of its registered holding of Bonds. Each Bond and each Certificate will have an identifying number which will be recorded on the relevant Certificate and in the Register (as defined in Condition 2(a)).

Certificates issued with respect to Rule 144A Bonds will bear the Securities Act Legend (as defined in the Trust Deed), unless determined otherwise in accordance with the provisions of the Agency Agreement by reference to applicable law. Certificates issued with respect to the Regulation S Bonds will not bear the Securities Act Legend. Upon issue, the Rule 144A Bonds will be represented *by the Restricted Global Certificate and the Regulation S Bonds will be represented by the Unrestricted Global Certificate. The Restricted Global Certificate will be deposited with a custodian for, and registered in the name of Cede & Co. as nominee of, The Depository Trust Company ("**DTC**") and the Unrestricted Global Certificate will be deposited with a custodian for, and registered in the name of Cede & Co. as nominee of, DTC for the accounts of Euroclear Bank SA/NV ("**Euroclear**") and Clearstream Banking, S.A. ("**Clearstream, Luxembourg**"). The Conditions are modified by certain provisions contained in the Global Certificates. See "Summary of Provisions relating to the Bonds while in Global Form."*

Except in the limited circumstances described in the Global Certificates and "Summary of Provisions relating to the Bonds while in Global Form," owners of interests in Bonds represented by the Global Certificates will not be entitled to receive Individual Certificates in respect of their individual holdings of Bonds. The Bonds are not issuable in bearer form.

(b) **Title**

Title to the Bonds passes only by transfer and registration in the Register (as defined in Condition 2(a)). The holder of any Bond will (except as otherwise required by law or as ordered by a court of competent jurisdiction) be treated as its absolute owner for all purposes (whether or not it is overdue and regardless of any notice of ownership, trust or any interest in it or the theft or loss of, the Certificate (if any) issued in respect of it or anything written on it or on the relevant Certificate) and no person will be liable for so treating the holder. In these Conditions, "**Bondholder**" and (in relation to a Bond) "**holder**" mean the person in whose name a Bond is registered in the Register from time to time.

(c) **Guarantee**

The Parent Guarantor and each initial Subsidiary Guarantor has unconditionally and irrevocably guaranteed, on a joint and several basis, the due payment of all sums expressed to be payable by the Issuer under the Trust Deed and the Bonds. The obligations of the Guarantors in that respect (the "**Guarantee**") are contained in the Trust Deed. The obligations of each Guarantor under the Guarantee shall, save for such exceptions as may be provided by applicable legislation, at all times rank at least equally with all its other present and future unsubordinated obligations.

The initial Subsidiary Guarantors on the Closing Date are Vedanta Holdings Mauritius Limited and Vedanta Holdings Jersey Limited.

The Parent Guarantor will cause each of its Subsidiaries which guarantees the payment of amounts payable under the Bridge Facility Agreement, the Permitted Senior Secured Facility Agreement or Permitted Refinancing Borrowings for the Bonds or the Permitted Senior Secured Facility Agreement (other than Finsider International Company Limited, Twin Star Holdings Limited, Welter Trading Limited and Westglobe Limited), concurrently with the issuance of such guarantee, to execute and deliver to the Trustee a supplemental trust deed to the Trust Deed (a "**Supplemental Trust Deed**") pursuant to which each such Subsidiary will guarantee the payment of any amount payable under the Bonds or the Trust Deed on a pari passu basis with the obligations of the Issuer under the Bridge Facility Agreement, the Permitted Senior Secured Facility Agreement or any such Permitted Refinancing Borrowings, as the case may be. Each Subsidiary of the Parent Guarantor that guarantees the Bonds after the Closing Date, upon execution of the applicable Supplemental Trust Deed, will be a "**Subsidiary Guarantor**".

Notwithstanding anything contrary in these Conditions, the Trust Deed, the Agency Agreement, the Bond Escrow Agreement, the Security Documents, the Intercreditor Agreement or any other document or agreement relating to any of the foregoing, the Parent Guarantor shall ensure that Vedanta Limited and its subsidiaries shall not provide any direct or indirect loan, guarantee, security, collateral or other form of financial assistance in connection with the Bonds or the Take Private

Transaction, including by way of disposal or encumbrance over their assets or Incurring Borrowings, and shall at all times comply with their obligations under Section 67(2) of the (Indian) Companies Act, 2013 and Regulation 4(4) of the Delisting Regulations, as applicable, and other applicable laws.

Neither the Trustee nor any of the Agents shall be responsible for monitoring or determining whether any Subsidiary is required to deliver a Supplemental Trust Deed to the Trustee pursuant to this Condition 1(c) and shall not be liable to any person for not doing so.

For the purposes of these Conditions, "**Bridge Facility Agreement**" means the facility agreement to be entered into on or prior to the Bond Escrow Release Date among Vedanta Holdings Mauritius Limited (as borrower) and the Issuer, the Parent Guarantor, Vedanta Holdings Jersey Limited, Twin Star Holdings Ltd, Welter Trading Limited, Finsider International Company Limited and Westglobe Limited (as guarantors) with various other parties thereto as lenders, the proceeds of the loans Incurred thereunder (the "**Bridge Loans**") to be used to fund part of the Take Private Transaction.

See "Description of Certain Financing Arrangements" for further information regarding the Bridge Facility Agreement.

(d) **Status**

The Bonds constitute senior, unsubordinated, direct and unconditional obligations of the Issuer and shall at all times rank *pari passu* and without any preference among themselves. The payment obligations of the Issuer under the Bonds shall, save for such exceptions as may be provided by applicable legislation and subject to Condition 3(a), at all times rank at least equally with all its other present and future unsubordinated obligations.

The Issuer's and the Guarantors' payment obligations under the Bonds and the Guarantee, respectively, and the performance of their other obligations under the Bonds and the Trust Deed, will be secured (i) on the Closing Date by the Bond Escrow Account pursuant to the Bond Escrow Account Charge and (ii) on or prior to the Bond Escrow Release Date by the Common Collateral pursuant to the Common Security Documents.

The initial Security Providers are the Issuer, Vedanta Holdings Mauritius Limited and Vedanta Holdings Jersey Limited.

In these Conditions:

"**Bond Escrow Account**" means an account denominated in US dollars with the Bond Escrow Account Bank.

"**Bond Escrow Account Bank**" means a bank of internationally recognized standing which has an Investment Grade rating with an affiliate licensed and regulated in Mauritius.

"**Bond Escrow Agreement**" means the escrow account agreement dated on or about the Closing Date between the Issuer and the Bond Escrow Account Bank.

"**Bond Escrow Account Charge**" means the pledge of escrow account agreement dated on or about the Closing Date among the Issuer, the Trustee and, upon the issuance of a bank guarantee by the Issuing Bank (in favour of the manager to the Take Private Transaction, in accordance with the Delisting Regulations, the CG Issuing Bank(s) (or affiliate thereof).

"**Bridge Escrow Account**" means an account denominated in US dollars with a bank of internationally recognized standing which has an Investment Grade rating with an affiliate licensed and regulated in Mauritius into which some or all of the Bridge Loans may be deposited pending their application to fund part of the Take Private Transaction.

"**Collateral**" means the Common Collateral and the Bond Escrow Account.

"**Common Collateral**" means (i) the Capital Stock of the Issuer and Vedanta Holdings Mauritius Limited and (ii) the bank accounts of the Issuer and Vedanta Holdings Mauritius Limited (other than the Bond Escrow Account, the Bridge Escrow Account and the India Escrow Account).

"**Common Security Documents**" means (i) a first ranking pledge over 100% of the Capital Stock of the Issuer and Vedanta Holdings Mauritius Limited among the Issuer, Vedanta Holdings Mauritius Limited, Vedanta Holdings Jersey Limited and the Common Security Agent and (ii) a first ranking pledge over the bank accounts of the Issuer and Vedanta Holdings Mauritius Limited (other than the Bond Escrow Account, the Bridge Escrow Account and the India Escrow Account) among the Issuer, Vedanta Holdings Mauritius Limited and the Common Security Agent, each to be dated on or prior to the Bond Escrow Release Date.

"**India Escrow Account**" means an account in India opened by the Parent Guarantor and/or the Issuer and/or Vedanta Holdings Mauritius Limited, as the case may be, with respect to the Take Private Transaction in accordance with the Delisting Regulations.

"**Intercreditor Agreement**" means the intercreditor agreement to be dated on or prior to the Bond Escrow Release Date among the Parent Guarantor, the Issuer, the other Security Providers, the Trustee, Citicorp International Limited as common security agent (the "**Common Security Agent**") and the other parties thereto.

"**Security Documents**" means the Common Security Documents and the Bond Escrow Account Charge.

"**Security Provider**" means each initial Security Provider and each other Person which provides Collateral pursuant to the Trust Deed to secure the obligations of the Issuer and the Guarantors under the Bonds and the Trust Deed.

See "Description of Certain Financing Arrangements" for further information regarding the Intercreditor Agreement and the Security Documents.

(e) **Bond Escrow**

The Issuer will cause the gross proceeds of the offering of the Bonds issued on the Closing Date to be funded directly into the Bond Escrow Account. The funds in the Bond Escrow Account will be released in accordance with the Bond Escrow Agreement.

The Issuer shall not, and the Parent Guarantor shall procure that the Issuer shall not, modify the Bond Escrow Agreement in a manner adverse to the Bondholders without the prior written consent of the Trustee or as approved by an Extraordinary Resolution of the Bondholders (other than any modification described in Condition 12(b)).

See "Description of Certain Financing Arrangements" for a description of the Bond Escrow Agreement, the Bond Escrow Account Charge and the conditions for the release of funds from the Bond Escrow Account.

2 Transfer of Bonds

(a) The Register

The Issuer will cause to be kept at the specified office of the Registrar and in accordance with the terms of the Agency Agreement a register (the "**Register**") on which shall be entered, on behalf of the Issuer, the names and addresses of the Bondholders from time to time and the particulars of the Bonds held by them and of all transfers and redemptions of Bonds. Each Bondholder shall be entitled to receive only one Certificate in respect of its entire holding.

(b) Transfers

Subject to the terms of the Agency Agreement and to Conditions 2(e) and 2(f), a Bond may be transferred by delivering the Certificate issued in respect of it, with the form of transfer on the back duly completed and signed, to the specified office of the Registrar or any of the Transfer Agents. No transfer of a Bond will be valid unless and until entered on the Register.

Transfers of interests in the Bonds evidenced by the Global Certificates will be effected in accordance with the rules of the relevant clearing systems.

*Upon the transfer, exchange or replacement of a Rule 144A Bond, a Transfer Agent will only deliver Certificates with respect to Rule 144A Bonds that bear the Securities Act Legend unless there is delivered to such Transfer Agent such satisfactory evidence, which may include an opinion of legal counsel, as may be reasonably required by the Issuer, that neither the Securities Act Legend nor the restrictions on transfer set forth therein are required to ensure compliance with the provisions of the US Securities Act of 1933, as amended (the "**Securities Act**").*

*Interests in Bonds represented by the Restricted Global Certificate may be transferred to a person who wishes to take delivery of any such interest in the form of an interest in Bonds represented by the Unrestricted Global Certificate only if a Transfer Agent receives a written certificate from the transferor (in the form provided in the Agency Agreement) to the effect that such transfer is being made in accordance with Rule 903 or 904 of Regulation S under the Securities Act ("**Regulation S**") or Rule 144 under the Securities Act ("**Rule 144A**") (if available).*

*Prior to the 40th day after the day of issue of the Bonds (the "**Restricted Period**"), an interest in Bonds represented by the Unrestricted Global Certificate may be exchanged for an interest in Bonds represented by the Restricted Global Certificate only if a Transfer Agent receives a written certificate from the transferee of the interest in Bonds represented by the Unrestricted Global Certificate (in the form provided in the Agency Agreement) to the effect that the transferee is a qualified institutional buyer (as defined in Rule 144A) and is obtaining such interest in a transaction meeting the requirements of Rule 144A and any applicable securities laws of any state of the United States or any other jurisdiction. After the expiration of the Restricted Period, this certification requirement will no longer apply to such transfers.*

Transfers of Bonds are also subject to the restrictions described under "Plan of Distribution" and "Transfer Restrictions" below.

(c) Delivery of new Certificates

Each new Certificate to be issued on transfer of a Bond or Bonds will, within five Business Days of receipt by the relevant Transfer Agent of the duly completed and signed form of transfer, be made available for collection at the specified office of the relevant Transfer Agent or, if so requested in the form of transfer, be mailed by uninsured mail at the risk of the holder entitled to the Bonds transferred (free of charge to the holder), to the address specified in the form of transfer.

Except in the limited circumstances described in "Summary of Provisions relating to the Bonds while in Global Form — Registration of Title", owners of interests in Bonds represented by the Global Certificates will not be entitled to receive physical delivery of Individual Certificates. Issues of Certificates upon transfers of Bonds are subject to compliance by the transferor and transferee with the certification procedures described above and in the Agency Agreement and, in the case of Rule 144A Bonds, compliance with the Securities Act Legend.

Where some but not all of the Bonds in respect of which a Certificate is issued are to be transferred or redeemed, a new Certificate in respect of the Bonds not so transferred or redeemed, will, within five Business Days of delivery or surrender of the original Certificate to the relevant Transfer Agent or Registrar, be made available for collection at the specified office of the relevant Agent or, if so requested by the holder, be mailed by uninsured mail at the risk of the holder of the Bonds not so transferred or redeemed (free of charge to the holder), to the address of such holder appearing on the Register.

In this Condition 2, "**Business Day**" means a day (other than a Saturday or a Sunday) on which banks are open for business in the city in which the specified office of the Registrar and the relevant Transfer Agent to which the Certificate in respect of the Bonds to be transferred or relevant form of transfer is delivered is situated.

(d) **Formalities free of charge**

Registration of transfer of Bonds will be effected without charge by or on behalf of the Issuer or any of the Transfer Agents, but only upon the person making such application for transfer, paying or procuring the payment (or the giving of such indemnity as the Issuer or any of the Transfer Agents may require) of any tax, duty or other governmental charges which may be imposed in relation to such transfer.

(e) **Closed periods**

No Bondholder may require the transfer of a Bond to be registered during the period of 15 days ending on (and including) the due date for any payment of principal of that Bond or seven days ending on (and including) any Interest Record Date (as defined in Condition 6(a)).

(f) **Regulations**

All transfers of Bonds and entries on the Register will be made subject to the detailed regulations concerning transfer of Bonds scheduled to the Agency Agreement. The regulations may be changed by the Issuer with the prior written approval of the Trustee and the Registrar. A copy of the current regulations will be mailed (free of charge) by the Registrar to any Bondholder upon written request.

3 Covenants

(a) **Limitation on Liens**

So long as any Bond remains outstanding (as defined in the Trust Deed):

(i) the Parent Guarantor will not, and will not permit any of its Subsidiaries to, directly or indirectly, create or permit to subsist any mortgage, charge, pledge, lien or other form of encumbrance or security interest ("**Security**") upon any Collateral (other than Permitted Security);

(ii) the Parent Guarantor will not, and will not permit any of its Subsidiaries to, directly or indirectly, create or permit to subsist any Security upon any assets of any Person, present or future, to secure any obligations of the Parent Guarantor or any of its Subsidiaries under the Bridge Facility

Agreement, the Permitted Senior Secured Facility Agreement or any Permitted Refinancing Borrowings for the Bonds or the Permitted Senior Secured Facility Agreement, unless, at the same time or prior thereto, the obligations of the Issuer and the Guarantors under the Bonds, the Guarantee and the Trust Deed (i) are secured equally and rateably therewith in substantially identical terms thereto, in each case to the satisfaction of the Trustee; or (ii) have the benefit of such other security or other arrangement as the Trustee in its absolute discretion shall deem to be not materially less beneficial to the Bondholders or as shall be approved by an Extraordinary Resolution of the Bondholders; *provided* that this clause (a)(ii) shall not apply to Security over the Bridge Escrow Account in favour of (i) the lenders under the Bridge Loans (and/or their agents or representatives) and/or (ii) the CG Issuing Bank (or affiliate thereof) (if the India Escrow Account is funded through a bank guarantee issued by the Issuing Bank in favour of the manager to the Take Private Transaction, in accordance with the Delisting Regulations);

(iii) the Issuer, Vedanta Holdings Mauritius Limited and Vedanta Holdings Jersey Limited will not, and the Parent Guarantor will procure that the Issuer, Vedanta Holdings Mauritius Limited and Vedanta Holdings Jersey Limited will not, directly or indirectly, create or permit to subsist any Security upon any assets of the Issuer, Vedanta Holdings Mauritius Limited and Vedanta Holdings Jersey Limited, present or future, to secure Borrowings other than the Bonds, the Bridge Loans, the PSSFA Loans and any Permitted Refinancing Borrowings for the Bonds and the PSSFA Loans; and

(iv) the Parent Guarantor will not create or permit to subsist any Security upon any assets directly held by the Parent Guarantor, present or future, to secure any Indebtedness or any guarantee or indemnity in respect of any Indebtedness, unless, at the same time or prior thereto, the Issuer's obligations under the Bonds and the Trust Deed (i) are secured equally and rateably therewith in substantially identical terms thereto, in each case to the satisfaction of the Trustee; or (ii) have the benefit of such other security or other arrangement as the Trustee in its absolute discretion shall deem to be not materially less beneficial to the Bondholders or as shall be approved by an Extraordinary Resolution of the Bondholders; *provided* that this clause (a)(iv) shall not apply to Security (x) arising by operation of law or (y) created in respect of Indebtedness (which for this purpose shall exclude Relevant Debt) in an aggregate principal amount not exceeding 10 per cent. of Total Assets. For the avoidance of doubt, the foregoing restriction in this clause (a)(iv) shall not apply to Security upon assets held by any Subsidiary (other than assets that are jointly held with the Parent Guarantor).

For the avoidance of doubt, nothing in this Condition 3(a) shall be construed (and is not intended to be construed) as creating any encumbrance as defined under the Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulations, 2011 on the assets of any subsidiary of Vedanta Limited listed in India.

As used in these Conditions:

"**Bank Guarantee Release Date**" means the later of the date of (i) discharge of obligations owed to the CG Issuing Bank under the counter bank guarantee issued by the CG Issuing Bank towards the Issuing Bank or (ii) release of the counter bank guarantee issued by the CG Issuing Bank in favour of the Issuing Bank.

"**Excluded Indebtedness**" means any Indebtedness to finance or refinance the ownership, acquisition, development and/or operation of projects, assets or installations (the "**Relevant Property**") in respect of which the person or persons (in this definition the "**Lender**") to whom any Indebtedness is or may be owed by the relevant borrower (whether or not a member of the Group) has or have no recourse whatsoever to any member of the Group for the repayment of all or any portion of such indebtedness other than recourse to:

(i) such borrower for amounts limited to the present and future cash flow or net cash flow from the Relevant Property; and/or

(ii) the proceeds of enforcement of any Security given by such borrower over the Relevant Property or the income, cash flow or other proceeds deriving therefrom (or given by any shareholder or the like in the borrower over its shares or the like in the capital of the borrower) to secure such Indebtedness, *provided* that:

(A) the extent of such recourse to such borrower is limited solely to the amount of any recoveries made on any such enforcement; and

(B) such Lender is not entitled, by virtue of any right or claim arising out of or in connection with such Indebtedness, to commence proceedings for the winding-up or dissolution of such borrower or to appoint or procure the appointment of any receiver, trustee or similar person or officer in respect of such borrower generally or any of its projects, assets or installations (save for the Relevant Property the subject of such security); and/or

(iii) such borrower generally, or directly or indirectly to a member of the Group, under any form of assurance, undertaking or support, which recourse is limited to a claim for damages (other than liquidated damages and damages required to be calculated in a specified way) for breach of an obligation (not being a payment obligation or an obligation to procure payment by another person or an indemnity in respect thereof or an obligation to comply or to procure compliance by another person with any financial ratios or other tests of financial condition) by the person against whom such recourse is available; and/or

(iv) any Subsidiary of the Parent Guarantor by way of guarantee of such Indebtedness (but not benefiting from any security or quasi-security from that Subsidiary of the Parent Guarantor);

"**Group**" means the Parent Guarantor and its Subsidiaries;

"**Indebtedness**" means any obligation (whether present or future, actual or contingent, secured or unsecured, as principal, surety or otherwise) for the payment or repayment of money;

"**Permitted Security**" means:

(i) Security over the Common Collateral in favour of the Common Security Agent created pursuant to the Common Security Documents to secure the Bonds, the Bridge Loans, the PSSFA Loans, Permitted Refinancing Borrowings for the Bonds and the PSSFA Loans, guarantees of any of the foregoing (including the Guarantee) and any hedging obligations in respect of or related to any of the foregoing (or otherwise entered into to protect the Issuer and/or Vedanta Holdings Mauritius Limited from fluctuations in currency exchange rates and/or interest rates and not for speculation) entered into in accordance with applicable law;

(ii) Security over the Bond Escrow Account in favour of (i) the Trustee and (ii) the CG Issuing Bank (or affiliate thereof) (if the Issuer elects to fund the India Escrow Account through a bank guarantee issued by the Issuing Bank in favour of the manager to the Take Private Transaction) until the Bank Guarantee Release Date, for so long as such guarantee is outstanding), created pursuant to the Bond Escrow Account Charge;

(iii) Security for taxes, assessments or governmental charges or claims that are not yet delinquent or that are being contested in good faith by appropriate proceedings promptly instituted and diligently concluded; provided that any reserve or other appropriate provision as is required in conformity with Applicable Accounting Principles has been made therefor; and

(iv) Security imposed by law, such as suppliers', carriers', warehousemen's, landlord's and mechanics' liens, in each case, Incurred in the ordinary course of business.

"**Relevant Debt**" means any present or future indebtedness (other than Excluded Indebtedness) of the Issuer, the Parent Guarantor or any other person in the form of, or represented by, bonds, notes, debentures, loan stock or other securities, which are for the time being, or are capable of being, quoted, listed or ordinarily dealt in on any stock exchange, over-the-counter or other securities market, have an original maturity of more than one year from their date of issue and are denominated, payable or optionally payable in a currency other than Rupees or are denominated in Rupees and more than 50 per cent. of the aggregate principal amount of which is initially distributed outside India by or with the authority of the Parent Guarantor;

"**Subsidiary**" means any company or other business entity of which the Parent Guarantor owns or controls (either directly or through one or more other Subsidiaries) more than 50 per cent. of the issued share capital or other ownership interest having ordinary voting power to elect directors, managers or trustees of such company or other business entity or any company or other business entity which at any time has its accounts consolidated with those of the Parent Guarantor or which, under English or other applicable law or regulations, or International Financial Reporting Standards, as the case may be, from time to time, should have its accounts consolidated with those of the Parent Guarantor; and

"**Total Assets**" means the aggregate of consolidated total current assets and consolidated total non-current assets of:

(i) the Parent Guarantor as shown in the balance sheet of the latest available audited consolidated financial statements of the Parent Guarantor; and

(ii) any Subsidiary of the Parent Guarantor acquired by the Parent Guarantor or any Subsidiary of the Parent Guarantor since the date of the latest available audited consolidated financial statements of the Parent Guarantor as shown in the balance sheet of the latest available audited consolidated financial statements of such Subsidiary.

(b) **Dividend restriction**

The Issuer shall not, each Subsidiary Guarantor shall not, the Parent Guarantor shall not, and the Parent Guarantor shall procure that each of its Material Subsidiaries shall not, create or otherwise cause or permit to exist or become effective any consensual encumbrance or restriction on the ability of the Issuer, any Subsidiary Guarantor or any Material Subsidiary to pay dividends or make any other distribution with respect to its Share Capital or to make or repay loans to the Issuer, any Subsidiary Guarantor, the Parent Guarantor or any other Material Subsidiary of the Parent Guarantor (and any such dividends, distributions or loans shall only be paid, made or repaid, as applicable, in the ordinary course of business and in accordance with applicable law), other than:

(a) the subordination of any Indebtedness made to the Issuer, any Subsidiary Guarantor, the Parent Guarantor or any of its Material Subsidiaries to any other Indebtedness of the Issuer, any Subsidiary Guarantor, the Parent Guarantor or any of its Material Subsidiaries; *provided* that:

  (i) such other Indebtedness is permitted under these Conditions; and

  (ii) such subordination would not singly or in the aggregate have a materially adverse effect on the ability of the Issuer or any Guarantor to meet its obligations under the Bonds;

(b) such encumbrance or restriction in relation to any Indebtedness of the Issuer, any Subsidiary Guarantor or any Material Subsidiary or other assurance against financial loss where such encumbrance or restriction relates to payment of dividends or other distributions during the continuance of an event of default (howsoever described) which has occurred pursuant to the terms of that Indebtedness;

(c) such encumbrance or restriction arising by operation of law;

(d) such encumbrance or restriction as is in existence on the date of issue of the Bonds; or

(e) in respect of any Person (including any existing Subsidiary of the Parent Guarantor) which becomes a Material Subsidiary after the date of issue of the Bonds, any encumbrance or restrictions on such Person as may be in existence on the date such Person becomes a Material Subsidiary, provided such restrictions were not imposed in contemplation of such Person becoming a Material Subsidiary;

provided that this Condition 3(b) shall not restrict any Material Subsidiary from issuing Preferred Stock otherwise in accordance with these terms of the Conditions.

(c) **Limitation on Borrowings**

(i) The Parent Guarantor shall not, and shall procure that each of its Subsidiaries shall not, Incur directly or indirectly any Borrowings, and the Parent Guarantor shall procure that each of its Subsidiaries shall not issue any Preferred Stock; *provided* that:

(a) at any time prior to the Take Private Date, (x) the Parent Guarantor may Incur Borrowings if, after giving pro forma effect to the Incurrence of such Borrowings and the application of the proceeds thereof, the Fixed Charge Coverage Ratio would be not less than 3.0 to 1.0 and (y) any Subsidiary of the Parent Guarantor may Incur Borrowings or issue Preferred Stock if, after giving pro forma effect to the Incurrence of such Borrowings or issuance of Preferred Stock and the application of the proceeds thereof, the Fixed Charge Coverage Ratio would be not less than 3.5 to 1.0; and

(b) at any time on or after the Take Private Date, the Parent Guarantor and any Subsidiary of the Parent Guarantor may Incur Borrowings and (in the case of any Subsidiary of the Parent Guarantor) may issue Preferred Stock if, after giving pro forma effect to the Incurrence of such Borrowings or issuance of Preferred Stock and the application of the proceeds thereof, the Fixed Charge Coverage Ratio would be not less than 3.0 to 1.0.

(ii) Notwithstanding the foregoing, the Parent Guarantor and any Subsidiary of the Parent Guarantor may Incur, to the extent provided below, each and all of the following in the ordinary course of business and in accordance with applicable law ("**Permitted Borrowings**"):

(a) Borrowings represented by the Bonds issued on the Closing Date and the Guarantee;

(b) Borrowings of the Parent Guarantor or any Subsidiary of the Parent Guarantor outstanding on the Closing Date;

(c) Borrowings Incurred (w) by the Parent Guarantor or any Subsidiary of the Parent Guarantor which is issued in exchange for, or the net proceeds of which are used to refinance or refund, replace, exchange, renew, repay, defease, discharge or extend (collectively, "**refinance**", and "**refinancing**", "**refinances**" and "**refinanced**" shall have correlative meanings) ("**Permitted Refinancing Borrowings**") then outstanding Borrowings (or Borrowings that are no longer outstanding, but that were refinanced substantially concurrently with the Incurrence of such Permitted Refinancing Borrowings) Incurred under clause (c)(i) or sub-clauses (c)(ii)(a), (c)(ii)(b), (c)(ii)(c), (c)(ii)(e) or (c)(ii)(f) and any refinancing thereof in an amount not to exceed the amount so refinanced (plus premiums, accrued interest, fees and expenses), *provided that* such Borrowings to be refinanced are fully and irrevocably repaid no later than 90 days after the Incurrence of such Permitted Refinancing Borrowings; (x) by the Parent Guarantor or any Subsidiary of the Parent Guarantor used to pay any accrued interest on then outstanding Borrowings; (y) by Hindustan Zinc Limited (or any of its successors or assigns) ("**HZL**") in an aggregate principal amount at any one time outstanding (together with refinancings thereof) not exceeding the product of (I) the amount of any Borrowings of Vedanta Limited (or any of its successors or assigns) which have been refinanced (together with any accrued interest and premium, if any, paid thereon) from dividends received directly or indirectly from HZL no earlier than 90 days before and no later than 90 days after the Incurrence of such Borrowings by HZL and (II) the quotient of (A) 100 per cent. *divided by* (B) the percentage ownership of Capital Stock in HZL held directly by Vedanta Limited (or any of its successors or assigns) or any of its wholly-owned subsidiaries at the time such dividends were paid by HZL (or the Dollar Equivalent thereof) and (z) by HZL on or after the Take Private Date in an aggregate principal amount at any one time outstanding (together with refinancings thereof) not exceeding the product of (I) the amount of any Borrowings of the Parent Guarantor which have been refinanced (together with any accrued interest and premium, if any, paid thereon) from dividends received directly or indirectly from Vedanta Limited (or any of its successors or assigns) (provided that such dividends were funded directly or indirectly by Vedanta Limited (or any of its successors or assigns) by way of dividends received directly or indirectly substantially concurrently from HZL) no earlier than 90 days before and no later than 90 days after the Incurrence of such Borrowings by HZL and (II) the product of (A) the quotient of (xx) 100 per cent. *divided by* (yy) the percentage ownership of Capital Stock in Vedanta Limited (or any of its successors or assigns) held directly by the Parent Guarantor or any of its wholly-owned Subsidiaries at the time such dividends were paid by HZL and (B) the quotient of (xx) 100 per cent. *divided by* (yy) the percentage ownership of Capital Stock in HZL held directly by Vedanta Limited (or any of its successors or assigns) or any of its wholly-owned subsidiaries at the time such dividends were paid by HZL (or the Dollar Equivalent thereof);

(d) Borrowings Incurred by the Parent Guarantor or any Subsidiary of the Parent Guarantor with a maturity of one (1) year or less used by the Parent Guarantor or any Subsidiary of the Parent Guarantor for working capital purposes (or any guarantee or indemnity given by the Parent Guarantor or any Subsidiary of the Parent Guarantor in relation thereto) (together with refinancings thereof);

(e) Borrowings Incurred by the Parent Guarantor or any Subsidiary of the Parent Guarantor represented by Capitalized Lease Obligations or purchase money obligations in the ordinary course of business to finance all or any part of the Incurred or to be Incurred purchase price or cost of construction, installation or improvement of property (real or personal) (including the lease purchase price of land use rights), plant or equipment (including through the acquisition of Capital Stock of any Person that owns property, plant or equipment which has or will, upon such acquisition, become a Subsidiary of the Parent Guarantor) to be used in the Permitted Business; *provided that* on the date of Incurrence of such Borrowings and after giving effect thereto, the aggregate principal amount of such Borrowings at any time outstanding (together with refinancings thereof) shall not exceed an amount equal to 5.0 per cent. of Total Assets (or the Dollar Equivalent thereof);

(f) at any time on or prior to the Take Private Date, Borrowings Incurred by the Parent Guarantor or any Subsidiary of the Parent Guarantor; *provided that* the net cash proceeds therefrom are used by the Parent Guarantor or any Subsidiary of the Parent Guarantor within 30 days of the Incurrence of such Borrowings to acquire Capital Stock of Vedanta Limited (or any of its successors or assigns) under the Take Private Transaction in accordance with the Delisting Regulations (and/or to establish an escrow for that purpose) and to pay costs, fees and expenses in connection therewith in accordance with applicable law, such that *pro forma* for such acquisition, the Parent Guarantor and its Subsidiaries shall hold no less than 90.0 per cent. of the Capital Stock in Vedanta Limited (or any of its successors or assigns) (for the avoidance of doubt, to be calculated excluding the Capital Stock of Vedanta Limited which is then held by a custodian and against which ADS have been issued and Capital Stock into which ADS have been converted after the Acquisition Date); and

(g) guarantees by the Parent Guarantor or any Subsidiary of the Parent Guarantor of Borrowings of the Parent Guarantor or any Subsidiary of the Parent Guarantor that was permitted to be Incurred by another provision of this covenant.

For purposes of determining compliance with this Condition (3)(c) (*Limitation on Borrowings*), if an item of Borrowings meets the criteria of more than one of the types of Permitted Borrowings or is permitted to be Incurred pursuant to paragraph (c)(i) of this covenant, the Parent Guarantor may, in its sole discretion, classify such item of Borrowings and only be required to include the amount of such Borrowings as one of such types.

Notwithstanding any other provision of this covenant, the maximum amount of Borrowings that the Parent Guarantor or any Subsidiary of the Parent Guarantor may Incur pursuant to this covenant shall not be deemed to be exceeded solely as a result of fluctuations in the exchange rate of currencies. For purposes of determining compliance with any U.S. dollar-denominated restriction on the Incurrence of Borrowings, the U.S. dollar equivalent principal amount of Borrowings denominated in a foreign currency shall be calculated based on the relevant currency exchange rate in effect on the date such Borrowings was Incurred (or first committed, in the case of revolving credit debt); provided, that if such Borrowings is Incurred to refinance other Borrowings denominated in a foreign currency, and such refinancing would cause the applicable U.S. dollar denominated restriction to be exceeded if calculated at the relevant currency exchange rate in effect on the date of such refinancing, such U.S. dollar-denominated restriction shall be deemed not to have been exceeded so long as the principal amount of such refinancing Borrowings does not exceed the principal amount of such Borrowings being refinanced. The principal amount of any Borrowings Incurred to refinance other Borrowings, if Incurred in a different currency from the Borrowings being refinanced, shall be calculated based on the currency exchange rate applicable to the currencies in which such respective Borrowings is denominated that is in effect on the date of such refinancing.

(d) **Limitation on distribution of Net Proceeds of Asset Sales**

The Parent Guarantor shall not, and shall procure that each of its Subsidiaries shall not pay any dividend in respect of or otherwise distribute the Net Proceeds from any Asset Sale to any Person (other than to the Parent Guarantor or any of its Subsidiaries) if such dividend or distribution, individually or when aggregated with all other dividends or distributions in respect of the Net Proceeds from any other Asset Sales in the twelve month period prior to the date of the declaration of such dividend or distribution, exceeds U.S.$250,000,000 (or the Dollar Equivalent thereof) (any such Asset Sale to be conducted only in the ordinary course of business and in accordance with applicable law).

(e) **Material Subsidiaries**

So long as any of the Bonds are outstanding (as defined in the Trust Deed), the Parent Guarantor or any of its Subsidiaries shall retain Control over, or, directly or indirectly, own more than 50 per cent. of the issued equity share capital of, each of its Material Subsidiaries.

For the avoidance of doubt, nothing in this Condition 3(e) shall be construed (and is not intended to be construed) as creating any encumbrance as defined under the Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulations, 2011 on the assets of any subsidiary of Vedanta Limited listed in India.

(f) **Accounts**

The Parent Guarantor agrees that:

(i) it will deliver to the Trustee and the specified office of each of the Paying Agents (A) as soon as reasonably practicable after the issue or publication thereof and in any event within 135 days after the end of each financial year (beginning with 31 March 2021), a copy of its audited Accounts as of the end of and for such financial year and (B) as soon as reasonably practicable after the issue or publication thereof and in any event within 180 days after the end of each financial year (beginning with 31 March 2020), a copy of its annual report as of the end of and for such financial year, and will establish, announce and conduct one conference call with all the holders of Bonds (including the beneficial owners thereof), the contents of which will be limited to such annual report and audited Accounts and any other publicly available information regarding the Parent Guarantor and its Subsidiaries;

(ii) as soon as reasonably practicable after the issue or publication thereof and in any event within 90 days after the end of each six-month period ending on 30 September of each financial year (beginning with 30 September 2020), it will deliver to the Trustee and the specified office of each of the Paying Agents a copy of its unaudited interim Accounts as of the end of and for such six-month period along with key production data for such six-month period, *provided* that if and to the extent that the financial statements are not prepared or adjusted on a basis consistent with that used for the preceding relevant six-month or annual fiscal period, that fact shall be stated, and will establish, announce and conduct one conference call with all the holders of Bonds (including the beneficial owners thereof), the contents of which will be limited to such unaudited interim Accounts and any other publicly available information regarding the Parent Guarantor and its Subsidiaries;

(iii) as soon as reasonably practicable after the issue or publication thereof and in any event within 90 days after the end of each three-month period ending 30 June and 31 December (beginning with 30 June 2020), the Parent Guarantor will deliver to the Trustee and the specified office of each of the Paying Agents a copy of the unaudited consolidated statement of profit or loss for Vedanta Limited for such three-month period along with key production data for such three-month period, provided that if and to the extent that the statement of profit or loss is not prepared or adjusted on a basis consistent with that used for the preceding relevant three-month, semi-annual or annual fiscal period, that fact shall be stated; and

(iv) with each set of Accounts delivered by it under Condition 3(f)(i) and 3(f)(ii), the Parent Guarantor will deliver to the Trustee and the specified office of each of the Paying Agents the Compliance Certificate.

(g) **Limitation on Issuer's activities and Borrowings of Issuer, Vedanta Holdings Mauritius Limited and Vedanta Holdings Jersey Limited**

The Issuer shall not, and the Parent Guarantor will procure that the Issuer will not, carry on any business activity whatsoever other than in connection with (i) the issue of the Bonds and (ii) its entry into and guarantee under the Bridge Facility Agreement, the Permitted Senior Secured Facility Agreement and any Permitted Refinancing Borrowings for the Bonds and the Permitted Senior Secured Facility Agreement and (iii) any other activities reasonably incidental thereto (such activities shall, for the avoidance of doubt, include:

(i) the entry into currency and interest rate swap transactions;

(ii) the acquisition of shares in Vedanta Limited in connection with the Take Private Transaction and activities reasonably incidental thereto;

(iii) activities undertaken to fulfill its obligations under the Bonds, the Trust Deed, the Agency Agreement, the Bridge Facility Agreement, the Permitted Senior Secured Facility Agreement and any Permitted Refinancing Borrowings for the Bonds and the Permitted Senior Secured Facility Agreement (including issuing its guarantees thereunder), the Security Agreements, the Bond Escrow Agreement, the Intercreditor Agreement and such swap transactions;

(iv) redemptions, purchases, consent solicitations and tender and exchange offers in respect of the Bonds; and

(v) activities directly related to the establishment and maintenance of the Issuer's corporate existence).

Prior to the occurrence of an Event of Default or an event of default under the Bridge Loans, the PSSFA Loans or any Permitted Refinancing Borrowings for the Bonds or the PSSFA Loans, the Issuer, Vedanta Holdings Mauritius Limited and Vedanta Holdings Jersey Limited may pay dividends and make other distributions on their Capital Stock and make intra-group loans to the Parent Guarantor or any of its Subsidiaries. If any such Event of Default or event of default shall have occurred, the Issuer, Vedanta Holdings Mauritius Limited and Vedanta Holdings Jersey Limited will not, and the Parent Guarantor shall procure that the Issuer, Vedanta Holdings Mauritius Limited and Vedanta Holdings Jersey Limited will not, pay any such dividends, make any such other distributions or make any such intra-group loans, except the Issuer and Vedanta Holdings Mauritius Limited may make intra-group loans to each other.

In furtherance of, and without limitation to, Condition 3(c), the Issuer, Vedanta Holdings Mauritius Limited and Vedanta Holdings Jersey Limited shall not, and the Parent Guarantor shall procure that the Issuer, Vedanta Holdings Mauritius Limited and Vedanta Holdings Jersey Limited shall not, Incur directly or indirectly any Borrowings or issue any Preferred Stock other than (i) in the case of the Issuer, its guarantee of the Bridge Loans and the PSSFA Loans, Permitted Refinancing Borrowings for the Bonds and the PSSFA Loans and Subordinated Borrowings the proceeds of which are used to pay interest or other amounts due in respect of the Bonds, the Bridge Loans, the PSSFA Loans and Permitted Refinancing Borrowings for the Bonds and the PSSFA Loans, (ii) in the case of Vedanta Holdings Mauritius Limited, the Bridge Loans and the PSSFA Loans, its Guarantee of the Bonds, Permitted Refinancing Borrowings for the Bonds and the PSSFA Loans and Subordinated Borrowings the proceeds of which are used to pay interest or other amounts due in respect of the Bonds, the Bridge Loans, the PSSFA Loans and Permitted Refinancing Borrowings for the Bonds and the PSSFA Loans, and (iii) in the case of Vedanta Holdings Jersey Limited, its Guarantee of the Bonds, its guarantee of the Bridge Loans, its guarantee of the PSSFA Loans, Permitted Refinancing Borrowings for the Bonds and the PSSFA Loans and Subordinated

Borrowings the proceeds of which are used to pay interest or other amounts due in respect of the Bonds, the Bridge Loans, the PSSFA Loans and Permitted Refinancing Borrowings for the Bonds and the PSSFA Loans.

As used in these Conditions, "**Subordinated Borrowings**" means Borrowings Incurred by the Issuer, Vedanta Holdings Mauritius Limited or Vedanta Holdings Jersey Limited owed to the Parent Guarantor or a Subsidiary of the Parent Guarantor which, by their terms or the terms of any agreement or instrument pursuant to which they are issued or remain outstanding, (i) are expressly made subordinate to the prior payment in full of the Bonds, the Bridge Loans, the PSSFA Loans and any Permitted Refinancing Borrowings for the Bonds and the PSSFA Loans (as applicable) (including upon any default, bankruptcy, reorganization, liquidation, winding up or other disposition of assets of the Issuer or Vedanta Holdings Mauritius Limited), (ii) do not mature or require any amortization and are not required to be repaid, redeemed, repurchased or otherwise retired, pursuant to a sinking fund obligation, event of default or otherwise (including any redemption, retirement or repurchase which is contingent upon events or circumstance) in whole or in part, on or prior to six months after the earlier of (a) the first date no Bonds are outstanding and (b) the final Stated Maturity of the Bonds, (iii) do not provide for any cash payment of interest (or premium, if any) prior to six months after the earlier of (a) the first date no Bonds are outstanding and (b) the final Stated Maturity of the Bonds, (iv) are not secured by any Security on any assets of any Person, and are not guaranteed by any Person and (v) do not (including upon the happening of any event) restrict the payment of amounts due in respect of the Bonds or compliance by the Issuer or any of the Guarantors with their respective obligations under the Bonds and the Guarantee.

All of the Capital Stock of Vedanta Limited acquired pursuant to the Take Private Transaction shall be held directly by the Issuer and/or Vedanta Holdings Mauritius Limited, and the Issuer and Vedanta Holdings Mauritius Limited shall not, and the Parent Guarantor shall procure that the Issuer and Vedanta Holdings Mauritius Limited shall not, directly or indirectly, sell, transfer or otherwise dispose of, or create any Security over, any Capital Stock of Vedanta Limited held by the Issuer and/or Vedanta Holdings Mauritius Limited (for the avoidance of doubt, whether such Capital Stock is or was acquired pursuant to the Take Private Transaction or otherwise).

(h) **Covenant suspension**

If, on any date following the date of the Trust Deed, the Bonds have an Investment Grade rating from any two of the Rating Agencies and no Event of Default or Potential Event of Default (as defined in the Trust Deed) has occurred and is continuing (a "**Suspension Event**"), then, beginning on that day and continuing until such time, if any, at which the Bonds cease to have an Investment Grade rating from either of the Rating Agencies, the provisions of the Trust Deed summarised under the following captions will not apply to the Bonds:

(a) Condition 3(c) "Limitation on Borrowings"; and

(b) Condition 3(d) "Limitation on distribution of Net Proceeds of Asset Sales."

Such covenants will be reinstituted and apply according to their terms as at and from the first day on which a Suspension Event ceases to be in effect. Such covenants will not, however, be of any effect with regard to actions of the Issuer properly taken in compliance with the provisions of the Trust Deed during the continuance of the Suspension Event.

(i) **Definitions**

As used in these Conditions:

"**Accounts**" means:

(i) as of each 31 March and for the twelve month period then ending, the audited consolidated profit and loss account and balance sheet of the Parent Guarantor prepared in accordance with Applicable Accounting Principles; and

(ii) as of each 30 September and for the six month period then ending, the unaudited consolidated profit and loss account and balance sheet of the Parent Guarantor prepared in accordance with Applicable Accounting Principles.

"**Acquisition Date**" means the first date the Parent Guarantor and its Subsidiaries collectively hold at least 90.0 per cent. of the Capital Stock in Vedanta Limited (for the avoidance of doubt, to be calculated excluding the Capital Stock of Vedanta Limited which is then held by a custodian and against which ADS have been issued).

"**Adjusted Treasury Rate**" means, with respect to any redemption date:

(1) the average of the yields in each statistical release for the immediately preceding week (from the calculation date) designated "H.15" or any successor release published by the Board of Governors of the Federal Reserve System which establishes yields on actively traded U.S. Treasury securities adjusted to constant maturity under the heading "U.S. government securities – Treasury constant maturities – nominal," for the maturity corresponding to the Comparable Treasury Issue; *provided* that if no maturity is within three months before or after the period from the redemption date to the maturity of the Comparable Treasury Issue, yields for the two published maturities most closely corresponding to the Comparable Treasury Issue will be determined and the Adjusted Treasury Rate will be interpolated or extrapolated from those yields on a straight-line basis rounding to the nearest month; *provided further* that if the period from the redemption date to 21 August 2022 is less than one year, the weekly average yield on actually traded U.S. Treasury securities adjusted to a constant maturity of one year will be used; or

(2) if such release (or any successor release) is not published during the week preceding the calculation date or does not contain such yields, the rate per annum equal to the semi-annual equivalent yield to maturity of the Comparable Treasury Issue, calculated using a price for the Comparable Treasury Issue (expressed as a percentage of its principal amount) equal to the Comparable Treasury Price for such redemption date.

The Adjusted Treasury Rate shall be calculated on the third Business Day preceding the redemption date.

"**ADS**" means American depositary shares issued by Vedanta Limited which are listed on New York Stock Exchange.

"**Affiliate**" means, with respect to any Person, any other Person, directly or indirectly controlling, controlled by, or under direct or indirect common control with, such Person. For purposes of this definition, "**control**" (including, with correlative meanings, the terms "**controlling**," "**controlled by**" and "**under common control with**"), as applied to any Person, means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting securities, by contract or otherwise.

"**Applicable Accounting Principles**" means the accounting principles and provisions of International Financial Reporting Standards applicable to the Parent Guarantor and its Subsidiaries as in effect from time to time.

"**Applicable Premium**" means with respect to a Bond at any redemption date, the greater of:

(i) 1.0 per cent. of the principal amount of such Bond; and

(ii) the excess of:

(A) the present value at such redemption date of the redemption price of such Bond at 21 August 2022 (such redemption price being set forth in the table under Condition 5(b)) , plus all required remaining scheduled interest payments due on such Bond through 21 August 2022 (but excluding accrued and unpaid interest to the redemption date), computed using a discount rate equal to the Adjusted Treasury Rate plus 50 basis points; over

(B) the principal amount of such Bond.

"**Approval In Principle**" mean the in-principle approval of the BSE Limited and the National Stock Exchange of India Limited in accordance with the Delisting Regulations with respect to the Take Private Transaction.

"**Assets**" of any Person means all or any of its shares, business, undertaking, property, assets, revenues (including any right to receive revenues) and uncalled capital.

"**Asset Sale**" means any sale, transfer or other disposition (including by way of merger, consolidation or sale leaseback transactions) in one or a series of transactions in any twelve-month period by the Parent Guarantor or any Subsidiary to any Person other than the Parent Guarantor or any of its Subsidiaries of a material part of the consolidated Assets of the Parent Guarantor.

"**Balance Sheet Date**" means each 30 September and 31 March or other semi-annual date at which the Parent Guarantor prepares its audited or unaudited Accounts.

"**Bond Escrow Release Conditions**" means (i) the Issuer certifying the entry into and completion of the conditions precedent under the Bridge Facility Agreement and that the Approval In Principle has been received and (ii) the satisfaction of the other conditions set forth in the Bond Escrow Agreement for the release of funds from the Bond Escrow Account.

"**Bond Escrow Release Date**" means the date on which the Bond Escrow Release Conditions are met and either (i) funds from the Bond Escrow Account are released to the India Escrow Account in accordance with the Delisting Regulations and/or (ii) the date on which the Issuing Bank issues a guarantee in favour of the manager of the Take Private Transaction in accordance with the Delisting Regulations, which shall be secured by way of a counter bank guarantee from the CG Issuing Bank.

"**Borrowings**" means, with respect to any Person at any date, without duplication:

(i) all obligations of such Person for borrowed money;

(ii) all obligations of such Person to pay the deferred purchase price of property or services, except trade accounts payable arising in the ordinary course of business;

(iii) all obligations of such Person as lessee which are capitalised in accordance with Applicable Accounting Principles;

(iv) all non-contingent obligations of such Person to reimburse any bank or other Person in respect of amounts paid under a letter of credit or similar instrument, except in respect of trade accounts payable arising in the ordinary course of business;

(v) all obligations of such Person representing Disqualified Stock valued at the greater of its voluntary or involuntary liquidation preference and its maximum fixed repurchase price, plus accrued dividends, if any;

(vi) all Borrowings of others guaranteed by such Person;

(vii) all Borrowings of others secured by Security on any Asset of such Person (whether or not such Borrowings are assumed by such Person); *provided* that the amount of such Borrowings will be the lesser of:

(A) the fair market value of such Asset at such date of determination; and

(B) the amount of such Borrowings; and

(viii) in the case of a Subsidiary of the Parent Guarantor, all obligations representing Preferred Stock valued at the greater of its voluntary or involuntary maximum fixed repurchase price, plus accrued dividends, if any;

provided that for the purposes of Condition 3(c), Borrowings shall not include:

(A) Borrowings of the Parent Guarantor or any of its Subsidiaries owed to the Parent Guarantor or any of its Subsidiaries; *provided* that where

(1) any Subsidiary of the Parent Guarantor to which such Borrowing is owed ceases to be a Subsidiary of the Parent Guarantor;

(2) there is a subsequent transfer of such Borrowing to any Person (other than the Parent Guarantor or any of its Subsidiaries), then such Borrowing shall be deemed to constitute a Borrowing for the purposes of Condition 3(c); and

(B) Preferred Stock or Disqualified Stock issued by any Subsidiary of the Parent Guarantor to the Parent Guarantor or any other Subsidiary of the Parent Guarantor; *provided further* that for the purposes of clause (y) of the proviso in Condition 3(c), Borrowings shall not include the Borrowings of any Subsidiary (which is established as a special purpose entity for the sole purpose of engaging in financing activities) of the Parent Guarantor, which are guaranteed by the Parent Guarantor and have no recourse, directly or indirectly, to any other member of the Group.

For the avoidance of doubt, the following shall not be deemed "Borrowings" of the Issuer or Vedanta Holdings Mauritius Limited: (i) the issuance of a bank guarantee by the Issuing Bank (in favour of the manager to the Take Private Transaction, in accordance with the Delisting Regulations), (ii) the issuance of a counter bank guarantee by the CG Issuing Bank towards the Issuing Bank and (iii) the granting of Security over the Bond Escrow Account or the Bridge Escrow Account to the CG Issuing Bank (or affiliate thereof).

"**Business Day**" means a day (other than a Saturday or Sunday) on which commercial banks are open for business in New York City and London.

"**Capital Stock**" means, with respect to any Person, any and all shares, interests, participations or other equivalents (however designated, whether voting or non-voting) in equity of such Person, whether outstanding or issued on the date of the Trust Deed or issued thereafter, including, without limitation, all Common Stock and Preferred Stock.

"**Capitalized Lease**" means, with respect to any Person, any lease of any property (whether real, personal or mixed), which, in conformity with Applicable Accounting Principles, is required to be capitalized on the balance sheet of such Person.

"**Capitalized Lease Obligations**" means the discounted present value of the rental obligations under a Capitalized Lease.

"**CG Issuing Bank**" means an intermediary bank(s), which is a bank of internationally recognized standing resident outside India providing the counter guarantee in favour of the Issuing Bank (if the Issuer elects to fund the India Escrow Account through a bank guarantee issued by the Issuing Bank in favour of the manager to the Take Private Transaction).

"**Change of Control**" means the occurrence of any of the following events:

(1) the Permitted Holders are the beneficial owners of less than 35 per cent. of the total voting power of the Voting Stock of the Parent Guarantor; or

(2) any "person" or "group" (as such terms are used in Sections 13(d) and 14(d) of the United States Securities Exchange Act of 1934, as amended (the "**Exchange Act**")) is or becomes the "beneficial owner" (as such term is used in Rule 13d-3 of the Exchange Act), directly or indirectly, of total voting power of the Voting Stock of the Parent Guarantor greater than such total voting power held beneficially by the Permitted Holders; or

(3) on or after the Take Private Date, the Parent Guarantor and its Subsidiaries (including the Issuer and Vedanta Holdings Mauritius Limited) collectively own less than 90.0 per cent. of the Capital Stock of Vedanta Limited (for the avoidance of doubt, to be calculated excluding the Capital Stock of Vedanta Limited which is then held by a custodian and against which ADS have been issued and Capital Stock into which ADS have been converted after the Acquisition Date).

"**Change of Control Triggering Event**" means the occurrence of (i) an event described under clause (1) or (2) of the definition of "Change of Control" and a Rating Decline or (ii) an event described under clause (3) of the definition of "Change of Control".

"**Common Stock**" means, with respect to any Person, any and all shares, interests or other participations in, and other equivalents (however designated and whether voting or non-voting) of such Person's common stock or ordinary shares, whether or not outstanding or issued at the date of the Trust Deed, and include, without limitation, all series and classes of such common stock or ordinary shares.

"**Comparable Treasury Issue**" means the U.S. Treasury security selected by an Independent Investment Bank having a maturity most nearly equal to the period from the redemption date to 21 August 2022.

"**Comparable Treasury Price**" means, with respect to any redemption date:

(1) the average of five Reference Treasury Dealer Quotations for such redemption date, after excluding the highest and lowest of such Reference Treasury Dealer Quotations; or

(2) if the Independent Investment Bank obtains fewer than five Reference Treasury Dealer Quotations, the average of all such quotations.

"**Compliance Certificate**" means a certificate signed by each of:

(i) the chief financial officer of the Parent Guarantor; and

(ii) a director or other authorised signatory of the Parent Guarantor confirming compliance with the financial ratios set out in this Condition 3,

in each case as of each Balance Sheet Date and in respect of the whole of the financial year for each Balance Sheet Date falling on 31 March and in respect of the whole of the six month period ending on the Balance Sheet Date for each Balance Sheet Date falling on 30 September, and setting out in reasonable detail the computations necessary to demonstrate such compliance.

"**Consolidated EBITDA**" means, for any period, the amount equal to:

(i) "operating profit"; plus

(ii) "depreciation"; plus

(iii) "special items" reducing "operating profit"; minus

(iv) "special items" increasing "operating profit,"

in each case as it is presented on consolidated financial statements of the Parent Guarantor and its Subsidiaries prepared in accordance with the Applicable Accounting Principles for such period.

"**Consolidated Fixed Charges**" means, for any period, the sum (without duplication) of:

(i) Consolidated Net Interest Expense for such period; and

(ii) all cash and non-cash dividends accrued or accumulated during such period on any Disqualified Stock or Preferred Stock of the Parent Guarantor or any of its Subsidiaries held by Persons other than the Parent Guarantor or any of its Subsidiaries.

"**Consolidated Net Interest Expense**" means, for any period, the amount equal to "finance costs" minus "investment revenue," in each case as it is presented on a consolidated income statement of the Parent Guarantor and its Subsidiaries prepared in accordance with the Applicable Accounting Principles for such period.

"**Control**", "**Controlling**" or "**Controlled**" means the right to appoint and/or remove all or the majority of the members of the board of directors or other governing body or the right to direct or cause the direction of the management and policies, in each case whether obtained directly or indirectly, and whether obtained by ownership of share capital, the possession of voting rights, contract or otherwise.

"**Delisting Regulations**" means the Securities and Exchange Board of India (Delisting of Equity Shares) Regulations, 2009, as amended.

"**Dollar Equivalent**" means, with respect to any monetary amount in a currency other than U.S. dollars, at any time for the determination thereof, the amount of U.S. dollars obtained by converting such foreign currency involved in such computation into U.S. dollars at the base rate for the purchase of U.S. dollars with the applicable foreign currency as quoted by the Federal Reserve Bank of New York on the date of determination.

"**Disqualified Stock**" means any class or series of Capital Stock of any Person that by its terms or otherwise is:

(1) required to be redeemed prior to the stated maturity of the Bonds;

(2) redeemable at the option of the holder of such class or series of Capital Stock at any time prior to the stated maturity of the Bonds; or

(3) convertible into or exchangeable for Capital Stock referred to in clause (1) or (2) above or Borrowing having a scheduled maturity prior to the stated maturity of the Bonds.

"**Fitch**" means Fitch Ratings Limited, its affiliates and any successor to or assignee of its ratings business.

"**Fixed Charge Coverage Ratio**" means, on any Transaction Date, the ratio of:

(1) the aggregate amount of Consolidated EBITDA for the then most recent two semi-annual periods prior to such Transaction Date for which consolidated financial statements of the Parent Guarantor prepared in accordance with the Applicable Accounting Principles (which the Parent Guarantor shall use its best efforts to compile in a timely manner) are available (the "**Two Semi-annual Period**") and have been provided to the Trustee; to

(2) the aggregate Consolidated Fixed Charges during such Two Semi-annual Period.

"**Incur**" means, as applied to any obligation, to directly or indirectly, create, incur, issue, assume, guarantee or in any other manner become directly or indirectly liable, contingently or otherwise. Such obligation and "**Incurred**", "**Incurrence**" and "**Incurring**" shall each have a correlative meaning.

"**Independent Investment Bank**" means a Reference Treasury Dealer appointed by the Parent Guarantor as such.

"**Investment Grade**" means a long term credit rating of "AAA," "AA," "A" or "BBB," as modified by a "±" or "-" indication, or an equivalent rating representing one of the four highest rating categories, by S&P or a long term credit rating of "Aaa," or "Aa," "A" or "Baa," as modified by a "1," "2" or "3" indication, or an equivalent rating representing one of the four highest rating categories, by Moody's or a long term credit rating of "AAA," or "AA," "A" or "BBB," as modified by a "±," or "-" indication, or an equivalent rating representing one of the four highest rating categories, by Fitch or the equivalent long term credit ratings of any internationally recognised rating agency or agencies, as the case may be, which shall have been designated by the Parent Guarantor as having been substituted for S&P, Moody's or Fitch or all of them, as the case may be.

"**Issuing Bank**" means a scheduled commercial bank in India.

"**Material Subsidiary**" has the meaning specified in Condition 8.

"**Moody's**" means Moody's Investors Service, Inc., its affiliates and any successor to or assignee of its ratings business.

"**Net Proceeds**" means the aggregate cash proceeds received by the Parent Guarantor or any Subsidiary of the Parent Guarantor in respect of any Asset Sale (including, without limitation, any cash received upon the sale or other disposition of any non-cash consideration received in any Asset Sale), net of the direct costs relating to such Asset Sale.

"**Offer to Purchase**" means an offer to purchase the Bonds by the Issuer from the Bondholders commenced by mailing a notice by first class mail, postage prepaid, to the Trustee and each Bondholder at its last address appearing in the Register stating:

(1) the provision of the Trust Deed pursuant to which the offer is being made and that all Bonds validly tendered will be accepted for payment on a pro rata basis;

(2) the purchase price and the date of purchase (which shall be a Business Day no earlier than 30 days nor later than 60 days from the date such notice is mailed) (the "**Offer to Purchase Payment Date**");

(3) that any Bond not tendered will continue to accrue interest pursuant to its terms;

(4) that, unless the Issuer or the Guarantors, as the case may be, defaults in the payment of the purchase price, any Bond accepted for payment pursuant to the Offer to Purchase shall cease to accrue interest on and after the Offer to Purchase Payment Date;

(5) that Bondholders electing to have a Bond purchased pursuant to the Offer to Purchase will be required to surrender the Bond, together with the form entitled "Option of the Holder to Elect Purchase" on the reverse side of the Bond completed, to the Paying Agent at the address specified in the notice prior to the close of business on the Business Day immediately preceding the Offer to Purchase Payment Date;

(6) that Bondholders will be entitled to withdraw their election if the Paying Agent receives, not later than the close of business on the third Business Day immediately preceding the Offer to Purchase Payment Date, a facsimile transmission or letter setting forth the name of such Bondholder, the principal amount of Bonds delivered for purchase and a statement that such Bondholder is withdrawing his election to have such Bonds purchased; and

(7) that Bondholders whose Bonds are being purchased only in part will be issued new Bonds equal in principal amount to the unpurchased portion of the Bonds surrendered; *provided* that each Bond purchased and each new Bond issued shall be in a minimum principal amount of U.S.$200,000 or integral multiples of U.S.$1,000 in excess thereof.

On the Offer to Purchase Payment Date, the Issuer shall:

(a) accept for payment on a pro rata basis Bonds or portions thereof tendered pursuant to an Offer to Purchase;

(b) deposit with the Paying Agent money sufficient to pay the purchase price of all Bonds or portions thereof so accepted; and

(c) deliver, or cause to be delivered, to the Trustee all Bonds or portions thereof so accepted together with a certificate signed by two directors of the Issuer specifying the Bonds or portions thereof accepted for payment by the Issuer.

The Paying Agent shall promptly mail to the Bondholders so accepted payment in an amount equal to the purchase price, and the Registrar shall promptly authenticate and mail to such Bondholders a new Bond equal in principal amount to any unpurchased portion of the Bond surrendered; *provided* that each Bond purchased and each new Bond issued shall be in a principal amount of U.S.$200,000 or integral multiples of U.S.$1,000 in excess thereof. The Issuer will publicly announce the results of an Offer to Purchase as soon as practicable after the Offer to Purchase Payment Date. The Issuer will comply with all applicable securities laws and regulations if it is required to repurchase Bonds pursuant to an Offer to Purchase and, to the extent any applicable securities laws and regulations conflict with the Offer to Purchase obligations, the Issuer will not be deemed to have breached such obligations by virtue of such compliance.

The materials used in connection with an Offer to Purchase are required to contain or incorporate by reference information concerning the business of the Parent Guarantor and its Subsidiaries which the Issuer in good faith believes will assist the Bondholders to make an informed decision with respect to the Offer to Purchase, including a brief description of the events requiring the Issuer to make the Offer to Purchase, and any other information required by applicable law to be included therein. The offer is required to contain all instructions and materials necessary to enable the Bondholders to tender Bonds pursuant to the Offer to Purchase.

"**Permitted Business**" means any business, service or activity conducted or proposed to be conducted (as described in the offering memorandum of the Issuer and the Guarantors relating to the Bonds dated 17 August 2020 (the "**OM Date**")) by the Parent Guarantor and its Subsidiaries and any other business, service or activity conducted by the Parent Guarantor and its Subsidiaries on the OM Date and other businesses reasonably related, complementary or ancillary thereto as approved by the Board of Directors of the Parent Guarantor from time to time.

"**Permitted Holders**" means any or all of the following:

(1) Mr Anil Agarwal and Mr Agnivesh Agarwal, individually or collectively;

(2) any Affiliate or a direct family member of any of the Persons specified in clause (1) of this definition; and

(3) any Person both the Capital Stock and the Voting Stock of which (or in the case of a trust, the beneficial interests in which) are more than 80 per cent. owned by Persons specified in clauses (1) and (2) of this definition.

"**Permitted Senior Secured Facility Agreement**" means a facility agreement entered into prior to the Acquisition Date by Vedanta Holdings Mauritius Limited (as borrower) and the Issuer, the Parent Guarantor, Vedanta Holdings Jersey Limited, Twin Star Holdings Ltd, Welter Trading Limited, Finsider International Company Limited and Westglobe Limited (as guarantors) with various other parties thereto as lenders; provided that (i) the proceeds of the loans Incurred thereunder (the "**PSSFA Loans**") are used to fund part of the Take Private Transaction or (ii) the PSSFA Loans are Incurred as Permitted Refinancing Borrowings for the Bonds and/or Permitted Refinancing Borrowings for any other PSSFA Loans, and that shall rank pari passu in right of payment and security with the Bridge Facility Agreement and the Bonds.

"**Person**" means any individual, firm, corporation, partnership, association, joint venture, tribunal, limited liability company, trust, government or political subdivision or agency or instrumentality thereof, or any other entity or organisation.

"**Preferred Stock**" as applied to the Capital Stock of any Person means Capital Stock of any class or classes that by its term is preferred as to the payment of dividends, or as to the distribution of assets upon any voluntary or involuntary liquidation, winding up or dissolution of such Person, over any other class of Capital Stock of such Person.

"**Primary Treasury Dealer**" means a primary U.S. government securities dealer in New York City.

"**Public Shareholders**" means public shareholders of Vedanta Limited, as defined under the Delisting Regulations.

"**Rating Agencies**" means:

(i) S&P;

(ii) Moody's;

(iii) Fitch; and

(iv) if any or all of them shall not make a rating of the Bonds publicly available, an internationally recognised securities rating agency or agencies, as the case may be, selected by the Parent Guarantor, which shall be substituted for such Rating Agency or Rating Agencies, as the case may be.

"**Rating Date**" means the date which is 90 days prior to the earlier of the date of consummation of Change of Control and a public announcement of a Change of Control.

"**Rating Decline**" means the occurrence on, or within six months after, the earlier of the date of consummation of Change of Control or public announcement of a Change of Control (which period shall be extended so long as the rating of the Bonds is under publicly announced consideration for possible ratings change by any of the Rating Agencies) of any of the events listed below:

(1) If the Bonds are rated by Moody's, S&P and Fitch on the Rating Date as Investment Grade, the rating of the Bonds by at least two such Rating Agencies shall be below Investment Grade;

(2) If the Bonds are rated by two of the three Rating Agencies on the Rating Date as Investment Grade, the rating of the Bonds by either such Rating Agency shall be below Investment Grade;

(3) If the Bonds are rated by one of the three Rating Agencies on the Rating Date as Investment Grade, the rating of the Bonds by such Rating Agency shall be below Investment Grade; or

(4) If the Bonds are rated by Moody's, S&P and Fitch on the Rating Date as below Investment Grade, the rating of the Bonds by any such Rating Agency shall be below the rating it provided on the Rating Date.

"**RBB Period**" means the five Working Day period during which the Public Shareholders can tender their bids and which commences no later than seven Working Days from the public announcement initiating the Take Private Transaction in accordance with the Delisting Regulations.

"**Reference Treasury Dealer**" means:

(1) each of Barclays Bank plc, Credit Suisse (Hong Kong) Limited, Deutsche Bank AG, Singapore Branch, J.P. Morgan Securities plc and Standard Chartered Bank and their respective successors or any of their respective affiliates, so long as it is Primary Treasury Dealer; *provided* that, if any such Person ceases to be a Primary Treasury Dealer, the Parent Guarantor will substitute another Primary Treasury Dealer; and

(2) any other Primary Treasury Dealer selected by the Parent Guarantor.

"**Reference Treasury Dealer Quotation**" means, with respect to each Reference Treasury Dealer and any redemption date, the average, as determined by the Independent Investment Bank, of the bid and asked prices for the Comparable Treasury Issue (expressed in each case as a percentage of its principal amount) quoted in writing to the Independent Investment Bank by such Reference Treasury Dealer at 5:00 p.m., New York City time, on the third Business Day preceding such redemption date.

"**S&P**" means S&P Global Ratings, a division of the McGraw Hill Companies, Inc., its affiliates and any successor to or assignee of its ratings business.

"**Share Capital**" means any and all shares, interests (including joint venture and partnership interests), participations or other equivalents of capital stock of a corporation or any and all equivalent ownership interests in a Person.

"**Take Private Date**" means the first date on which both (a) the Parent Guarantor and its Subsidiaries hold no less than 90.0 per cent. of the Capital Stock in Vedanta Limited (or any of its successors or assigns) (for the avoidance of doubt, to be calculated excluding the Capital Stock of Vedanta Limited which is then held by a custodian and against which ADS have been issued and Capital Stock into which ADS have been converted after the Acquisition Date) and (b) Vedanta Limited's (or any of its successors or assigns) Capital Stock ceases to be listed on the BSE Limited and the National Stock Exchange of India Limited.

"**Take Private Transaction**" means the proposed acquisition by the Parent Guarantor, the Issuer and Vedanta Holdings Mauritius Limited of all fully paid up equity shares of Vedanta Limited ("**Equity Shares**") that are held by Public Shareholders and consequent voluntary delisting of the Equity Shares from the BSE Limited and the National Stock Exchange of India Limited in accordance with the Delisting Regulations.

"**Transaction Date**" means, with respect to the Incurrence of any Borrowing, the date such Borrowing is to be Incurred.

"**Voting Stock**" means, with respect to any Person, Capital Stock of any class or kind ordinarily having the power to vote for the election of directors, managers or other voting members of the governing body of such Person.

4 Interest

The Bonds will bear interest from (and including) the Closing Date at the rate of 13.00 per cent. per annum. Interest shall be payable semi-annually in arrear on 21 February and 21 August of each year, commencing on 21 February 2021 (each such interest payment date, an "**Interest Payment Date**"). Interest on the Bonds shall accrue from (and including) the most recent date to which interest has been paid and ending on (but excluding) the next Interest Payment Date for the Bonds. The Bonds will cease to bear interest from the due date for redemption unless, upon surrender in accordance with Condition 6, payment of the full amount of principal is improperly withheld or refused or unless default is otherwise made in respect of any such payment. In such event the Bonds shall continue to bear interest at the applicable rate (both before and after judgment) until, but excluding whichever is the earlier of:

(a) the day on which all sums due in respect of the Bonds up to that day are received by or on behalf of the relevant holder; and

(b) the day which is seven calendar days after the Trustee or the Principal Agent has notified Bondholders of receipt of all sums due in respect of all the Bonds up to that seventh calendar day (except to the extent that there is failure in the subsequent payment to the relevant holders under these Conditions). If interest is required to be calculated for a period of less than one year, it will be calculated on the basis of a 360-day year consisting of 12 months of 30 days each and, in the case of an incomplete month, the number of days elapsed.

5 Redemption and Purchase

(a) Mandatory redemptions and final redemption

On 21 August 2022, one-third of the principal amount of the Bonds then outstanding will be redeemed at their principal amount and on 21 February 2023, one-half of the principal amount of the Bonds then outstanding will be redeemed at their principal amount. The Bonds to be redeemed on each such date will be selected on a pro rata basis, by lot or by such other method as required by law or requirement of any stock exchange on which the Bonds are listed or DTC or any alternative clearing system; *provided* that Bonds with a principal amount of U.S.$200,000 will not be redeemed in part.

Unless previously redeemed, or purchased and cancelled as provided herein, the Bonds will be redeemed at their principal amount on 21 August 2023. The Bonds may not be redeemed at the option of the Issuer other than in accordance with this Condition 5.

(b) **Redemption at the option of the Issuer**

At any time and from time to time prior to 21 August 2022, the Bonds may be redeemed, in whole or in part, at the option of the Issuer on giving not less than 30 nor more than 60 calendar days' written notice to the Trustee and the Bondholders, at a redemption price equal to 100 per cent. of the principal amount of the Bonds being redeemed plus the Applicable Premium, plus accrued and unpaid interest, if any, to (but excluding) the redemption date. For the avoidance of doubt, none of the Agents or the Trustee have any responsibility with respect to the calculation of the Applicable Premium.

On or after 21 August 2022, the Bonds may be redeemed, in whole or in part, at the option of the Issuer on giving not less than 30 nor more than 60 calendar days' written notice to the Trustee and the Bondholders, at the redemption prices (expressed as percentages of principal amount) set forth below, plus accrued and unpaid interest, if any, to (but excluding) the applicable redemption date, if redeemed during the periods set forth below:

Period	**Percentage**
On or after 21 August 2022 to (but excluding) 21 February 2023	104.3333%
On or after 21 February 2023 to (but excluding) 21 August 2023	103.2500%

Any optional redemption of Bonds and notice of redemption may, at the Issuer's discretion, be subject to the satisfaction (or waiver by the Issuer in its sole discretion) of one or more conditions precedent. If any such redemption or notice is subject to satisfaction of one or more conditions precedent, such notice may state that, in the Issuer's sole discretion, the redemption date may be delayed until such time as any or all such conditions shall be satisfied, or such redemption may not occur and such notice may be rescinded if any or all such conditions shall not have been satisfied by the redemption date, or by the redemption date so delayed.

If fewer than all the Bonds are to be redeemed, the Bonds for redemption will be selected on a pro rata basis, by lot or by such other method as required by law or requirement of any stock exchange on which the Bonds are listed or DTC or any alternative clearing system; *provided* that Bonds with a principal amount of U.S.$200,000 will not be redeemed in part.

(c) **Redemption for taxation reasons**

The Bonds may be redeemed at the option of the Issuer in whole, but not in part, at any time on giving not less than 30 nor more than 60 calendar days' written notice to the Trustee and the Bondholders (which notice shall be irrevocable), at their principal amount (together with interest accrued and unpaid to (but excluding) the date fixed for redemption and any additional amounts then due and that will become due on the date fixed for redemption), if:

(i) the Issuer (or any Guarantor) has or will become obliged to pay additional amounts as provided or referred to in Condition 7 as a result of any change in, or amendment to, the laws or regulations of a Tax Jurisdiction (as defined in Condition 7), or any authority therein or thereof having power to tax, or any change in the application or official interpretation of such laws or regulations, which change or amendment becomes effective on or after the Closing Date (or, in the case of a Subsidiary that becomes a Subsidiary Guarantor after the Closing Date, the date such Subsidiary becomes a Subsidiary Guarantor); and

(ii) such obligation cannot be avoided by the Issuer (or as the case may be, the relevant Guarantor) taking reasonable measures available to it (*provided* that changing the jurisdiction of organisation of the Issuer (or as the case may be, the relevant Guarantor) is not a reasonable measure for purposes of this section),

provided that no such notice of redemption shall be given earlier than 90 calendar days prior to the earliest date on which the Issuer (or, as the case may be, the relevant Guarantor) would be obliged to pay such additional amounts were a payment in respect of the Bonds or the Guarantee then due and, unless at the time such notice is given, the obligation to pay additional amounts remains in effect. Prior to the publication of any notice of redemption pursuant to this paragraph, the Issuer (or, as the case may be, the relevant Guarantor) shall deliver to the Trustee a certificate signed by two directors of the Issuer (or, as the case may be, the relevant Guarantor) stating that the obligation referred to in (i) above cannot be avoided by the Issuer (or, as the case may be, the relevant Guarantor) taking reasonable measures available to it and the Trustee shall be entitled to accept such certificate as sufficient evidence of the satisfaction of the condition precedent set out in (ii) above in which event it shall be conclusive and binding on the Bondholders.

(d) **Repurchase of Bonds Upon a Change of Control Triggering Event**

Not later than 30 days following the occurrence of a Change of Control Triggering Event, the Issuer will make an Offer to Purchase all outstanding Bonds (a "**Change of Control Offer**") at a purchase price equal to 101.0 per cent. of the principal amount thereof plus accrued and unpaid interest, if any, to (but excluding) the Offer to Purchase Payment Date.

Notwithstanding the above, the Issuer will not be required to make a Change of Control Offer following a Change of Control if a third party makes the Change of Control Offer in the same manner and at the same time and purchases all Bonds validly tendered and not withdrawn under such Change of Control Offer.

Except as described above with respect to a Change of Control, the Trust Deed does not contain provisions that permit the Bondholders to require that the Issuer purchase or redeem the Bonds in the event of a takeover, recapitalisation or similar transaction.

(e) **Special Mandatory Redemption**

If (i) Approval In Principle is not received by 5 October 2020 (being 45 days after the Closing Date), or (ii) the Parent Guarantor and/or the Issuer and/or Vedanta Holdings Mauritius Limited, as the case may be, do not accept the final offer price (as determined as per the reverse book building mechanism as specified in the Delisting Regulations) within five Working Days after the closure of the RBB Period or, if a counter offer has been made in accordance with the Delisting Regulations, the counter offer price has not been accepted by the Public Shareholders in accordance with the Delisting Regulations, or (iii) the Acquisition Date has not occurred by 19 November 2020 (being 90 days after the Closing Date), or (iv) Vedanta Holdings Mauritius Limited fails, having used commercially reasonable efforts, to enter into the Bridge Facility Agreement and the Permitted Senior Secured Facility Agreement or to satisfy the conditions to Incur Bridge Loans and PSSFA Loans in an amount sufficient, when taken together with the proceeds from the offering of the Bonds, to consummate the Take Private Transaction, the Issuer will, within five Business Days, redeem all of the Bonds then outstanding at a redemption price of 101 per cent. of their principal amount plus accrued and unpaid interest, if any, to (but excluding) the redemption date (such redemption, a "**Special Mandatory Redemption**").

(f) **Purchase**

Subject to the requirements (if any) of any stock exchange on which the Bonds may be listed at the relevant time, the Parent Guarantor and any of its Subsidiaries (other than Vedanta Limited or any of its Subsidiaries) may at any time purchase Bonds in the open market or otherwise at any price. Any purchase of Bonds by tender shall be made available to all Bondholders alike and such Bonds may be retained for the account of the relevant purchaser or otherwise dealt with at its discretion (but may not be resold). The Bonds so purchased, while held by or on behalf of the Parent Guarantor or any such Subsidiary, shall not entitle the holder to vote at any meetings of the Bondholders and shall not be deemed to be outstanding for the purposes of calculating quorums at meetings of the Bondholders or for the purposes of Condition 12(a).

(g) **Cancellation**

All Bonds so redeemed will be cancelled and may not be re-issued or resold. All Bonds purchased pursuant to this Condition may be cancelled at the discretion of the relevant purchaser. Bonds may be surrendered for cancellation by surrendering each such Bond to the Principal Agent and if so surrendered shall be cancelled forthwith (and may not be reissued or resold) and the obligations of the Issuer in respect of any such Bonds shall be discharged.

6 Payments

(a) **Principal and Interest**

Payment of principal and interest due other than on an Interest Payment Date will be made in United States dollars by transfer to the registered account of the Bondholder. Payment of principal will only be made after surrender of the relevant Certificate at the specified office of any of the Paying Agents.

Interest on Bonds due on an Interest Payment Date will be paid in United States dollars on the due date for the payment of interest to the holder shown on the Register at the close of business on the fifteenth day before the due date for the payment of interest (the "**Interest Record Date**"). Payments of interest on each Bond will be made by transfer to the registered account of the Bondholder.

(b) **Registered accounts**

For the purposes of this Condition, a Bondholder's registered account means the United States dollar account maintained by or on behalf of it with a bank in New York City, details of which appear on the Register at the close of business on the second business day (as defined below) before the due date for payment, and a Bondholder's registered address means its address appearing on the Register at that time.

(c) **Payments subject to fiscal laws**

All payments are subject in all cases to:

(i) any applicable fiscal or other laws and regulations in the place of payment, but without prejudice to the provisions of Condition 7; and

(ii) any withholding or deduction required pursuant to an agreement described in Section 1471(b) of the U.S. Internal Revenue Code of 1986 (the "**Code**") or otherwise imposed pursuant to Sections 1471 through 1474 of the Code, any regulations or agreements thereunder, any official interpretations thereof, or any law implementing an intergovernmental approach thereto. No commissions or expenses shall be charged to the Bondholders in respect of such payments.

(d) **Payment initiation**

Where payment is to be made by transfer to a registered account, payment instructions (for value on the due date or, if that is not a business day (as defined below), for value on the first following day which is a business day) will be initiated on the due date for payment (or, if it is not a business day, the first following day which is a business day) or, in the case of a payment of principal, if later, on the business day on which the relevant Certificate is surrendered at the specified office of a Paying Agent.

Bondholders will not be entitled to any interest or other payment for any delay after the due date in receiving the amount due if the due date is not a business day or if the Bondholder is late in surrendering its Certificate (if required to do so).

(e) **Business Day**

In this Condition, "**business day**" means:

(i) in the case of payment by transfer to a registered account, a day (other than a Saturday or Sunday) on which commercial banks are open for business in New York City and the place of the specified office of the Paying Agent; and

(ii) in the case of the surrender of a Certificate, a day in which commercial banks are open for business in the place of the specified office of the Paying Agent to whom the Certificate is surrendered. If an amount which is due on the Bonds is not paid in full, the Registrar will annotate the Register with a record of the amount (if any) in fact paid.

(f) **Paying Agents**

The initial Paying Agents, Transfer Agents and Registrar and their initial specified offices are listed below. The Issuer reserves the right at any time with the approval of the Trustee to vary or terminate the appointment of any Paying Agent, Transfer Agents or Registrar and appoint additional or other Paying Agents, Transfer Agents or Registrar; *provided* that it will maintain:

(i) a Principal Agent;

(ii) a Paying Agent in Singapore so long as the Bonds are listed on the SGX-ST and the rules of the SGX-ST so require; and

(iii) a Registrar. Notice of any change in the Paying Agents, Transfer Agents or Registrar or their specified offices will promptly be given to the Bondholders and the SGX-ST (so long as the Bonds are listed on the SGX-ST and the rules of the SGX-ST so require).

7 Taxation

All payments by or on behalf of the Issuer or the Guarantors in respect of the Bonds or the Guarantee, as applicable, shall be made free and clear of, and without withholding or deduction for, any taxes, duties, assessments or governmental charges (including, without limitation, penalties and interest and other amounts related thereto) of whatever nature imposed, levied, collected, withheld or assessed by or within Mauritius, Jersey or the United Kingdom or any other jurisdiction in which the Issuer or any Guarantor is then incorporated, organised, engaged in business for tax purposes or resident for tax purposes or through which any payment on the Bonds or the Guarantee is made on behalf of the Issuer or a Guarantor (each, a "**Tax Jurisdiction**") or any authority therein or thereof having power to tax, unless such withholding or deduction is required by law. If such withholding or deduction is required by law, the Issuer, or as the case may be, the Guarantor shall pay such additional amounts as will result in receipt by the Bondholders of such amounts as would have been received by them had no such withholding or deduction been required, except that no such additional amounts shall be payable in respect of any Bond:

(a) to a holder (or to a third party on behalf of a holder) who is liable to such taxes, duties, assessments or governmental charges in respect of such Bond by reason of such holder (or its beneficial owner or equity holder) having some connection with a Tax Jurisdiction other than the mere holding of such Bond or exercising any rights or obligations relating thereto;

(b) in the case of payment of principal or interest (other than interest due on an Interest Payment Date) if the Certificate in respect of such Bond is presented for payment more than 30 days after the Relevant Date except to the extent that the holder of it would have been entitled to such additional amounts on presenting such Certificate for payment on the last day of such period of 30 days;

(c) with respect to taxes, duties, assessments or governmental charges in respect of such Bond imposed as a result of the failure of the holder or beneficial owner of such Bond to comply with a written request of the Issuer or the relevant Guarantor at least 60 days before any such withholding or deduction would be payable to provide timely or accurate information concerning the nationality, residence or identity of the holder or beneficial owner or to make any valid or timely declaration or similar claim or satisfy any certification, information or other reporting requirement (to the extent such holder or beneficial owner is legally eligible to do so), which is required or imposed by a statute, treaty, regulation or administrative practice of a Tax Jurisdiction or any authority therein or thereof having the power to tax as a condition to exemption from all or part of such taxes;

(d) for any estate, inheritance, gift, sale, transfer, personal property or similar tax or assessment;

(e) for any taxes imposed or required to be withheld under Sections 1471 to 1474 (or any successor provisions or amendments thereof) of the Code, any regulations or other official guidance thereunder, any intergovernmental agreement entered into in connection therewith or any law or regulation (or any official interpretation thereof) implementing an intergovernmental approach thereto, or any agreements entered into pursuant to Section 1471(b) of the Code; or

(f) for any taxes, duties, assessments or governmental charges payable otherwise than by deduction or withholding on payments under such Bond or the Guarantee.

Such additional amounts shall also not be payable where, had the beneficial owner of the Bond been the holder of the Bond, it would not have been entitled to payment of additional amounts by reason of clauses (a) through (f) inclusive above.

"**Relevant Date**" means whichever is the later of:

(i) the date on which such payment first becomes due; and

(ii) if the full amount payable has not been received in New York City by the Principal Agent or the Trustee on or prior to such due date, the date on which, the full amount having been so received, notice to that effect shall have been given to the Bondholders and payment made.

Any reference in these Conditions to principal and/or interest in respect of the Bonds shall be deemed to include any additional amounts which may be payable under this Condition or any undertaking given in addition to or substitution for it under the Trust Deed.

8 Events of Default

The Trustee at its discretion may, and if so requested by holders of not less than 25 per cent. in principal amount of the Bonds then outstanding or if so directed by an Extraordinary Resolution shall (subject in each case to it being indemnified and/or secured (including by way of payment in advance) to its satisfaction), give notice in writing to the Issuer and the Parent Guarantor that the Bonds are, and they shall immediately become, due and payable at their principal amount together with accrued interest, if applicable, if any of the following events (each an "**Event of Default**") shall have occurred:

(a) **Non-Payment:**

(i) the Issuer and the Guarantors fail to pay all or any part of the principal of any of the Bonds when the same shall become due and payable, whether at maturity, upon redemption or otherwise and such failure continues for a period of seven calendar days; or

(ii) the Issuer and the Guarantors fail to pay any instalment of interest upon any of the Bonds as and when the same shall become due and payable, and such failure continues for a period of 14 calendar days; or

(b) **Breach of Other Obligations:**

(i) the Issuer fails to make or consummate (x) an Offer to Purchase with respect to any of the Bonds in the manner set out in Condition 5(d) or (v) a Special Mandatory Redemption in the manner set out in Condition 5(e); or

(ii) the Issuer or any Guarantor defaults in the performance or observance of or compliance with any of its other obligations set out in the Bonds or the Trust Deed or under the Guarantee, which default is incapable of remedy or, if in the opinion of the Trustee such default is capable of remedy, is not in the opinion of the Trustee remedied within

45 calendar days after the date on which written notice specifying such failure, stating that such notice is a "Notice of Default" under the Bonds and demanding that the Issuer or, as the case may be, the relevant Guarantor remedy the same, shall have been given to the Issuer and the Parent Guarantor by the Trustee; or

(c) **Cross-Default:**

(i) any other present or future indebtedness of the Issuer, any Subsidiary Guarantor, the Parent Guarantor or any of its Material Subsidiaries for or in respect of moneys borrowed or raised becomes due and payable prior to its stated maturity (otherwise than at the option of the Issuer, any Subsidiary Guarantor, the Parent Guarantor or any Material Subsidiary, as the case may be) by reason of any actual or potential default, event of default or the like (howsoever described); or

(ii) any such indebtedness is not paid when due or, as the case may be, within any applicable grace period originally provided for; or

(iii) the Issuer, any Subsidiary Guarantor, the Parent Guarantor or any of its Material Subsidiaries fails to pay when due (or within any applicable grace period originally provided for) any amount payable by it under any present or future guarantee for, or indemnity in respect of, any moneys borrowed or raised;

provided that the aggregate amount of the relevant indebtedness, guarantees and indemnities in respect of which any one or more of the events mentioned above in this Condition 8(c) has or have occurred equals or exceeds U.S.$100,000,000 (or the Dollar Equivalent thereof); or

(d) **Enforcement Proceedings:** a distress, attachment, execution or other legal process (other than distraint or attachment imposed by any government, authority or agent prior to enforcement foreclosure) is levied, enforced or sued out, as the case may be, on or against a substantial part of the property, assets or revenues of the Issuer, any Subsidiary Guarantor, the Parent Guarantor or all or a substantial part of the property, assets or revenues of any of its Material Subsidiaries and is not:

(i) either discharged or stayed within 60 calendar days or in circumstances where the levy, enforcement or suing out, as the case may be, of such legal process is not, or does not become, materially prejudicial to the interests of the Bondholders, within 120 calendar days; or

(ii) being contested in good faith on the basis of appropriate legal advice provided by reputable independent counsel in the relevant jurisdiction or jurisdictions and by appropriate proceedings; or

(e) **Security Enforced:** an encumbrancer takes possession or a receiver, administrator, administrative receiver, liquidator, examiner, manager, receiver and manager, Viscount of the Royal Court of Jersey or other similar person (any of the foregoing, an "**Administrator or Receiver**") is appointed over, or an attachment order is issued in respect of, the whole or a substantial part of the undertaking, property, assets or revenues of the Issuer, any Subsidiary Guarantor, the Parent Guarantor or any of its Material Subsidiaries and in any such case such possession or appointment is not stayed or terminated or the debt on account of which such possession was taken or appointment made is not discharged or satisfied within 60 calendar days of such appointment or the issue of such order; or

(f) **Insolvency:** the Issuer, any Subsidiary Guarantor, the Parent Guarantor or any of its Material Subsidiaries:

(i) is insolvent or bankrupt (including "**bankrupt**" as that term is interpreted pursuant to Article 8 of the Interpretation (Jersey) Law 1954) or is deemed to be insolvent as a result of a court being satisfied that the value of the Issuer, any Subsidiary Guarantor, the Parent Guarantor or any of its Material Subsidiaries' assets is less than the amount of its liabilities, taking into account contingent and prospective liabilities, or unable to pay its debts or stops, suspends or threatens to stop or suspend payment of all or a substantial part of (or of a particular type of) its debts as they mature; or

(ii) applies for or consents to or suffers the appointment of an Administrator or Receiver in respect of the Issuer, any Subsidiary Guarantor, the Parent Guarantor or any of its Material Subsidiaries or over the whole or a substantial part of the undertaking, property, assets or revenues of the Issuer, any Subsidiary Guarantor, the Parent Guarantor or any of its Material Subsidiaries; or

(iii) proposes or makes or enters into a general assignment or an arrangement or composition with or for the benefit of its creditors (which shall be construed so as to include, without limitation, a "**compromise**" or "**arrangement**" of the type referred to in Article 125 of the Companies (Jersey) Law 1991) in respect of any of such debts or a moratorium is agreed or declared or comes into effect in respect of or affecting all or a substantial part of (or of a particular type of) the debts of the Issuer, any Subsidiary Guarantor, the Parent Guarantor or any of its Material Subsidiaries, except, in any such case, for the purpose of and followed by a reconstruction, amalgamation, reorganisation, merger or consolidation on terms approved by the Trustee or by an Extraordinary Resolution; or

(g) **Winding-up, Disposals:** an Administrator or Receiver is appointed, an order is made or an effective resolution is passed for the winding-up (including, without limitation, pursuant to any "**procedure**" or "**process**" referred to in Part 21 of the Companies (Jersey) Law 1991), dissolution, striking off the register, examinership or administration of the Issuer, any Subsidiary Guarantor, the Parent Guarantor or any of its Material Subsidiaries, or the Issuer, any Subsidiary Guarantor, the Parent Guarantor or any of its Material Subsidiaries ceases or threatens to cease to carry on all or a substantial part of its business or operations, or the Issuer, any Subsidiary Guarantor, the Parent Guarantor or any of its Material Subsidiaries sells or disposes of all or a substantial part of its assets or business whether as a single transaction or a number of transactions, related or not; except, in any such case, for the purpose of and followed by a reconstruction, amalgamation, reorganisation, merger, consolidation or other similar arrangement:

(i) on terms previously approved in writing by the Trustee or by an Extraordinary Resolution; or

(ii) in the case of a Material Subsidiary, not including arising out of the insolvency of such Material Subsidiary and under which all or substantially all of its assets are transferred to another member or members of the Group or to a transferee or transferees which immediately upon such transfer become(s) a Subsidiary or Subsidiaries of the Parent Guarantor; or

(h) **Expropriation:** any governmental authority or agency condemns, seizes, compulsorily purchases or expropriates (excluding any distraint or attachment prior to enforcement or foreclosure) all or a substantial part of the assets or shares of the Issuer, any Subsidiary Guarantor, the Parent Guarantor or any of its Material Subsidiaries; or

(i) **Issuer or Subsidiary Guarantor ceases to be Subsidiary:** the Issuer or any Subsidiary Guarantor ceases to be a Subsidiary wholly-owned and controlled, directly or indirectly, by the Parent Guarantor; or

(j) **Analogous Events:** any event occurs which under the laws of England or, in the case of the Issuer, a Subsidiary Guarantor or a Material Subsidiary, the laws of the Issuer's, the relevant Subsidiary Guarantor's or the relevant Material Subsidiary's (as the case may be) place of incorporation or principal place of business has an analogous effect to any of the events referred to in paragraphs (d) to (i) above; or

(k) **Guarantee:** the Guarantee of any Guarantor is not (or is claimed by any Guarantor not to be) in full force and effect; or

(l) **Collateral:** any default by the Issuer or any other Security Provider in the performance of any of its obligations under the Security Documents or the Bond Escrow Agreement which adversely affects the enforceability, validity, perfection or priority of the applicable Security on the Collateral or which adversely affects the condition or value of the Collateral, taken as a whole; or

(m) **Security Documents and Bond Escrow Agreement:** the Issuer or any other Security Provider denies or disaffirms its obligations under any Security Document or the Bond Escrow Agreement or, other than in accordance with the Trust Deed, the Intercreditor Agreement, the Security Documents and the Bond Escrow Agreement, any Security Document or the Bond Escrow Agreement ceases to be or is not in full force and effect or the Common Security Agent ceases to have a valid and perfected first priority security interest in the Common Collateral (subject to any Permitted Security and the Intercreditor Agreement) or the Trustee ceases to have a valid and perfected first priority security interest in the Bond Escrow Account (subject to any Permitted Security).

Upon any such notice being given to the Issuer and the Parent Guarantor, the Bonds will immediately become due and payable at their principal amount together with accrued interest as provided in the Trust Deed, *provided* that no such notice may be given unless an Event of Default shall have occurred and *provided further* that, in the case of paragraphs (b)(ii), (d), (e) and (h), the Trustee shall have certified that in its opinion such event is materially prejudicial to the interests of the Bondholders.

"**Material Subsidiary**" means, at any particular time, a Subsidiary of the Parent Guarantor:

(a) whose:

  (i) total assets; or

  (ii) gross revenues,

  (in each case on an unconsolidated basis) attributable to the Parent Guarantor are equal to or greater than 10 per cent. of the consolidated total assets or consolidated gross revenues of the Parent Guarantor, as applicable (in each case as calculated based on the latest annual unconsolidated financial statements of the Subsidiary and the latest audited annual consolidated financial statements of the Parent Guarantor); or

(b) to which is transferred all or substantially all of the business, assets and undertaking of a Subsidiary of the Parent Guarantor which immediately prior to such transfer is a Material Subsidiary, whereupon the transferor Subsidiary of the Parent Guarantor shall immediately cease to be a Material Subsidiary and the transferee Subsidiary shall immediately become a Material Subsidiary (subject to the provisions of paragraph (a) above).

A report by two directors of the Parent Guarantor that in their opinion a Subsidiary of the Parent Guarantor is or is not, or was or was not, at any particular time or throughout any specified period a Material Subsidiary shall, in the absence of manifest error, be conclusive and binding on the Trustee and the Bondholders.

9 Consolidation, Amalgamation or Merger

The Parent Guarantor will not consolidate with, merge or amalgamate into, or transfer its properties and assets substantially as an entirety to, any corporation or convey or transfer its properties and assets substantially as an entirety to any Person (the consummation of any such event, a "**Merger**"), unless:

(a) the Person formed by such Merger or that acquired such properties and assets shall expressly assume, by a supplemental trust deed in form and substance satisfactory to the Trustee, all obligations of the Parent Guarantor under the Trust Deed and the Bonds and the performance of every covenant and agreement applicable to it contained therein;

(b) the Person formed by such Merger or that acquired such properties and assets, if not organised under the law of the United Kingdom, shall expressly agree, by a supplemental trust deed in form and substance satisfactory to the Trustee, that its jurisdiction of organisation (or any authority therein or thereof having power to tax) will be added to Condition 7 and clause (c) of Condition 5 in each place therein in which reference is made to the United Kingdom, subject to clause (d) of the first paragraph of this Condition 9;

(c) immediately after giving effect to any such Merger, no Event of Default or Potential Event of Default (as defined in the Trust Deed) shall have occurred or be continuing or would result therefrom as confirmed to the Trustee by:

    (i) a certificate signed by two directors of the Parent Guarantor; and

    (ii) a certificate signed by two directors of the Person that would result from such Merger or that would acquire such properties and assets; and

(d) the Person formed by such Merger or that acquired such properties and assets shall expressly agree, among other things, not to redeem the Bonds pursuant to Condition 5(c) as a result of it becoming obliged to pay any additional amounts (as provided or referred to in Condition 7) arising solely as a result of such Merger.

Each Subsidiary Guarantor will not, and the Parent Guarantor will not permit any Subsidiary Guarantor to, consolidate with, merge or amalgamate into, or transfer its properties and assets substantially as an entirety to, any corporation or convey or transfer its properties and assets substantially as an entirety to any Person other than the Parent Guarantor or another Subsidiary Guarantor (the consummation of any such event, a "**Subsidiary Merger**"), unless:

(a) the Person formed by such Subsidiary Merger or that acquired such properties and assets shall expressly assume, by a supplemental trust deed in form and substance satisfactory to the Trustee, all obligations of such Subsidiary Guarantor under the Trust Deed and the Bonds and the performance of every covenant and agreement applicable to it contained therein;

(b) the Person formed by such Subsidiary Merger or that acquired such properties and assets, if not organised under the law of the jurisdiction of organisation of such Subsidiary Guarantor, shall expressly agree, by a supplemental trust deed in form and substance satisfactory to the Trustee, that its jurisdiction of organisation (or any authority therein or thereof having power to tax) will be added to Condition 7 and clause (c) of Condition 5 in each place therein in which reference is made to the jurisdiction of organisation of such Subsidiary Guarantor, subject to clause (d) of the second paragraph this Condition 9;

(c) immediately after giving effect to any such Subsidiary Merger, no Event of Default or Potential Event of Default (as defined in the Trust Deed) shall have occurred or be continuing or would result therefrom as confirmed to the Trustee by:

(i) a certificate signed by two directors of the Parent Guarantor; and

(ii) a certificate signed by two directors of the Person that would result from such Subsidiary Merger or that would acquire such properties and assets; and

(d) the Person formed by such Subsidiary Merger or that acquired such properties and assets shall expressly agree, among other things, not to redeem the Bonds pursuant to Condition 5(c) as a result of it becoming obliged to pay any additional amounts (as provided or referred to in Condition 7) arising solely as a result of such Subsidiary Merger.

10 Prescription

Claims in respect of principal and interest will become void unless made as required by Condition 6 within a period of 10 years in the case of principal and five years in the case of interest from the appropriate Relevant Date.

11 Replacement of Certificates

If any Certificate representing a Bond is lost, stolen, mutilated, defaced or destroyed it may be replaced at the specified office of the Registrar subject to all applicable laws and stock exchange or other relevant authority requirements, upon payment by the claimant of the costs and expenses Incurred in connection with such replacement and on such terms as to evidence, security, indemnity and otherwise as the Issuer and the Parent Guarantor may require (*provided* that the requirement is reasonable in the light of prevailing market practice). Mutilated or defaced Certificates must be surrendered before replacements will be issued.

12 Meetings of Bondholders, Modification and Waiver

(a) **Meetings of Bondholders**

The Trust Deed contains provisions for convening meetings of Bondholders to consider matters affecting their interests, including the sanctioning by Extraordinary Resolution of a modification of any of these Conditions or any provisions of the Trust Deed, the Agency Agreement, the Security Documents, the Intercreditor Agreement or the Bond Escrow Agreement. Such a meeting may be convened by the Issuer, the Parent Guarantor or the Trustee at any time and shall be convened by the Trustee if it receives a written request by Bondholders holding not less than 15 per cent. in principal amount of the Bonds for the time being outstanding. The quorum for any such meeting convened to consider an Extraordinary Resolution will be two (2) or more persons holding or representing a clear majority in principal amount of the Bonds for the time being outstanding, or at any adjourned meeting two (2) or more persons being or representing Bondholders whatever the principal amount of the Bonds held or represented, unless the business of such meeting includes consideration of proposals, *inter alia*:

(i) to modify the maturity of the Bonds or the dates on which interest is payable in respect of the Bonds;

(ii) to reduce or cancel the principal amount of, or interest on, the Bonds;

(iii) to change the currency of payment of the Bonds;

(iv) to cancel or modify any Guarantee (other than any modification described in Condition 12(b));

(v) to modify or discharge any Security (other than any modification described in Condition 12(b)); or

(vi) to modify the provisions concerning the quorum required at any meeting of Bondholders or the majority required to pass an Extraordinary Resolution, in which case the necessary quorum will be two (2) or more persons holding or representing not less than two-thirds, or at any adjourned meeting not less than one-third, in principal amount of the Bonds for the time being outstanding. Any Extraordinary Resolution duly passed shall be binding on Bondholders (whether or not they were present at the meeting at which such resolution was passed and whether or not they voted in favour).

The expression "**Extraordinary Resolution**" means a resolution passed at a meeting of Bondholders duly convened and held in accordance with these provisions by a majority consisting of not less than two-thirds of the votes cast.

(b) **Modification and Waiver**

The Trustee may agree, without the consent of the Bondholders, to:

(i) any modification to these Conditions or to the provisions of the Trust Deed, the Agency Agreement, the Security Documents, the Intercreditor Agreement or the Bond Escrow Agreement which is in its opinion of a formal, minor or technical nature or is made to correct a manifest error, and

(ii) any other modification (except as provided for in the Trust Deed), and any waiver or authorisation of any breach or proposed breach, of any of the provisions of these Conditions, the Trust Deed, the Agency Agreement, the Security Documents, the Intercreditor Agreement or the Bond Escrow Agreement which is in the opinion of the Trustee not materially prejudicial to the interests of the Bondholders.

Any such modification, authorisation or waiver shall be binding on the Bondholders and such modification shall be notified to the Bondholders as soon as practicable.

(c) **Written resolutions of 90 per cent. holders**

The Trust Deed provides that a written resolution signed by or on behalf of the holders of not less than 90 per cent. of the aggregate principal amount outstanding of Bonds who for the time being are entitled to receive notice of a meeting in accordance with the provisions of the Trust Deed shall be as valid and effective as a duly passed Extraordinary Resolution.

(d) **Entitlement of the Trustee**

In connection with the exercise of its powers, trusts, authorisations or discretions (including but not limited to those referred to in this Condition), the Trustee shall have regard to the interests of the Bondholders as a class and shall not have regard to the consequences of such exercise for individual Bondholders (including as a result of their being for any purpose domiciled or resident in, or otherwise connected with, or subject to the jurisdiction of, any particular territory) and the Trustee shall not be entitled to require, nor shall any Bondholder be entitled to claim, from the Issuer or the Guarantors any indemnification or payment in respect of any tax consequence of any such exercise upon individual Bondholders.

13 Enforcement

At any time after the Bonds become due and payable, the Trustee may, at its discretion and without further notice, institute such proceedings against the Issuer, the Guarantors and/or the Security Providers as it may think fit to enforce the terms of the Trust Deed, the Bonds, the Guarantee, the Security Documents, the Intercreditor Agreement and/or the Bond Escrow Agreement but it need not take any such proceedings unless:

(a) it shall have been so directed by an Extraordinary Resolution or so requested in writing by Bondholders holding at least one-quarter in principal amount of the Bonds outstanding; and

(b) it shall have been indemnified and/or secured (including by way of payment in advance) to its satisfaction.

No Bondholder may proceed directly against the Issuer and/or the Guarantors unless the Trustee, having become bound so to proceed, fails to do so within a reasonable time and such failure is continuing.

In addition, at any time after the Bonds become due and payable following an Event of Default, the Trustee may, and shall upon request of holders of at least 25% in aggregate principal amount of outstanding Bonds, subject to receiving indemnity and/or security and/or pre-funding to its satisfaction, (i) foreclose on the Bond Escrow Account in accordance with the terms of the Bond Escrow Account Charge (if applicable at such time), (ii) give the Common Security Agent a written notice thereof and/or (iii) instruct the Common Security Agent in accordance with the terms of the Intercreditor Agreement to foreclose on the Common Collateral in accordance with the terms of the Security Documents and take such further action on behalf of the holders of the Bonds with respect to the Collateral as the Trustee deems appropriate.

14 Indemnification of the Trustee

The Trust Deed contains provisions for the indemnification of the Trustee and for its relief from responsibility, including provisions relieving it from taking proceedings to enforce repayment unless indemnified and/or secured (including by way of payment in advance) to its satisfaction. The Trustee is entitled to enter into business transactions with the Issuer, any Guarantor and any entity related to the Issuer or any Guarantor without accounting for any profit.

The Trustee may rely without liability to Bondholders on any certificate or report prepared by the auditors or any other person pursuant to these Conditions and/or the Trust Deed, whether or not addressed to the Trustee and whether or not the auditors liability in respect thereof is limited by a monetary cap or otherwise; any such certificate shall be conclusive and binding on the Issuer, the Guarantors, the Trustee, and the Bondholders.

15 Further Issues

The Issuer may from time to time without the consent of the Bondholders create and issue further securities either having the same terms and conditions as the Bonds in all respects (or in all respects except for the first payment of interest on them) and so that such further issue shall be consolidated and form a single series with the outstanding securities (including the Bonds) or upon such terms as the Issuer may determine at the time of their issue, *provided* that, if the securities of such further issue are not fungible with the Bonds for U.S. federal income tax purposes, such securities will have a separate CUSIP or ISIN from those of the Bonds. References in these Conditions to the Bonds include (unless the context requires otherwise) any other securities issued pursuant to this Condition and forming a single series with the Bonds. Any further securities forming a single series with the outstanding securities of any series (including the Bonds) constituted by the Trust Deed or any deed supplemental to it shall, and any other securities may (with the consent of the Trustee), be constituted by a deed supplemental to the Trust Deed.

16 Notices

Notices to Bondholders will be valid if published in a leading newspaper having general circulation in Singapore (which is expected to be the Business Times). Any such notice shall be deemed to have been given on the date of such publication or, if published more than once, on the first date on which publication is made.

So long as the Bonds are represented by the Global Certificates and the Global Certificates are held on behalf of DTC or the alternative clearing system (as defined in the Global Certificates), notices to Bondholders may be given by delivery of the relevant notice to DTC or the alternative clearing system, for communication by it to entitled accountholders in substitution for notification as required by the Conditions.

17 Contracts (Rights of Third Parties) Act 1999

No person shall have any right to enforce any term or condition of the Bonds under the Contracts (Rights of Third Parties) Act 1999.

18 Governing Law and Jurisdiction

(a) Governing Law

The Trust Deed, the Agency Agreement, the Bonds and the Intercreditor Agreement and all non-contractual matters arising therefrom or in connection therewith are governed by and construed in accordance with English law. The Security Documents and the Bond Escrow Agreement and all non-contractual matters arising therefrom or in connection therewith are governed by and construed in accordance with Mauritius law.

(b) Jurisdiction

The courts of England have exclusive jurisdiction to settle any dispute (a "**Dispute**") arising from or connected with the Trust Deed or the Bonds and all non-contractual matters arising therefrom or in connection therewith (including a dispute regarding the existence, validity or termination of the Trust Deed or the Bonds or the consequences of their nullity). The submission to the jurisdiction of the courts of England is for the benefit of the Trustee and the Bondholders only and shall not (and shall not be construed so as to) limit the right of the Trustee or any Bondholder to take proceedings relating to a Dispute ("**Proceedings**") in any other courts with jurisdiction nor shall the taking of Proceedings in any one or more jurisdictions preclude the taking of Proceedings in any other jurisdiction (whether concurrently or not) if any to the extent permitted by law.

(c) Process Agent

The Issuer and each Subsidiary Guarantor hereby irrevocably appoints the Parent Guarantor, located at 30 Berkeley Square, London W1J 6EX, as its agent in England and Wales to receive service of process in any Proceedings in England. If the Parent Guarantor ceases to be able to accept service of process in England and Wales, the Issuer and each Subsidiary Guarantor shall immediately appoint a new agent to accept such service of process in England and notify the Trustee of the same. Nothing herein shall affect the right to serve process in any other manner permitted by law.

SUMMARY OF PROVISIONS RELATING TO THE BONDS WHILE IN GLOBAL FORM

The Global Certificates contain provisions which apply to the Bonds while they are in global form, some of which modify the effect of the Conditions of the Bonds set out in this Offering Circular. The following is a summary of certain of those provisions. Terms defined in the Conditions have the same meaning in the paragraphs below.

Book-Entry; Delivery and Form

The certificates representing the Bonds will be issued in fully registered form without interest coupons attached. The Regulation S Bonds will initially be represented by the Unrestricted Global Certificates and will be deposited with a custodian for, and registered in the name of a nominee of, DTC for the accounts of Euroclear and Clearstream. Prior to the 40th day after the date of issue of the Bonds, beneficial interests in the Regulation S Bonds may only be held through Euroclear or Clearstream, and any resale or transfer of such interests to US persons shall not be permitted during such period unless such resale or transfer is made pursuant to Rule 144A or Regulation S under the Securities Act.

The Rule 144A Bonds will initially be represented by the Restricted Global Certificates and will be deposited with a custodian for, and registered in the name of a nominee of, DTC.

Each Global Certificate (and any Bonds issued for exchange therefor) will be subject to certain restrictions on transfer set forth therein as described under "*Transfer Restrictions*".

Ownership of beneficial interests in a Global Certificate will be limited to persons who have accounts with DTC ("participants") or persons who hold interests through participants. Ownership of beneficial interests in a Global Certificate will be shown on, and the transfer of that ownership will be effected only through, records maintained by DTC or its nominee (with respect to interests of participants) and the records of participants (with respect to interests of persons other than participants). QIBs may hold their interests in a Restricted Global Certificate directly through DTC if they are participants in such system, or indirectly through organisations which are participants in such system.

Investors may hold their interests in a Regulation S Bond directly through Euroclear or Clearstream, if they are participants in such systems, or indirectly through organisations that are participants in such system. On or after the 40th day following the date of issue of the Bonds, investors may also hold such interests through organisations other than Euroclear or Clearstream that are participants in the DTC system. Euroclear and Clearstream will hold interests in the Regulation S Bonds on behalf of their participants through DTC.

So long as DTC, or its nominee, is the registered owner or holder of a Global Certificate, DTC or such nominee, as the case may be, will be considered the sole owner or holder of the Bonds represented by such Global Certificate for all purposes under the Trust Deed and the Bonds. No beneficial owner of an interest in a Global Certificate will be able to transfer that interest except in accordance with DTC's applicable procedures, in addition to those provided for under the Trust Deed and the Agency Agreement and, if applicable, those of Euroclear and Clearstream.

Registration of Title

Individual Certificates will not be issued in exchange for interests in the Bonds in respect of which the Global Certificates are issued, except if (where they shall be issued free of charge to the holder) DTC (or any clearing system as shall have been designated by the Issuer and approved by the Trustee (the "Alternative Clearing System") on behalf of which the Bonds evidenced by the Global Certificates may be held) notifies the Issuer that it is no longer willing or able to discharge properly its responsibilities as depositary with respect to the Bonds, or ceases to be a "Clearing Agency" registered under the Exchange Act or is at any time no longer eligible to act as such and the Issuer is unable to locate a qualified successor within 90 days of receiving notice of such ineligibility on the part of DTC (or, as the case may be, such Alternative Clearing System).

Approval in-principle has been received from the SGX-ST for listing of and quotation for the Bonds on the SGX-ST. The SGX-ST assumes no responsibility for the correctness of any statements made, opinions expressed, or reports contained herein. Admission of the Bonds to the Official List of the SGX-ST is not to be taken as an indication of the merits of the Issuer, the Group, their subsidiaries, their associated companies or the Bonds. The Bonds will be traded on the SGX-ST in a minimum board lot size of S$200,000 (or its equivalent in other currencies) for so long as the Bonds are listed on the SGX-ST and the rules of the SGX-ST so require.

So long as the Bonds are listed on the SGX-ST and the rules of the SGX-ST so require, the Issuer shall appoint and maintain a paying agent in Singapore if a Global Certificate is exchanged for Individual Certificates. In addition, if a Global Certificate is exchanged for Individual Certificates, an announcement of such exchange shall be made through the SGX-ST (so long as the Bonds are listed on the SGX-ST and the rules of the SGX-ST so require) and such announcement will include all material information with respect to the delivery of the Individual Certificates, including details of the paying agent in Singapore.

In such circumstances, the Issuer will cause sufficient Individual Certificates to be executed and delivered to the Registrar for completion, authentication and despatch to the relevant Bondholders. A person with an interest in the Bonds in respect of which a Global Certificate is issued must provide the Registrar with a written order containing instructions and such other information as the Issuer and the Registrar may require to complete, execute and deliver such Individual Certificates and, in the case of a person with an interest in the Bonds represented by a Restricted Global Certificate, a fully completed, signed certification substantially to the effect that the exchanging holder is not transferring its interest at the time of such exchange, or in the case of a simultaneous sale pursuant to Rule 144A, Regulation S or Rule 144 under the Securities Act ("Rule 144"), a certification that the transfer is being made in compliance with the provisions of Rule 144A, Regulation S or Rule 144, as the case may be, in accordance with the Agency Agreement. Restricted individual certificates issued in respect of the Rule 144A Bonds shall bear the Securities Act Legends applicable to transfers pursuant to Rule 144A.

Payments and Transfers

Payments of principal and interest in respect of Bonds represented by a Global Certificate will be made to DTC or its nominee, as the case may be, and will be made without presentation or, if no further payment falls to be made in respect of the Bonds, against presentation and surrender, of the Global Certificate to or to the order of the Principal Agent or such other Paying Agent as shall have been notified to the Bondholders for such purpose. None of the Issuer, the Trustee or any Paying Agent will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in a Global Certificate or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

The Issuer expects that DTC or its nominee, upon receipt of any payment of principal or interest in respect of a Global Certificate, will credit participants' accounts with payments in amounts proportionate to their respective beneficial interests in the principal amount of such Global Certificate as shown on the records of DTC or its nominee. The Issuer also expects that payments by participants to owners of beneficial interests in such Global Certificate held through such participants will be governed by standing instructions and customary practises, as is now the case with securities held for the accounts of customers registered in the names of nominees for such customers. Such payments will be the responsibility of such participants.

Transfers between participants in DTC will be effected in the ordinary way in accordance with DTC rules and will be settled in same-day funds. Transfers between participants in Euroclear and Clearstream will be effected in the ordinary way in accordance with their respective rules and operating procedures.

The Issuer expects that DTC will take any action permitted to be taken by a Bondholder (including the presentation of Bonds for exchange as described below) only at the direction of one or more participants to whose account the DTC interests in a Global Certificate is credited and only in respect of such portion of the aggregate principal amount of Bonds as to which such participant or participants has or have given such direction.

The Issuer understands that DTC is a limited purpose trust company organised under the laws of the State of New York, a "banking organisation" within the meaning of New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the Uniform Commercial Code and a "Clearing Agency" registered pursuant to the provisions of Section 17A of the Exchange Act. DTC was created to hold securities for its participants and to facilitate the clearance and settlement of securities transactions between participants through electronic book-entry changes in accounts of its participants, thereby eliminating the need for physical movement of securities certificates. Indirect access to the DTC system is available to others such as banks, brokers, dealers and trust companies and certain other organisations that clear through or maintain a custodial relationship with a participant, either directly or indirectly ("indirect participants").

Although DTC, Euroclear and Clearstream are expected to follow the foregoing procedures in order to facilitate transfers of interests in a Global Certificate among participants of DTC, Euroclear and Clearstream, they are under no obligation to perform or continue to perform such procedures, and such procedures may be discontinued at any time. None of the Issuer, the Trustee or any Paying Agent will have any responsibility for the performance by DTC, Euroclear or Clearstream or their respective participants or indirect participants of their respective obligations under the rules and procedures governing their operations.

Notices

So long as the Bonds are listed on the SGX-ST and the rules of the SGX-ST so require, notices to Bondholders will be published in a leading newspaper having general circulation in Singapore (which is expected to be the Business Times). Any such notice shall be deemed to have been given on the date of such publication. So long as the Bonds are represented by a Global Certificate and such Global Certificate is held on behalf of DTC or an Alternative Clearing System, notices to Bondholders may be given by delivery of the relevant notice to that clearing system for communication by it to entitled account holders in substitution for publication as required by the Conditions.

Meetings

The registered holder of each Global Certificate will be treated as being two persons for the purposes of any quorum requirements of a meeting of Bondholders and, at any such meeting, as having one vote in respect of each $1,000 in principal amount of the Bonds for which the Global Certificates may be exchanged. The Trustee may allow a person with an interest in the Bonds in respect of which a Global Certificate has been issued to attend and speak (but not to vote) at a meeting of Bondholders on appropriate proof of his identity and interest.

Purchase and Cancellation

Cancellation of any Bond required by the Conditions to be cancelled following its purchase will be effected by reduction in the principal amount of the Bonds in the register of Bondholders.

Trustee's Powers

In considering the interests of Bondholders while a Global Certificate is registered in the name of a nominee for a clearing system, the Trustee may have regard to any information provided to it by or on behalf of the relevant clearing system or its operator as to the identity (either individually or by category) of its account holders with entitlements to the Bonds and may consider such interests as if such account holders were the Bondholders.

The Clearing Systems

General

DTC, Euroclear and Clearstream have advised the Issuer, the Parent Guarantor and each Subsidiary Guarantor as follows:

DTC. DTC is a limited-purpose trust company organised under the laws of the State of New York, a "banking organisation" within the meaning of New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Exchange Act. DTC was created to hold securities of its participants and to facilitate the clearance and settlement of securities transactions among its participants in such securities through electronic book entry changes in accounts of its participants, thereby eliminating the need for physical movement of securities certificates. DTC's participants include securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organisations, some of whom own DTC, and may include the Joint Bookrunners. Indirect access to the DTC system is also available to others that clear through or maintain a custodial relationship with a DTC participant, either directly or indirectly. Transfers of ownership or other interests in Bonds in DTC may be made only through DTC participants. In addition, beneficial owners of Bonds in DTC will receive all distributions of principal of and interest on the Bonds from the Trustee through such DTC participant.

Euroclear and Clearstream. Euroclear and Clearstream hold securities for participating organisations and facilitate the clearance and settlement of securities transactions between their respective participants through electronic book-entry changes in accounts of such participants. Euroclear and Clearstream provide to their participants, among other things, services for safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Euroclear and Clearstream interface with domestic securities markets. Euroclear and Clearstream participants are financial institutions such as underwriters, securities brokers and dealers, banks, trust companies and certain other organisations. Indirect access to Euroclear or Clearstream is also available to others such as banks, brokers, dealers and trust companies that clear through or maintain a custodial relationship with a Euroclear or Clearstream participant, either directly or indirectly.

Initial Settlement

Initial settlement for the Bonds will be made in immediately available funds. All Bonds issued in the form of global certificates will be deposited with Cede & Co., as custodian for DTC. Investors' interests in Bonds held in book-entry form by DTC will be represented through financial institutions acting on their behalf as direct and indirect participants in DTC. As a result, Euroclear and Clearstream will initially hold positions on behalf of their participants through DTC.

Investors electing to hold their Bonds through DTC (other than through accounts at Euroclear or Clearstream) must follow the settlement practises applicable to United States corporate debt obligations. The securities custody accounts of investors will be credited with their holdings against payment in same day funds on the settlement date.

Investors electing to hold their Bonds through Euroclear or Clearstream accounts will follow the settlement procedures applicable to conventional Eurobonds in registered form. Bonds will be credited to the securities custody accounts of Euroclear holders and of Clearstream holders on the business day following the settlement date against payment for value on the settlement date.

Secondary Market Trading

Because the purchaser determines the place of delivery, it is important to establish at the time of trading of any Bonds where both the purchaser's and seller's accounts are located to ensure that settlement can be made on the desired value date.

Trading between DTC participants. Secondary market trading between DTC participants will occur in the ordinary way in accordance with DTC rules and will be settled using the procedures applicable to United States corporate debt obligations in same-day funds using DTC's Same-Day Funds Settlement System.

Trading between Euroclear and Clearstream participants. Secondary market trading between Euroclear participants and Clearstream participants will occur in the ordinary way in accordance with the applicable rules and operating procedures of Clearstream and Euroclear and will be settled using the procedures applicable to conventional Eurobonds in same-day funds.

Trading between DTC seller and Euroclear or Clearstream purchaser. When Bonds are to be transferred from the account of a DTC participant to the account of a Euroclear participant or a Clearstream participant, the purchaser must send instructions to Euroclear or Clearstream through a participant at least one business day prior to settlement. Euroclear or Clearstream, as the case may be, will receive the Bonds against payment. Payment will then be made to the DTC participant's account against delivery of the Bonds. Payment will include interest accrued on the Bonds from and including the last interest payment date to and excluding the settlement date, on the basis of a calendar year consisting of twelve 30-day calendar months. For transactions settling on the 31st day of the month, payment will include interest accrued to and excluding the first day of the following month. Payment will then be made to the DTC participant's account against delivery of the Bonds. After settlement has been completed, the Bonds will be credited to the respective clearing system and by the clearing system, in accordance with its usual procedures, to the Euroclear participant's or Clearstream participant's account. Credit for the Bonds will appear on the next day (European time), and cash debit will be back-valued to, and the interest on the Bonds will accrue from, the value date (which would be the preceding day when settlement occurs in New York). If settlement is not completed on the intended value date (i.e., the trade date fails), the Euroclear or Clearstream cash debit will be valued instead on the actual settlement date.

Euroclear participants or Clearstream participants will need to make available to the respective clearing systems the funds necessary to process same-day funds settlement. The most direct means of doing so is to pre-position funds for settlement, either from cash on hand or existing lines of credit, as they would for any settlement occurring within Euroclear or Clearstream. Under this approach, they may take on credit exposure to Euroclear or Clearstream until the Bonds are credited to their accounts one day later.

As an alternative, if Euroclear or Clearstream has extended a line of credit to them, participants can elect not to pre-position funds and allow that credit line to be drawn upon to finance settlement. Under this procedure, Euroclear participants or Clearstream participants purchasing Bonds would incur overdraught charges for one day, assuming they cleared the overdraught when the Bonds were credited to their accounts. However, interest on the Bonds would accrue from the value date. Therefore, in many cases, the investment income on Bonds earned during that one-day period may substantially reduce or offset the amount of such overdraught charges, although this result will depend on each participant's particular cost of funds.

The sale proceeds will be available to the DTC seller on the settlement date. Thus, to the DTC participant, a cross-market transaction will settle no differently than a trade between two DTC participants.

Finally, day traders that use Euroclear or Clearstream and that purchase Bonds from DTC participants for credit to Euroclear participants or Clearstream participants should note that these trades will automatically fail on the sale side unless affirmative action is taken. At least three techniques should be readily available to eliminate this potential problem:

(1) borrowing through Euroclear or Clearstream for one day (until the purchase side of the day trade is reflected in their Euroclear account or Clearstream account) in accordance with the clearing system's customary procedures;

(2) borrowing the Bonds in the United States from a DTC participant no later than one day prior to settlement, which would give the Bonds sufficient time to be reflected in the borrower's Euroclear account or Clearstream account in order to settle the sale side of the trade; or

(3) staggering the value dates for the buy and sell sides of the trade so that the value date for the purchase from the DTC participant is at least one day prior to the value date for the sale to the Euroclear participants or Clearstream participants.

Trading between Euroclear or Clearstream seller and DTC purchaser. Due to the time zone differences in their favour, Euroclear participants or Clearstream participants may employ their customary procedures for transactions in which Bonds are to be transferred by the respective clearing system to another DTC participant. The seller must send instructions to Euroclear or Clearstream through a participant at least one business day prior to settlement. In these cases, Euroclear or Clearstream will credit the Bonds to the DTC participant's account against payment. Payment will include interest accrued on the Bonds from and including the last interest payment date to and excluding the settlement date, on the basis of a calendar year consisting of twelve 30-day calendar months. For transactions settling on the 31^{st} day of the month, payment will include interest accrued to the Bonds excluding the first day of the following month. Payment will then be made to the DTC participant's account against delivery of the Bonds. The payment will then be reflected in the account of the Euroclear participant or Clearstream participant the following day, and receipt of the cash proceeds in the Euroclear or Clearstream participant's account will be back-valued to the value date (which would be the preceding day when settlement occurs in New York). If the Euroclear participant or Clearstream participant has a line of credit with its respective clearing system and elects to draw on such line of credit in anticipation of receipt of the sale proceeds in its account, the back-valuation may substantially reduce or offset any overdraught charges incurred over the one-day period. If settlement is not completed on the intended value date (i.e., the trade fails), receipt of the cash proceeds in the Euroclear or Clearstream participant's account would instead be valued on the actual settlement date.

As in the case with respect to sales by a DTC participant to a Euroclear or Clearstream participant, participants in Euroclear and Clearstream will have their accounts credited the day after their settlement date. See the section entitled "— *Trading between DTC seller and Euroclear or Clearstream purchaser*" above for more information.

TRANSFER RESTRICTIONS

Because of the following restrictions, purchasers are advised to consult legal counsel prior to making any offer, resale, pledge or other transfer of the Bonds and the Guarantee.

This offering is being made in reliance on Rule 144A and Regulation S. The Bonds and the Guarantee have not been, and will not be, registered or with any securities regulatory authority of any State in the United States or any other jurisdiction, and may only be offered or sold (a) within the United States to QIBs in reliance on the exemption from the registration requirements of the Securities Act provided by Rule 144A and (b) to non-US persons outside the United States in reliance on Regulation S, and in each case in accordance with any other applicable law.

Rule 144A Bonds

Each purchaser of the Bonds and the Guarantee within the United States pursuant to Rule 144A, by accepting delivery of this Offering Circular, will be deemed to have represented, agreed and acknowledged that it has received such information as it deems necessary to make an investment decision and that:

- It is (a) a QIB within the meaning of Rule 144A, (b) acquiring such Bonds and the Guarantee for its own account or for the account of one or more QIBs, (c) not acquiring the Bonds and the Guarantee with a view to further distribute such Bonds, and (d) aware, and each beneficial owner of such Bonds and the Guarantee has been advised, that the sale of such Bonds and the Guarantee to it is being made in reliance on Rule 144A.

- It understands that such Bonds and the Guarantee have not been and will not be registered under the Securities Act or with any securities regulatory authority of any state or other jurisdiction of the United States and may not be offered, resold, pledged or otherwise transferred except (a) in accordance with Rule 144A to a person that the holder and any person acting on its behalf reasonably believe is a QIB purchasing for its own account or for the account of a QIB, (b) in an offshore transaction in accordance with Rule 903 or Rule 904 of Regulation S, (c) pursuant to an exemption from registration under the Securities Act provided by Rule 144 thereunder (if available) or (d) pursuant to an effective registration statement under the Securities Act, in each case in accordance with all applicable securities laws of the States of the United States; and the purchaser will, and each subsequent holder is required to, notify any subsequent purchaser of the Bonds and the Guarantee of the resale restrictions referred to in this clause.

- It acknowledges that such Bonds and the Guarantee are "restricted securities" within the meaning of Rule 144(a)(3) under the Securities Act, are being offered and sold in a transaction not involving any public offering in the United States within the meaning of the Securities Act and that no representation is made as to the availability of the exemption provided by Rule 144 for resales of the Bonds and the Guarantee.

- It understands that any offer, sale, pledge or other transfer of the Bonds and the Guarantee made other than in compliance with the above-stated restrictions may not be recognised by the Issuer, the Parent Guarantor or the Subsidiary Guarantors.

- The Issuer, the Parent Guarantor, the Subsidiary Guarantors, the Registrar, the Joint Bookrunners and their respective affiliates, and others will rely upon the truth and accuracy of the foregoing acknowledgments, representations and agreements. If it is acquiring any Bonds and the Guarantee for the account of one or more QIBs, it represents that it has sole investment discretion with respect to each such account and that it has full power to make (and does make) the foregoing acknowledgments, representations and agreements on behalf of each such account.

- It understands that the Bonds offered in reliance on Rule 144A and the Guarantee will be represented by the Restricted Global Certificates. Before any interest in the Restricted Global Certificates may be offered, sold, pledged or otherwise transferred to a person who takes delivery in the form of an interest in the Unrestricted Global Certificates, it will be required to provide a Transfer Agent with a written certification (in the form provided in the Agency Agreement) as to compliance with applicable securities laws.

It understands that such Bonds and the Guarantee, unless otherwise agreed between the Issuer, the Parent Guarantor, the Subsidiary Guarantors and the Trustee in accordance with applicable law, will bear a legend to the following effect:

THIS BOND AND THE GUARANTEE IN RESPECT HEREOF HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933 (THE "SECURITIES ACT") OR WITH ANY SECURITIES REGULATORY AUTHORITY OF ANY STATE OR OTHER JURISDICTION OF THE UNITED STATES AND MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT (1) PURSUANT TO A REGISTRATION STATEMENT THAT HAS BEEN DECLARED EFFECTIVE UNDER THE SECURITIES ACT, (2) IN ACCORDANCE WITH RULE 144A UNDER THE SECURITIES ACT TO A PERSON THAT THE HOLDER AND ANY PERSON ACTING ON ITS BEHALF REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER WITHIN THE MEANING OF RULE 144A UNDER THE SECURITIES ACT PURCHASING FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER, (3) IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH RULE 903 OR RULE 904 OF REGULATION S UNDER THE SECURITIES ACT, (4) PURSUANT TO RULE 144 UNDER THE SECURITIES ACT (IF AVAILABLE) OR (5) PURSUANT TO ANY OTHER AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT, IN EACH CASE IN ACCORDANCE WITH ANY APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES. THE HOLDER OF THIS BOND WILL, AND EACH SUBSEQUENT HOLDER IS REQUIRED TO, NOTIFY ANY PURCHASER OF THIS BOND OF THE RESALE RESTRICTIONS REFERRED TO ABOVE.

Regulation S Bonds

Each purchaser of Bonds and the Guarantee offered hereby to non-US persons in reliance on Regulation S, by accepting delivery of this Offering Circular and the Bonds and the Guarantee, will be deemed to have represented, agreed and acknowledged that it has received such information as it deems necessary to make an investment decision and that:

- It understands that such Bonds and the Guarantee have not been and will not be registered under the Securities Act, and such Bonds and the Guarantee are being offered and sold to non-US persons in reliance on Regulation S.

- It is, or at the time the Bonds and the Guarantee are purchased will be, the beneficial owner of such Bonds and the Guarantee and (a) it is purchasing the Bonds and the Guarantee in an offshore transaction (within the meaning of Regulation S); (b) it is not an affiliate of the Issuer, the Parent Guarantor or the Subsidiary Guarantors or a person acting on behalf of such an affiliate and (c) it is not a US person (as defined in Regulation S) and is located outside the United States and will continue to be located outside the United States at the time the buy order is originated.

- It will not offer, sell, pledge or transfer Bonds and the Guarantee, except in accordance with the Securities Act and any applicable laws of the states of the United States and any other jurisdiction.

- The Issuer, the Parent Guarantor, the Subsidiary Guarantors, the Registrar, the Joint Bookrunners and their affiliates, and others will rely upon the truth and accuracy of the foregoing acknowledgments, representations and agreements.

It understands that the Bonds and the Guarantee offered in reliance on Regulation S will be represented by the Unrestricted Global Certificates. For the period until and including the 40th day after the commencement of the offering, any interest in the Unrestricted Global Certificates may be offered, sold, pledged or otherwise transferred to a US person or a person located in the United States or a person who takes delivery in the form of an interest in the Restricted Global Certificate, provided that it will be required to provide a Transfer Agent with a written certification (in the form provided in the Agency Agreement) to the effect that the transferee is a "qualified institutional buyer" (as defined in Rule 144A) and as to compliance with applicable securities laws.

It understands that such Bonds and the Guarantee will, unless otherwise agreed between the Issuer, the Parent Guarantor, the Subsidiary Guarantors and the Trustee in accordance with applicable law, will bear a legend to the following effect:

This Bond and the Guarantee in respect hereof have not been and will not be registered under the United States Securities Act of 1933 (the "Securities Act") or with any securities regulatory authority of any state or other jurisdiction of the United States and may not be offered, sold, pledged or otherwise transferred in the United States or to, for the account or benefit of, any United States person except pursuant to an available exemption from the registration requirements of the Securities Act and all applicable state securities laws. Terms used above have the meanings given to them in Regulation S under the Securities Act.

TAXATION

The information provided below does not purport to be a comprehensive description of all tax considerations which may be relevant to a decision to purchase the Bonds. Neither these statements nor any other statements in this Offering Circular are to be regarded as advice on the tax position of any holder or beneficial owner of the Bonds or of any person acquiring, selling or otherwise dealing with the Bonds or on any tax implications arising from the acquisition, sale or other dealings in respect of the Bonds. The statements do not purport to be a comprehensive description of all the tax considerations that may be relevant to a decision to purchase, own or dispose of the Bonds and do not purport to deal with the tax consequences applicable to all categories of investors, some of which (such as dealers in securities) may be subject to special rules.

Prospective purchasers of the Bonds are advised to consult their tax advisers as to the tax consequences, under the tax laws of the country in which they are resident, of a purchase of Bonds including, without limitation, the consequences of receipt of interest and premium, if any, on the Bonds and a sale or redemption of, the Bonds or any interest therein.

Certain Mauritian Taxation Considerations

The Issuer is structured as a Global Business Company ("GBC") in Mauritius. A GBC must at all times: (i) carry out its core income generating activities in, or from, Mauritius, as required under the Income Tax Act 1995 of Mauritius; (ii) be managed and controlled from Mauritius; and (iii) be administered by a management company licensed under the Financial Services Act 2007.

Generally, income tax rate for GBCs is at 15%, but subject to meeting certain prescribed conditions, a partial exemption of 80% may be allowed against certain types of income such as foreign source dividend and interest. Where the GBC derives income which is subject to foreign tax, and where the said partial exemption has not been applied, the amount of foreign tax paid may be allowed as a credit against income tax payable in Mauritius in respect of that income.

Under Income Tax Act 1995 of Mauritius, interest paid by a GBC to a non-resident not carrying on any business in Mauritius out of its "foreign source income" is not subject to withholding tax in Mauritius. To the extent that the Company holds a GBC license, interest paid under the Bonds issued to non-residents not carrying on any business in Mauritius will therefore not be subject to withholding tax in Mauritius. There are currently no capital duties levied in Mauritius on the issue, transfer, conversion or redemption of the Bonds. Registration duties do not apply to the transfer of the Bonds. Capital gains derived from the sale of the Bonds will not be subject to tax in Mauritius. The Issuer is entitled to apply for tax residence certificates issued by the Mauritius Revenue Authority. These certificates are required for the avoidance of double taxation under the Agreements for the Avoidance of Double Taxation signed between Mauritius and other jurisdictions, including India, Jersey and the United Kingdom. Prospective purchasers of the Bonds are urged to consult their own tax advisers in order to fully understand the tax consequences of purchasing the Bonds.

Certain United Kingdom Taxation Considerations

The comments below, which are of a general nature and are based on the Issuer's understanding of current UK tax law as applied in England and Wales and HM Revenue & Customs ("HMRC") practice (which may not be binding on HMRC) in each case as at the latest practicable date before the date of this Offering Circular, both of which may be subject to change, possibly with retrospective effect, describe only the UK withholding tax treatment of payments in respect of the Bonds. They are not exhaustive. They do not deal with any other UK taxation implications of acquiring, holding, exchanging, redeeming or disposing of the Bonds. Prospective holders of the Bonds who are in any doubt as to their tax position or who may be subject to tax in a jurisdiction other than the UK are strongly advised to consult their own professional advisers.

United Kingdom Withholding Tax — Payments by a Guarantor

If a Guarantor makes any payments in respect of interest on the Bonds (or other amounts due under the Bonds other than the repayment of amounts subscribed for the Bonds) which are not treated as having a UK source, they should not be subject to UK withholding tax. If this is not the case then, depending on the correct legal analysis of the payments as a matter of UK law (which is uncertain), it is possible that such payments may be subject to deduction or withholding for or on account of UK income tax at the basic rate (currently 20%), subject to any claim which could be made under an applicable double taxation treaty or any other available exemption or relief. In particular, such payments by a Guarantor may not be eligible for the quoted Eurobonds exemption described above.

US Federal Income Tax Considerations

The following discussion is a summary of certain material US federal income tax consequences of the purchase, ownership and disposition of the Bonds by a US holder (defined below), (except for discussions of FATCA (as defined below under "— *Foreign Account Tax Compliance Act*"), which apply to all holders), but does not purport to be a complete analysis of all potential tax effects. This summary is based upon the US Internal Revenue Code of 1986, as amended (the "Code"), Treasury regulations issued or proposed thereunder, and judicial and administrative interpretations thereof, each of the date hereof, and all of which are subject to change, possibly with retroactive effect. No rulings from the US Internal Revenue Service (the "IRS") have been or are expected to be sought with respect to the matters discussed below. There can be no assurance that the IRS will not take a different position concerning the tax consequences of the purchase, ownership or disposition of the Bonds or that any such position would not be sustained.

This discussion does not address all of the US federal income tax consequences that may be relevant to a US holder in light of such US holder's particular circumstances, including the impact of the unearned income Medicare contribution tax or the alternative minimum tax, or to US holders subject to special rules, such as certain financial institutions, US expatriates, insurance companies, dealers in securities or currencies, traders in securities, US holders whose functional currency is not the US dollar, tax-exempt entities, regulated investment companies, real estate investment trusts, partnerships or other pass-through entities, persons that are resident in or have a permanent establishment in a jurisdiction outside the United States, persons holding the Bonds as part of a "straddle," "hedge," "conversion transaction" or other integrated transaction, and persons subject to special tax accounting rules as a result of any item of gross income with respect to the Bonds being taken into account in an applicable financial statement. In addition, this discussion does not address state, local or non-US tax consequences or estate or gift tax laws and is limited to persons who purchase Bonds for cash pursuant to this Offering Circular at original issue, at their "issue price" (the first price at which a substantial part of the Bonds are sold to the public for cash, excluding sales to bond houses, brokers or similar persons or organisations acting in the capacity of underwriters, placement agents or wholesalers) and who hold the Bonds as capital assets within the meaning of Section 1221 of the Code (generally for investment).

For purposes of this discussion, a "US holder" is a beneficial owner of a Bond that is, for US federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation created or organised in the United States or under the laws of the United States, any state thereof or the District of Columbia;
- any estate the income of which is subject to US federal income taxation regardless of its source; or

- any trust if (i) a court within the United States is able to exercise primary supervision over the administration of the trust and one or more United States persons have the authority to control all substantial decisions of the trust, or (ii) a valid election is in place to treat the trust as a United States person.

If an entity or arrangement treated as a partnership for US federal income tax purposes holds Bonds, the tax treatment of a partner in the partnership will generally depend upon the status of the partner and the activities of the partnership. A holder that is a partnership, and partners in such partnerships, should consult their tax advisers regarding the tax consequences of the purchase, ownership and disposition of Bonds.

Prospective purchasers of Bonds should consult their tax advisers concerning the tax consequences of the purchase, ownership and disposition of the Bonds in light of their particular circumstances, including the application of the US federal income tax considerations discussed below, as well as the application of state, local, foreign or other tax laws.

Payments of Interest

It is expected, and the following discussion assumes, that the Bonds will be issued with no original issue discount or original issue discount that is less than a statutorily defined *de minimis* amount. Payments of stated interest on the Bonds generally will be includible in the gross income of a US holder as ordinary income at the time that such payments are received or accrued, in accordance with such US holder's method of accounting for US federal income tax purposes.

Interest income on a Bond generally will constitute foreign source income and generally will be considered "passive category income" for purposes of the foreign tax credit limitation rules.

Should any foreign tax be withheld, the amount withheld and the gross amount of any additional amounts paid to a US holder as a result of such withholding as described in "*Terms and Conditions of the Bonds — Taxation*" (such amounts, "Additional Amounts") will be included in such US holder's income as ordinary income at the time such amount is deemed paid, received or accrued in accordance with such US holder's method of tax accounting. Foreign withholding tax paid at the rate applicable to a US holder would, subject to limitations and conditions, be treated as foreign income tax eligible for credit against such US holder's US federal income tax liability or, at such US holder's election, eligible for deductions in computing taxable income. There are significant complex limitations on a US holder's ability to claim foreign tax credits. US holders should consult their tax advisers regarding the creditability or deductibility of any withholding taxes. Any Additional Amounts would generally constitute foreign source income.

Sale, Exchange, Redemption or Other Disposition of Bonds

Generally, upon the sale, exchange, redemption or other disposition of a Bond, a US holder will recognise taxable gain or loss equal to the difference between the amount realised on the sale, exchange, redemption or other disposition (less any amount attributable to accrued but unpaid interest not previously included in income, which will be taxable as discussed above) and such US holder's adjusted tax basis in the Bond. A US holder's adjusted tax basis in a Bond generally will equal the cost of such Bond to such US holder, less any principal payments received by the US holder.

Such gain or loss generally will be US source capital gain or loss, and will be long-term capital gain or loss if at the time of the sale, exchange, redemption or other disposition the Bond has been held by such US holder for more than one year. Long-term capital gain recognised by a non-corporate US holder will generally be subject to taxation at a reduced rate. The deductibility of capital losses is subject to limitation.

Information Reporting and Backup Withholding

In general, payments made in the United States or through certain US-related financial intermediaries of interest or principal and the proceeds from sales of Bonds held by a US holder will be required to be reported to the IRS unless the US holder is an exempt recipient and when required, demonstrates this fact. In addition, a US holder that is not an exempt recipient may be subject to backup withholding unless it provides a taxpayer identification number and otherwise complies with applicable certification requirements.

Backup withholding is not an additional tax. Amounts withheld as backup withholding may be credited against a US holder's US federal income tax liability and may entitle the US holder to a refund, provided that the appropriate information is timely furnished to the IRS.

Tax Return Disclosure Requirements

Individuals that own "specified foreign financial assets" with an aggregate value in excess of certain thresholds are generally required to file an information report (on IRS Form 8938) with respect to such assets with their tax returns. If a US holder does not file a required IRS Form 8938, such holder may be subject to substantial penalties and the statute of limitations on the assessment and collection of all US federal income taxes of such holder for the related tax year may not close before the date which is three years after the date on which such report is filed. The Bonds generally will constitute specified foreign financial assets subject to these reporting requirements, unless the Bonds are held in certain accounts maintained by certain financial institutions. Under certain circumstances, an entity may be treated as an individual for purposes of these rules.

Foreign Account Tax Compliance Act

Pursuant to Sections 1471 through 1474 of the Code (commonly referred to as "FATCA") and subject to the proposed regulations discussed below, a "foreign financial institution" may be required to withhold US tax on certain "foreign passthru payments" to the extent such payments are treated as attributable to certain US source payments. Obligations issued on or prior to the date that is six months after the date on which applicable final regulations defining foreign passthru payments are published in the Federal Register generally would be "grandfathered" unless materially modified after such date. Accordingly, if the Issuer is treated as a foreign financial institution, FATCA could apply to payments on the Bonds if there is a significant modification of the Bonds for US federal income tax purposes after the expiration of this grandfathering period. Under proposed regulations, any withholding on foreign passthru payments on Bonds that are not otherwise grandfathered would apply to passthru payments made on or after the date that is two years after the date of filing with the Federal Register of applicable final regulations defining foreign passthru payments. Taxpayers generally may rely on these proposed regulations until final regulations are issued. Non-US governments (including the UK, Jersey and Mauritius) have entered into agreements with the United States (and additional non-US governments are expected to enter into such agreements) to implement FATCA in a manner that alters the rules described herein. Holders should consult their own tax advisers on how these rules may apply to their investment in the Bonds. In the event any withholding under FATCA is imposed with respect to any payments on the Bonds, there will be no Additional Amounts payable to compensate for the withheld amount.

PLAN OF DISTRIBUTION

Each of the Joint Bookrunners has, pursuant to a subscription agreement dated date of this Offering Circular (the "Subscription Agreement"), severally and not jointly agreed with the Parent Guarantor, the Subsidiary Guarantors and the Issuer, subject to the satisfaction of certain conditions, to subscribe for the principal amount of the Bonds set forth opposite its name below.

Joint Bookrunners	Principal Amount of Bonds
Barclays Bank PLC	$280,000,000
Credit Suisse (Hong Kong) Limited	$280,000,000
Deutsche Bank AG, Singapore Branch	$280,000,000
J.P. Morgan Securities plc	$280,000,000
Standard Chartered Bank	$280,000,000
Total	$1,400,000,000

The Subscription Agreement provides that the Joint Bookrunners will purchase all the Bonds if they purchase any of the Bonds. The Subscription Agreement entitles the Joint Global Coordinators and Joint Lead Managers on behalf of the Joint Bookrunners to terminate the Subscription Agreement in certain circumstances prior to payment being made to the Bond Escrow Account Bank on behalf of the Issuer. The Parent Guarantor, the Subsidiary Guarantors and the Issuer, jointly and severally, have under the Subscription Agreement agreed to indemnify the Joint Bookrunners against certain liabilities. The Joint Bookrunners may offer and sell the Bonds through certain of their affiliates. The Joint Bookrunners or certain of their affiliates may purchase Bonds and be allocated Bonds for asset management and/or proprietary purposes but not with a view to distribution.

Neither the Parent Guarantor, the Subsidiary Guarantors or the Issuer, nor any person acting on behalf of any of them will, from the date of this Offering Circular until the date 30 days after the date of this Offering Circular, without the prior written consent of the Joint Bookrunners, issue, offer, sell, contract to sell, pledge or otherwise dispose of (or publicly announce any such issuance, offer, sale or disposal) non-equity-linked debt securities issued or guaranteed (other than guarantees in respect of Indian Rupee denominated non-equity linked debt securities) by the Parent Guarantor, any Subsidiary Guarantor or the Issuer and having a maturity of more than one year from the date of issue.

The Bonds are a new issue of securities with no established trading market. Approval in-principle has been received from the SGX-ST for listing of and quotation for the Bonds on the SGX-ST. In connection with this offering, the Stabilising Manager or any of its affiliates (or persons acting on behalf of the Stabilising Manager) may, to the extent permitted by laws and regulations, over-allot or effect transactions with a view to supporting the market price of the Bonds at a level higher than that which might otherwise prevail for a limited time after the Closing Date. However, there is no assurance that the Stabilising Manager or any of its affiliates (or persons acting on behalf of the Stabilising Manager) will undertake any stabilisation action. Any stabilising action may begin on or after the date on which adequate public disclosure of the terms of the offer of the Bonds is made and, if begun, may be ended at any time, but it must end no later than the earlier of 30 days after the Closing Date. and 60 days after the date of the allotment of the Bonds. Any stabilisation action must be conducted by the Stabilising Manager or any of its affiliates (or persons acting on behalf of the Stabilising Manager or any of its affiliates) in accordance with all applicable laws and rules.

The Joint Bookrunners and their respective affiliates have, in the past, provided banking, investment banking and advisory services for the Company and the Group for which they have received customary fees and expenses. Any or all of the Joint Bookrunners and their respective affiliates may, from time to time, engage in transactions with and perform services for the Company and its subsidiaries and affiliates in the ordinary course of their business for which they may receive customary fees and reimbursement of expenses. It is expected that the Joint Bookrunners and their respective affiliates will continue to provide such services to, and enter into such transactions with, the Company and its subsidiaries and affiliates in the future. Each of the Joint Bookrunners or its affiliate is a party to the Bridge Facility Agreement. J.P. Morgan is also the global coordinator, bookrunner and mandated lead arranger under the Bridge Facility. An affiliate of J.P. Morgan is also the facility agent and lender for the Bridge Facility. Some of the Joint Bookrunners and/or their affiliates will be hedge providers for the Take Private Transaction. See the sections entitled "*Take Private Transaction*" and "*Description of Certain Financing Arrangements*" for more information.

In connection with the offering of the Bonds, each Joint Bookrunner and/or its affiliates may act as an investor for its own account and may take up Bonds in the offering and in that capacity may retain, purchase or sell for its own account such securities and any securities of the Company or its subsidiaries and affiliates or related investments and may offer or sell such securities or other investments otherwise than in connection with the offering. Accordingly, references herein to the Bonds being offered should be read as including any offering of the Bonds to the Joint Bookrunners and/or their affiliates acting in such capacity. Such persons do not intend to disclose the extent of any such investment or transactions otherwise than in accordance with any legal or regulatory obligation to do so.

It is expected that delivery of beneficial interests in the Bonds will be made through the facilities of DTC on or about 21 August 2020, which will be the fourth business day following the initial sale of the Bonds. Under Rule 15c6-1 of the Exchange Act, trades in the secondary market generally are required to settle in two business days, unless the parties to any such trade expressly agree otherwise. Accordingly, purchasers who wish to trade Bonds prior to the second business day before the delivery of the Bonds will be required, by virtue of the fact that the Bonds initially will settle on a delayed basis, to agree to a delayed settlement cycle at the time of any such trade to prevent a failed settlement. Purchasers of Bonds who wish to make such trades should consult their advisers.

European Economic Area and the United Kingdom

Each Joint Bookrunner has represented and agreed that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Bonds to any retail investor in the European Economic Area or in the United Kingdom. For the purposes of this provision, the expression "retail investor" means a person who is one (or more) of the following:

- a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "MiFID II"); or

- a customer within the meaning of Directive (EU) 2016/97, where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II.

Hong Kong

Each Joint Bookrunner has represented and agreed that:

- it has not offered or sold and will not offer or sell in Hong Kong, by means of any document, any Bonds (except for Bonds which are a "structured product" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong ("SFO")) other than (i) to "professional investors" as defined in the SFO and any rules made under the SFO or (ii) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong (the "C(WUMP)O") or which do not constitute an offer to the public within the meaning of the C(WUMP)O; and

- it has not issued or had in its possession for the purposes of issue, and will not issue or have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or document relating to the Bonds, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to Bonds which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made under the SFO.

India

The Bonds will not be offered or sold, directly or indirectly, in India or to, or for the account or benefit of, any resident in India. Each Joint Bookrunner has represented, warranted and agreed that this Offering Circular has not been and will not be registered as a prospectus or a statement in lieu of prospectus in respect of a public offer or an information memorandum or private placement offer cum application letter or any other offering material with the Registrar of Companies in India in accordance with the Indian Companies Act, 2013, as amended, and other applicable laws in India for the time being in force. This Offering Circular has not been and will not be reviewed or approved by any regulatory authority in India or Indian stock exchange. This Offering Circular and the Bonds are not and should not be construed as an advertisement, invitation, offer or sale of any securities whether by way of private placement or to the public in India.

Indonesia

Each Joint Bookrunner has represented and agreed that the offer of the Bonds shall not constitute a public offering under Law No. 8 of 1995 regarding Capital Markets. Under Indonesian law, a public offering means the offer of securities in Indonesia or to Indonesian citizens through mass media or to more than 100 Indonesian parties in Indonesia (foreign and/or Indonesian parties) or the sale of securities to more than 50 Indonesian parties in Indonesia (foreign and/or Indonesian parties) within certain values and period of time and the Bonds are not being offered or sold and may not be offered or sold, directly or indirectly, in Indonesia, except as permitted by the Law 8 of 1995 regarding Capital Markets.

Japan

The Bonds have not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948, as amended, the "Financial Instruments and Exchange Act"). Accordingly, each Joint Bookrunner has represented and agreed that it has not, directly or indirectly, offered or sold and will not, directly or indirectly, offer or sell any Bonds in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organised under the laws of Japan), or to others for re-offering or re-sale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Act and any other relevant laws and regulations of Japan.

Jersey

No person shall, without the consent of the Jersey Financial Services Commission, circulate in Jersey any offer for subscription, sale or exchange of the Bonds.

Malaysia

Each Joint Bookrunner:

i. has acknowledged that the issue of, offer for subscription or purchase of, or invitation to subscribe for or purchase the Bonds may only be made exclusively:

   (1) at the primary level to (1) persons falling within Part I of Schedule 6 and Part I of Schedule 7 and Schedule 8 or Section 257(3) of the Capital Markets and Services Act 2007 ("CMSA"), read together with Schedule 9 or Section 257(3) of the CMSA; and

   (2) persons falling within the categories of excluded offers or invitation of securities and excluded offers or invitations of sukuk set out in section 13(5)(a) and section 13(5)(b) of the Labuan Islamic Financial Services and Securities Act 2010 ("LIFSSA"); and (2) at the secondary level to (1) persons falling within Part I of Schedule 6 or Section 229(1)(b) and Schedule 8 or Section 257(3) of the CMSA read together with Schedule 9 or Section 257(3) of the CMSA; and (2) persons falling within the categories of excluded offers or invitation of securities set out in section 13(5)(a) of the LIFSSA; and

ii. has represented, warranted and agreed that it has not offered, sold or issued an invitation to purchase or subscribe and will not offer, sell or issue an invitation to purchase or subscribe, the Bonds, and that it has not circulated or distributed and will not circulate or distribute this Offering Circular or any other offering document or material relating to the Bonds, directly or indirectly, to persons or parties other than those described in paragraph (i)(1) above.

Mauritius

Each Joint Bookrunner has represented that:

- the Bonds shall not be offered or sold, directly or indirectly, to the public in Mauritius. Neither this Offering Circular, nor any offering material or information contained therein relating to the offer of the Bonds, shall be released or issued to the public in Mauritius or used in connection with any such offer. This Offering Circular shall not constitute an offer to sell the Bonds to the public in Mauritius.

- the Bonds shall only be offered or sold, by way of private placement as defined in the Mauritius Securities Act 2005. An offer of securities will be a private placement where each person subscribes or purchases for his own account, no publicity (as defined under Mauritius law) is made by the person making the offer and the total cost of subscription or purchase for each person to whom the offer is made is for an amount of at least 1 million Mauritian rupees.

Singapore

Each Joint Bookrunner has acknowledged that this Offering Circular has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each Joint Bookrunner has represented and agreed that it has not offered or sold any Bonds or caused the Bonds to be made the subject of an invitation for subscription or purchase and will not offer or sell any Bonds or cause the Bonds to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this Offering Circular or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of any Bonds, whether directly or indirectly, to any person in Singapore other than:

- to an institutional investor (as defined in Section 4A of the SFA pursuant to Section 274 of the SFA;
- to a relevant person (as defined in section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA; or
- otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the Bonds are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within nine months after that corporation or that trust has acquired the Bonds pursuant to an offer made under Section 275 of the SFA except:

- to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
- where no consideration is or will be given for the transfer;
- where the transfer is by operation of law;
- pursuant to Section 276(7) of the SFA; or
- as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

Singapore SFA Product Classification: In connection with Section 309B of the SFA and the CMP Regulations 2018, the Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A(1) of the SFA), that the Bonds are 'prescribed capital markets products' (as defined in the CMP Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

United Kingdom

Each Joint Bookrunner has represented and agreed that:

- it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) received by it in connection with the issue or sale of any Bonds in circumstances in which Section 21(1) of the FSMA does not apply to the Issuer; and

- it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the Bonds in, from or otherwise involving the United Kingdom.

United States

The Bonds and the Guarantee have not been and will not be registered under the Securities Act and may not be offered or sold within the United States or to, or for the account or benefit of, US persons except in accordance with Regulation S or pursuant to an exemption from the registration requirements of the Securities Act. Each Joint Bookrunner has represented that it has offered and sold the Bonds and the Guarantee, and agreed that it will offer and sell the Bonds and the Guarantee, (i) as part of their distribution at any time and (ii) otherwise until 40 days after the later of the commencement of the offering and the Closing Date, only in accordance with Rule 903 of Regulation S or Rule 144A as set forth below. Accordingly, neither it, its affiliates nor any persons acting on its or their behalf have engaged or will engage in any directed selling efforts with respect to the Bonds and the Guarantee, and it and they have complied and will comply with the offering restrictions requirement of Regulation S. Each Joint Bookrunner has agreed that, at or prior to confirmation of sale of the Bonds and the Guarantee (other than a sale pursuant to Rule 144A), it will have sent to each distributor, dealer or person receiving a selling concession, fee or other remuneration that purchases the Bonds and the Guarantee from it during the distribution compliance period a confirmation or notice to substantially the following effect:

"The securities covered hereby have not been registered under the US Securities Act of 1933 (the "Securities Act") and may not be offered or sold within the United States or to, or for the account or benefit of, US persons (i) as part of their distribution at any time or (ii) otherwise until 40 days after the later of the commencement of the offering and the closing date of the offering, except in either case in accordance with Regulation S or Rule 144A under the Securities Act. Terms used above have the meanings given to them by Regulation S under the Securities Act".

Terms used in the foregoing paragraph have the meanings given to them by Regulation S.

Each Joint Bookrunner has represented and agreed that neither it nor any of its affiliates (as defined in Rule 501(b) of Regulation D under the Securities Act ("Regulation D")), nor any person acting on its or their behalf has engaged or will engage in any form of general solicitation or general advertising (within the meaning of Regulation D) in connection with any offer and sale of the Bonds and the Guarantee in the United States.

The Joint Bookrunners may directly or through their respective US broker-dealer affiliates arrange for the offer and resale of the Bonds and the Guarantee in the United States only to qualified institutional buyers in accordance with Rule 144A.

LEGAL MATTERS

Certain legal matters with respect to the Bonds will be passed upon for the Issuer and the Guarantors by Linklaters Singapore Pte. Ltd. as to matters of English law and US federal securities law. Certain legal matters with respect to the Bonds will be passed upon for the Joint Bookrunners by Latham & Watkins LLP as to matters of English law and US federal securities law. Certain legal matters with respect to the Bonds will be passed upon for the Joint Bookrunners by Khaitan & Co as to matters of Indian law. Certain legal matters with respect to the Bonds will be passed upon for the Joint Bookrunners by BLC Roberts & Associates as to matters of Mauritian law. Certain legal matters with respect to the Bonds will be passed upon for the Joint Bookrunners by Carey Olsen Jersey LLP as to matters of Jersey law.

INDEPENDENT AUDITORS

The Audited Financial Statements included elsewhere in this Offering Circular have been audited by Ernst & Young LLP, independent auditors, as stated in their reports included elsewhere in this Offering Circular. Ernst & Young LLP is a member of the Institute of Chartered Accountants in England & Wales.

The audit reports of Ernst & Young LLP, with respect to the Company's Audited Financial Statements in accordance with guidance issued by The Institute of Chartered Accountants in England and Wales, include the following limitations: "This report is made solely to the Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditors' report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed".

EXPERTS

The information included in this Offering Circular regarding Ore Reserves is based on estimates determined by Vedanta.

- The Mineral Resources and Ore Reserves of KCM's Konkola, Nchanga and Nampundwe mines were prepared as of 31 March 2019 by SRK Consulting (UK) and are reported in accordance with the terms and definitions of the JORC Code (2012). The details of the responsible Competent Persons are included in Annex C of this Offering Circular. The Mineral Resources and Ore Reserves as reported for KCM's Konkola, Nchanga and Nampundwe mines were prepared as of 31 March 2019 are not current and are reported solely as a statement of historical fact. Accordingly, these estimates may be significantly different to that reported herein if these were assessed as at 31 March 2020.

- The Mineral Resources of CMT's copper mines are derived from management estimates as of 31 March 2020 and are reported in accordance with the terms and definitions of the JORC Code (2012). The details of the responsible Competent Persons are included in Annex C of this Offering Circular.

- The Mineral Resources and Ore Reserves of HZL's mines were audited as of 31 March 2020 by SRK Consulting (UK) Limited and are reported in accordance with the terms and definitions of the JORC Code (2012). The details of the responsible Competent Persons are included in Annex C of this Offering Circular.

- The Mineral Resources and Ore Reserves of Black Mountain Mining's Black Mountain mine were audited as of 31 March 2020 by SRK Consulting (UK) Limited and are reported in accordance with the terms and definitions of the JORC Code (2012). The details of the responsible Competent Persons are included in Annex C of this Offering Circular.

- The Mineral Resources and Ore Reserves of Black Mountain Mining's Gamsberg mines were audited as of 31 March 2020 by SRK Consulting (UK) Limited and are reported in accordance with the terms and definitions of the JORC Code (2012). The details of the responsible Competent Persons are included in Annex C of this Offering Circular.

- The Mineral Resources and Ore Reserves of Skorpion were audited as of 31 March 2020 by SRK Consulting (UK) Limited and are reported in accordance with the terms and definitions of the JORC Code (2012). The details of the responsible Competent Persons are included in Annex C of this Offering Circular.

- The Mineral Resources and Ore Reserves of BALCO's Bauxite mines were audited as of 31 March 2020 by SRK Consulting (UK) Limited and are reported in accordance with the terms and definitions of the JORC Code (2012). The details of the responsible Competent Persons are included in Annex C of this Offering Circular.

- The Mineral Resources and Ore Reserves of the iron ore mines of Vedanta Limited and its subsidiary, SRL, were audited as of 31 March 2020 by SRK Consulting (UK) Limited and are reported in accordance with the terms and definitions of the JORC Code (2012).

DeGolyer and MacNaughton have independently estimated the information included in this Offering Circular regarding the proved, probable, and possible reserves and contingent resources of Vedanta Limited as of 31 March 2020 according to the PRMS approved in March 2007 by the Society of Petroleum Engineers, the World Petroleum Council, the American Association of Petroleum Geologists, and the Society of Petroleum Evaluation Engineers. DeGolyer and MacNaughton has independently estimated the information included in this Offering Circular regarding the proved, probable, and possible reserves and contingent resources of the Company's oil and gas assets in Rajasthan as of 31 March 2020 according to the PRMS approved in March 2007 and revised in June 2018 by the Society of Petroleum Engineers, the World Petroleum Council, the American Association of Petroleum Geologists, the Society of Petroleum Evaluation Engineers, the Society of Exploration Geophysicists, the Society of Petrophysicists and Well Log Analysts, and the European Association of Geoscientists & Engineers.

The information included in this Offering Circular regarding the proved, probable and possible oil, condensate, and sales gas reserves and the contingent and prospective resources owned by Vedanta Limited in India is based on estimates determined by Vedanta Limited.

DEFINITIONS AND GLOSSARY OF TECHNICAL TERMS

Definitions

The following definitions apply throughout this Offering Circular unless the context requires otherwise:

"**Accounts Pledge Document**"	a first-priority bank accounts pledge by (i) the Issuer over its operative bank accounts held in Mauritius and (ii) by the Bridge Borrower over its operative bank accounts held in Mauritius and the Mandatory Prepayment Account (as described in the Bridge Facility Agreement), this security expressly excludes the Bond Escrow Account of the Issuer and the India Escrow Account
"**Acquirers**"	Collectively, the Company, the Issuer and Vedanta Mauritius
"**ADSs**"	American Depositary Shares
"**affiliate**"	a person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, a specified person. A person shall be deemed to control another person if such first person possesses, directly or indirectly, the power to direct, or cause the direction of, the management and policies of such other person, whether through the ownership of voting securities, by contract or otherwise
"**Agency Agreement**"	the Agency agreement to be dated on or about the Closing Date among the Issuer, the Guarantors, the Trustee and the Principal Agent
"**Agarwal family**"	Messrs. Anil Agarwal, Dwarka Prasad Agarwal and Agnivesh Agarwal, any of their parents, spouses, children, siblings and their children of Vedanta, and the families of any such person
"**Air Act**"	Air (Prevention and Control of Pollution) Act, 1981 of India, as amended
"**aluminium business**"	the business of Vedanta comprising the aluminium operations as further described in "*Business — Description of the Businesses — Aluminium Business*"
"**Amalgamation and Reorganisation Scheme**"	the reorganisation transaction that took place in 2013 which involved a series of transactions including amongst others: (a) the merger of Sterlite with and into SGL (which was subsequently renamed Sesa Sterlite Limited) through the issue of SGL shares to Sterlite shareholders (other than MALCO) on a three for five basis resulting in the issue of approximately 1,945 million SGL shares to Sterlite shareholders; (b) the sale of MALCO's power business to Vedanta Aluminium Limited for a cash consideration of Rs. 1,500 million; (c) the merger or MALCO with and into SGL through the issue of SGL shares to the shareholders of MALCO on a seven for ten basis, resulting in the issue of approximately 78.7 million SGL shares to the shareholders of MALCO and consequent cancellation of MALCO's holding in Sterlite; (d) the merger of Sterlite Energy Limited with and into SGL for no consideration; (e) the merger of Vedanta Aluminium Limited's business with and into SGL for no consideration; and (f) though a separate but concurrent amalgamation under Indian and Mauritian law, the merger of Ekaterina Limited with and into SGL rendering Vedanta Aluminium Limited to be a wholly-owned subsidiary of Sesa Sterlite Limited

"**Audited Financial Statements**"	the audited consolidated financial statements for the Company as of and for Fiscal Years 2019 and 2020
"**Approval In Principle**"	The in-principle approval of the BSE Limited and the National Stock Exchange of India Limited in accordance with the Delisting Regulations with respect to the Take Private Transaction
"**APTEL**"	Appellate Tribunal for Electricity
"**associated undertakings**"	has the meaning ascribed to it under Part 36 of the Companies Act
"**AT&C**"	Aggregate Technical and Commercial
"**Aurubis**"	The Aurubis Group
"**BALCO**"	Bharat Aluminium Company Limited, a company incorporated in India
"**Bankruptcy Code**"	The Insolvency and Bankruptcy Code, 2016 of India, as amended
"**BCD**"	Basic customs duty
"**BDC**"	Base Development Costs
"**BHP Billiton**"	BHP Billiton Limited
"**Bond Escrow Account**"	an escrow account into which the gross proceeds of this offering will be deposited on the Closing Date
"**Bond Escrow Agreement**"	the escrow account agreement entered in relation to the Bond Escrow Account between the Bond Escrow Account Bank and the Issuer
"**Bond Escrow Charge**"	A first priority pledge over the Bond Escrow Account (subject to the terms of the Bond Escrow Charge) over the Issuer's rights and claims with respect to the Bond Escrow Account (the "**Bond Collateral**")
"**Black Mountain Mining**"	Black Mountain Mining Pty Ltd
"**Bloomberg**"	Bloomberg L.P.
"**Board**"	the Board of Directors of the Company
"**Bondholders**"	Holders of the Bonds
"**Bridge Facility Agreement**"	A bridge facility agreement entered on or about the Closing Date between Vedanta Mauritius (as borrower) (the "**Bridge Borrower**") and the Issuer, the Company, Vedanta Jersey and certain other members of the Group as guarantors (the "**Bridge Guarantors**") and various parties thereto as lenders
"**BSE**"	BSE Limited
"**CAGR**"	Compound annual growth rate
"**Cairn**"	Oil and Gas business of Vedanta Limited
"**Cairn Energy**"	Cairn Energy plc, a company incorporated in England & Wales
"**Cairn Energy Group**"	Cairn Energy and its subsidiaries
"**CCEA**"	Cabinet Committee on Economic Affairs
"**CEA**"	the Central Electricity Authority of India
"**CEC**"	Copperbelt Energy Corporation PLC, a public company in Lusaka, Zambia

"**CEHL**"	Cairn Energy Hydrocarbons Limited
"**CIHL**"	Cairn India Holdings Limited
"**Chalco**"	Aluminium Corporation of China Limited
"**CIS**"	Commonwealth of Independent States
"**Clearstream**"	Clearstream Banking, S.A.
"**CMSA**"	Capital Markets and Services Act 2007
"**CMT**"	Copper Mines of Tasmania Pty Ltd, a company incorporated in Tasmania, Australia
"**Coal India**"	Coal India Limited, the government-owned coal monopoly in India
"**Codelco**"	Corporación Nacional del Cobre
"**Command Petroleum**"	Command Petroleum (India) Pty Ltd.
"**Common Collateral**"	the Share Collateral under the Share Security Document and the accounts given as security under the Account Pledge Document
"**Companies Act**"	the United Kingdom Companies Act 2006, as amended
"**Company Bonds**"	the 2021 Bonds, the 2022 Bonds, the 2023 Bonds I and the 2024 Bonds
"**Competition Act**"	Competition Act, 2002, as amended
"**Conclave**"	Conclave PTC Limited, the trustee of the Trust
"**copper business**"	the business of Vedanta comprising the copper operations as further described in the section entitled "*Business — Description of the Businesses — Copper Business*"
"**COVID-19**"	the outbreak of a novel strain or coronavirus (i.e. Coronavirus Disease 2019 (COVID-19)) which first emerged in Wuhan City, Hubei province, the People's Republic of China in late 2019
"**CRO**"	Chingola Refractory Ore
"**CSMP**"	Coal Mines (Special Provisions) Act, 2015
"**CUHL**"	Cairn UK Holdings Limited, a company incorporated in England and Wales
"**DA**"	Development Area
"**DDT**"	Dividend distribution tax
"**Delisting Regulations**"	Securities and Exchange Board of India (Delisting of Equity Shares) Regulations, 2009, as amended
"**DGH**"	Directorate General of Hydrocarbons
"**Directors**"	the Executive Directors and Non-Executive Directors
"**DSF**"	Discovered Small Fields
"**DTAs**"	Agreements for the Avoidance of Double Taxation
"**DTC**"	The Depositary Trust Company
"**DMG**"	Directorate of Mines and Geology

"**EBITDA**"	Earnings before interest, tax, depreciation and amortisation
"**EC**"	Environmental Clearance
"**ECB**"	external commercial borrowings
"**EIA**"	Energy Information Administration
"**Equity Shares**"	all fully paid up equity shares of Vedanta Limited
"**ESL**"	Electrosteel Steels Limited
"**ETB**"	Environmental and terminal benefits
"**EU**"	the European Union as established by the Treaty on European Union
"**Euroclear**"	Euroclear Bank SA/NV
"**Exchange Act**"	United States Securities Exchange Act of 1934, as amended
"**Executive Directors**"	Anil Agarwal and Navin Agarwal
"**Factories Act**"	Factories Act, 1948, as amended, of India
"**Finsider**"	Finsider International Company Limited, a company incorporated in England and Wales
"**Fiscal Year**"	the financial year ended or ending 31 March of that year
"**Freeport-McMoran**"	Freeport McMoran Copper and Gold Corporation
"**FSMA**"	the United Kingdom Financial Services and Markets Act 2000, as amended
"**GDP**"	gross domestic product
"**Global Certificates**"	the Restricted Global Certificates and the Unrestricted Global Certificates
"**GOI**"	Government of India
"**GRIDCO**"	Grid Corporation of Odisha Limited, a nominee of the State Government of Odisha
"**Group**"	Vedanta and its subsidiaries on a consolidated basis
"**GSPCB**"	Goa State Pollution Control Board
"**GST**"	Goods and Service Tax
"**Guarantors**"	the Company and the Subsidiary Guarantors
"**Guaranteed Bonds**"	the 2023 Bonds II and the 2026 Bonds
"**HELP**"	Hydrocarbon Exploration and Licensing Policy
"**Hindalco**"	Hindalco Industries Limited
"**HWMTM Rules 2016**"	Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016
"**HZL**"	Hindustan Zinc Limited, a company incorporated in India
"**IAS**"	International Accounting Standards
"**IEA**"	International Energy Agency

"**IFRS**"	International Financial Reporting Standards
"**ILZDA**"	India Lead Zinc Development Association
"**Income Tax Act**"	Income Tax Act, 1961, as amended of India
"**INDAL**"	Indian Aluminium Company Limited
"**India**"	Republic of India
"**India Escrow Account**"	An escrow account in India in relation to the Take Private Transaction
"**Indian Takeover Code**"	SEBI (Substantial Acquisition of Shares and Takeovers) Regulations, 2011
"**Industry Guide 7**"	Industry Guide 7 — Description of Property by Issuers Engaged or to be Engaged in Significant Mining Operations issued by the Commission
"**Intercreditor Agreement**"	An intercreditor agreement, to be dated on or around the date of the Bridge Facility by, among others, the Issuer, the Guarantors, the Trustee, and other parties named therein
"**IOCL**"	Indian Oil Corporation Limited
"**iron ore business**"	the business of Vedanta comprising the iron ore operations as further described in "*Business — Description of the Businesses — Iron Ore Business*"
"**IRS**"	US Internal Revenue Service
"**ISO**"	International Standards Organisation. ISO 14001 refers to the international standard for environmental management systems published by the ISO in 1996
"**IST**"	India Standard Time
"**Issuer**"	Vedanta Holdings Mauritius II Limited
"**Joint Global Coordinators, Joint Lead Managers and Joint Bookrunners**"	Barclays Bank PLC, Credit Suisse (Hong Kong) Limited, Deutsche Bank AG, Singapore Branch, J.P. Morgan Securities plc and Standard Chartered Bank
"**JPY**"	Japanese Yen
"**JSPCB**"	Jharkhand State Pollution Control Board
"**Kapasan Project**"	the implementation of a 100,000 tpa greenfield zinc smelter plan at Kapasan, State of Rajasthan, by HZL under the terms of SOVL's shareholders' agreement
"**KCM**"	Konkola Copper Mines plc, a company incorporated in Zambia
"**KDMP**"	Konkola Deep Mining Project
"**LIBOR**"	London Interbank Offering Rate
"**Lisheen**"	Lisheen Mine Partnership and its subsidiaries
"**LME**"	the London Metal Exchange Limited
"**LML**"	the four large-scale mining licences granted to KCM by the Republic of Zambia on 31 March 2000, each of which has a term of 25 years
"**LOB**"	Lower Ore Body, a stratigraphic horizon for mineralisation

"**MALCO**"	Madras Aluminium Company Limited a company incorporated in India
"**MBA Fields**"	the Mangala, Bhagyam and Aishwariya fields located in the Rajasthan Block
"**MCL**"	Mahanadi Coalfields Limited
"**MCLR**"	Marginal Cost of Funds based Lending Rate
"**MCD Rules**"	Mineral Conservation and Development Rules, 1988, as amended, of India
"**MEL**"	MALCO Energy Limited
"**Mines Act**"	Mines Act, 1952, as amended
"**Mitsui**"	Mitsui & Co.
"**MLAA**"	Mineral Laws (Amendment) Act dated 13 March 2020
"**MMDR Act**"	Mines and Minerals (Development and Regulations) Act, 1957 of India, as amended
"**MoEF**"	Ministry of Environment and Forest of the GOI
"**Monte Cello**"	Monte Cello BV, a company incorporated in The Netherlands
"**Moody's**"	Moody's Investors Service, Inc.
"**MoP**"	Ministry of Power of the GOI
"**MoPNG**"	Ministry of Petroleum and Natural Gas of the GOI
"**MPT**"	Mangala Processing Terminal
"**MPT Concession Agreement**"	An agreement entered into on 22 September 2016 between Goa Sea Port Private Limited and the Mormugao Port Trust, to operate the berth on a build-finance-operate transfer basis for 30 years
"**NCLAT**"	National Company Law Appellate Tribunal
"**NCLT**"	National Company Law Tribunal
"**NDMC**"	New Domestic Manufacturing Companies
"**NELP**"	New Exploration Licencing Policy
"**NGT**"	National Green Tribunal
"**NMDC**"	National Mineral Development Corporation
"**NMP 2008**"	National Mineral Policy of 2008
"**NMP 2019**"	National Mineral Policy of 2019
"**No. 1 shaft**"	the mining operations by underground methods focussing on the shaft system of the Kirila Bombwe South ore body
"**No. 3 shaft**"	the mining operations by underground methods focussing on the shaft system of the Kirila Bombwe North ore body
"**Non-Executive Directors**"	Geoffrey Green, Deepak Parekh, Ravi Rajagopal and Edward Story
"**Noon Buying Rate**"	the noon buying rate in New York City for cable transfer of such foreign currency as certified for customs purposes by the Federal Reserve Bank of New York

"**NSE**"	the National Stock Exchange of India Limited
"**NTPC**"	National Thermal Power Corporation Limited
"**NYSE**"	New York Stock Exchange
"**OALP**"	Open Acreage Licensing Policy
"**OERC**"	Odisha Electricity Regulatory Commission
"**OHSAS**"	Occupational Health and Safety Assessment Series
"**OIDA Cess**"	Indian Oil Industry (Development) Act 1974, as amended
"**OMCL**"	Odisha Mining Corporation Limited
"**OMCs**"	Oil marketing companies
"**ONGC**"	The Oil and Natural Gas Corporation Limited
"**OPEC**"	Organisation of the Petroleum Exporting Countries
"**Ordinary Shares**"	ordinary shares of $0.10 each in the Company
"**Parent Guarantor**"	the Company
"**PGCIL**"	Power Grid Corporation India Limited
"**Phase II**"	the second phase of development of the Rajasthan Block, including the development of Bhagyam and Aishwariya fields and the construction and installation of the Salaya to Bhogat section of the Pipeline
"**Platts**"	Platts, McGraw Hill Financial, a global provider of energy, petrochemicals, metals and agriculture information, including benchmark price assessments for commodity markets
"**PNG Rules**"	Petroleum and Natural Gas Rules, 1959, as amended
"**PPAs**"	power purchase agreements
"**Pre-NELP**"	Pre-New Exploration Licencing Policy
"**Principal Agent**"	Citibank, N.A., London Branch
"**PRMS**"	Petroleum Resources Management System
"**PSEB**"	Punjab State Electricity Board
"**PSERC**"	Punjab State Electricity Regulatory Commission
"**PSPCL**"	Punjab State Power Corporation Ltd.
"**Public Shareholders**"	Public shareholders of Vedanta Limited (as defined under Delisting Regulations)
"**QIB**"	qualified institutional buyer within the meaning of Rule 144A
"**R-APDRP**"	Restructured Accelerated Power Development and Reforms Programme
"**Rajasthan Block**"	Block RJ-ON-90/1
"**Rajasthan Block PSC**"	The PSC between the GOI and a consortium consisting of ONGC, SIPD and Vedanta Limited in relation to the Rajasthan Block
"**Ravva Block**"	Block PKGM-1

"**Ravva PSC**"	the production sharing contract for the exploration, development and production of the Ravva Block
"**RBI**"	Reserve Bank of India
"**Registrar**"	Citibank, N.A., London Branch
"**Regulation S**"	Regulation S under the Securities Act
"**Regulation S Bonds**"	the Bonds which are offered and sold outside the United States to non-US persons in reliance on Regulation S
"**Restricted Global Certificates**"	the restricted global certificates in restricted form initially representing the Rule 144A Bonds
"**Richter**"	Richter Holding Ltd.
"**Rio Tinto**"	Rio Tinto plc
"**Rio Tinto Alcan**"	Rio Tinto Alcan Ltd.
"**Rule 144A**"	Rule 144A under the Securities Act
"**Rule 144A Bonds**"	the Bonds which are offered and sold in the United States to QIBs in reliance on Rule 144A
"**SEBI**"	Securities and Exchange Board of India
"**SEBs**"	State Electricity Boards in India
"**SEC**"	US Securities and Exchange Commission
"**Securities Act**"	United States Securities Act of 1933, as amended
"**Securities Act Legend**"	has the meaning as ascribed to in the Trust Deed
"**SEPCO**"	Shandong Electric Power Construction Corporation
"**SEZ**"	Special Economic Zone
"**SFA**"	Securities and Futures Act, Chapter 289 of Singapore
"**SFO**"	Securities and Futures Ordinance (Cap. 571) of Hong Kong
"**SGL**"	Sesa Goa Limited, a company incorporated in India
"**SGX-ST**"	Singapore Exchange Securities Trading Limited
"**SHAKTI**"	Scheme for Harnessing and Allocating Koyala (Coal) Transparently in India
"**SIL**"	Sesa Industries Limited, a company incorporated in India, which was formerly the subsidiary of SGL, which has since amalgamated with SGL with effect from 14 February 2011 and the appointment date of 1 April 2005
"**SIPCOT**"	State Industries Promotion Corporation of Tamil Nadu
"**SIPD**"	Shell India Production Development B.V.
"**Skorpion**"	Skorpion Mining Company (Pty) Ltd and its subsidiaries
"**SOVL**"	Sterlite Opportunities and Ventures Limited, now merged with and into Sterlite
"**SRK UK**"	independent consulting firm SRK Consulting (UK) Limited

“**SRL**”	Sesa Resources Limited (previously known as V.S. Dempo & Co. Private Limited)
“**SSNP**”	Shenzhen Shandong Nuclear Power Construction Co. Limited
“**Sterlite**”	Sterlite Industries (India) Limited, now merged into Vedanta Limited
“**Share Security Document**”	a first-priority share pledge and floating charge by Vedanta Jersey over the entire Capital Stock issued by the Issuer and the Bridge Borrower (the “**Share Collateral**”)
“**STL**”	Sterlite Technologies Limited, a company incorporated in India
“**Subsidiary Guarantors**”	Vedanta Jersey and Vedanta Mauritius
“**S&P**”	Standard & Poor’s Ratings Services, a division of McGraw-Hill Companies, Inc.
“**Take Private Transaction**”	The acquisition of all Equity Shares that are held by Public Shareholders and consequently voluntarily delist the Equity Shares in accordance with the Delisting Regulations from the Indian Stock Exchanges by making an offer in accordance with the Delisting Regulations
“**Tata Petrodyne**”	Tata Petrodyne Limited
“**Tax Authorities**”	Indian Tax Authorities
“**TCM**”	Thalanga Copper Mines Pty Ltd, a company incorporated in Victoria, Australia
“**TLP**”	tailings leach plant
“**TNPCB**”	Tamil Nadu Pollution Control Board
“**TRO**”	Tax Recovery Officer
“**Trust**”	Anil Agarwal Discretionary Trust
“**Trust Deed**”	the trust deed to be dated on or about the Closing Date between the Issuer, the Guarantors and the Trustee
“**Trustee**”	Citicorp International Limited
“**TSEHL**”	Twin Star Energy Holdings Limited, a company incorporated in Mauritius
“**Twin Star**”	Twin Star Holdings Ltd., a company incorporated in Mauritius
“**UC RUSAL**”	United Company RUSAL Ltd.
“**TSPL**”	Talwandi Sabo Power Limited
“**Unrestricted Global Certificates**”	the unrestricted global certificates in registered form initially representing the Regulation S Bonds
“**USGS**”	US Geological Survey, a science agency for the US Department of the Interior with a mission to provide for the provision of reliable scientific information to describe and understand the Earth; minimise loss of life and property from natural disasters; manage water, biological, energy, and Mineral Resources; and enhance and protect quality of life
“**VAT**”	State value added tax

"**Vedanta**"	Vedanta and its subsidiaries and "member of Vedanta" shall be construed accordingly
"**Vedanta Limited**"	Vedanta Limited, a company incorporated in India
"**Vedanta Limited Group**"	Vedanta Limited and its subsidiaries
"**VGCB**"	Vizag General Cargo Berth Private Limited
"**Volcan**"	Volcan Investments Limited, a company incorporated in the Bahamas
"**VRHL**"	Vedanta Resources Holdings Limited, a company incorporated in England and Wales
"**VSL**"	Vedanta Star Limited
"**Water Act**"	Water (Prevention and Control of Pollution) Act, 1974 of India
"**Water Cess Act**"	Water (Prevention and Control of Pollution) Cess Act, 1977 of India
"**WCA**"	Workmen's Compensation Act, 1923 of India
"**WCL**"	Western Cluster Limited
"**Working Day(s)**"	Working day(s) of SEBI
"**Zambia**"	the Republic of Zambia
"**ZCI**"	Zambia Copper Investments Ltd, a company incorporated in Zambia
"**ZESCO**"	Zambia Electricity Supply Corporation Limited
"**zinc business**"	the business of Vedanta comprising the zinc operations as further described in "*Business — Description of the Businesses — Zinc Business*"

Terms and Definitions of the JORC Code (2012)

"**Ore Reserves**"	those portions of Mineral Resources that, after the application of all Modifying Factors, result in an estimated tonnage and grade which, in the opinion of the Competent Person making the estimates, can be the basis of a technically and economically viable project, after taking account of material relevant Modifying Factors. Deriving an Ore Reserve without a mine design or mine plan through a process of factoring of the Mineral Resource is unacceptable.
"**Proved Ore Reserve**"	the economically mineable part of a Measured Mineral Resource. A Proved Ore Reserve implies a high degree of confidence in the Modifying Factors.
"**Probable Ore Reserve**"	the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Ore Reserve is lower than that applying to a Proved Ore Reserve.

“**Mineral Resource**” a concentration or occurrence of solid material of economic interest in or on the Earth’s crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

“**Measured Mineral Resource**” that part of a Mineral Resource for which quantity, grade (or quality), densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.

“**Indicated Mineral Resource**” that part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.

“**Inferred Mineral Resource**” that part of a Mineral Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to an Ore Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

Glossary of Technical Terms

The following definitions shall apply to the technical terms used herein:

“**2D**” two dimensional

“**2P**” gross proved plus probable reserves

“**3D**” three dimensional

“**4D**” four dimensional

“**alloy**” a compound of two or more metals

“**alumina**” the calcined product from an alumina refinery containing at least 98% aluminium oxide (Al2O3)

“**anode**” the electrode by which current enters the cell. For copper refining, the impure copper is used as an anode. For zinc refining, lead anodes are used. For aluminium refining, a carbon anode is used

“**anode slime**”	a deposit of insoluble residue formed from the dissolution of the anode in commercial electrolysis. In copper refining, this slime contains the precious metals that are recovered from it
“**API**”	a specific gravity scale developed by the American Petroleum Institute for measuring the relative density of various petroleum liquids
“**AS**”	acid soluble (pertaining to copper)
“**ASP**”	alkaline surfactant polymer
“**assay**”	a test to determine the level of a particular element in a sample
“**asset capacity**”	the maximum throughput of fixed facilities such as a processing plant or material handling system, which can vary over the life of the facility from the initial nameplate capacity
“**boe**”	barrels of oil equivalent
“**boepd**”	barrels of oil equivalent per day
“**bopd**”	barrels of oil per day
“**bauxite**”	a general term for a rock composed of a mixture of hydrated aluminium oxides and hydroxides and generally contaminated with compounds of iron; it is the main ore from which aluminium is produced
“**Bayer process**”	this is the principal industrial means of refining bauxite to produce alumina. In the Bayer process, bauxite is washed with a hot solution of sodium hydroxide at 175°C (digestion). This converts the alumina to aluminium hydroxide which dissolves in the hydroxide solution. The other components of bauxite do not dissolve and are filtered from the solution as solid impurities (clarification). The mixture of solid impurities is called red mud, and presents a disposal problem. Next, the hydroxide solution is cooled, and the dissolved aluminium hydroxide precipitates out as a white, fluffy residue. When then heated to 1,050°C, the aluminium hydroxide decomposes to alumina (calcination), giving off water vapour in the process. A large amount of the alumina so produced is then subsequently smelted in order to produce aluminium
“**beneficiation**”	beneficiation is a variety of processes whereby minerals suitable for further processing or direct use are separated from extracted ore
“**Blast Hole Mining method**”	this mining method involves the drilling of blast holes within an ore block in an upward and/or downward direction which are then filled with explosives. These explosives are set off in stages to break up the ore block in order to extract it from the mine. The broken ore is removed by loading and transportation equipment at the mine. The cavity in the ore block is filled with mill tailing and cement to maintain the stability of the mine

“**brownfield**”	development project to upgrade, modify or further develop an existing property
“**bwpd**”	barrels of water per day
“**calcined**”	to be heated to a high temperature, but below the melting or fusing point causing loss of moisture, reduction or oxidation or thermal decomposition (a chemical reaction where a single compound breaks up into two or more simpler compounds or elements when heated)
“**cathode**”	the cathode is the conductor through which electricity leaves the cell. For copper refining, the cathode is where the refined copper is deposited. For aluminium smelting, the cathode is known as the pot lining
“**cells**”	cells are the containers in which the electrolytic process for formation of metal takes place. For aluminium smelting, these are known as pots
“**concentrate**”	material which has been processed to increase the percentage of the valuable mineral to facilitate transportation and downstream processing
“**copper concentrate**”	a product of the flotation process with a copper content typically ranging between 24% and 40%
“**CPP**”	captive power plant
“**cut-off grade**”	the lowest grade of mineralised material considered economic to mine; cut-off grade is used in the calculation of the Ore Reserves for a given deposit
“**Darcy**”	a darcy unit, a unit to measure permeability
“**DCQ**”	daily contract quantity
“**debottlenecking**”	the removal of a constraint on production by increasing the productivity of one part of an operation
“**deposit**”	a deposit is a concentration (or occurrence) of material of possible economic interest, in or on the earth’s crust, that may include mineralised material that cannot be estimated with sufficient confidence to be classified in the Inferred category. Portions of a deposit, that do not have reasonable and realistic prospects for eventual economic extraction are not included in a Mineral Resource
“**Development**”	activities related to a mineral deposit commencing at the point economically recoverable reserves can reasonably be estimated to exist and generally continuing until commercial production begins
“**dmt**”	dry metric tonnes
“**dmtu**”	dry metric tonne unit. Iron ore prices are quoted in dmtu
“**DOC**”	declaration of commerciality

"**DORS II**"	Dynamic Ore Reserve System II; an in-house system developed to calculate the Nchanga underground reserves by applying the grade factor to the resource based on the percentage of ore drawn and forecasts of the grades to be mined
"**Draft**"	with respect to a ship's hull, the vertical distance between the waterline and the bottom of the hull (keel), with the thickness of the hull included
"**DTH**"	down the hole; a drilling method in all application segments including blasthole, water well, foundation, oil and gas, cooling systems, and drilling for heat exchange pumps
"**dwt**"	dead weight tonnes; refers to the maximum amount of tonnes of cargo a ship is able to carry
"**economic feasibility of the reserves**"	the degree on the other hand categorising the resources under economic, marginally economic and sub-economic according to the relationship between prices and extraction costs and technological exploitability
"**EOR**"	enhanced oil recovery
"**exploration**"	prospecting, sampling, mapping, drilling and other work involved in searching for ore
"**EUR**"	estimated ultimate recovery
"**g/t**"	grams per tonne
"**Fe**"	symbol for the chemical element, iron
"**FGD**"	flue gas desulphurization
"**flotation**"	a wet chemistry process by which particular minerals are induced to become attached to bubbles and to float, while other minerals sink
"**flue gas**"	gas that exits to the atmosphere via a flue, which is a pipe or channel for conveying exhaust gases from a fireplace, oven, furnace, boiler or steam generator
"**FOB**"	Free on Board
"**footwall**"	the rock which lies below the ore
"**frame contracts**"	prospecting, sampling, mapping, drilling and other work involved in searching for ore

"**GAMI technology**"	technology from Guiyang Aluminium — Magnesium Design & Research Institute of China. In the GAMI technology, pots are cut into the circuit by taking complete power outage. This involves loss of production as well as regular operational disturbances to pot operation. Fuses are designed to bypass the line current, until the pot was cut into the circuit. After a calculated safe period of time, the fuses melted resulting in the pot coming into potline circuit. The GAMI technology potline has a capacity for producing initially 245,000 tpa aluminium
"**GBA**"	gas balancing agreement
"**GCV**"	Gross Calorific Value
"**Geostatistics**"	geostatistics is a branch of statistics used to predict probability distributions of ore grades for mining operations
"**grade**"	proportion (by weight) of the valuable element within the mineralised rock
"**greenfield**"	new development project on previously undeveloped land that is built from scratch
"**GW**"	gigawatt, a unit of electrical energy equal to 1 billion watts
"**HG**"	high grade; an international standard of grading for zinc ingots
"**hydrometallurgical**"	the treatment of metal or the separation of metal from ores and ore concentrates by liquid processes, such as leaching, extraction and precipitation to extract and recover metals from their ores
"**IPP**"	independent power plant
"**IsaProcess(TM)**"	an electrolytic refining process developed by MIM Holdings Ltd.'s Process Technologies
"**IsaSmelt(TM)**"	a lance-based intensive bath smelting technology developed by MIM Holdings Ltd.'s Process Technologies
"**ITAT**"	Income Tax Appellate Tribunal
"**JORC Code (2012)**"	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 Edition, prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia
"**Kcal/kg**"	thousands of calories per kilogramme, a measurement of energy per unit mass

"**Koepe winder**"	a system where the winding drum is replaced by a large wheel or sheave. Both cages are connected to the same rope, which passes around some 200 degrees of the sheave in a groove of friction material. The Koepe sheave may be mounted on the ground adjacent to the headgear or in a tower over the shaft. The drive to the rope is the frictional resistance between the rope and the sheave. It requires the use of a balance rope. It is often used for hoisting heavy loads from deep shafts and has the advantage that the large inertia of the ordinary winding drum is avoided. The system has been widely used in Europe for many years, and some large projects in the UK are being equipped with winders of this type
"**km**"	kilometres
"**km^2**"	square kilometres
"**kt**"	kilotons
"**ktpa**"	kilotons per annum
"**ktpm**"	thousand tonnes per month
"**KV**"	kilovolts
"**kVA**"	kilovolt-ampere
"**kWh**"	kilowatt-hours
"**lb**"	imperial pound (mass) equivalent to 0.4536 kilograms
"**leaching**"	extracting a soluble metallic compound from an ore by selectively dissolving it in a suitable solvent
"**lead concentrate**"	product of the flotation process with a lead content typically ranging between 50% and 70%
"**life of mine**"	the remaining life of a mine in years calculated by deducting the scheduled production rates (i.e. the rate at which material will be removed from the mine, from the current defined reserves)
"**m^3**"	cubic metres
"**MAT**"	minimum alternate tax
"**metcoke**"	metallurgical coke which is produced by the carbonisation of coals or coal blends at temperatures up to 1,400 K (1,127 degrees Celsius) to produce a macroporous carbon material of high strength and relatively large lump size
"**mill**"	a plant in which ore is treated and metals are recovered or prepared for smelting; also a revolving drum used for the grinding of ores in preparation for treatment

"**million oz**"	millions of ounces
"**mineral**"	a natural, inorganic, homogeneous material that can be expressed by a chemical formula
"**mineralisation**"	the process by which minerals are introduced into a rock. More generally, a term applied to accumulations of potentially economic or related minerals in quantities ranging from anomalous to economically recoverable
"**Million Units**"	Million kilo watt hours
"**mm**"	millimetres
"**mmbbls**"	million barrels
"**mmboe**"	million barrels of oil equivalent
"**mmbtu**"	million British thermal units
"**mmscfd**"	million standard cubic feet per day
"**mt**"	metric tonnes
"**mtpa**"	million tonnes per annum
"**MW**"	megawatt, a unit of electrical energy equal to one million watts
"**OIIP**"	oil initially in place
"**open-pit mine**"	a mine that is entirely on the surface. Also referred to as an open-cut or opencast mine
"**ore**"	a mineral or mineral aggregate containing precious or useful minerals in such quantities, grade and chemical combination to make extraction economic
"**overburden**"	waste material overlying ore in an open-pit mine
"**PFA**"	Primary Foundry Alloys
"**pH**"	potential of Hydrogen; a measure of the acidity or alkalinity of a solution
"**pig iron**"	pig iron is raw iron that is the immediate product of smelting iron ore with coke and limestone in a blast furnace
"**plant**"	fixed or moveable equipment required in the process of winning or processing the ore

"**PLF**" or "**plant load factor**"	in relation to a given period, is expressed as the percentage of total kilowatt hours per unit (kWh) generated at generator terminals to installed capacity, expressed in kilowatts (kW) multiplied by number of hours in that period
"**ppm**"	parts per million (in relation to silver)
"**Properzi**"	technology for fabricating wire, sheets and ingots sold by Continuous Properzi S.p.A., Italy
"**Properzi CCR**"	Properzi Continuously Cast and Rolled; a copper rod technology from Continuous-Properzi S.p.A. to produce copper rods
"**PSC**"	production sharing contracts. These contracts are a common type of contract signed between a government and a resource extraction company (or group of companies) concerning how much of the resource (usually oil) extracted from the country each will receive
"**PSU**"	public sector undertaking
"**PTRR**"	post tax rate of return regime
"**PW**"	Prime Western; an international standard of grading for zinc ingots
"**Pyrometallurgical**"	pertaining to metallurgical operations that involve processing temperatures above ambient conditions, generally involving chemical reactions as distinct from metal casting substantially which involves only a physical transformation, such as, solidification
"**Rc**"	refining charge; the price paid by mining companies to smelters for refining the contained precious metals (and copper) in their concentrates to produce a payable metal. The Rc is based on the payable metal content (after deductions)
"**refining**"	the final process of upgrading of the metal quality, although for aluminium, it is the intermediate stage of converting bauxite to alumina
"**refining charge**"	the fees charged by a refinery for purifying crude metallic products
"**RLE**"	roast-leach-electro win; a process utilised in many hydrometallurgical zinc smelters whereby zinc concentrate is first roasted to remove the Sulphur content, which comes out in the form of Sulphur Dioxide gas, and then subjected to leaching and electrolysis
"**RoM**"	run of mine, which includes all material mined including the waste
"**SAG**"	semi-autogenous
"**SCF**"	slag cleaning furnace
"**SHG**"	Special High Grade; an international standard of grading for zinc ingots

"**slag**"	the vitreous mass separated from the fused metals in the smelting process
"**SLOS**"	sub land open stopping
"**smelting**"	a thermal process whereby molten metal is liberated from a concentrate, with impurities separating into a lighter slag
"**SNIF degasser**"	a spinning nozzle inert flotation (SNIF) in-line degassing/filtration system for treatment of molten aluminium
"**spot market**"	a market in which commodities are bought and sold for cash and delivered immediately
"**spot price**"	the current price of a metal for immediate delivery
"**STOIIP**"	stock tank oil initially in place
"**stope**"	the underground excavation within the ore body where the main production takes place; depending on the ore body qualities, stopes can range from 5 kt to 2 mt
"**strip ratio**"	the number of units of waste material in a surface mine which must be removed in order to extract one unit of ore
"**sustaining capital expenditure**"	capital expenditure to maintain Vedanta's operating capacity
"**SX-EW**"	solvent extraction/electro winning
"**synchronise**"/ "**synchronisation**"	Synchronisation is the process of matching the speed and frequency of a generator or other source to a running network necessary to commence operations at an electricity-generating power plant
"**t**" or "**tonne**"	metric tonne equivalent to 2,204.62 lb or 1,000 kilograms
"**tailing dam**"	a low-lying depression used to confine tailings, the prime function of which is to allow enough time for heavy metals to settle out or for cyanide to be destroyed before water is discharged into the local watershed
"**Tc**"	treatment charge
"**TcRc**"	treatment charge and refining charge levied by smelters and refineries for the smelting and refining of copper concentrate from mines into copper metal
"**TCu**"	total copper
"**toll smelter**"	a smelter that is independent of the concentrate supplier and charges a fee for smelting the concentrate

"**total production**"	that part of production at mines and operations in which subsidiaries of the Company have an interest; in this Offering Circular, unless expressly stated otherwise, production also refers to total production
"**total reserves**"	that part of the reserves from a mine in which subsidiaries of the Company have an interest; in this Offering Circular, unless expressly stated otherwise, reserves also refer to total reserves
"**tpa**"	tonnes per annum
"**Vertical Crater Retreat method**"	a comparatively new method of blast hole mining in which only large diameter in-the-hole drills are used to blast down horizontal slices of ore into an opening below the block of ore being mined
"**VSS technology**"	Vertical Stud Soderberg technology; a method of primary aluminium reduction using the Soderberg process in which the electrical current is introduced to self-baking anodes by steel rods, or studs, inserted into the top of a monolithic anode
"**Whittle 4X multi-element optimisation software**"	this software is used for strategic planning and provides information which is used to determine the life of an open pit mine. This software helps define the economically workable limits of an open pit mine and provides a template for the pit design. Using this template, the KCM Group is able to determine the quantity of waste that is required to be mined in order to extract a known quantity of copper ore
"**zinc concentrate**"	product of flotation process with a zinc content typically ranging between 45% and 60%

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* Certain references in the consolidated financial statements refer to sections in annual reports, which are not included or incorporated by reference in this Offering Circular.

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF VEDANTA RESOURCES LIMITED

Qualified opinion

In our opinion, except for the possible effects of the matter described in the basis for qualified opinion section of our report:

- Vedanta Resources Limited's Group financial statements and parent company financial statements (the "financial statements") give a true and fair view of the state of the Group's and of the parent company's affairs as at 31 March 2020 and of the Group's loss for the year then ended;
- the Group financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union;
- the parent company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements of Vedanta Resources Limited which comprise:

Group	**Parent company**
the Consolidated Income Statement;	the Company Balance Sheet;
the Consolidated Statement of Comprehensive Income;	the Company Statement of Changes in Equity; and
the Consolidated Statement of Financial Position;	the related notes 1 to 13 to the Company financial statements, including a summary of significant accounting policies.
the Consolidated Cash Flow Statement;	
the Consolidated Statement of Changes in Equity; and	
Related notes 1 to 40 to the financial statements, including a summary of significant accounting policies	

The financial reporting framework that has been applied in the preparation of the Group financial statements is applicable law and International Financial Reporting Standards (IFRSs) as adopted by the European Union. The financial reporting framework that has been applied in the preparation of the parent company financial statements is applicable law and United Kingdom Accounting Standards, including FRS 101 "Reduced Disclosure Framework" (United Kingdom Generally Accepted Accounting Practice).

Basis for qualified opinion

Due to the enforcement from the Government of India of restrictions in response to COVID-19, EY have been prevented from performing our planned procedures surrounding the observation of physical counts of inventory. We have been unable to satisfy ourselves through alternative audit procedures under UK International Standards on Auditing (UK) (ISAs (UK)) as to the accuracy of the inventory quantities held at 31 March 2020 within India, which are included in the Statement of Financial Position at $1,383m of the total of $1,515m. Consequently, we were unable to determine whether any adjustment to this amount was necessary. In addition, were any adjustment to the inventory balance to be required, the strategic report would also need to be amended.

We conducted our audit in accordance with ISAs (UK) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report below. We are independent of the Group and parent company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard as applied to listed entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our qualified opinion.

Material uncertainty relating to going concern

We draw attention to note 1(d) 'Going Concern' in the financial statements, which indicates that the ability of the Group and Company to continue as a going concern is subject to a number of material uncertainties that may cast significant doubt on the Company's ability to continue as a going concern.

In the 21-month period to 31 December 2021, the Group has scheduled debt repayments of c.$6.6bn, of which c.$2.2bn are repayments to be made by the Company. In a plausible downside case, the Company, prior to receipt or payment of dividends, will have a funding shortfall that may be in the order of $2.5bn in the period to 31 December 2021. In such a scenario, the rest of the Group will not be able fully to support the Company without access to the mitigating actions described below.

In addition, the Group is subject to certain restrictive financial covenants on its loan agreements and bonds. The Group has secured the necessary covenant waivers and relaxations to remediate breaches on a covenant at 31 March 2020 and any future potential breaches up to and including 31 March 2021. In a plausible downside case, the Group may require certain further covenant waivers or relaxations for loans for the period subsequent to 31 March 2021.

In the base case and plausible downside case forecasts, on which the Group's going concern conclusions are based, dividends of $150m that would be paid to the Company's parent entities have been included. No further dividends are forecast within the going concern period. Any such dividends would not be paid, unless it were determined that, at a minimum, there were available legally distributable reserves, borrowings and other undertakings (including the necessary covenant waivers and other relaxations noted above) were not placed at risk and the going concern conclusion were not affected.

The Group and Company's ability to remain a going concern will therefore be dependent on its ability successfully to execute a number of mitigating actions as set out in note 1(d). Material uncertainties arise from the liquidity and covenant compliance matters described above, which are subject to the mitigations below:

- Whether the Group is able to execute and draw down term loans amounting to a total of $1.6bn at Vedanta Limited level, for which the Group has secured sanction letters to date covering $0.9bn from the relevant banks.
- Whether the Group receives, as necessary, additional covenant waivers and/or relaxations in relation to covenants not already waived or relaxed for the period from 31 March 2021 to 31 December 2021.
- Whether the Group is able to roll-over its short-term financing facilities, including commercial papers, working capital facilities, customer advances and supplier credit.
- Provision of an additional intercompany loan from an operating subsidiary of the Group to the Company.
- Execution of an off-take agreement with one or more third parties, including an advance payment for the Group's future production.

- The severity of the impact of the COVID-19 pandemic on the Group's expected future cash flows, resulting from the global policy response thereto and the associated economic impacts.

Our opinion is not modified in respect of these matters.

We describe below how our audit responded to the risk relating to going concern:

- The audit engagement partner increased his time directing and supervising the audit procedures on going concern
- We engaged experienced internal restructuring specialists to support us in carrying out our going concern audit procedures. In particular, our restructuring specialists provided advice on the appropriateness of the assumptions and the reasonableness of the mitigations contained in management's forecasts, considering the Group's structure and the potential of its operating subsidiaries to pay dividends up the group. We also obtained detailed insights and feedback from our specialists in calibrating our own additional stress-testing of management's conservative case to reflect plausible downside scenarios to trading and other sensitive inputs, including the Group's levels of customer advances and supplier credit
- We engaged specialists from EY Valuations and Business Modelling to provide assurance on the mathematical accuracy and integrity of management's models
- Our audit procedures focussed on management's forecasting process and the key assumptions used in the Directors' assessment and cash flow model, including timing and quantum of upcoming debt maturities, dividend upstreaming, production profiles, commodity prices and operating costs
- We agreed the debt facilities and arrangements available to the Group to underlying agreements and obtained external confirmation from debt providers for outstanding loan balances and the granting of waivers
- For facilities under negotiation (and therefore substantially outside of management's control), we reviewed term sheets, draft agreements and other relevant documentation to establish the status of negotiations and expected terms.
- In assessing the potential for operating subsidiaries to upstream dividends, we considered the availability of cash and distributable reserves within those entities, as well as cash leakage to minority shareholders. We evaluated the ability of the Company to enforce dividend upstreaming and took into account in our analysis regulatory restrictions on intercompany loans to the Company, where applicable
- We assessed the reasonableness of management's production profiles, by considering historic trends, recent production, capital expenditure (or deferral thereof), shutdowns, planned maintenance and the detailed insights of our local component audit teams
- We verified that management's forecast commodity prices were aligned with the most recent market consensus, incorporating the impact on prices observed as a consequence of COVID-19. We applied our own additional trading sensitivities to management's conservative case, based on our evaluation of plausible downside risks, and considered the results in reaching our conclusion on going concern
- We recalculated the Group's performance against financial covenants as at 31 March 2020 to ensure that covenant testing had been performed correctly in accordance with the Group's agreements with debtholders. We also recalculated the Group's forecast future performance under multiple scenarios to determine whether it would have headroom under its financial covenants at all covenant testing dates in the period to December 2021
- We reviewed the disclosures made in the Annual Report and Accounts, as highlighted in the above section of our opinion covering going concern.

Overview of our audit approach

Key audit matters	• Valuation of Konkola Copper Mines Plc (KCM) • Production Sharing Contract (PSC) extension for the Rajasthan block • Recoverability of property, plant & equipment and exploration & evaluation assets • Management override of controls in relation to revenue recognition • Claims and exposures relating to taxation and litigation • Undisclosed related party transactions
Audit scope	• We performed an audit of the complete financial information of nine components and audit procedures on specific balances for a further six components. • The components where we performed full or specific audit procedures accounted for 97% of EBITDA, 92% of revenue and 98% of total assets.
Materiality	• Overall Group materiality of $55m which represents approximately 2% of EBITDA.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit, and directing the efforts of the engagement team. These matters were addressed in the context of our audit of the financial statements as a whole, and in our opinion thereon, and we do not provide a separate opinion on these matters. In addition to the matters described in the basis for qualified opinion section and in the material uncertainty relating to going concern section above, we have determined the matters described below to be the key audit matters to be communicated in our report.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Valuation of Konkola Copper Mines Plc (KCM) *Refer to the Audit Committee Report; Accounting policies (note 2(c)); and Note 3(e) of the Consolidated Financial Statements* As at 31 March 2020, the carrying value of KCM related receivables was $660 million (2019: $Nil) and the	The audit procedures in relation to the fair value assessment of the equity interest and the recoverability of KCM receivables has been performed at a Group level by the Group team. **The procedures performed to address this key audit matter include:**	Based on the evidence obtained and the audit procedures performed by both the audit team and internal valuation specialists, we conclude that the fair value determined is reasonable and the uncertainties surrounding the valuation are appropriately disclosed in the financial statements.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
equity interest in KCM was $ nil (2019: $266 million) The Group has recognised a fair value loss of $771 million in respect of the receivables and the equity interest. We draw attention to note 3(e) of the accompanying IFRS financial statements which describes the uncertainty arising in respect of the valuation of KCM related receivables and equity interest, as a result of the liquidation proceedings initiated by KCM's minority shareholder ZCCM Investments Holdings Plc ("ZCCM"), against KCM. Our opinion is not modified in respect of this matter. In May 2019, the Group lost control over KCM after the appointment of a provisional liquidator following ZCCM's winding up petition. The valuation of KCM has been identified as a key audit matter due to the high level of estimation uncertainty involved when assessing the fair value of receivables and equity interests. There is uncertainty associated with the outcome and timings of the legal proceedings, as well as the counterparties' ability to make payment. An external specialist was engaged by management to carry out the fair value assessment. Due to the subjectivity and materiality of the amounts involved we have designated this as a key audit matter.	• We have obtained an understanding of the liquidation proceedings through enquiries with VRL management, VRL internal and external legal counsel. • We enquired of external legal counsel to evaluate the likelihood of KCM's success in the legal proceedings. Together with the assistance of our internal valuation specialists, we considered if the legal counsel's assessment has been appropriately factored into the external specialist's valuation. • We obtained a legal letter directly from the external legal counsel supporting their assessment of the matter. • We evaluated the independence, objectivity and competence of the external valuation specialist and external legal counsel. • We, together with our EY internal valuation specialists, critically examined the scope of work of the external valuation specialist. • We, performed procedures to assess the reasonableness of the key assumptions and inputs used in the external specialists fair value assessment, through comparison with the prior year impairment model and mine plan. • We engaged EY internal valuation specialists to consider the appropriateness of the methodology adopted by the external specialists. • Our EY internal valuation specialists compared the key assumptions used to expectations, such as discount rate, COVID 19 impact, commodity price, the	

Risk	Our response to the risk	Key observations communicated to the Audit Committee
	probability of the license renewal, the weighted probability of litigation outcome and including key risks such as the enforceability of a successful claim and the uncertainty over the timing and outcome of the legal proceedings. • We have audited the relevant disclosures in the financial statements and in particular whether those disclosures adequately described the uncertainties in relation to fair value of these assets.	
Production Sharing Contract (PSC) extension for the Rajasthan block *Refer to the Audit Committee Report; and Note 2(c)(viii) of the Consolidated Financial Statements* We draw attention to note 2(c)(viii) of the accompanying IFRS financial statements which describes the circumstances in respect of the extension of the Production Sharing Contract for the Rajasthan oil block following the demands that have been raised to the Group. Our opinion is not modified in respect of this matter. The Production Sharing Contract (PSC) for the Rajasthan block expired on 14 May 2020. The Company received a letter from the Government of India granting the extension of the PSC for 10 years, subject to the resolution of audit exceptions identified by the Directorate General of Hydrocarbons (DGH). Management has concluded, based on the facts and circumstances, including court rulings, that the PSC has in effect been extended. Were the PSC not to be extended it would have a significant and pervasive	**The procedures performed to address this key audit matter include:** • We have read the original PSC agreement, as well as the PSC letter, which grants the Group an additional ten year extension, subject to certain conditions being met; • We have inspected the high court ruling on the matter which granted the Group a ten year PSC extension; • We have inspected documentation which informed management's assessment of the likelihood of the PSC extension being granted and the likelihood of any amount being paid as a result of the DGH demands; • We have examined the communications between the Group and DGH / Ministry of petroleum and natural gas in relation to the audit exceptions; • We have inspected the initial approval of costs by the Government of India pertaining to the DGH dispute demands;	Based on the evidence obtained and the audit procedures performed we are satisfied with the current accounting treatment and relevant disclosures adopted by the Group with respect to the PSC extension.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
impact on the Group financial statements. Due to continued uncertainty surrounding the license extension we have considered this as a key audit matter.	• We have considered the adequacy of the relevant disclosures made within the financial statements to ensure that they appropriately reflect the Group's conclusion and relevant facts and circumstances.	
Recoverability of property, plant & equipment and exploration & evaluation assets Refer to the Audit Committee Report; Accounting policies 2(a) and 2(c); and Note 6 of the Consolidated Financial Statements The carrying value of property, plant and equipment ("PP&E") as at 31 March 2020 was $13,245 million (2019: $17,726 million) which includes Evaluation and Exploration ("E&E") assets amounting to $240 million (2019: $404 million).The associated DD&A charge in the year to 31 March 2020 was $1,412 million (2019: $ 1,380 million) and the impairment charge for the year ended 31 March 2020 was $ 2,072 million (2019: nil) The recoverability of PP&E and E&E assets has been identified as a key audit matter due to: • The significance of the carrying value of the assets being assessed • The size of recent impairment charges • The challenges in respect of the Group's license to operate in certain jurisdictions • The complexity and significant judgement involved in auditing the inputs used specifically for the Group's estimation of reserves and resources at its Oil & Gas division • Our assessment that the recoverable amount of the Group's Cash Generating Units ("CGUs") involves significant judgements about the future cash	These procedures were performed by the Group and component audit teams. The group team ensured consistency of approach and provided the Macroeconomic assumptions and provided oversight of the location-specific insights provided by component teams. **The procedures performed to address recoverability of property, plant & equipment and exploration & evaluation assets include:** • We have obtained an understanding of the controls over the Group's impairment process. We then evaluated the design of these controls. • Critically assessed through an analysis of internal and external factors impacting the entity, whether there were any indicators of impairment (or reversal of impairment) in line with IAS 36 for PP&E and IFRS 6 for E&E assets across the Group. • Specifically, in relation to the CGUs where impairment indicators were identified, we have obtained and evaluated the valuation models used to determine the recoverable amount by challenging the key assumptions used by management including: • Testing the integrity of the models together with their clerical accuracy.	Based on the evidence obtained and the audit procedures performed we consider that the impairment charge is fairly stated and that there are no further material impairments or impairment reversals in the Group. Based on the testing performed, we have not identified any significant errors in the oil and gas reserves estimates and concluded that the inputs and assumptions used to estimate proved reserves were reasonable. We conclude that the related disclosures as per IAS 36 and IFRS 6 are appropriately presented in the financial statements.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
flow forecasts, accentuated by commodity price volatility, and the discount rate applied We focused our efforts on those CGU's with impairment indicators. The key judgements centred on forecast production profiles/ volumes, prices and discount rate assumptions. Indicators of impairment were identified in specific CGUs within the Oil & Gas, Copper, Aluminium & Power, Steel, Zinc International, BALCO and ASI divisions. However impairments were only recognised in the businesses mentioned as per note 6 of the financial statements. ***Estimation of Reserves and Resources (Vedanta Limited Oil and Gas division)*** Auditing the estimation of reserves and resources is complex as there is significant estimation uncertainty in assessing the quantities of the Group's Oil and Gas reserves and resources. The Group relies on the work of internal and external specialists, whose modelling takes into account a number of inputs, including initial estimates of reserves and resources, subsequent production curves, production costs and prices. Judgement is required to assess the appropriateness of the estimates used.	• Compared forecasted volumes in relation to asset development plans. • Critically assessing management's forecasting accuracy by comparing prior year forecasts to actual results and assessing the potential impact of any variances. • Corroborating the price assumptions used in the models against external source data such as analyst consensus. • Testing the appropriateness of the weighted average cost of capital used to discount the impairment models through engaging our internal valuations specialists. • We have considered the adequacy of the related disclosures in the financial statements to ensure that they meet the requirements as per IAS 36. **The procedures performed to address the estimation of reserves include:** • We have obtained an understanding of the controls over the Group's reserves estimation process. We then evaluated the design of these controls. • We evaluated the professional qualifications and objectivity of both the Group's internal specialist engineers and the external specialists engaged to provide an independent reserves valuation. We also	

Risk	Our response to the risk	Key observations communicated to the Audit Committee
	evaluated the independence of the external specialist. • Our internal reserve specialist ensured our audit approach was appropriate by evaluating the design of our procedures and participating in the meeting with management external specialists. • We evaluated the completeness and accuracy of the inputs used in estimating the economic limit test for reserves determination by agreeing the inputs to source documentation. • We compared the production profiles used in the impairment calculation to the external reserve reports. • We compared the reserve estimations calculated by the Group to those provided by the independent external reserves specialist and reviewed significant discrepancies. We performed audit procedures over this risk area in twelve components (full and specific scope), which covered 98% of the risk amount.	
Management Override of controls in relation to revenue recognition For the year ended 31 March 2020 the Group recognised total revenue of $11,790 million (2019: $13,006 million). Revenue recognition has been identified as a key audit matter due to the diverse and complex revenue streams across the Group. We have identified the following key areas for consideration: • Complex calculation of power tariff agreements with Grid Corporation of Odisha	We performed our audit procedures across the Group's revenue streams considering the revenue recognition policies. Our procedures were performed mainly by the component teams under the direction and supervision of the Group audit engagement team. **The procedures performed to address this key audit matter include:** • Performed walkthroughs of the revenue recognition processes at each of the nine full and two specific scope components and considered	Based on the on the evidence obtained and the audit procedures performed we consider revenue to be fairly stated in the financial statements and appropriate disclosures made in accordance with IFRS 15.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Limited ("GRIDCO") and Punjab State Power Corporation Limited ("PSPCL"). • Complexity associated with the calculation of profit petroleum within the Vedanta Limited Oil and Gas division. • Cut-off: the variety of terms that define when title, risk and rewards are transferred to the customer, as well as the high value of the transactions, give rise to the risk that revenue is not recognised in the correct period. • Measurement: at the end of each reporting period there are a number of contracts that are either provisionally priced or subject to hedging arrangements through forward contracts. These calculations are based on estimations and susceptible to potential manipulation. The level of risk has remained consistent with the prior year.	the design effectiveness of key controls. • For the components referred to above, tested the controls, including IT controls, over the revenue recognition process to confirm operating effectiveness. • Inspected the term of all the agreements to assess the reasonability of the inputs used in the calculation of the power tariff in respect of the revenue recognised for GRIDCO and PSPCL. • Inspected the terms of all the Vedanta Oil and Gas profit sharing agreements and tested the underlying cost recovery and profit petroleum calculation used by management by comparing to the terms of the agreements. • Selected a sample of sales across the Group made pre and post year-end, agreeing the date of revenue recognition to third party support, such as bills of lading, to confirm sales are recognised according to contract conditions. • Examined invoice samples with different shipping terms to ensure that revenue has been recognised appropriately, both pre and post year end. • Re-calculated the provisional pricing adjustments and validated the prices used to third party data. • On a sample basis we recalculated sales revenues to ensure recognition is in accordance with the contract terms and rates, Group accounting manual and IFRS 15. For the zinc and lead	

<table>
<tr><th>Risk</th><th>Our response to the risk</th><th>Key observations communicated to the Audit Committee</th></tr>
<tr><td></td><td>price forwards taken out during the year we tested any resulting realised and unrealised loss, including the agreement of market forward rates used in determining the unrealised fair value loss at year end.

• We have considered the adequacy of the related disclosures in the financial statements to ensure that they are in accordance with IFRS 15.

We performed audit procedures over this risk area in eight full scope and one specific scope components, where revenue was present, covering 92% of the revenue balance impacted by this risk.</td><td></td></tr>
<tr><td>Claims and exposures relating to taxation and litigation

Refer to the Audit Committee Report; Accounting policies (note 2(b)); and Note 33 of the Consolidated Financial Statements

The Group has disclosed in note 33 contingent liabilities related to tax and legal claims amounting to $3,225 million (2019: $2,914 million) of which $2,253 million (2019: $1,827 million) relates to tax cases.

Taxation and litigation exposures have been identified as a key audit matter due to the large number of complex tax and legal claims across the Group, particularly in relation to the operations located in India.

There is significant judgment required by management in assessing the exposure of each case, and thus a risk exists that such cases may not be adequately provided for or disclosed appropriately.

There have been no significant developments during the current year</td><td>Our procedures were performed centrally where cases impacted a number of components. For location specific issues, component teams undertook the majority of the procedures under the direction and supervision of the Group audit engagement team.

The procedures performed to address this key audit matter include:

• Obtained the Group legal and tax summary and critically assessed management's position through discussions with those responsible for legal matters, tax and operational management, regarding both the probability of success in significant cases and the magnitude of any potential loss.

• Inspected external legal opinions (where considered necessary) and other evidence such as latest correspondence to corroborate management's</td><td>Based on the on the evidence obtained and the audit procedures performed we are satisfied that the accounting treatment in respect of potential tax exposures and legal cases is appropriate

We conclude that the related disclosures are appropriately presented in the financial statements.</td></tr>
</table>

Risk	Our response to the risk	Key observations communicated to the Audit Committee
regarding the ongoing tax litigations that are present within the Group. However, the Group's accounting treatment for tax exposures reflects the introduction of IFRIC 23 in the current year. We consider this risk a key audit matter because of the potential quantitative impact on the financial statements from the Group's exposures. Additionally, the treatment of taxation and litigation cases requires significant judgement due to the complexity of the cases, timescales for resolution and the need to negotiate with various authorities and other parties. The level of risk has remained consistent with the prior year.	assessment of the risk profile in respect of legal claims. • Engaged internal tax specialists to appraise technically the tax positions taken by management with respect to local tax issues. • Using our internal tax specialists ensured that management's assessment was consistent across the Group for similar cases, or that differences in positions were adequately justified. • Considered the relevant disclosures made within the financial statements to ensure they appropriately reflect the facts and circumstances of the respective tax and legal exposures, and are in accordance with the requirements of IAS 37. We performed audit procedures over this risk area in nine full scope and two specific scope components, which covered 96.5% of the risk amount.	
Undisclosed related party transactions *Refer to the Audit Committee Report and Note 35 of the Consolidated Financial Statements* The Group's complex and decentralised structure and single controlling party give rise to the risk that related party transactions are not appropriately identified and/or disclosed, in accordance with IAS 24. The challenges facing the Group, including its limited headroom on debt covenants, and the difficult economic environment heighten the risk that related party transactions are executed, but not identified and/or disclosed. Judgement is required in establishing parameters to identify potentially	These procedures were performed by the Group and component audit teams. **The procedures performed to address this key audit matter include:** • We obtained an understanding of management's processes and controls for identifying related party transactions and evaluated the effectiveness of the control environment. • We inspected bank and legal confirmations and minutes of board meetings to identify any undisclosed related parties and/or related party transactions.	We are satisfied that related party transactions are accounted for appropriately. Nothing has come to our attention which would indicate, that all required disclosures have not been included in the notes to the financial statements, in accordance with IAS 24.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
unidentified related party transactions. In addition, we invested significant time and resources in customising audit procedures and utilising data analytics to verify the completeness and accuracy of the Group's related party disclosures. Based on this, we have determined the risk of undisclosed related party transactions to be a key audit matter.	• We inspected significant contracts with related parties within the Group, including entities relating to Volcan Investments Limited ("Volcan"). • We analysed whistleblowing reports made to those charged with governance for evidence of undisclosed related parties and/or related party transactions. • We tested manual top-side adjustments, through inspection of supporting evidence such as invoices to identify any undisclosed related party transactions and evaluated the appropriateness of consolidation adjustments. • We engaged specialists in our forensics department to perform procedures customised to identify a sample of unusual transactions that might require further investigation. Data analytics was used to carry out these procedures including testing the completeness of the Group's related party disclosures. • We conducted a press coverage review to identify any indications of undisclosed related party transactions between Group entities and entities and/or individuals. • We compared Volcan debt repayments as per external sources to private debt agreements with banks to identify any undisclosed debt or collateral in relation to Group entities and Volcan. • We evaluated the Group and parent company's related party disclosures against the requirements of IAS 24.	

Risk	Our response to the risk	Key observations communicated to the Audit Committee
	We performed audit procedures over the entire Group in relation to this risk.	

In 2019, our auditor's report included two key audit matters that have not been reported as key audit matters in our 2020 report. These relate to: (1) Economic interest purchase from a related party, and (2) The recoverability of disputed receivables. We no longer consider economic interest purchase from a related party a key audit matter due to the absence of any such transaction involving the Group in the current year. We no longer consider the recoverability of disputed receivables to be a key audit matter as payment has been received against significant outstanding balances that existed in the previous year and for the balances that remain, we consider the risk to have reduced.

In the current year, we have added three key audit matters that were not reported as key audit matters in our 2019 report. These relate to: (1) Liquidation proceedings of Konkola Copper Mines Plc (KCM), (2) Production Sharing Contract (PSC) extension for the Rajasthan block, and (3) Undisclosed related party transactions.

An overview of the scope of our audit

Tailoring the scope

Our assessment of audit risk, our evaluation of materiality and our allocation of performance materiality determine our audit scope for each entity within the Group. Taken together, this enables us to form an opinion on the consolidated financial statements. We take into account size, risk profile, the organisation of the Group and effectiveness of Group wide controls, changes in the business environment and other factors such as recent internal audit results when assessing the level of work to be performed at each entity.

The Group has decentralised processes and controls over the key areas of our audit focus with responsibility lying with component management for the majority of estimation processes and significant risk areas. We have tailored our audit response accordingly and thus for the majority of our focus areas, audit procedures were undertaken by the component and Group audit teams.

In assessing the risk of material misstatement to the Group financial statements, and to ensure we had adequate quantitative coverage of significant accounts in the financial statements, we selected, from the 57 reporting components of the Group, 17 components covering entities within India, South Africa and the United Kingdom. These components represent the principal business units within the Group.

Of the 17 components selected, we performed an audit of the complete financial information of 9 components ("full scope components") which were selected based on their size or risk characteristics. For 6 "specific scope components", we performed audit procedures on specific accounts within that component that we considered had the potential for the greatest impact on the significant accounts in the financial statements either because of the size of these accounts or their risk profile. For 1 component, procedures were performed at the component level that were specified by the Group engagement team in response to specific risk factors. For the remaining component review procedures were performed.

The reporting components where we performed audit procedures accounted for 97% (2019: 96%) of the Group's EBITDA, 92% (2019: 94%) of the Group's revenue and 98% (2019: 97%) of the Group's total assets. For the current year, the full scope components contributed 91% (2019: 93%) of the Group's EBITDA, 88% (2019: 90%) of the Group's revenue and 80% (2019: 90%) of the Group's total assets. The specific scope components contributed 7% (2019: 3%) of the Group's EBITDA, 4% (2019: 4%) of the Group's revenue and 18% (2019: 7%) of the Group's total assets. The decrease in total assets covered by full-scope procedures and the increase covered by specific scope procedures is due to the change in our scoping of the Vedanta Iron Ore division from full-scope in the prior year to specific scope in the current year. The audit scope of these components may not have included testing of all significant accounts of the component but will have contributed to the coverage of the specified significant accounts tested for the Group. We also instructed 1 component team to perform specified procedures over the recoverability of property, plant and equipment at ASI, a subsidiary of the Group, as described in the Risk section above.

Of the remaining 40 components that together represent 3% of the Group's EBITDA, none are individually greater than 2% of the Group's EBITDA. For these components, we performed other procedures, including analytical reviews, testing of consolidation adjustments and intercompany eliminations to respond to any potential risks of material misstatement to the Group financial statements.

We have obtained an understanding of the entity level controls of the Group as a whole, which assisted us in identifying and assessing risks of material misstatement due to fraud or error, as well as assisting us in determining the most appropriate audit strategy.

Changes from the prior year
In the current year, the scoping for Electrosteel Steels Limited has changed from specific scope to full scope. This primarily reflects the increasing contribution to Group EBITDA made by the business, according to which it has become significant due to size and risk. Vedanta Limited Power has changed from a full scope to a specific scope component for receivables, PP&E and tax as a result of the division's decreased contribution to the Group's EBITDA. The focus remains on these accounts, which we have judged to be significant based on risk. As a result of the continued shutdown of most of its business and consequently its limited contributions to the Group's metrics, Vedanta Limited Iron Ore has been reclassified from a full scope to a specific scope component for revenue, purchases, payables, receivables, PP&E and tax. These accounts reflect the areas we have assessed to be significant based on risk at the entity.

Integrated team structure
The overall audit strategy is determined by the Senior Statutory Auditor, Richard Addison. Whilst the Senior Statutory Auditor is based in the UK, the Group audit team functions as an integrated team with members from both the UK and India working together throughout the audit process. The team's composition reflects the fact that Group management and operations are concentrated in India. During this year's audit cycle, the Senior Statutory Auditor made two visits to India; a final planned visit to India at the end of the financial year was cancelled due to travel restrictions imposed as a result of COVID-19 (see COVID 19 Group team response, below). The Senior Statutory Auditor used his time in India to review the areas of significant risk and judgement in the audit and to hold discussions with India-based members of the Group audit team, and met with key representatives of the Indian component audit teams for certain full scope components to discuss the audit approach. While in India the Senior Statutory Auditor also used his time to attend a component specific full day workshop directly with component management, detailed discussions with the heads of various business functions as well as meetings with Group management.

Involvement with component teams
It was concluded that audit procedures on nine full scope components would be performed directly by the component audit teams and the procedures on one full scope component, the parent company, would be performed by the Group audit team. For the five specific scope components and one review scope component, where the work was performed by component auditors, the Group audit team

determined the appropriate level of involvement to enable it to determine that sufficient, appropriate audit evidence had been obtained as a basis for its opinion on the Group as a whole.

The Group audit team shared detailed instructions with all component teams. These instructions covered the significant areas that were to be addressed by the component teams (which included the relative risks of material misstatement detailed above) and set out the information to be reported back to the Group audit team. As a result of COVID-19 the Group audit team and Senior Statutory auditor were unable to carry out site visits to any operational sites as initially planned, however alternative procedures as detailed below, were performed. As noted above, the UK-based members of the Group audit team made two visits to component teams in India during the current year. These visits involved key members of the Group audit team meeting with component teams to discuss and direct their planned audit approach, holding meetings with local management and reviewing procedures performed to date on Group risk areas. A final visit to India at the end of the Group's financial year was cancelled due to travel restrictions imposed in response to COVID-19.

COVID 19 Group audit team response

As a result of the COVID pandemic the Group audit team were unable to perform a final year end visit to India and carry out a rotational operational site visit as initially planned. The component audit teams were unable to adequately observe the year end stock count, as detailed above.

In order to compensate for the Group team's lack of physical presence in India and the ability to perform the planned site visit, the following compensating procedures were performed:

- The Group audit team was in ongoing communication, including planning and closing calls and video conferences, with all in-scope component teams. The Group team were able to perform a remote review of the components audit working papers and audit files (facilitated by the EY electronic audit file platform) and maintained responsibility for the scope and direction of the audit process. Group oversight included follow up of queries through on going communication facilitated by the use of technology.

- Component teams, including India based partners of the integrated Group team, conducted site visits at various points during the year, the details of which have been shared with the Group team. During one of the India trips the Senior Statutory Auditor attended a full day workshop with executive management of the Oil and Gas division.

- There was no decrease in the extent of interactions with Group management and the heads of relevant business functions and the quality of these meetings was maintained through the use of video conferencing.

The above gave us appropriate evidence for our opinion on the Group financial statements.

Our application of materiality

We apply the concept of materiality in planning and performing the audit, in evaluating the effect of identified misstatements on the audit and in forming our audit opinion.

Materiality
The magnitude of an omission or misstatement that, individually or in the aggregate, could reasonably be expected to influence the economic decisions of the users of the financial statements. Materiality provides a basis for determining the nature and extent of our audit procedures.

We determined our preliminary materiality for the Group to be $55 million (2019: $68 million), which was approximately 2% (2019: 2%) of forecasted EBITDA. We believe that EBITDA provides us with an earnings-based measure that is significant to users of the financial statements; EBITDA is a key performance indicator for the Group and is also a key metric used by the Group in assessing management's performance. Market and analyst commentary on the performance of the Group uses EBITDA as a key metric. In addition, external lenders use the measure to assess the Group's compliance with key restrictive covenants on its borrowings. The decrease in materiality relative to the previous year was due to a decline in Group EBITDA, which for the current year was $3,003 million (2019: $3,457 million).

We determined materiality for the Parent Company to be $17.56 million (2019: $14.86 million), which is 1% (2019: 1%) of Equity.

During the course of our audit, we reassessed our preliminary materiality in the context of the Group's performance. We noted that actual Group EBITDA was in excess of the EBITDA used in our original materiality assessment, however we have conducted our audit using the lower materiality as originally determined.

Performance materiality
The application of materiality at the individual account or balance level. It is set at an amount to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds materiality.

We set performance materiality at 50% (2019: 50%) of our planning materiality, namely $27m (2019: $35m). This was based on our overall risk assessment of the audit, our assessment of the Group's control environment and the number, size and nature of individual misstatements (corrected and uncorrected) identified in prior periods.

Audit work at component locations for the purpose of obtaining audit coverage over significant financial statement accounts is undertaken based on a percentage of total performance materiality. The performance materiality set for each component is based on the relative scale and risk of the component to the Group as a whole and our assessment of the risk of misstatement at that component. In the current year, the range of performance materiality allocated to components was $4.1m to $16.4m (2019: $6.7m to $20.1m).

Reporting threshold
An amount below which identified misstatements are considered as being clearly trivial.

We agreed with the Audit Committee that we would report to them all uncorrected audit differences in excess of $2.7m (2019: $3.4m), which is set at 5% of planning materiality, as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds.

We evaluate any uncorrected misstatements against both the quantitative measures of materiality discussed above and in light of other relevant qualitative considerations in forming our opinion.

Other information

The other information comprises the information included in the annual report, other than the financial statements and our auditor's report thereon. The directors are responsible for the other information.

Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in this report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of the other information, we are required to report that fact.

As described in the basis for qualified opinion section of our report, we were unable to satisfy ourselves concerning the inventory quantities of $1,515 million held at 31st March,2020. We have concluded that where the other information refers to the inventory balance or related balances such as cost of sales, it may be materially misstated for the same reason.

Qualified opinions on other matters prescribed by the Companies Act 2006

Except for the possible effects of the matter described in the basis for qualified opinion section of our report, in our opinion, based on the work undertaken in the course of the audit:

- the information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the strategic report and directors' report have been prepared in accordance with applicable legal requirements.

Matters on which we are required to report by exception

Except for the matter described in the basis for qualified opinion section of our report, in the light of the knowledge and understanding of the Group and the parent company and its environment obtained in the course of the audit, we have not identified material misstatements in the strategic report or the directors' report.

Arising solely from the limitation on the scope of our work relating to inventory, referred to above:
• we have not obtained all the information and explanations that we considered necessary for the purpose of our audit; and
• we were unable to determine whether adequate accounting records have been kept.
We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion:

- returns adequate for our audit have not been received from branches not visited by us; or
- the parent company financial are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made.

Responsibilities of directors

As explained more fully in the directors' responsibilities statement set out on page 118 and 119, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group and parent company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or the parent company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at https://www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Use of our report

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Richard Addison (Senior Statutory Auditor)
for and on behalf of Ernst & Young LLP, Statutory Auditor
London
10 August 2020

CONSOLIDATED INCOME STATEMENT

(US$ million)

		Year ended 31 March 2020			Year ended 31 March 2019 (Restated)*		
	Note	Before Special items	Special items (Note 6)	Total	Before Special items	Special items (Note 6)	Total
Revenue	5	11,790	-	11,790	13,006	-	13,006
Cost of sales		(9,611)	24	(9,587)	(10,451)	-	(10,451)
Gross profit		**2,179**	**24**	**2,203**	**2,555**	**-**	**2,555**
Other operating income		142	-	142	225	-	225
Distribution costs		(257)	-	(257)	(244)	-	(244)
Administrative expenses		(473)	(17)	(490)	(460)	-	(460)
Impairment (charge)/reversal [net]	6	-	(2,072)	(2,072)	-	38	38
Operating profit/ (loss)		**1,591**	**(2,065)**	**(474)**	**2,076**	**38**	**2,114**
Investment revenue	7	382	12	394	533	-	533
Finance costs	8	(1,179)	-	(1,179)	(1,213)	9	(1,204)
Other gains and (losses) [net]	9	(87)	-	(87)	(75)	-	(75)
Profit/ (loss) before taxation from continuing operations (a)		**707**	**(2,053)**	**(1,346)**	**1,321**	**47**	**1,368**
Net (expense)/tax credit (b)	11	**(411)**	**781**	**370**	**(595)**	**(16)**	**(611)**
Profit/ (loss) for the year from continuing operations (a+b)		**296**	**(1,272)**	**(976)**	**726**	**31**	**757**
Loss after tax for the year from discontinued operations	3(e)	-	(771)	(771)		(333)	(333)
Profit/ (loss) for the year		**296**	**(2,043)**	**(1,747)**	**726**	**(302)**	**424**
Attributable to:							
Equity holders of the parent		(202)	(1,366)	(1,568)	11	(248)	(237)
Non-controlling interests		498	(677)	(179)	715	(54)	661
Profit/ (loss) for the year		**296**	**(2,043)**	**(1,747)**	**726**	**(302)**	**424**

* ***Restated refer Note 1(b)***

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

(US$ million)

	Year ended 31 March 2020	Year ended 31 March 2019*
(Loss)/ Profit for the year	**(1,747)**	**424**
Items that will not be reclassified subsequently to income statement:		
Remeasurement of net defined benefit plans (note 27)	(30)	(6)
Tax effects on net defined benefit plans	10	4
Loss on fair value of financial asset investment	(10)	(6)
Total (a)	**(30)**	**(8)**
Items that may be reclassified subsequently to income statement:		
Exchange differences arising on translation of foreign operations	(652)	(608)
Gains of cash flow hedges recognized during the year	18	16
Tax effects arising on cash flow hedges	(6)	(7)
Gains on cash flow hedges recycled to income statement	(4)	(28)
Tax effects arising on cash flow hedges recycled to income statement	2	9
Total (b)	**(642)**	**(618)**
Other comprehensive loss for the year (a+b)	**(672)**	**(626)**
Total comprehensive loss for the year	**(2,419)**	**(202)**
Attributable to:		
Equity holders of the parent	(1,802)	(484)
Non-controlling interests	(617)	282
Total comprehensive loss for the year	**(2,419)**	**(202)**

* *Restated refer Note 1(b)*

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(US$ million)

	Note	As at 31 March 2020	As at 31 March 2019
Assets			
Non-current assets			
Goodwill	14	12	12
Intangible assets	15	100	108
Property, plant and equipment	16	13,005	17,322
Exploration and evaluation assets	16	240	404
Leasehold land		-	63
Financial asset investments	17	12	707
Non-current tax assets	11(d)	354	504
Other non-current assets	18	1,548	1,010
Financial Instruments (derivatives)	25	0	-
Deferred tax assets	11(c)	1,114	778
		16,385	**20,908**
Current assets			
Inventories	19	1,515	2,060
Trade and other receivables	18	1,102	1,504
Financial instruments (derivatives)	25	93	11
Current tax assets		1	1
Short-term investments	20	4,385	4,164
Cash and cash equivalents	21	705	1,133
		7,801	**8,873**
Total assets		**24,186**	**29,781**
Liabilities			
Current liabilities			
Borrowings	22(a)	10,186	5,456
Trade and other payables	24	5,719	6,878
Financial instruments (derivatives)	25	13	66
Retirement benefits	27	15	17
Provisions	26	32	38
Current tax liabilities		26	61
		15,991	**12,516**
Net current liabilities		**(8,190)**	**(3,643)**
Non-current liabilities			
Borrowings	22(a)	4,909	10,524
Trade and other payables	24	232	244
Financial instruments (derivatives)	25	6	14
Deferred tax liabilities	11(c)	397	776
Retirement benefits	27	22	71
Provisions	26	356	371
Non equity non-controlling interests	23	-	12
		5,922	**12,012**
Total liabilities		**21,913**	**24,528**
Net assets		**2,273**	**5,253**
Equity			
Share capital	30	29	29
Share premium		202	202
Hedging reserve		(95)	(98)
Other reserves		(331)	(97)
Retained earnings		(3,068)	(964)
Equity attributable to equity holders of the parent		**(3,263)**	**(928)**
Non-controlling interests	31	5,536	**6,181**
Total equity		**2,273**	**5,253**

Financial Statements of Vedanta Resources Limited (formerly Vedanta Resources plc) with registration number 4740415 were approved by the Board of Directors on 10 August 2020 and signed on their behalf by

Navin Agarwal

Director

CONSOLIDATED CASH FLOW STATEMENT

(US$ million)

	Note	Year ended 31 March 2020	Year ended 31 March 2019*
Operating activities			
Profit/(Loss) before taxation from continuing operations		(1,346)	1,368
Adjustments for:			
Depreciation and amortisation		1,412	1,380
Investment revenues		(394)	(533)
Finance costs		1,179	1,204
Other (gains) and losses (net)		87	75
Loss on disposal of PP&E		8	9
Write-off of unsuccessful exploration costs		-	7
Share-based payment charge		10	18
Impairment charge/ (reversal) (net)		2,072	(38)
Other special items		(7)	-
Operating cash flows before movements in working capital		**3,021**	**3,490**
Decrease/ (Increase) in inventories		292	(67)
Increase in receivables		(713)	(421)
Increase in payables		352	767
Cash generated from operations		**2,952**	**3,769**
Dividend received		2	6
Interest received		130	159
Interest paid		(1,136)	(1,237)
Income taxes paid (net of refunds)		(165)	(547)
Dividends paid		(536)	(113)
Cash Flows from operating activities (Continuing activities)		**1,247**	**2,037**
Net cash from Operating Activities (Discontinued operations)		3	(153)
Net cash inflow from operating activities		**1,250**	**1,884**
Cash flows from investing activities			
Consideration paid for business acquisition (net of cash and cash equivalents acquired)	3(b)	(5)	(752)
Purchases of property, plant and equipment, intangibles, exploration and evaluation assets		(1,104)	(1,291)
Proceeds on disposal of property, plant and equipment, intangibles, exploration and evaluation assets		21	18
Proceeds from redemption of short-term investments	22(b)	15,178	12,588
Purchases of short-term investments	22(b)	(15,460)	(11,949)
Proceeds from sale of financial asset investments	22(b)	428	-
Payments toward financial asset investments	22(b)	(63)	(254)
Amount paid against guarantees issued on behalf of KCM		(251)	-
Reduction in cash and cash equivalents from discontinued operations		(1)	-
Cash Flows from investing activities (Continuing activities)		**(1,257)**	**(1,640)**
Net cash from Investing Activities (Discontinued operations)		(4)	(35)
Net cash (used in) investing activities		**(1,261)**	**(1,675)**
Cash flows from financing activities			
Issue of ordinary shares		-	1
Payment for acquiring non-controlling interest		(15)	-
Dividends paid to non-controlling interests of subsidiaries		(101)	(1,028)
Share purchase by subsidiary		-	(21)
Sale of treasury shares		-	19
Exercise of stock options in subsidiary		0	1
Repayment of working capital loan (net)	22(b)	(1,604)	(90)
Proceeds from other short-term borrowings	22(b)	317	1,324
Repayment of other short-term borrowings	22(b)	(551)	(2,296)
Proceeds from long-term borrowings	22(b)	4,294	2,856
Repayment of long-term borrowings	22(b)	(2,650)	(370)
Payment of lease liabilities		(45)	-
Cash Flows from financing activities (Continuing activities)		(355)	396
Net cash from Financing Activities (Discontinued operations)		-	(229)
Net cash (used in)/ from financing activities		**(355)**	**167**
Net (decrease)/ increase in cash and cash equivalents		**(366)**	**376**
Effect of foreign exchange rate changes		(62)	(42)
Cash and cash equivalents at beginning of the year		**1,133**	**799**
Cash and cash equivalents at end of the year	**21 & 22(b)**	**705**	**1,133**

**Restated, refer note 1(b)*

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the year ended 31 March 2020

(US$ million)

	Attributable to equity holders of the parent							
	Share capital (Note 30)	**Share premium**	**Hedging reserve**	**Other reserves[1]**	**Retained earnings**	**Total**	**Non-controlling Interests**	**Total equity**
At 1 April 2019	**29**	**202**	**(98)**	**(97)**	**(964)**	**(928)**	**6,181**	**5,253**
Loss for the year	-	-	-	-	(1,568)	(1,568)	(179)	(1,747)
Other comprehensive income/ (loss) for the year	-	-	3	(237)	-	(234)	(438)	(672)
Total comprehensive income/(loss) for the year	**-**	**-**	**3**	**(237)**	**(1,568)**	**(1,802)**	**(617)**	**(2,419)**
Transfers	-	-	-	(14)	14	-	-	-
Dividends paid/ payable (note 13)	-	-	-	-	(537)	(537)	(101)	(638)
Derecognition of Non-controlling interest pertaining to KCM (refer note 3(e))	-	-	-	-	-	-	86	86
Acquisition of Non-controlling interest of ESL	-	-	-	17	-	17	(33)	(16)
Change in fair value of put option liability/conversion option asset/derecognition of non controlling interest	-	-	-	-	(16)	(16)	12	(4)
Other changes in non-controlling interests[2]	-	-	-	-	3	3	8	11
At 31 March 2020	**29**	**202**	**(95)**	**(331)**	**(3,068)**	**(3,263)**	**5,536**	**2,273**

1. Other reserves comprise the currency translation reserve, merger reserve, investment revaluation reserve, debenture redemption reserve, capital redemption reserve and the general reserves established in the statutory accounts of the Group's subsidiaries.

2. Includes share based payment charge by subsidiaries and exercise of stock options of subsidiary

For the year ended 31 March 2019

(US$ million)

	Attributable to equity holders of the parent									
	Share capital (Note 30)	**Share premium**	**Treasury Shares**	**Share-based payment reserves**	**Hedging reserve**	**Other reserves[1]**	**Retained earnings**	**Total**	**Non-controlling Interests**	**Total equity**
At 1 April 2018	**30**	**202**	**(558)**	**13**	**(93)**	**155**	**(79)**	**(330)**	**6,870**	**6,540**
Profit/(loss) for the year	-	-	-	-	-	-	(237)	(237)	661	424
Other comprehensive loss for the year	-	-	-	-	(5)	(242)	-	(247)	(379)	(626)
Total comprehensive income/(loss) for the year	**-**	**-**	**-**	**-**	**(5)**	**(242)**	**(237)**	**(484)**	**282**	**(202)**
Transfers	-	-	-	-	-	(10)	10	-	-	-
Dividends paid (note 13)	-	-	-	-	-	-	(113)	(113)	(1,008)	(1,121)
Sale/cancellation of treasury shares	(2)	-	557	-	-	-	(536)	19	-	19
Exercise of stock options	1	-	1	(19)	-	-	18	1	-	1
Recognition of share-based payment	-	-	-	6	-	-	-	6	-	6
Non-controlling interest on business combination	-	-	-	-	-	-	-	-	29	29
Change in fair value of put option liability/conversion option asset/derecognition of non controlling interest	-	-	-	-	-	-	(15)	(15)	5	(10)
Other changes in non-controlling interests[2]	-	-	-	-	-	-	(12)	(12)	3	(9)
At 31 March 2019	**29**	**202**	**-**	**-**	**(98)**	**(97)**	**(964)**	**(928)**	**6,181**	**5,253**

1. Other reserves comprise the currency translation reserve, merger reserve, investment revaluation reserve, debenture redemption reserve, capital redemption reserve and the general reserves established in the statutory accounts of the Group's subsidiaries.

2. Includes purchase of shares by Vedanta Limited through ESOP trust for its stock options and share based payment charge by subsidiaries.

OTHER RESERVES COMPRISE

(US$ million)

	Currency translation reserve	Merger reserve[(2)]	Financial asset investment revaluation reserve	Capital Reserve	Other reserves[(3)]	Total
At 1 April 2018	**(2,142)**	**4**	**14**	**12**	**2,267**	**155**
Exchange differences on translation of foreign operations	(238)	-	-	-	-	(238)
Loss on fair value of financial asset investments	-	-	(3)	-	-	(3)
Remeasurements	-	-	-	-	(1)	(1)
Transfer from/(to) retained earnings[(1)]	-	-	-	-	(10)	(10)
At 1 April 2019	**(2,380)**	**4**	**11**	**12**	**2,256**	**(97)**
Exchange differences on translation of foreign operations	(225)	-	-	-	-	(225)
Loss on fair value of financial asset investments	-	-	(5)	-	-	(5)
Remeasurements	-	-	-	-	(7)	(7)
Acquisition of Non-controlling interest of ESL	-	-	-	17	-	17
Transfer from/(to) retained earnings[(1)]	-	-	-	-	(14)	(14)
At 31 March 2020	**(2,605)**	**4**	**6**	**29**	**2,235**	**(331)**

(1) *Transfer to other reserve during the year ended 31 March 20 includes withdrawal of US$ 14 million from debenture redemption reserve (31 March 2019: US$ 12 million of debenture redemption reserve).*

(2) *The merger reserve arose on incorporation of the Company during the year ended 31 March 2004. The investment in Twin Star had a carrying amount value of US$ 20 million in the accounts of Volcan. As required by the Companies Act 1985, Section 132, upon issue of 156,000,000 Ordinary shares to Volcan, Twin Star's issued share capital and share premium account have been eliminated and a merger reserve of US$4 million arose, being the difference between the carrying value of the investment in Twin Star in Volcan's accounts and the nominal value of the shares issued to Volcan.*

(3) *Other reserves includes legal reserves of US$ 4 million (31 March 2019: US$ 4 million), debenture redemption reserve of US$ 130 million (31 March 2019 US$ 144 million) and balance mainly includes general reserve and capital redemption reserve. Debenture redemption reserve is required to be created under the Indian Companies Act from annual profits until such debentures are redeemed. Legal reserve is required to be created by Fujairah Gold by appropriation of 10 % of profits each year until the balance reaches 50% of the paid up share capital. This reserve is not available for distribution except in circumstances stipulated by the Articles of Incorporation. Under the erstwhile Indian Companies Act, 1956, general reserve was created in relation to Group's Indian subsidiaries through an annual transfer of net income to general reserve at a specified percentage in accordance with applicable regulations. The purpose of these transfers is to ensure that the total dividend distribution is less than total distributable reserves for that year. The said requirement was dispensed with w.e.f. 1 April 2013 and there are no restrictions of use of these reserves.*

Group Overview

Vedanta Resources Limited ((“Vedanta” or “VRL” or “Company”) formerly known as Vedanta Resources plc or “VRPLC”) is a company incorporated and domiciled in the United Kingdom. Registered address of the company is 8th Floor, 20 Farringdon Street, London, EC4A 4AB. Vedanta and its consolidated subsidiaries (collectively, the “Group”) is a diversified natural resource group engaged in exploring, extracting and processing minerals and oil and gas. The Group engages in the exploration, production and sale of zinc, lead, silver, copper, aluminium, iron ore and oil & gas and have a presence across India, South Africa, Namibia, Ireland, Australia, Liberia and UAE. The Group is also in the business of commercial power generation, steel manufacturing and port operations in India and manufacturing of glass substrate in South Korea and Taiwan.

Buy back and delisting of Vedanta Resources plc Shares

On 31 July 2018, Volcan Investments (“Volcan”) and Vedanta announced that they had reached agreement on the terms of a recommended cash offer (the "Offer") by Volcan for the remaining issued and to-be-issued share capital of Vedanta not currently owned by Volcan.

The Volcan Offer was declared unconditional in all respects on 03 September 2018 and Volcan announced that Vedanta had applied for its shares to be cancelled from listing on the Official List of the UK Listing Authority and to trading on the main market for listed securities of the London Stock Exchange, such cancellation took effect on 01 October 2018.

At the General Meeting of Vedanta shareholders held on 01 October 2018, the resolution put to shareholders in relation to the re-registration of VRPlc as a private limited company was duly passed on a poll. Re-registration of VRPlc as a private limited company became effective on 29 October 2018 pursuant to which the name has been changed to Vedanta Resources Limited.

Following the delisting of the Company’s shares from the Official list of the London Stock Exchange, 6,904,995 ordinary shares of US 10 Cents each, which were issued on the conversion of certain convertible bonds issued by one of Vedanta's subsidiaries and held through a global depositary receipt (GDR), were redeemed and the GDR listing was cancelled.

Details of Group’s various businesses are as follows.

- Zinc India business is owned and operated by Hindustan Zinc Limited (“HZL”).
- Zinc international business is comprised of Skorpion mine and refinery in Namibia operated through THL Zinc Namibia Holdings (Proprietary) Limited (“Skorpion”), Lisheen mine in Ireland operated through Vedanta Lisheen Holdings Limited (“Lisheen”) (Lisheen mine ceased operations in December 2015) and Black Mountain Mining (Proprietary) Limited (“BMM”), whose assets include the operational Black Mountain mine and the Gamsberg mine located in South Africa.
- The Group’s oil and gas business is owned and operated by Vedanta Limited and its subsidiary, Cairn Energy Hydrocarbons Limited and consists of exploration, development and production of oil and gas.
- The Group’s iron ore business is owned by Vedanta Limited, and by two wholly owned subsidiaries of Vedanta Ltd. i.e. Sesa Resources Limited and Sesa Mining Corporation Limited and consists of exploration, mining and processing of iron ore, pig iron and metallurgical coke and generation of power for captive use. Pursuant to Honourable Supreme Court order, operations in the state of Goa are currently suspended. The Group’s iron ore business includes Western Cluster Limited (“WCL”) in Liberia which has iron ore assets and is wholly owned by the Group. WCL’s assets include development rights to Western Cluster and a network of iron ore deposits in West Africa. WCL’s assets have been fully impaired.

- The Group's copper business comprises three operations divided into two segments, namely (i) Copper India/Australia, comprising Vedanta Limited's custom smelting operations in India (including captive power plants at Tuticorin in Southern India) and (ii) Copper Zambia comprising Konkola Copper Mines plc's ("KCM") mining and smelting operations in Zambia. Due to the ongoing litigations in relation to the Zambian operations, the Group believes that it has lost control over KCM and has accordingly deconsolidated the same (refer note 3(b)(iii) for further details).

  The Group's copper business in India has received an order from Tamil Nadu Pollution Control Board ("TNPCB") on 09 April 2018, rejecting the Group's application for renewal of consent to operate under the Air and Water Acts for the 400,000 tpa copper smelter plant in Tuticorin for want of further clarification and consequently the operations were suspended. The Group has filed an appeal with TNPCB Appellate authority against the said order. During the pendency of the appeal, TNPCB through its order dated 23 May 2018 ordered for disconnection of electricity supply and closure of our copper smelter plant. Post such order, the state government on 28 May 2018 ordered the permanent closure of the plant. (Refer Note 3(a)(vii))

  In addition, the Group owns and operates the Mt. Lyell copper mine in Tasmania, Australia through its subsidiary, CMT and a precious metal refinery and copper rod plant in Fujairah, UAE through its subsidiary Fujairah Gold FZC. The operations of Mt Lyell copper mine were suspended in January 2014 following a mud slide incident and were put into care and maintenance since 09 July 2014 following a rock fall incident in June 2014.
- The Group's Aluminium business is owned and operated by Vedanta Limited and by Bharat Aluminium Company Limited ("BALCO"). The aluminium operations include a refinery and captive power plant at Lanjigarh and a smelter and captive power plants at Jharsuguda both situated in the State of Odisha in India. BALCO's partially integrated aluminium operations are comprised of two bauxite mines, captive power plants, smelting and fabrication facilities in central India.
- The Group's power business is owned and operated by Vedanta Limited, BALCO, and Talwandi Sabo Power Limited ("TSPL"), a wholly owned subsidiary of Vedanta Limited, which are engaged in the power generation business in India. Vedanta Limited power operations include a thermal coal- based commercial power facility of 600 MW at Jharsuguda in the State of Odisha in Eastern India. BALCO power operations included 600 MW (2 units of 300 MW each) thermal coal-based power plant at Korba, of which a unit of 300 MW was converted to be used for captive consumption vide order from Central Electricity Regulatory Commission (CERC) dated 01 January 2019. Talwandi Sabo Power Limited ("TSPL") power operations include 1,980 MW (three units of 660 MW each) thermal coal- based commercial power facilities. Power business also includes the wind power plants commissioned by HZL and a power plant at MALCO Energy Limited ("MEL") (under care and maintenance) situated at Mettur Dam in State of Tamil Nadu in southern India.
- The Group's other activities include Electrosteel Steels Limited ("ESL") acquired on 04 June 2018. ESL is engaged in the manufacturing and supply of billets, TMT bars, wire rods and ductile iron pipes in India.

The Group's other activities also include Vizag General Cargo Berth Private Limited ("VGCB") and Maritime Ventures Private Limited ("MVPL"). Vizag port project includes mechanization of coal handling facilities and upgradation of general cargo berth for handling coal at the outer harbour of Visakhapatnam Port on the east coast of India. VGCB commenced operations in the fourth quarter of fiscal year 2013. MVPL is engaged in the business of rendering logistics and other allied services inter alia rendering stevedoring, and other allied services in ports and other allied sectors. The Group's other activities also include AvanStrate Inc. ("ASI"). ASI is involved in manufacturing of glass substrate in South Korea and Taiwan.

NOTES TO THE FINANCIAL STATEMENTS

1. Basis of preparation and basis of measurement of financial statements

a) Basis of preparation

The consolidated financial statements have been prepared in accordance with those parts of the Companies Act 2006 applicable to companies reporting under International Financial Reporting Standards (IFRS) and IFRS as adopted by the European Union and related interpretations.

These financial statements have been prepared in accordance with the accounting policies, set out below and were consistently applied to all periods presented unless otherwise stated.

These financial statements are approved for issue by the Board of Directors on 10 August 2020.

These financial statements are presented in US dollars being the functional currency of the Company and all values are rounded off to the nearest million except when indicated otherwise. Amounts less than US$ 0.5 million have been presented as "0".

b) Restatement/Reclassification

Due to the ongoing litigation with respect to the Zambian operations, it has been classified as discontinued operations from the current year in accordance with IFRS 5. Consequently, the figures of previous year of the Zambian operations in the Consolidated Income Statement, Cash Flow statement and the corresponding notes have been restated. The profit/ (loss) after tax from discontinued operations and Cash flows from discontinued operations have been disclosed separately in the respective statements. Refer note 3(e) for further details.

c) Basis of Measurement

The consolidated financial statements have been prepared using historical cost convention and on an accrual method of accounting, except for certain financial assets and liabilities which are measured at fair value as explained in the accounting policies below.

d) Going concern

Introduction
The Group has prepared the consolidated financial statements on a going concern basis. The Directors have considered a number of factors in concluding on their going concern assessment.

The developments surrounding the Covid-19 virus have had a profound impact on the operational and financial performance of the Group. There is inherent uncertainty as to the short- and medium-term effects of the virus and the situation evolves on a daily basis. The virus and associated uncertainty have therefore had a significant impact on the Directors' assessment of the ability of the Group and Company to continue as a going concern.

The Group monitors and manages its funding position and liquidity requirements throughout the year and routinely forecasts its future cash flows and financial position. The key assumptions for these forecasts include production profiles, commodity prices and financing activities. The Directors are confident that the Group will be able to ensure production is not materially impacted by the COVID-19 virus, that the Group will be able to roll-over or obtain external financing as required and that prices will remain within their expected range. The Directors have considered the Group's ability to continue as a going concern in the period to 31 December 2021 ("the going concern period") under both a base case and a downside case.

The downside case assumes, amongst other sensitivities, a decrease in key commodity prices, delayed ramp-up and re-opening of projects, nil receipt or rollover of uncommitted financing and additional capex.

Payment of dividends by the Company to its parent companies could affect the above going concern cases. The forecasts on which the going concern assumption is based include dividends of $150m from the Company to its parent companies but such dividends would not be paid, unless it is determined that, at a minimum, there were available legally distributable reserves, borrowings and other undertakings were not placed at risk and the going concern conclusion were not affected.

Material uncertainties

The liquidity and covenant compliance considerations described below constitute material uncertainties which may cast significant doubt on the Group and Company's ability to continue as a going concern. The financial statements do not contain the adjustments that would result if the company was unable to continue as a going concern.

Under the downside case, the Company is forecast to have a funding shortfall in the order of $2.5bn within the going concern period. The Group's ability to support the Company's funding requirements is dependent on rollover of existing facilities and access to further financing. Execution of these facilities is not wholly within management's control and this therefore creates material uncertainties, as detailed further below.

In addition, the Company was in breach of a financial covenant as at 31 March 2020, for which it has secured the necessary covenant waivers and relaxations. However, the Company remains subject to financial covenants and, under the downside case, is forecast to require further covenant waivers or relaxation of its financial covenants for periods subsequent to 31 March 2021. Receipt of these waivers or relaxations is not wholly within management's control and this therefore creates an additional material uncertainty, as detailed further below.

- **Liquidity**

  The Group is required to make repayments under its financing arrangements as its obligations fall due. Within the 21-month going concern period, the Group has scheduled debt repayments of c.$6.6bn, of which c.$2.2bn are repayments to be made by the Company. Due to leakage to minority shareholders, the financial support required from the Group's operating subsidiaries to the Company may create a funding shortfall at the operating subsidiaries in the order of $1bn. This shortfall could be increased by in excess of $2bn were additional sensitivities to be applied to the downside case's EBITDA forecasts and to such assumptions as supplier credit and customer advances.

  Management intends to reduce the extent of dividends required from subsidiaries by extending an additional intercompany loan from an operating subsidiary to the Company. In addition, management plans to resolve the forecast liquidity shortfall at operating subsidiary level through execution of term loans amounting to $1.6bn, combined with rollover of short-term uncommitted financing and additional financing arrangements, as described below. Although management has a high degree of confidence that these financing arrangements will be concluded, they are not currently legally committed and are therefore subject to uncertainty.

- **Covenant Compliance**

The Group's financing facilities, including bank loans and bonds, contain covenants requiring the Group to maintain specified financial ratios. These include, amongst others, debt service ratios, asset to borrowings ratios and total outside liabilities to net worth ratios. As at 31 March 2020, the Group was in breach of a net debt to EBITDA ratio included within its covenants for a number of facilities which has resulted in relevant debt being reclassified as current. In addition, the Group forecasts, under its downside case, further breaches of the same ratio and two other ratios within the going concern period, for which waivers have been obtained for the period to 31 March 2021, as set out below.

The Group has secured the necessary covenant waivers and relaxations remediating the covenants breached at 31 March 2020. The Group has also received covenant waivers or relaxations from all its lenders for covenant testing dates up to and including 31 March 2021. Management notes that the Group has previously obtained covenant waivers, including in response to the appointment of a provisional liquidator at KCM. Additionally, the Group has recently successfully amended the covenants for its listed bonds. The Directors of the Group are confident that they will be able to execute mitigating actions (see below) to ensure that the Group avoids, or secures waivers or relaxations for, any further breaches of its covenants during the going concern period. However, further waivers or relaxations would potentially be required for the period subsequent to 31 March 2021 and receipt thereof is inherently subject to uncertainty.

Mitigating actions

The mitigating options available to the Group and Company to address the material uncertainties in relation to going concern include:

- Provision of an intercompany loan of up to $1.0bn from an operating entity of the Group to the Company. The Company currently has an agreement in place amounting to $475m for an intercompany loan from the operating entity. The Directors believe that the existing agreement provides a precedent demonstrating that an additional $525m loan could be provided by the same operating entity, as required, and that such an option would be wholly within management's control.
- Execution and drawdown of a bilateral $0.2bn term loan and a syndicated $1.4bn term loan at Vedanta Limited level. The Group has received sanction letters indicating approval for loans amounting to a total of $0.9bn, comprising the entirety of the bilateral facility and half of the syndicated facility, which relates to the portion to be provided by the public sector bank leading the syndicate. Final execution and drawdown of the loan is subject to completion of standard administrative processes. The Group is also in the process of organizing the syndication of the remaining $0.7bn with other Indian banks. The agreements are not at present legally binding and there therefore remains uncertainty as to the ability of the Group to draw down the funds.
- Execution of an off-take agreement covering certain future production and amounting potentially to c.$1bn. The Group is currently negotiating with a number of interested bidders an off-take agreement, under which the Group would receive an advance payment in return for supply of certain future production. However, no agreement has been concluded and there is a therefore uncertainty as to the Group's ability to access these funds.
- Extension of working capital facilities and rollover of commercial papers. As at 31 March 2020, the Group had unutilised working capital facilities amounting to c.$1.3bn and commercial papers in issue amounting to c.$1.0bn. These facilities are not committed for the full duration of the going concern period to December 2021, but rather must be extended or rolled over. There is therefore a risk that, in adverse market conditions, the

Group would not be able to extend or roll over these facilities. However, the Directors assess that the Group has a strong record of extending and rolling over these short-term facilities and has historically had significantly higher levels of commercial papers in issue.

- Access to supplier credit and customer advances. As at 31 March 2020, the Group had c.$1.4bn of supplier's credit and c.$1.0bn of advances from customers. These financing arrangements are integral to the business of certain Group divisions, but are not committed for the full duration of the going concern period. There is therefore a risk that the Group will not be able to access these financing arrangements in the future. Nevertheless, the Directors note that the Group has in the past consistently obtained supplier credit and customer advances at current levels.
- Take-private of Vedanta Limited. As set out in note 36 to the consolidated financial statements, the Group made an offer on 12 May 2020 to buy out the interests of minority shareholders in Vedanta Limited and the Group is currently in negotiations to obtain external financing to fund the buy-out. Depending on the date of execution of any take-private and the repayment profile of any future financing secured, there is potential upside for the Group through a reduction in the leakage to minority shareholders on the payment of dividends.

Conclusion

Notwithstanding the material uncertainties described above, the Directors have confidence in Group's ability to execute sufficient mitigating actions. Based on these considerations, the Directors have a reasonable expectation that the Group and the Company will meet its commitments as they fall due over the going concern period. Accordingly, the Directors continue to adopt the going concern basis in preparing the Group's consolidated financial statements and Company's standalone financial statements.

e) Parent Company financial statements

The financial statements of the parent company, Vedanta Resources Limited, incorporated in the United Kingdom, have been prepared in accordance with FRS 101 and UK company law. The Company financial statements and associated notes have been presented separately.

2(a) Accounting policies

(i) Basis of consolidation

Subsidiaries:

The consolidated financial statements incorporate the results of the Company and all its subsidiaries (the "Group"), being the entities that it controls. Control is evidenced where the Group has power over the investee, is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Power is demonstrated through existing rights that give the ability to direct relevant activities, which significantly affect the entity's returns.

The financial statements of subsidiaries are prepared for the same reporting year as the Company. Where necessary, adjustments are made to the financial statements of subsidiaries to align the accounting policies in line with accounting policies of the Group.

For non-wholly owned subsidiaries, a share of the profit/(loss) for the financial year and net assets is attributed to the non-controlling interests as shown in the consolidated income statement, consolidated statement of comprehensive income and consolidated statement of financial position.

Liability for put option issued to non-controlling interests which do not grant present access to ownership interest to the Group is recognised at present value of the redemption amount and is reclassified from equity. At the end of each reporting period, the non-controlling interests subject to put option is derecognised and the difference between the amount derecognised and present value of the redemption amount, which is recorded as a financial liability, is accounted for as an equity transaction.

For acquisitions of additional interests in subsidiaries, where there is no change in control, the Group recognises a reduction to the non-controlling interest of the respective subsidiary with the difference between this figure and the cash paid, inclusive of transaction fees, being recognised in equity. Similarly, upon dilution of controlling interests the difference between the cash received from sale or listing of the subsidiary shares and the increase to non-controlling interest is also recognised in equity. The results of subsidiaries acquired or disposed off during the year are included in the consolidated income statement from the effective date of acquisition or up to the effective date of disposal, as appropriate.

Intra-Group balances and transactions, and any unrealised profits arising from intra-Group transactions, are eliminated. Unrealised losses are eliminated unless costs cannot be recovered.

Joint arrangements

A Joint arrangement is an arrangement of which two or more parties have joint control. Joint control is considered when there is contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control. Investments in joint arrangements are classified as either joint operations or joint venture. The classification depends on the contractual rights and obligations of each investor, rather than the legal structure of the joint arrangement. A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement, have rights to the assets, and obligations for the liabilities, relating to the arrangement. A joint venture is a joint arrangement whereby, the parties that have joint control of the arrangement have rights to the net assets of the arrangement.

The group has both joint operations and joint ventures.

Joint operations

The Group has Joint operations within its Oil and gas segment. It participates in several unincorporated joint operations which involve the joint control of assets used in oil and gas exploration and producing activities. The Group accounts for its share of assets, liabilities, income and expenditure of joint operations in which the Group holds an interest. Liabilities in unincorporated joint operations where the Group is the operator, is accounted for at gross values (including share of other partners) with a corresponding receivable from the venture partners. These have been included in the consolidated financial statements under the appropriate headings.

Details of joint operations are set out in note 38.

Joint venture

The Group accounts for its interest in joint venture using the equity method, after initially being recognised at cost in the consolidated statement of financial position. Goodwill arising on the acquisition of joint venture is included in the carrying value of investments in joint venture.

Investments in associates:

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control over those policies. Investments in associates are accounted for using the equity method. Goodwill arising on the acquisition of associates is included in the carrying value of investments in associate.

Equity method of accounting

Under the equity method of accounting applicable for investments in associates and joint ventures, investments are initially recorded at the cost to the Group and then, in subsequent periods, the carrying value is adjusted to reflect the Group's share of the post-acquisition profits or losses of the investee, and the Group's share of other comprehensive income of the investee, other changes to the investees net assets and is further adjusted for impairment losses, if any. Dividend received or receivable from associate and joint ventures are recognised as a reduction in carrying amount of the investment.

The consolidated income statement and consolidated statement of comprehensive income include the Group's share of investee's results, except where the investee is generating losses, share of such losses in excess of the Group's interest in that investee are not recognised. Losses recognised under the equity method in excess of the Group's investment in ordinary shares are applied to the other components of the Group's interest that forms part of Group's net investment in the investee in the reverse order of their seniority (i.e. priority in liquidation).

If the Group's share of losses in an associate or joint venture equals or exceeds, its interests in the associate or joint venture, the Group discontinues the recognition of further losses. Additional losses are provided for, only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate/ joint venture.

Unrealised gains arising from transactions with associates are eliminated against the investment to the extent of the Group's interest in these entities. Unrealised losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment of the asset transferred. Accounting policies of equity accounted investees is changed where necessary to ensure consistency with the policies adopted by the Group.

The carrying amount of equity accounted investments are tested for impairment in accordance with the policy described in note 2 (a)(xi) below.

(ii) Business combinations

Business combinations are accounted for under the acquisition method. The acquiree's identifiable assets, liabilities and contingent liabilities that meet the conditions for recognition under IFRS 3 are recognised at their fair value at the acquisition date, except certain assets and liabilities required to be measured as per the applicable standards.

Excess of fair value of purchase consideration and the acquisition date non-controlling interest over the acquisition date fair value of identifiable assets acquired and liabilities assumed is recognised as goodwill. Goodwill arising on acquisitions is reviewed for impairment annually. Where the fair values of the identifiable assets and liabilities exceed the purchase consideration,

the Group re-assesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognised at the acquisition date. If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the surplus is credited to the consolidated income statement in the period of acquisition. Where it is not possible to complete the determination of fair values by the date on which the first post-acquisition financial statements are approved, a provisional assessment of fair value is made and any adjustments required to those provisional fair values are finalised within 12 months of the acquisition date.

Those provisional amounts are adjusted through goodwill during the measurement period, or additional assets or liabilities are recognised to reflect new information obtained about facts and circumstances that existed as of the acquisition date that, if known, would have affected the amounts recognised at that date. These adjustments are called as measurement period adjustments. The measurement period does not exceed twelve months from the acquisition date.

Any non-controlling interest in an acquiree is measured at fair value or as the non-controlling interest's proportionate share of the acquiree's net identifiable assets. This accounting choice is made on a transaction by transaction basis.

Acquisition expenses are charged to the consolidated income statement.

If the Group acquires a group of assets in a company that does not constitute a business combination in accordance with IFRS 3 'Business Combinations', the cost of the acquired group of assets is allocated to the individual identifiable assets acquired based on their relative fair value.

Common control transactions

A business combination involving entities or businesses under common control is a business combination in which all of the combining entities or businesses are ultimately controlled by the same party or parties both before and after the business combination and the control is not transitory. The transactions between entities under common control are scoped out of IFRS 3 and there is no authoritative literature for these transactions under IFRS. As a result, the Group adopted accounting principles similar to the pooling-of-interest method based on the predecessor values. The assets and liabilities of the acquired entity are recognised at the book values recorded in the ultimate parent entity's consolidated financial statements. The components of equity of the acquired companies are added to the same components within Group equity except that any share capital and investments in the books of the acquiring entity is cancelled and the differences, if any, is adjusted in the opening retained earnings/ capital reserve. The Company's shares issued in consideration for the acquired companies are recognised from the moment the acquired companies are included in these financial statements and the financial statements of the commonly controlled entities would be combined, retrospectively, as if the transaction had occurred at the beginning of the earliest reporting period presented. However, the prior years' comparative information is only adjusted for periods during which the entities were under common control

(iii) Revenue recognition

Sale of goods/ rendering of services (Including revenue from contracts with customers)

The Group's revenue from contracts with customers is mainly from the sale of copper, aluminium, iron ore, zinc, oil and gas, power, steel, glass substrate and port operations. Revenue from contracts with customers is recognised when control of the goods or services is transferred to the customer which usually is on delivery of the goods to the shipping agent at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services. Revenue is recognised net of discounts, volume rebates, outgoing sales taxes/ goods and service tax and other indirect taxes. Revenues from sale of by-products are included in revenue.

Certain of the Group's sales contracts provide for provisional pricing based on the price on the London Metal Exchange (LME) and crude index, as specified in the contract. Revenue in respect of such contracts is recognised when control passes to the customer and is measured at the amount the entity expects to be entitled – being the estimate of the price expected to be received at the end of the measurement period. Post transfer of control of goods, provisional pricing features are accounted in accordance with IFRS 9 'Financial Instruments' rather than IFRS 15 'Revenue from contracts with customers' and therefore the IFRS 15 rules on variable consideration do not apply. These 'provisional pricing' adjustments i.e. the consideration adjusted post transfer of control are included in total revenue from operations on the face of the Consolidated Income Statement and disclosed by way of note to the financial statements. Final settlement of the price is based on the applicable price for a specified future period. The Group's provisionally priced sales are marked to market using the relevant forward prices for the future period specified in the contract and is adjusted in revenue.

Revenue from oil, gas and condensate sales represent the Group's share in the revenue from sale of such products, by the joint operations, and is recognised as and when control in these products gets transferred to the customers. In computing its share of revenue, the Group excludes government's share of profit oil which gets accounted for when the obligation in respect of the same arises.

Revenue from sale of power is recognised when delivered and measured based on rates as per bilateral contractual agreements with buyers and at a rate arrived at based on the principles laid down under the relevant Tariff Regulations as notified by the regulatory bodies, as applicable.

Where the Group acts as a port operator, revenues relating to operating and maintenance phase of the port contract are measured at the amount that Group expects to be entitled to for the services provided.

A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Group performs part of its obligation by transferring goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognised for the earned consideration when that right is conditional on the Group's future performance.

A contract liability is the obligation to transfer goods or services to a customer for which the Group has received consideration from the customer. If a customer pays consideration before the Group transfers goods or services to the customer, a contract liability is recognised when the payment is received. The advance payments received plus a specified rate of return/ discount, at the prevailing market rates, is settled by supplying respective goods over a period of up to twenty four months under an agreed delivery schedule as per the terms of the respective agreements. As these are contracts that the Group expects, and has the ability, to fulfil through delivery of a non-financial item, these are presented as advance from customers and are recognised as revenue as and when control of respective commodities is transferred to customers under the agreements. The fixed rate of return/discount is treated as finance cost. The portion of the advance where either the Group does not have a unilateral right to defer settlement beyond 12 months or expects settlement within 12 months from the balance sheet date is classified as current liability.

Interest income

Interest income from debt instruments is recognised using the effective interest rate method. The effective interest rate is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to the gross carrying amount of a financial asset. When calculating the effective interest rate, the Group estimates the expected cash flows by considering all the contractual terms of the financial instrument (for example, prepayment, extension, call and similar options) but does not consider the expected credit losses.

Dividends

Dividend income is recognised in the consolidated income statement only when the right to receive payment is established, provided it is probable that the economic benefits associated with the dividend will flow to the Group, and the amount of the dividend can be measured reliably.

(iv) Special items

Special items are those items that management considers, by virtue of their size or incidence (including but not limited to impairment charges and acquisition and restructuring related costs), should be disclosed separately to ensure that the financial information allows an understanding of the underlying performance of the business in the year, so as to facilitate comparison with prior years. Also, tax charges related to Special items and certain one-time tax effects are considered Special. Such items are material by nature or amount to the year's result and require separate disclosure in accordance with IFRS. The determination as to which items should be disclosed separately requires a degree of judgement.

(v) Property, plant and equipment

Mining properties and leases

When a decision is taken that a mining property is viable for commercial production (i.e. when the Group determines that the mining property will provide sufficient and sustainable return relative to the risks and the Group decided to proceed with the mine development), all further pre-production primary development expenditure other than that on land, buildings, plant, equipment and capital work in progress is capitalised as property, plant and equipment under the heading "Mining properties and leases" together with any amount transferred from "Exploration and evaluation" assets. The costs of mining properties and leases include the costs of acquiring and developing mining properties and mineral rights.

The stripping cost incurred during the production phase of a surface mine is deferred to the extent the current period stripping cost exceeds the average period stripping cost over the life of mine and recognised as an asset if such cost provides a benefit in terms of improved access to ore in future periods and certain criteria are met. When the benefit from the stripping costs are realised in the current period, the stripping costs are accounted for as the cost of inventory. If the costs of inventory produced and the stripping activity asset are not separately identifiable, a relevant production measure is used to allocate the production stripping costs between the inventory produced and the stripping activity asset. The group uses the expected volume of waste compared with the actual volume of waste extracted for a given value of ore/mineral production for the purpose of determining the cost of the stripping activity asset.

Deferred stripping costs are included in mining properties within property, plant and equipment and disclosed as a part of mining properties. After initial recognition, the stripping activity asset is depreciated on a unit of production method over the expected useful life of the identified component of the ore body.

In circumstances where a mining property is abandoned, the cumulative capitalised costs relating to the property are written off in the period in which it occurs i.e. when the Group determines that the mining property will not provide sufficient and sustainable returns relative to the risks and the Group decides not to proceed with the mine development.

Commercial reserves are proved and probable reserves as defined by the 'JORC' Code, 'MORC' code or 'SAMREC' Code. Changes in the commercial reserves affecting unit of production calculations are dealt with prospectively over the revised remaining reserves.

The estimates of hydrocarbon reserves and resources have been derived in accordance with the Society of Petroleum Engineers "Petroleum Resources Management System (2018)".

Oil and gas assets- (developing/producing assets)

For oil and gas assets a successful efforts based accounting policy is followed. Costs incurred prior to obtaining the legal rights to explore an area are expensed immediately to the consolidated income statement.

All costs incurred after the technical feasibility and commercial viability of producing hydrocarbons has been demonstrated are capitalised within property, plant and equipment - development/producing assets on a field-by-field basis. Subsequent expenditure is capitalised only where it either enhances the economic benefits of the development/producing asset or replaces part of the existing development/producing asset. Any remaining costs associated with the part replaced are expensed.

Net proceeds from any disposal of development/producing assets are credited against the previously capitalised cost. A gain or loss on disposal of a development/producing asset is recognised in the consolidated income statement to the extent that the net proceeds exceed or are less than the appropriate portion of the net capitalised costs of the asset.

Exploration and evaluation assets

Exploration and evaluation expenditure incurred prior to obtaining the mining right or the legal right to explore are expensed as incurred.

Exploration and evaluation expenditure incurred after obtaining the mining right or the legal right to explore, are capitalised as exploration and evaluation assets (property, plant and equipment) and stated at cost less impairment, if any. Exploration and evaluation assets are transferred to the appropriate category of property, plant and equipment when the technical feasibility and commercial viability has been determined. Exploration and evaluation assets are assessed for impairment and impairment loss, if any, is recognised prior to reclassification.

Exploration expenditure includes all direct and allocated indirect expenditure associated with finding specific mineral resources which includes depreciation and applicable operating costs of related support equipment and facilities and other costs of exploration activities:

- Acquisition costs - costs associated with acquisition of licences and rights to explore, including related professional fees.
- General exploration costs - costs of surveys and studies, rights of access to properties to conduct those studies (e.g., costs incurred for environment clearance, defence clearance, etc.), and salaries and other expenses of geologists, geophysical crews and other personnel conducting those studies.
- Costs of exploratory drilling and equipping exploratory and appraisal wells.

Exploration expenditure incurred in the process of determining oil and gas exploration targets is capitalised within "exploration and evaluation assets "and subsequently allocated to drilling activities. Exploration drilling costs are initially capitalised on a well-by-well basis until the success or otherwise of the well has been established. The success or failure of each exploration effort is judged on a well-by-well basis. Drilling costs are written off on completion of a well unless the results indicate that hydrocarbon reserves exist and there is a reasonable prospect that these reserves are commercial.

Following appraisal of successful exploration wells, if commercial reserves are established and technical feasibility for extraction demonstrated, then the related capitalised exploration costs are transferred into a single field cost centre within property, plant & equipment - development/ producing assets (oil and gas properties) after testing for impairment. Where results of exploration drilling indicate the presence of hydrocarbons which are ultimately not considered commercially viable, all related costs are written off to the consolidated income statement.

Expenditure incurred on the acquisition of a licence interest is initially capitalised on a licence-by-licence basis. Costs are held undepleted, within exploration and evaluation assets until such time as the exploration phase on the licence area is complete or commercial reserves have been discovered.

Net proceeds from any disposal of an exploration asset are initially credited against the previously capitalised costs. Any surplus/ deficit is recognised in the consolidated income statement.

Other property, plant and equipment

The initial cost of property, plant and equipment comprises its purchase price, including import duties and non-refundable purchase taxes, and any directly attributable costs of bringing an asset to working condition and location for its intended use. It also includes the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located. If significant parts of an item of property, plant and equipment have different useful lives, then they are accounted for as separate items (major components) of property, plant and equipment. All other expenses on existing property, plant and equipment, including day-to-day repair and maintenance expenditure and cost of replacing parts, are charged to the consolidated income statement for the period during which such expenses are incurred.

Gains and losses on disposal of an item of property, plant and equipment computed as the difference between the net disposal proceeds and the carrying amount of the asset is included in the consolidated income statement when the asset is derecognised. Major inspection and overhaul expenditure is capitalised, if the recognition criteria are met.

(vi) Assets under construction

Assets under construction are capitalised in the assets under construction account. At the point when an asset is capable of operating in the manner intended by management, the cost of construction is transferred to the appropriate category of property, plant and equipment. Costs associated with the commissioning of an asset and any obligatory decommissioning costs are capitalised until the period of commissioning has been completed and the asset is ready for its intended use.

(vii) Depreciation, depletion and amortisation expense

Mining properties and other assets in the course of development or construction, freehold land and goodwill are not depreciated or amortised.

Mining properties

The capitalised mining properties are amortised on a unit-of-production basis over the total estimated remaining commercial proved and probable reserves of each property or Group of properties and are subject to impairment review. Costs used in the unit of production calculation comprise the net book value of capitalised costs plus the estimated future capital expenditure required to access the commercial reserves. Changes in the estimates of commercial reserves or future capital expenditure are dealt with prospectively.

Oil and gas assets

All expenditures carried within each field are amortised from the commencement of production on a unit of production basis, which is the ratio of oil and gas production in the period to the estimated quantities of commercial reserves at the end of the period plus the production in the period, generally on a field-by-field basis or group of fields which are reliant on common infrastructure.

Commercial reserves are proven and probable oil and gas reserves, which are defined as the estimated quantities of crude oil, natural gas and natural gas liquids which geological, geophysical and engineering data demonstrate with a specified degree of certainty to be recoverable in future years from known reservoirs and which are considered commercially producible.

Costs used in the unit of production calculation comprise the net book value of capitalised costs plus the estimated future field development costs required to access the commercial reserves. Changes in the estimates of commercial reserves or future field development costs are dealt with prospectively.

Other assets

Depreciation on Property, plant and equipment is calculated using the straight-line method (SLM) to allocate their cost, net of their residual values, over their estimated useful lives (determined by the management) as given below. Management's assessment takes into account, inter alia, the nature of the assets, the estimated usage of the assets, the operating conditions of the assets, past history of replacement and maintenance support.

Estimated useful life of assets are as follows:

Buildings operations and administration	3-60 years
Plant and machinery	15-40 years
Railway Sidings	15 years
Office equipment	3–6 years
Furniture and fixtures	8-10 years
Vehicles	8-10 years

Major inspection and overhaul costs are depreciated over the estimated life of the economic benefit to be derived from such costs. The carrying amount of the remaining previous overhaul cost is charged to the consolidated income statement if the next overhaul is undertaken earlier than the previously estimated life of the economic benefit.

The Group reviews the residual value and useful life of an asset at least at each financial year end and, if expectations differ from previous estimates, the change is accounted for as a change in accounting estimate.

(viii) Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. Subsequently, intangibles assets are measured at cost less accumulated amortisation and accumulated impairment losses, if any.

The Group recognises port concession rights as "Intangible Assets" arising from a service concession arrangement, in which the grantor controls or regulates the services provided and the prices charged, and also controls any significant residual interest in the infrastructure such as property, plant and equipment, irrespective whether the infrastructure is existing infrastructure of the grantor or the infrastructure is constructed or purchased by the Group as part of the service concession arrangement. Such an intangible asset is recognised by the Group initially at cost determined as the fair value of the consideration received or receivable for the construction service delivered and is capitalised when the project is complete in all respects. Port concession rights are amortised on straight line basis over the balance of license period. The concession period is 30 years from the date of the award. Any addition to the port concession rights are measured at fair value on recognition. Port concession rights also include certain property, plant and equipment in accordance with IFRIC 12 ″Service Concession Arrangements".

Intangible assets are amortised over their estimated useful life on a straight line basis. Software is amortised over the estimated useful life ranging from 2 – 5 years. Amounts paid for securing mining rights are amortised over the period of the mining lease ranging from 16-25 years. Technological know-how and acquired brand are amortised over the estimated useful life of 10 years.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognised in the consolidated income statement when the asset is derecognised.

The amortisation period and the amortisation method are reviewed at least at each financial year end. If the expected useful life of the asset is different from previous estimates, the change is accounted for prospectively as a change in accounting estimate.

(ix) Non-current assets held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the asset (or disposal group) is available for immediate sale in its present condition. Management must be committed to the sale which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

Non-current assets and disposal groups classified as held for sale are not depreciated and are measured at the lower of carrying amount and fair value less costs to sell. Such assets and disposal groups are presented separately on the face of the consolidated statement of financial position.

(x) Impairment

Non-financial assets

Impairment charges and reversals are assessed at the level of cash-generating units. A cash-generating unit (CGU) is the smallest identifiable group of assets that generate cash inflows that are largely independent of the cash inflows from other assets or group of assets.

The Group assesses at each reporting date, whether there is an indication that an asset may be impaired. The Group conducts an internal review of asset values annually, which is used as a source of information to assess for any indications of impairment or reversal of previously recognised impairment losses. Internal and external factors, such as worse economic performance than expected, changes in expected future prices, costs and other market factors are also monitored to assess for indications of impairment or reversal of previously recognised impairment losses.

If any such indication exists or in case of goodwill where annual testing of impairment is required then an impairment review is undertaken, the recoverable amount is calculated, as the higher of fair value less costs of disposal and the asset's value in use.

Fair value less costs of disposal is the price that would be received to sell the asset in an orderly transaction between market participants and does not reflect the effects of factors that may be specific to the group and not applicable to entities in general. Fair value for mineral and oil and gas assets is generally determined as the present value of the estimated future cash flows expected to arise from the continued use of the asset, including any expansion prospects, and its eventual disposal, using assumptions that an independent market participant may take into account. These cash flows are discounted at an appropriate post-tax discount rate to arrive at the net present value.

Value in use is determined as the present value of the estimated future cash flows expected to arise from the continued use of the asset in its present form and its eventual disposal. The cash flows are discounted using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which estimates of future cash flows have not been adjusted. Value in use is determined by applying assumptions specific to the Group's continued use and cannot take into account future development. These assumptions are different to those used in calculating fair value and consequently the value in use calculation is likely to give a different result to a fair value calculation.

The carrying amount of the CGU is determined on a basis consistent with the way the recoverable amount of the CGU is determined. The carrying value is net of deferred tax liability recognised in the fair value of assets acquired in the business combination.

If the recoverable amount of an asset or CGU is estimated to be less than it's carrying amount, the carrying amount of the asset or CGU is reduced to its recoverable amount. An impairment loss is recognised in the consolidated income statement.

Any reversal of the previously recognised impairment loss is limited to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined if no impairment loss had previously been recognised except if initially attributed to goodwill.

Exploration and evaluation assets:

In assessing whether there is any indication that an exploration and evaluation asset may be impaired, the Group considers, as a minimum, the following indicators:

- the period for which the Group has the right to explore in the specific area has expired during the period or will expire in the near future, and is not expected to be renewed;
- substantive expenditure on further exploration for and evaluation of mineral resources in the specific area is neither budgeted nor planned;
- exploration for and evaluation of mineral resources in the specific area have not led to the discovery of commercially viable quantities of mineral resources and the Group has decided to discontinue such activities in the specific area;
- sufficient data exist to indicate that, although a development in the specific area is likely to proceed, the carrying amount of the exploration and evaluation asset is unlikely to be recovered in full from successful development or by sale; and
- reserve information prepared annually by external experts.

When a potential impairment is identified, an assessment is performed for each area of interest in conjunction with the group of operating assets (representing a cash-generating unit) to which the exploration and evaluation assets is attributed. Exploration areas in which reserves have been discovered but require major capital expenditure before production can begin, are continually evaluated to ensure that commercial quantities of reserves exist or to ensure that additional exploration work is under-way or planned. To the extent that capitalised expenditure is no longer expected to be recovered, it is charged to the consolidated income statement.

(xi) Financial Instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

(a) Financial Assets – Recognition & subsequent measurement

All financial assets are recognised initially at fair value plus, in the case of financial assets not recorded at fair value through profit or loss, transaction costs that are attributable to the acquisition of the financial asset. Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognised on the trade date, i.e., the date that the Group commits to purchase or sell the asset.

For purposes of subsequent measurement, financial assets are classified in four categories:

Debt instruments at amortised cost

A 'debt instrument' is measured at amortised cost if both the following conditions are met:

a) The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and
b) Contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding.

After initial measurement, such financial assets are subsequently measured at amortised cost using the Effective Interest Rate (EIR) method. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in interest income in consolidated income statement. The losses arising from impairment are recognised in consolidated income statement.

Debt instruments at fair value through other comprehensive income (FVOCI)

A 'debt instrument' is classified as at FVOCI if both of the following criteria are met:

a) The objective of the business model is achieved both by collecting contractual cash flows and selling the financial assets, and
b) The asset's contractual cash flows represent SPPI.

Debt instruments included within the FVOCI category are measured initially as well as at each reporting date at fair value. Fair value movements are recognised in other comprehensive income (OCI). However, interest income, impairment losses and reversals and foreign exchange gain or loss are recognised in the consolidated income statement. On derecognition of the asset, cumulative gain or loss previously recognised in other comprehensive income is reclassified from the equity to consolidated income statement. Interest earned whilst holding fair value through other comprehensive income debt instrument is reported as interest income using the EIR method.

Debt instruments at fair value through profit or loss (FVTPL)

FVTPL is a residual category for debt instruments. Any debt instrument, which does not meet the criteria for categorization as at amortised cost or as FVOCI, is classified as at FVTPL.

In addition, the Group may elect to designate a debt instrument, which otherwise meets amortised cost or FVOCI criteria, as at FVTPL. However, such election is allowed only if doing so reduces or eliminates a measurement or recognition inconsistency (referred to as 'accounting mismatch'). The Group has not designated any debt instrument as at FVTPL.

Debt instruments included within the FVTPL category are measured at fair value with all changes being recognised in consolidated income statement.

Equity instruments

All equity investments in the scope of IFRS 9 are measured at fair value. Equity instruments which are held for trading and contingent consideration recognised by an acquirer in a business combination to which IFRS 3 applies are classified as at FVTPL. For all other equity instruments, the Group may make an irrevocable election to present in other comprehensive income subsequent changes in the fair value. The Group makes such election on an instrument-by-instrument basis. The classification is made on initial recognition and is irrevocable.

If the Group decides to classify an equity instrument as at FVOCI, then all fair value changes on the instrument, excluding dividends, are recognised in the OCI. There is no recycling of the amounts from OCI to profit and loss, even on sale of investment. However, the Group may transfer the cumulative gain or loss within equity. For equity instruments which are classified as FVTPL, all subsequent fair value changes are recognised in the consolidated income statement.

(b) Financial Assets - Derecognition

The Group derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred.

(c) Impairment of financial assets

In accordance with IFRS 9, the Group applies expected credit loss ("ECL") model for measurement and recognition of impairment loss on the following financial assets:

i) Financial assets that are debt instruments, and are measured at amortised cost e.g., loans, debt securities and deposits

ii) Financial assets that are debt instruments and are measured as at FVOCI

iii) Trade receivables or any contractual right to receive cash or another financial asset that result from transactions that are within the scope of IFRS 15.

The Group follows 'simplified approach' for recognition of impairment loss allowance on trade receivables, contract assets and lease receivables. The application of simplified approach does not require the Group to track changes in credit risk. Rather, it recognises impairment loss allowance based on lifetime ECLs at each reporting date, right from its initial recognition.

At each reporting date, for recognition of impairment loss on other financial assets and risk exposure, the Group determines whether there has been a significant increase in the credit risk since initial recognition. If credit risk has not increased significantly, 12-month ECL is used to provide for impairment loss. However, if credit risk has increased significantly, lifetime ECL is used. If, in a subsequent period, credit quality of the instrument improves such that there is no longer a significant increase in credit risk since initial recognition, then the Group reverts to recognising impairment loss allowance based on 12-month ECL.

Lifetime ECL are the expected credit losses resulting from all possible default events over the expected life of a financial instrument. The 12-month ECL is a portion of the lifetime ECL which results from default events that are possible within 12 months after the reporting date.

ECL is the difference between all contractual cash flows that are due to the Group in accordance with the contract and all the cash flows that the entity expects to receive, discounted at the original EIR.

ECL impairment loss allowance (or reversal) during the year is recognised as income/expense in consolidated income statement. The consolidated statement of financial position presentation for various financial instruments is described below:

i) Financial assets measured at amortised cost: ECL is presented as an allowance, i.e., as an integral part of the measurement of those assets. The Group does not reduce impairment allowance from the gross carrying amount.

ii) Debt instruments measured at FVOCI: Since financial assets are already reflected at fair value, impairment allowance is not further reduced from its value. Rather, ECL amount is presented as 'accumulated impairment amount' in the OCI.

For assessing increase in credit risk and impairment loss, the Group combines financial instruments on the basis of shared credit risk characteristics with the objective of facilitating an analysis that is designed to enable significant increases in credit risk to be identified on a timely basis.

The Group does not have any purchased or originated credit-impaired (POCI) financial assets, i.e., financial assets which are credit impaired on purchase/origination.

(d) Financial liabilities – Recognition and Subsequent measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, or as loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognised initially at fair value, and in the case of financial liabilities at amortised cost, net of directly attributable transaction costs.

The Group's financial liabilities include trade and other payables, loans and borrowings including bank overdrafts, financial guarantee contracts and derivative financial instruments.

The measurement of financial liabilities depends on their classification, as described below:

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by IFRS 9. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognised in the consolidated income statement.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated as such at the initial date of recognition, and only if the criteria in IFRS 9 are satisfied. For liabilities designated as FVTPL, fair value gains/losses attributable to changes in own credit risk are recognised in OCI. These gains/ losses are not subsequently transferred to consolidated income statement. However, the Group may transfer the cumulative gain or loss within equity. All other changes in fair value of such liability are recognised in the consolidated income statement. The Group has not designated any financial liability as at fair value through profit or loss.

Financial liabilities at amortised cost (Loans and Borrowings and Trade and Other payables)

After initial recognition, interest-bearing loans and borrowings and trade and other payables are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in consolidated income statement when the liabilities are derecognised as well as through the EIR amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance costs in the consolidated income statement.

(e) Financial liabilities – Derecognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the consolidated income statement.

(f) Embedded Derivatives

An embedded derivative is a component of a hybrid (combined) instrument that also includes a non-derivative host contract – with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative. An embedded derivative causes some or all of the cash flows that otherwise would be required by the contract to be modified according to a specified interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index, or other variable, provided in the case of a non-financial variable that the variable is not specific to a party to the contract. Reassessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss.

If the hybrid contract contains a host that is a financial asset within the scope of IFRS 9, the Group does not separate embedded derivatives. Rather, it applies the classification requirements contained in IFRS 9 to the entire hybrid contract. Derivatives embedded in all other host contracts are accounted for as separate derivatives and recorded at fair value if their economic characteristics and risks are not closely related to those of the host contracts and the host contracts are not held for trading or designated at fair value though profit or loss. These embedded derivatives are measured at fair value with changes in fair value recognised in Consolidated Income Statement, unless designated as effective hedging instruments.

(g) Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Group are recognised at the proceeds received, net of direct issue costs.

(h) Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the consolidated statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis or to realise the asset and settle the liability simultaneously.

(i) Derivative financial instruments and hedge accounting

Initial recognition and subsequent measurement

In order to hedge its exposure to foreign exchange, interest rate, and commodity price risks, the Group enters into forward, option, swap contracts and other derivative financial instruments. The Group does not hold derivative financial instruments for speculative purposes.

Such derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently re-measured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

Any gains or losses arising from changes in the fair value of derivatives are taken directly to consolidated income statement, except for the effective portion of cash flow hedges, which is recognised in OCI and later reclassified to consolidated income statement when the hedge item affects profit or loss or treated as basis adjustment if a hedged forecast transaction subsequently results in the recognition of a non-financial asset or non-financial liability.

For the purpose of hedge accounting, hedges are classified as:

- Fair value hedges when hedging the exposure to changes in the fair value of a recognised asset or liability or an unrecognised firm commitment
- Cash flow hedges when hedging the exposure to variability in cash flows that is either attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction or the foreign currency risk in an unrecognised firm commitment
- Hedges of a net investment in a foreign operation

At the inception of a hedge relationship, the Group formally designates and documents the hedge relationship to which the Group wishes to apply hedge accounting. The documentation includes the Group's risk management objective and strategy for undertaking hedge, the hedging/economic relationship, the hedged item or transaction, the nature of the risk being hedged, hedge ratio and how the Group will assess the effectiveness of changes in the hedging instrument's fair value in offsetting the exposure to changes in the hedged item's fair value or cash flows attributable to the hedged risk. Such hedges are expected to be highly effective in achieving offsetting changes in fair value or cash flows and are assessed on an ongoing basis to determine that they actually have been highly effective throughout the financial reporting periods for which they were designated.

Hedges that meet the strict criteria for hedge accounting are accounted for, as described below:

(i) Fair value hedges

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognised in consolidated income statement immediately, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.

When an unrecognised firm commitment is designated as a hedged item, the subsequent cumulative change in the fair value of the firm commitment attributable to the hedged risk is recognised as an asset or liability with a corresponding gain or loss recognised in consolidated income statement. Hedge accounting is discontinued when the Group revokes the hedge relationship, the hedging instrument or hedged item expires or is sold, terminated, or exercised or no longer meets the criteria for hedge accounting.

(ii) Cash flow hedges

The effective portion of the gain or loss on the hedging instrument is recognised in OCI in the cash flow hedge reserve, while any ineffective portion is recognised immediately in the consolidated income statement.

Amounts recognised in OCI are transferred to consolidated income statement when the hedged transaction affects profit or loss, such as when the hedged financial income or financial expense is recognised or when a forecast sale occurs. When the hedged item is the cost of a non-financial asset or non-financial liability, the amounts recognised in OCI are transferred to the initial carrying amount of the non-financial asset or liability

If the hedging instrument expires or is sold, terminated or exercised without replacement or rollover (as part of the hedging strategy), or if its designation as a hedge is revoked, or when the hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss previously recognised in OCI remains separately in equity until the forecast transaction occurs or the foreign currency firm commitment is met.

(iii) Hedges of a net investment

Hedges of a net investment in a foreign operation, including a hedge of a monetary item that is accounted for as part of the net investment, are accounted for in a way similar to cash flow hedges. Gains or losses on the hedging instrument relating to the effective portion of the hedge are recognised in OCI while any gains or losses relating to the ineffective portion are recognised in the consolidated income statement. On disposal of the foreign operation, the cumulative value of any such gains or losses recorded in equity is reclassified to the consolidated income statement (as a reclassification adjustment).

(iv) Financial guarantees

Financial guarantees issued by the Group on behalf of related parties are designated as 'Insurance Contracts'. The Group assesses at the end of each reporting period whether its recognised insurance liabilities (if any) are adequate, using current estimates of future cash flows under its insurance contracts. If that assessment shows that the carrying amount of its insurance liabilities is inadequate in the light of the estimated future cash flows, the entire deficiency is recognised in consolidated income statement.

(xii) Leases

The Group assesses at contract inception, all arrangements to determine whether they are, or contain, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

(a) Group as a lessor

Leases in which the Group does not transfer substantially all the risks and rewards of ownership of an asset are classified as operating leases. Rental income from operating lease is recognised on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

Leases are classified as finance leases when substantially all of the risks and rewards of ownership transfer from the Group to the lessee. Amounts due from lessees under finance leases are recorded as receivables at the Group's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the net investment outstanding in respect of the lease.

(b) Group as a lessee

The Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Group recognises lease liabilities towards future lease payments and right-of-use assets representing the right to use the underlying assets.

(i) Right-of-use assets

The Group recognises right-of-use assets at the commencement date of the lease (i.e., the date when the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. The right-of-use assets are also subject to impairment.

Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets as described in (vii) above.

(ii) Lease liabilities

At the commencement date of the lease, the Group recognises lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (and, in some instances, in-substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating the lease, if the lease term reflects the Group exercising the option to terminate. Variable lease payments that do not depend on an index or a rate are recognised as expenses (unless they are incurred to produce inventories) in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is generally not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments (e.g., changes to future payments resulting from a change in an index or rate used to determine such lease payments) or a change in the assessment of an option to purchase the underlying asset.

The Group’s lease liabilities are included in Trade and other payables.

(iii) Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to its short-term leases of equipment (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption to leases of office equipment that are considered to be low value. Lease payments on short-term leases and leases of low-value assets are recognised as expense on a straight-line basis over the lease term.

(xiii) Inventories

Inventories and work-in-progress are stated at the lower of cost and net realisable value.

Cost is determined on the following basis:

- Purchased copper concentrate is recorded at cost on a first-in, first-out (“FIFO”) basis; all other materials including stores and spares are valued on weighted average basis; except in Oil and Gas business where stores and spares are valued on a FIFO basis.

- Finished products are valued at raw material cost plus costs of conversion, comprising labour costs and an attributable proportion of manufacturing overheads based on normal levels of activity and are moved out of inventory on a weighted average basis (except in copper business where FIFO basis is followed); and
- By-products and scrap are valued at net realisable value.

  Net realisable value is determined based on estimated selling price, less further costs expected to be incurred for completion and disposal.

(xiv) Government grants

Grants and subsidies from the government are recognised when there is reasonable assurance that (i) the Group will comply with the conditions attached to them, and (ii) the grant/subsidy will be received.

When the grant or subsidy relates to revenue, it is recognised as income on a systematic basis in the consolidated income statement over the periods necessary to match them with the related costs, which they are intended to compensate.

Government grants relating to tangible fixed assets are deducted in calculating the carrying amount of the assets and recognised in the consolidated income statement over the expected useful lives of the assets concerned as a reduced depreciation expense.

When loans or similar assistance are provided by governments or related institutions, with an interest rate below the current applicable market rate, the effect of this favourable interest is regarded as a government grant. The loan or assistance is initially recognised and measured at fair value and the government grant is measured as the difference between the initial carrying value of the loan and the proceeds received. The loan is subsequently measured as per the accounting policy applicable to financial liabilities.

(xv) Taxation

Tax expense represents the sum of current tax and deferred tax.

Current tax is provided at amounts expected to be paid (or recovered) using the tax rates and laws that have been enacted or substantively enacted by the reporting date and includes any adjustment to tax payable in respect of previous years.

Subject to the exceptions below, deferred tax is provided, using the balance sheet method, on all temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes and on carry forward of unused tax credits and unused tax losses:

- Tax payable on the future remittance of the past earnings of subsidiaries where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future;
- Deferred income tax is not recognised on initial recognition as well as on the impairment of goodwill which is not deductible for tax purposes or on the initial recognition of an asset or liability in a transaction that is not a business combination, and at the time of the transaction, affects neither the accounting profit nor taxable profit (tax loss) ; and
- Deferred tax assets (including MAT credit entitlement) are recognised only to the extent that it is more likely than not that they will be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date. Tax relating to items recognised outside consolidated income statement is recognised outside consolidated income statement (either in other comprehensive income or equity).

The carrying amount of deferred tax assets (including MAT credit entitlement) is reviewed at each reporting date and is adjusted to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the asset to be recovered.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set off current income tax assets against current income tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

Deferred tax is provided on temporary differences arising on acquisitions that are categorised as Business Combinations. Deferred tax is recognised at acquisition as part of the assessment of the fair value of assets and liabilities acquired. Subsequently deferred tax is charged or credited in the consolidated income statement/other comprehensive income as the underlying temporary difference is reversed.

(xvi) Retirement benefit schemes

The Group operates or participates in a number of defined benefits and defined contribution schemes, the assets of which (where funded) are held in separately administered funds.

For defined benefit schemes, the cost of providing benefits under the plans is determined by actuarial valuation each year separately for each plan using the projected unit credit method by third party qualified actuaries.

Remeasurement including, effects of asset ceiling and return on plan assets (excluding amounts included in interest on the net defined benefit liability) and actuarial gains and losses arising in the year are recognised in full in other comprehensive income and are not recycled to the consolidated income statement.

Past service costs are recognised in the consolidated income statement on the earlier of:

- the date of the plan amendment or curtailment, and
- the date that the Group recognises related restructuring costs

Net interest is calculated by applying a discount rate to the net defined benefit liability or asset at the beginning of the period. Defined benefit costs are split into current service cost, past service cost, net interest expense or income and remeasurement, and gains and losses on curtailments and settlements.

Current service cost and past service costs are recognised within cost of sales and administrative expenses and distribution expenses. Net interest expense or income is recognised within finance costs.

For defined contribution schemes, the amount charged to the consolidated income statement in respect of pension costs and other post-retirement benefits is the contributions payable in the year, recognised as and when the employee renders related services.

(xvii) Share-based payments

Certain employees (including executive directors) of the Group receive part of their remuneration in the form of share-based payment transactions, whereby employees render services in exchange for shares or rights over shares (‘equity-settled transactions’).

The cost of equity-settled transactions with employees is measured at fair value of share awards at the date at which they are granted. The fair value of share awards is determined with the assistance of an external valuer and the fair value at the grant date is expensed on a proportionate basis over the vesting period based on the Group's estimate of shares that will eventually vest. The estimate of the number of awards likely to vest is reviewed at each reporting date up to the vesting date at which point the estimate is adjusted to reflect the current expectations.

The resultant increase in equity is recorded in share-based payment reserve.

In case of cash-settled transactions, a liability is recognised for the fair value of cash-settled transactions. The fair value is measured initially and at each reporting date up to and including the settlement date, with changes in fair value recognised in employee benefits expense. The fair value is expensed over the period until the vesting date with recognition of a corresponding liability. The fair value is determined with the assistance of an external valuer.

(xviii) Provisions, contingent liabilities and contingent assets

The assessments undertaken in recognising provisions and contingencies have been made in accordance with the applicable IFRS.

Provisions represent liabilities for which the amount or timing is uncertain. Provisions are recognised when the Group has a present obligation (legal or constructive), as a result of past events, and it is probable that an outflow of resources, that can be reliably estimated, will be required to settle such an obligation. If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows to net present value using an appropriate pre-tax discount rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. Unwinding of the discount is recognised in the consolidated income statement as a finance cost. Provisions are reviewed at each reporting date and are adjusted to reflect the current best estimate.

A contingent liability is a possible obligation that arises from past events whose existence will be confirmed by the occurrence or non-occurrence of one or more uncertain future events beyond the control of Group or a present obligation that is not recognised because it is not probable that an outflow of resources will be required to settle the obligation. A contingent liability also arises in extremely rare cases where there is a liability that cannot be recognised because it cannot be measured reliably. The Group does not recognise a contingent liability but discloses its existence in the consolidated financial statements.

Contingent assets are not recognised but disclosed in the financial statements when an inflow of economic benefit is probable.

The Group has significant capital commitments in relation to various capital projects which are not recognised in the consolidated statement of financial position.

(xix) Restoration, rehabilitation and environmental costs

An obligation to incur restoration, rehabilitation and environmental costs arises when environmental disturbance is caused by the development or ongoing production of a mine or oil fields. Such costs, discounted to net present value, are provided for and a corresponding amount is capitalised at the start of each project, as soon as the obligation to incur such costs arises. These costs are charged to the consolidated income statement over the life of the operation through the depreciation of the asset and the unwinding of the discount on the provision. The cost estimates are reviewed periodically and are adjusted to reflect known developments which may have an impact on the cost estimates or life of operations. The cost of the related asset is adjusted for changes in the provision due to factors such as updated cost estimates, changes to lives of operations, new disturbance and revisions to discount rates. The adjusted cost of the asset is depreciated prospectively over the lives of the assets to which they relate. The unwinding of the discount is shown as a finance cost in the consolidated income statement.

Costs for restoration of subsequent site damage which is caused on an ongoing basis during production are provided for at their net present value and charged to the consolidated income statement as extraction progresses. Where the costs of site restoration are not anticipated to be material, they are expensed as incurred.

(xx) Accounting for foreign currency transactions and translations

The functional currency for each entity in the Group is determined as the currency of the primary economic environment in which it operates. For all principal operating subsidiaries, the functional currency is normally the local currency of the country in which it operates with the exception of oil and gas business operations which have a US Dollar functional currency as that is the currency of the primary economic environment in which they operate. The financial statements are presented in US Dollars.

In the financial statements of individual group companies, transactions in currencies other than the respective functional currencies are translated into their functional currencies at the exchange rates ruling at the date of the transaction. Monetary assets and liabilities denominated in other currencies are translated into functional currencies at exchange rates prevailing on the reporting date. Non-monetary assets and liabilities denominated in other currencies and measured at historical cost or fair value are translated at the exchange rates prevailing on the dates on which such values were determined.

All exchange differences are included in the consolidated income statement except those where the monetary item is designated as an effective hedging instrument of the currency risk of designated forecasted sales or purchases, which are recognised in the other comprehensive income.

Exchange differences which are regarded as an adjustment to interest costs on foreign currency borrowings, are capitalised as part of borrowing costs in qualifying assets.

For the purposes of consolidation of financial statements, items in the consolidated income statement of those businesses for which the US dollar is not the functional currency are translated into US dollars at the average rates of exchange during the year/ exchange rates as on the date of transaction. The related consolidated statement of financial position is translated into US dollars at the rates as at the reporting date. Exchange differences arising on translation are recognised in the consolidated statement of comprehensive income. On disposal of such entities the deferred cumulative exchange differences recognised in equity relating to that particular foreign operation are recognised in the consolidated income statement.

(xxi) Buyers' credit / Suppliers' credit

The Group enters into arrangements whereby banks and financial institutions make direct payments to suppliers for raw materials and project materials. The banks and financial institutions are subsequently repaid by the Group at a later date providing working capital timing benefits. These are normally settled up to twelve months (for raw materials) and up to 36 months (for project and materials). Where these arrangements are with a maturity of up to twelve months, the economic substance of the transaction is determined to be operating in nature and these are recognised as operational buyers' credit/ suppliers' credit (under Trade and other payables). Where these arrangements are with a maturity beyond twelve months and up to thirty six months, the economic substance of the transaction is determined to be financing in nature, and these are presented within borrowings in the consolidated statement of financial position. Interest expense on these are recognised in the finance cost.

(xxii) Current and non-current classification

The Group presents assets and liabilities in the consolidated statement of financial position based on current / non-current classification. An asset is classified as current when it satisfies any of the following criteria:

- it is expected to be realized in, or is intended for sale or consumption in, the Group's normal operating cycle.
- it is held primarily for the purpose of being traded;
- it is expected to be realized within 12 months after the reporting date; or
- it is cash or cash equivalent unless it is restricted from being exchanged or used to settle a liability for at least 12 months after the reporting date.

All other assets are classified as non-current.

A liability is classified as current when it satisfies any of the following criteria:

- it is expected to be settled in the Group's normal operating cycle;
- it is held primarily for the purpose of being traded;
- it is due to be settled within 12 months after the reporting date; or
- the Group does not have an unconditional right to defer settlement of the liability for at least 12 months after the reporting date. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

All other liabilities are classified as non-current.

Deferred tax assets and liabilities are classified as non-current only.

(xxiii) Borrowing costs

Borrowing cost includes interest expense as per effective interest rate (EIR) and exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest cost.

Borrowing costs directly relating to the acquisition, construction or production of a qualifying capital project under construction are capitalised and added to the project cost during construction until such time that the assets are substantially ready for their intended use i.e. when they are capable of commercial production. Borrowing costs relating to the construction phase of a service concession arrangement is capitalised as part of the cost of the intangible asset. Where funds are borrowed specifically to finance a qualifying capital project, the amount capitalised represents the actual borrowing costs incurred. Where surplus funds are available out of money borrowed specifically to finance a qualifying capital project, the income generated from such short-term investments is deducted from the total capitalised borrowing cost. If any specific borrowing remains outstanding after the related asset is ready for its intended use or sale, that borrowing then becomes part of general borrowing. Where the funds used to finance a project form part of general borrowings, the amount capitalised is calculated using a weighted average of rates applicable to relevant general borrowings of the Group during the year.

All other borrowing costs are recognised in the consolidated income statement in the year in which they are incurred.

Capitalisation of interest on borrowings related to construction or development projects is ceased when substantially all the activities that are necessary to make the assets ready for their intended use are complete or when delays occur outside of the normal course of business.

EIR is the rate that exactly discounts the estimated future cash payments or receipts over the expected life of the financial liability or a shorter period, where appropriate, to the amortised cost of a financial liability. When calculating the effective interest rate, the Group estimates the expected cash flows by considering all the contractual terms of the financial instrument (for example, prepayment, extension, call and similar options).

(xxiv) Cash and cash equivalents

Cash and cash equivalents in the consolidated statement of financial position comprise cash at bank and in hand and short-term money market deposits which have a maturity of three months or less from the date of acquisition, that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

For the purpose of the consolidated statement of cash flows, cash and cash equivalents consist of cash and short-term deposits, as defined above and additionally includes unpaid dividend account.

2(b) Application of new and revised standards

The Group has adopted, with effect from 01 April 2019, the following new and revised standards and interpretations. Their adoption has not had any significant impact on the amounts reported in the consolidated financial statements.

IFRS 16 – Leases

IFRS 16, Leases, replaces the existing standard on accounting for leases, IAS 17, with effect from 01 April 2019. This standard introduces a single lessee accounting model and requires a lessee to recognize a 'right of use asset' (ROU) and a corresponding 'lease liability' for all leases. Lease costs are to be recognised in the consolidated income statement over the lease term in the form of depreciation on the ROU asset and finance charges representing the unwinding of the discount on the lease liability. In contrast, the accounting requirements for lessors remain largely unchanged.

The Group acts as a lessee in lease arrangements mainly involving plant and machinery, office premises and other properties. The Group has elected to apply the modified retrospective approach on transition, and accordingly the comparative numbers have not been restated. For contracts in place as at 01 April 2019, the Group has continued to apply its existing definition of leases as under IAS 17 (“grandfathering”), instead of reassessing whether existing contracts are or contain a lease at that date. Further, the Group has elected to avail the exemption in IFRS 16 from applying the requirements of IFRS 16 to short-term leases of all assets that have a lease term of 12 months or less and leases for which the underlying asset is of low value. The lease payments associated with these leases are recognized as an expense on a straight-line basis over the lease term.

Refer note 16 for impact of ROU assets and note 24 for lease liabilities.

Previous period accounting policies: Leases

Determining whether an arrangement contains lease

At inception of an arrangement, the Group determines whether the arrangement is or contains a lease. The arrangement is, or contains, a lease if fulfilment of the arrangement is dependent on the use of a specific asset or assets and the arrangement conveys a right to use the asset or assets, even if that right is not explicitly specified in an arrangement.

At inception or on reassessment of an arrangement that contains lease, the Group separates payments and other consideration required by the arrangement into those for the lease and those for other elements on the basis of their relative fair values. If the Group concludes for a finance lease that it is impracticable to separate the payments reliably, then an asset and a liability are recognised at an amount equal to the fair value of the underlying asset; subsequently the liability is reduced as payments are made and an imputed finance cost on the liability is recognised using the Group's incremental borrowing rate.

Group as a lessee

A lease is classified at the inception date as a finance lease or an operating lease. A lease that transfers substantially all the risks and rewards incidental to ownership to the Group is classified as a finance lease.

Finance leases are capitalised at the commencement of the lease at the inception date fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are recognised in finance costs in the consolidated income statement, unless they are directly attributable to qualifying assets, in which case they are capitalised in accordance with the Group's policy on the general borrowing costs. Contingent rentals are recognised as expenses in the periods in which they are incurred.

A leased asset is depreciated over the useful life of the asset. However, if there is no reasonable certainty that the Group will obtain ownership by the end of the lease term, the asset is depreciated over the shorter of the estimated useful life of the asset and the lease term.

Operating lease payments are recognised as an expense in the consolidated income statement on a straight-line basis over the lease term.

Group as a lessor

Leases in which the Group does not transfer substantially all the risks and rewards of ownership of an asset are classified as operating leases. Rental income from operating lease is recognised on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

Leases are classified as finance leases when substantially all of the risks and rewards of ownership transfer from the Group to the lessee. Amounts due from lessees under finance leases are recorded as receivables at the Group's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the net investment outstanding in respect of the lease.

IFRIC 23 – Uncertainty over Income Tax Treatments

IFRIC 23 clarifies how to apply the recognition and measurement requirements in IAS 12 *Income Taxes* when there is uncertainty over income tax treatments. The clarification did not have a material effect on the Group's financial statements so far as the recognition and measurement of income taxes is concerned. A consequential impact of the clarification is on the disclosure of contingent liabilities. The Group previously used to consider only those cases/matters for contingent liabilities wherever demand has been raised by the authorities/ initial assessment has been completed. The contingent liabilities have now been extrapolated to other years where a similar issue exists, but formal demand has not been raised by tax authorities. Considering the impact of IFRIC 23, the amounts of Income Tax disputes disclosed in note 11 and 33 of these financial statements would have been higher by US$ 561 million as on April 01, 2019, as against the hitherto followed practice. As per the transitional provisions of IFRIC 23, the Group has not restated comparative information.

Other Amendments

A number of other minor amendments to existing standards also became effective on 01 April 2019 and have been adopted by the Group. The adoption of these new accounting pronouncements did not have a material impact on the accounting policies, methods of computation or presentation applied by the Group.

Standards issued but not yet effective

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's financial statements are not expected to have a significant impact on the Group's financial statements. The Group has not early adopted any amendment, standard or interpretation that has been issued but is not yet effective.

2(c) Significant accounting estimates and judgements

The preparation of consolidated financial statements in conformity with IFRS requires management to make judgements, estimates and assumptions, that affect the application of accounting policies and the reported amounts of assets, liabilities, income, expenses and disclosures of contingent assets and liabilities at the date of these consolidated financial statements and the reported amounts of revenues and expenses for the years presented. These judgments and estimates are based on management's best knowledge of the relevant facts and circumstances, having regard to previous experience, but actual results may differ materially from the amounts included in the financial statements.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised and future periods affected.

The information about significant areas of estimation uncertainty and critical judgements in applying accounting policies that have the most significant effect on the amounts recognised in the financial statements are as given below:

I. Significant Estimates:

(i) Impact of COVID-19

The outbreak of novel Coronavirus (COVID-19) pandemic globally and in India and the consequent lockdown restrictions imposed by national governments is causing significant disturbance and slowdown of economic activity across the globe. The commodity prices including oil have seen significant volatility with downward price pressures due to major demand centers affected by lockdown.

The Group is in the business of metals and mining, Oil & gas and generation of electricity which are considered as either essential goods and services or were generally allowed to continue to carry out the operations with adequate safety measures. The Group has taken proactive measures to comply with various regulations/guidelines issued by the Government and local bodies to ensure safety of its workforce and the society in general.

The Group has considered possible effects of Covid-19 on the recoverability of its property, plant and equipment (PPE), inventories, loans and receivables, etc in accordance with IFRS. The Group has considered forecast consensus, industry reports, economic indicators and general business conditions to make an assessment of the implications of the Pandemic. The Group has also performed sensitivity analysis on the key assumptions identified based on the internal and external information, which are indicative of future economic condition. Based on the assessment, the Group has recorded necessary adjustments, including impairment to the extent the carrying amount exceeds the recoverable amount and has disclosed the same as special item in these financial statements (refer note 6)

The actual effects of COVID-19 could be different from what is presently assessed and would be known only in due course of time.

(ii) Oil and Gas reserves

Significant technical and commercial judgements are required to determine the Group's estimated oil and natural gas reserves. Oil and Gas reserves are estimated on a proved and probable entitlement interest basis. Proven and probable reserves are estimated using standard recognised evaluation techniques. The estimate is reviewed annually. Future development costs are estimated taking into account the level of development required to produce the reserves by reference to operators, where applicable, and internal engineers.

Net entitlement reserves estimates are subsequently calculated using the Group's current oil price and cost recovery assumptions, in line with the relevant agreements.

Changes in reserves as a result of factors such as production cost, recovery rates, grade of reserves or oil and gas prices could impact the depletion rates, carrying value of assets (refer note 16) and environmental and restoration provisions.

(iii) Carrying value of exploration and evaluation oil and gas assets

The recoverability of a project is assessed under IFRS 6. Exploration assets are assessed by comparing the carrying value to higher of fair value less cost of disposal or value in use, if impairment indicators exist. Change to the valuation of exploration assets is an area of judgement. Further details on the Group's accounting policies on this are set out in accounting policy above. The amounts for exploration and evaluation assets represent active exploration projects. These amounts will be written off to the consolidated income statement as exploration costs unless commercial reserves are established, or the determination process is not completed and there are no indications of impairment. The outcome of ongoing exploration, and therefore whether the carrying value of exploration and evaluation assets will ultimately be recovered, is inherently uncertain. Details of impairment charge/reversal and the assumptions used and carrying values are disclosed in note 6 and note 16 respectively.

(iv) Carrying value of developing/producing oil and gas assets

Management performs impairment tests on the Group's developing/producing oil and gas assets where indicators of impairment are identified in accordance with IAS 36.

The impairment assessments are based on a range of estimates and assumptions, including:

Estimates/ assumptions	Basis
Future production	proved and probable reserves, production facilities, resource estimates and expansion projects
Commodity prices	management's best estimate benchmarked with external sources of information, to ensure they are within the range of available analyst forecast
Discount to price	Management's best estimate based on historical prevailing discount and updated sales contracts
Extension of PSC	granted till 2030 on the expected commercial terms (Refer note 2(c)(I)(viii)
Discount rates	cost of capital risk-adjusted for the risk specific to the asset/CGU

Any subsequent changes to cash flows due to changes in the above mentioned factors could impact the carrying value of the assets.

Details of impairment charge/reversal and the assumptions used and carrying values are disclosed in note 6 and note 16 respectively.

(v) Mining properties and leases

The carrying value of mining property and leases is arrived at by depreciating the assets over the life of the mine using the unit of production method based on proved and probable reserves. The estimate of reserves is subject to assumptions relating to life of the mine and may change when new information becomes available. Changes in reserves as a result of factors such as production cost, recovery rates, grade of reserves or commodity prices could thus impact the carrying values of mining properties and leases and environmental and restoration provisions.

Management performs impairment tests when there is an indication of impairment. The impairment assessments are based on a range of estimates and assumptions, including:

Estimates/assumptions	Basis
Future production	proved and probable reserves, resource estimates (with an appropriate conversion factor) considering the expected permitted mining volumes and, in certain cases, expansion projects
Commodity prices	management's best estimate benchmarked with external sources of information, to ensure they are within the range of available analyst forecast
Exchange rates	management best estimate benchmarked with external sources of information
Discount rates	cost of capital risk-adjusted for the risk specific to the asset/CGU

Details of impairment charge/reversal and the assumptions used and carrying values are disclosed in note 6 and note 16 respectively.

(vi) Recoverability of deferred tax and other income tax assets

The Group has carry forward tax losses, unabsorbed depreciation and MAT credit that are available for offset against future taxable profit. Deferred tax assets are recognised only to the extent that it is probable that taxable profit will be available against which the unused tax losses or tax credits can be utilized. This involves an assessment of when those assets are likely to reverse, and a judgement as to whether or not there will be sufficient taxable profits available to offset the assets. This requires assumptions regarding future profitability, including the additional volume from the expansion projects in oil and gas and aluminium businesses, which is inherently uncertain. To the extent assumptions regarding future profitability change, there can be an increase or decrease in the amounts recognised in respect of deferred tax assets and consequential impact in the consolidated income statement.

The total deferred tax assets recognised in these financial statement (refer note 11) includes MAT credit entitlements of US$ 1,220 million (Previous year US$ 1,492 million) which needs to be utilised within a period of fifteen years from year of origination. Of the said amount US$ 481 million is expected to be utilised in the fourteenth and the fifteenth year.

Additionally, the Group has tax receivables on account of refund arising on account of past amalgamation and relating to various tax disputes. The recoverability of these receivables involve application of judgement as to the ultimate outcome of the tax assessment and litigations. This pertains to the application of the legislation, which in certain cases is based upon management's interpretation of country specific tax law, in particular India, and the likelihood of settlement. Management uses in-house and external legal professionals to make informed decision (refer note 11(d)).

vii). Copper- India

Existing Plant:

In an appeal filed by the Group against the closure order of the Tuticorin Copper smelter by Tamil Nadu Pollution Control Board ("TNPCB"), the appellate authority National Green Tribunal ("NGT") passed an interim order on 31 May 2013 allowing the copper smelter to recommence operations and appointed an Expert Committee to submit a report on the plant operations. Post the interim order, the plant recommenced operations on 23 June 2013. Based on Expert Committee's report on the operations of the plant stating that the plant's emission were within prescribed standards and based on this report, NGT ruled on 08 August 2013 that the Copper smelter could continue its operations and recommendations made by the Expert Committee be implemented in a time bound manner. The Group has implemented all of the recommendations. TNPCB has filed an appeal against the order of the NGT before the Supreme Court of India.

In the meanwhile, the application for renewal of Consent to Operate (CTO) for existing copper smelter, required as per procedure established by law was rejected by TNPCB in April 2018. Vedanta Limited has filed an appeal before the TNPCB Appellate Authority challenging the Rejection Order. During the pendency of the appeal, there were protests by a section of local community raising environmental concerns and TNPCB vide its order dated 23 May 2018 ordered closure of existing copper smelter plant with immediate effect. Further, the Government of Tamil Nadu, issued orders dated 28 May 2018 with a direction to seal the existing copper smelter plant permanently. The company believes these actions were not taken in accordance with the procedure prescribed under applicable laws. Subsequently, the Directorate of Industrial Safety and Health passed orders dated 30 May 2018, directing the immediate suspension and revocation of the Factory License and the Registration Certificate for the existing smelter plant.

The company has appealed this before the National Green Tribunal (NGT). NGT vide its order on 15 December 2018 has set aside the impugned orders and directed the TNPCB to pass fresh orders for renewal of consent and authorization to handle hazardous substances, subject to appropriate conditions for protection of environment in accordance with law.

The State of Tamil Nadu and TNPCB approached Supreme Court in Civil Appeals on 02 January 2019 challenging the judgement of NGT dated 15 December 2018 and the previously passed judgement of NGT dated 08 August 2013. The Supreme Court vide its judgement dated 18 February 2019 set aside the judgements of NGT dated 15 December 2018 and 08 August 2013 on the basis of maintainability alone and directed the company to file an appeal in High court.
The company has filed a writ petition before Madras High Court challenging the various orders passed against the company in 2018 and 2013. Continuous hearings were conducted from June 2019 to January 2020. Rejoinder and sur-rejoinder arguments on behalf of all the parties concluded on 08 January 2020 and the orders have been reserved for Judgement.

Further, in October 2019, the company has filed a writ petition in Madras High court for allowing access to plant to undertake essential care and maintenance as due to lack of care and maintenance in the last 18 months, several structures such as pipelines, cable trays etc. are in corroded state and likely to get damaged. Management believes that assessment of physical damage, if any, can be carried out once it gets access to the plant. However, the same is not expected to be material.

As per the company's assessment, it is in compliance with the applicable regulations and expects to get the necessary approvals in relation to the existing operations.

The company has carried out an impairment analysis for existing plant assets during the year ended 31 March 2020 considering the key variables and concluded that there exists no impairment. The company has done an additional sensitivity analysis with commencement of operations of the existing plant in FY 2022-23 and noted that the recoverable amount of the assets would still be in excess of their carrying values.

The carrying value of the assets as at 31 March 2020 is US$ 260 million (US$ 284 million as at 31 Mar 2019)

Expansion Plant:

Separately, the company has filed a fresh application for renewal of the Environmental Clearance for the proposed Copper Smelter Plant 2 (Expansion Project) dated 12 March 2018 before the Expert Appraisal Committee of the MoEF wherein a sub-committee was directed to visit the Expansion Project site prior to prescribing the Terms of Reference.
In the meantime, the Madurai Bench of the High Court of Madras in a Public Interest Litigation held vide its order dated 23 May 2018 that the application for renewal of the Environmental Clearance for the Expansion Project shall be processed after a mandatory public hearing and in the interim, ordered the company to cease construction and all other activities on site for the proposed Expansion Project with immediate effect. The Ministry of Environment and Forests (MoEF) has delisted the expansion project since the matter is sub-judice. Separately, SIPCOT vide its letter dated 29 May 2018, cancelled 342.22 acres of the land allotted for the proposed Expansion Project. Further the TNPCB issued orders on 07 June 2018 directing the withdrawal of the Consent to Establish (CTE) which was valid till 31 March 2023.

The company has approached Madras High Court by way of writ petition challenging the cancellation of lease deeds by SIPCOT pursuant to which an interim stay has been granted. The company has also filed Appeals before the TNPCB Appellate Authority challenging withdrawal of CTE by the TNPCB, the matter is pending for adjudication.

Impairment recognised during the year

For the expansion plant, the project activities are on halt since May 2018. Further, the project environment clearance (EC) for the expansion plant expired on 31 December 2018 and fresh application has been filed before the competent authority, however, the process will start only after reopening of the existing plant and after obtaining all statutory approvals, the timing of which is uncertain.

Keeping in view the above factors and the fact that value in use cannot be reasonably ascertained, the company has carried out recoverability assessment of the items of property, plant and equipment, capital work in progress (CWIP) and capital advances using fair value less cost of disposal method. Based on the realisable value estimate of US$ 38 million, the company has recognised an impairment of US$ 94 million (comprising of CWIP balances of US$ 61 million, capital advances of US$ 28 million and other property plant and equipment of US$ 5 million) during the year.

Property, plant and equipment of US$ 197 million and inventories of US$ 69 million, pertaining to existing and expansion plant, could not be physically verified, anytime during the year, as the access to the plant is presently restricted. However, since operations are suspended and access to the plant restricted, any difference between book and physical quantities is unlikely to be material.

viii) PSC Extension

Rajasthan Block

On 26 October 2018, the Government of India (GoI), acting through the Directorate General of Hydrocarbons (DGH) granted its approval for a ten-year extension of the Production Sharing Contract (PSC) for the Rajasthan Block (RJ), with effect from 15 May 2020 subject to certain conditions. The GoI had granted the extension under the Pre-NELP Extension Policy, the applicability whereof to PSC for Rajasthan Block is sub-judice and pending before the Hon'ble Delhi High Court. This policy entails additional 10% profit petroleum payment to GoI. In the ongoing proceedings in Delhi High court, GoI have agreed for ad-hoc arrangement not to seek the 10% additional profit petroleum till 1 September 2020. The next date of hearing is scheduled on 20 August 2020.

The key conditions stated by DGH and the Group's position is detailed below:

c) *Submission of Audited Accounts and End of year statement:*

Condition regarding submission of audited accounts and End of Year Statement for adoption by Management Committee of the Block has been delinked by DGH vide letter dated 03 December 2019 as a pre-condition to PSC extension.

d) *Profit Petroleum:*

DGH has raised a demand for the period up to 31 March 2017 for Government's additional share of Profit oil based on its computation of disallowance of cost incurred over the initially approved Field Development Plan (FDP) of pipeline project for US$ 202 million and retrospective re-allocation of certain common costs between Development Areas (DAs) of Rajasthan Block aggregating to US$ 364 million, representing the Group's share.

Subsequently, the company in January 2020 received notifications from DGH on audit exceptions arising out of its audit for the FY 2017-18, which comprises of the consequential effects on profit oil due to the aforesaid matters and certain new matters on cost allowability plus interest aggregating to US$ 645 million, representing the Group's share, which have been responded to by the Group.

The company believes that it has sufficient as well as reasonable basis (pursuant to PSC provisions & approvals), supported by legal advice, for having claimed such costs and for allocating common costs between different DAs. In the company's opinion, these computations of the aforesaid demand / audit exceptions are not appropriate and the accounting adjustments sought for issues pertaining to Year 2007 and onwards are based on assumptions that are not in consonance with the approvals already in place. The company's view is also supported by independent legal opinion and the company has been following the process set out in PSC to resolve these aforesaid matters. Thus, the company sought for appointment of a sole expert for opining on the audit exceptions by a letter dated 14 November 2019 and thereafter on 14 May 2020, company has issued a notice of Arbitration proceeding on the above matters and is confident of resolution of matters in its favour.

The Government of India (GoI) has responded to company's notice of arbitration on 29 June 2020 and raised claims of US$ 1,031 million (representing audit exceptions notified by DGH upto FY 2017-18) plus consequential impact until the expiry of the current PSC on 14 May 2020.

GoI has nominated their arbitrator and the company has notified GoI about proceeding with appointment of the presiding arbitrator as per the PSC.

Further to above stated letter from GoI on 26 October 2018, in view of pending non-finalization of the Addendum to PSC, the extraordinary situation prevailing on account of COVID-19 and non-finalisation of issues including the aforesaid DGH demand, the GoI granted, vide letter dated 14 May 2020, permission to the Group to continue petroleum operations in Rajasthan block, till the execution of the Addendum to PSC or for a period of three months from 15 May 2020, whichever is earlier.

In our view, above mentioned condition linked to PSC extension is untenable and has not resulted in creation of any liability and cannot be a ground for non-extension. In addition, all necessary procedures prescribed in the PSC including appropriate dispute resolution process, in respect of the stated audit observation have also been satisfied. Accordingly, in our view, all the conditions of the PSC extension approval granted vide DGH letter dated 26 October 2018 stands addressed and no material liability would devolve upon the Group.

An adverse decision from the Government of India on the PSC extension could result in a substantial loss of value and could have a material adverse effect on Vedanta's results of operations and financial condition.

Ravva Block

The Government of India (GoI) has granted its approval for a ten-year extension of PSC for Ravva Block with effect from 28 October 2019, in terms of the provision of the "Policy on the Grant of the extension to Production Sharing Contract Signed by Government awarding small, medium-sized and discovered field to private joint ventures" dated 28 March 2016. The PSC addendum recording this extension has been executed by all parties.

The Ravva Extension Policy, amongst others, provides for an increased share of profit petroleum of 10% for the GoI during the extended term of the Ravva PSC and payment of royalty and cess as per prevailing rate in accordance with the PNG Rules, 1959 and OIDB Act. Under the Ravva PSC, the company's oil and gas business is entitled to recover 100% of cost of production and development from crude oil and natural gas sales before any profit is allocated among the parties.

(ix) Impact of Taxation Laws (Amendment) Act, 2019

Pursuant to the introduction of Section 115BAA of the Indian Income Tax Act, 1961, which is effective 01 April 2019, companies in India have the option to pay corporate income tax at the rate of 22% plus applicable surcharge and cess as against the earlier rate of 30% plus applicable surcharge and cess, subject to certain conditions like, the company has to forego all benefits like tax holidays, brought forward losses generated through tax incentives/additional depreciation and outstanding MAT credit. Considering all the provisions under Section 115BAA and based on the expected timing of exercising of the option under Section 115BAA, the Group has re-measured its deferred tax balances leading to a deferred tax credit of US$ 233 million on deferred tax balances as at 31 March 2019 being recognised during the financial year. This computation required assessment of assumptions regarding future profitability, which is inherently uncertain. To the extent assumptions regarding future profitability change, there can be increase or decrease in the amounts recognised.

(x) Flue-gas desulfurization (FGD) implementation:

Ministry of Environment, Forest and Climate Change (MOEF&CC) has revised emission norms for coal-based power plants in India. Accordingly, both captive and independent coal-based power plants in India are required to comply with these revised norms for reduction of sulphur oxide (SOx) emissions for which the current plant infrastructure is to be modified or new equipments have to be installed. Timelines for compliance to the revised norm for various plants in the Group range from December 2019 to March 2022. Different power plants are at different stages of the implementation process.

Status of Implementation at TSPL

TSPL for which the last date of compliance was December 31, 2019, has issued Letter of Intent (LOI) to the successful bidder and continues to operate the plant in absence of any directions from Central Pollution Control Board (CPCB) or MOEF&CC . TSPL is confident that authorities would take considerate stand in view of stringent timelines and earnest efforts taken by the plant to meet the environmental norms. TSPL has received show cause notice from Punjab Pollution Control Board (PPCB), which was favourably disposed of by PPCB with a recommendation to CPCB for extension of timeline. Subsequently, a show cause notice has been issued by CPCB to TSPL and other power plants which were required to meet December 31, 2019 deadline. CPCB vide notice published on its website, has imposed environment compensation penalty of ₹ 18 Lacs per month per non-compliant unit and any further directions based on the periodic review of compliance status. The impact of this penalty for the year ended 31 March 2020 is not material.

Subsequently, TSPL has filed its reply to CPCB to extend the timeline and revoke the environment compensation notice. The company has also paid Rs 54 lacs under protest.

Status of Implementation at other Plants

The timeline prescribed for captive power plants of Vedanta Limited, Balco & HZL was June 2020. While Vedanta Limited and Balco have issued Letter of Intent (LOI) to the successful bidder, HZL is in the process of issuing the LOI. Group's respective operations have been engaging with the concerned authorities to extend the timeline for compliance. In the event, the request for extension of timeline is not accepted, this could impact the operations of power plants and associated operations, the impact of which cannot be determined with reasonable certainty. In the absence of any direction from concerned authorities, the power plants are continuing its operations.

(xi) Electrosteel Steels Limited had filed application for renewal of Consent to Operate (‘CTO’) on 24 August 2017 for the period of five years which was denied by Jharkhand State Pollution Control Board (‘JSPCB’) on 23 August 2018. Hon'ble High Court of Jharkhand has granted stay on 25 August 2018 against said order of denial of CTO by JSPCB and the stay has been extended by the Court to allow the operations till next date of hearing. Hon’ble High Court has also extended stay against order of Ministry of Environment, Forest and Climate Change (MOEF&CC) dated 20 September 2018 in respect of revocation of environmental clearance (EC) till next date of hearing. In December 2019, ESL has been granted the stage I forest clearance by MOEF&CC. The company is working out appropriate solution to secure the revised EC in due course and does not expect a material liability in this regard.

(xii) Assessment of impairment at Avanstrate Inc (ASI)

Significant changes in the market and economic environment in which ASI operates has led to decrease in demand and profitability in the glass substrate business. Accordingly, the Group had assessed the recoverable value of all its assets and liabilities which led to a non-cash impairment charge during the year ended March 31, 2020 (refer note 6).

The impairment assessments are based on a range of estimates and assumptions, including:

Estimates/ assumption	Basis
Future sales volume	Existing customer relationships, unperformed contracts and expected wins
Commodity prices	management's best estimate
Discount rates	cost of capital risk-adjusted for the risk specific to the asset/CGU

The projections of future sales volume are based on the existing customer relationships, unperformed contracts and revenue from contracts with new customers which are in the advanced stage of discussions or are probable wins based on management judgement. Any subsequent changes to cash flows due to changes in the above-mentioned factors could impact the carrying value of the assets.

(xiii) Assessment of impairment of assets at Skorpion Zinc (pty) Limited (Skorpion):

Skorpion is an integrated Zinc facility in Namibia, Africa comprising of an open-pit mine and refinery. Skorpion is approaching its end of life on the mine (LOM), the remaining ore is expected to take 8 months to mine and a further 8 months to be processed through the refinery. Due to a slope failure in January 2020 the mine and the refinery were put into care and maintenance in order for a new mine plan to be developed. Considering the uncertainty around the future operations of refinery, an impairment trigger was identified as of March 31, 2020. The Group has carried out an impairment analysis over the remaining book value of the mining and refining assets as at March 31, 2020 considering the available ore only from the existing mine and concluded that there exists no impairment. The Group has carried out sensitivity analysis on key assumptions including LME prices, Exchange rates, discount rate and inflation. Based on sensitivity analysis, the recoverable amount is still expected to exceed the carrying value as at March 31, 2020 of US$ 76 million.

The refinery is built to process oxide based ores only which are available from the in-house mine. Post expiry of mine life, the Group intends to convert the refinery to be able to process both sulphide and oxide ore to continue Skorpion as a custom refinery through procurement of ore from other Group entities or other external parties. Capital work-in-progress with a carrying value of US$ 10 million has been incurred to date on the conversion.

(xiv) Assessment of impairment of assets at Aluminium division

Considering lower sales realisation, an impairment trigger has been identified in the aluminium division of Vedanta Limited. The impairment assessments are based on a range of estimates and assumptions, including:

Estimates/assumption	Basis
Future production	Proved and probable reserves, production facilities, resource estimates and expansion projects
Commodity prices	management's best estimate benchmarked with external sources of information, to ensure they are within the range of available analyst forecast
Discount rates	cost of capital risk-adjusted for the risk specific to the asset/CGU

The Group has carried out impairment analysis, based on value in use approach, considering the key variables and concluded that there exists no impairment. The Group has carried out sensitivity analysis on key assumptions including commodity price, discount rate and delay in expansion of refinery. Based on sensitivity analysis, the recoverable amount is still expected to exceed the carrying value of US$ 3,263 million as at March 31, 2020.

(xiv) Discontinued operations - Copper Zambia (KCM)

The investment in KCM and loans, receivables and obligations of KCM towards the Group recognised following its deconsolidation were fair valued during the year. The Group employed third-party experts to undertake the valuations using the income approach method. In this approach, the discounted cash flow method was used to capture the present value of the expected future economic benefits to be derived from the ownership of these assets. The resulting valuation is adjusted to reflect a number of factors, including the uncertainty and risks inherent in litigation and recovery. Details of significant estimates are disclosed in note 3(e).

II. Significant Judgements:

(i) Determining whether an arrangement contains a lease

The Group has ascertained that the Power Purchase Agreement (PPA) entered into between one of the Subsidiary and a State Grid qualifies to be an operating lease under IFRS 16 "Leases". Accordingly, the consideration receivable under the PPA relating to recovery of capacity charges towards capital cost have been recognised as operating lease rentals and in respect of variable cost that includes fuel costs, operations and maintenance etc. is considered as revenue from sale of products/services.

Significant judgement is required in segregating the capacity charges due from State Grid, between fixed and contingent payments. The Group has determined that since the capacity charges under the PPA are based on the number of units of electricity made available by its Subsidiary which would be subject to variation on account of various factors like availability of coal and water for the plant, there are no fixed minimum payments under the PPA, which requires it to be accounted for on a straight-line basis. The contingent rents recognised are disclosed in note 4,5 & 33(E)(ii).

(ii) Contingencies

In the normal course of business, contingent liabilities may arise from litigation, taxation and other claims against the Group. A provision is recognised when the Group has a present obligation as a result of past events, and it is probable that the Group will be required to settle that obligation.

Where it is management's assessment that the outcome cannot be reliably quantified or is uncertain the claims are disclosed as contingent liabilities unless the likelihood of an adverse outcome is remote. Such liabilities are disclosed in the notes but are not provided for in the financial statements.

When considering the classification of a legal or tax cases as probable, possible or remote there is judgement involved. This pertains to the application of the legislation, which in certain cases is based upon management's interpretation of country specific applicable law, in particular India, and the likelihood of settlement. Management uses in-house and external legal professionals to make informed decision.

Although there can be no assurance regarding the final outcome of the legal proceedings, the Group does not expect them to have a materially adverse impact on the Group's financial position or profitability. These are set out in note 33.

(iii) Revenue recognition and receivable recovery in relation to the power division

In certain cases, the Group's power customers are disputing various contractual provisions of Power Purchase Agreements (PPA). Significant judgement is required in both assessing the tariff to be charged under the PPA in accordance with IFRS 15 and to assess the recoverability of withheld revenue currently accounted for as receivables.

In assessing this critical judgment management considered favourable external legal opinions the Group has obtained in relation to the claims and favourable court judgements in the related matter. In addition the fact that the contracts are with government owned companies implies the credit risk is low. Refer note 18.

(iv) Special items

Special items are those items that management considers, by virtue of their size or incidence (including but not limited to impairment charges and acquisition and restructuring related costs), should be disclosed separately to ensure that the financial information allows an understanding of the underlying performance of the business in the year, so as to facilitate comparison with prior periods. Also, tax charges related to Special items and certain one-time tax effects are considered Special. Such items are material by nature or amount to the year's result and require separate disclosure in accordance with IFRS.

The determination as to which items should be disclosed separately requires a degree of judgement. The details of special items is set out in note 6.

3. Business Combination and others

a) Ferro Alloys Corporation Limited – business combination (proposed)

Pursuant to the order dated 30 January 2020 of the National Company Law Tribunal (NCLT), Vedanta Limited is implementing the approved Resolution Plan for acquisition of Ferro Alloys Corporation Limited ("FACOR") which was under liquidation as per the Insolvency and Bankruptcy Code 2016 (including all amendments for the time being in force). The closing of the transaction requires certain substantive actions to be taken whereupon the transaction would qualify for accounting under IFRS 3 Business Combinations.
FACOR is a company in the business of producing Ferro Alloys and owns a Ferro Chrome plant with capacity of 72,000 TPA, two operational Chrome mines and 100 MW of Captive Power Plant through its subsidiary, FACOR Power Limited (FPL). The consideration payable for the acquisition of FACOR on debt and cash free basis under the approved Resolution Plan is US$ 1 million as well as equivalent of cash balance in FPL as Upfront Payment and zero coupon, secured and unlisted Non-Convertible Debentures of aggregate face value of US$ 36 million to the Financial Creditors payable equally over 4 years commencing March 2021.

b) Global Coke – business combination

On 28 July, 2019, Vedanta Limited acquired Sindhudurg plant of Global Coke Limited which was under liquidation as per the Insolvency and Bankruptcy Code 2016 (including all amendments for the time being in force) for a cash consideration of US$ 5 Million. The assets acquired mainly included Land, Building and Plant & Machinery of similar value as the cash consideration. The acquisition complements backward integration opportunity for company's existing pig iron division and also increase the company's footprint in met coke market in south western part of India. Detailed disclosure of fair value of the identifiable assets and liabilities of Sindhudurg plant has not been provided as the same is not material.

Acquisition costs related to the same were not material.

c) Electrosteel Steels Limited

During the previous year ended 31 March 2019, the Group, through its subsidiary Vedanta Star Limited (VSL) acquired control over Electrosteel Steels Limited (ESL). Based on completion of the closing conditions, the Group concluded the acquisition date as 04 June 2018. ESL has been included in "Others" segment. If ESL had been acquired at the beginning of the previous year, revenue and profit before taxation of the Group for the year ended 31 March 2019 would have been US $ 13,102 million and US$ 1,364 million respectively.

During the current year, Hon'ble National Company Law Tribunal, Kolkata Bench vide its Order dated 31 January 2020 approved the Scheme of Amalgamation of VSL with ESL. Post the amalgamation becoming effective on 25 March 2020, Vedanta Limited directly holds 95.49% in ESL .

d) Acquisition of new hydrocarbon blocks

In August, 2018, Vedanta Limited was awarded 41 hydrocarbon blocks out of 55 blocks auctioned under the open acreage licensing policy (OALP) by Government of India (GOI). The blocks awarded to Vedanta Limited comprise of 33 onshore and 8 offshore blocks. Vedanta Limited will share a specified proportion of the net revenue from each block with GOI and has entered into 41 separate revenue sharing contracts (RSC) on 01 October 2018.

The bid cost of US$ 551 million represents Vedanta Limited's total committed capital expenditure on the blocks for the committed work programs during the exploration phase. Vedanta Limited has provided bank guarantees for minimum work programme commitments amounting to US$ 303 million for the 41 exploration blocks. These have been disclosed in note 33.

In March 2019, the company has been awarded 2 Contract Areas out of total 25 Contract Areas auctioned under Round II of the Discovered Small Field Policy (DSF) by Government of India (GOI). Both the Contract Areas awarded are onland fields. The Group will share a specified proportion of the revenue from each block with GOI and has entered into 2 separate Revenue Sharing Contracts (RSC) on 07 March 2019. There is no commitment for minimum work programme in these blocks.

In July 2019, the company has been awarded 10 hydrocarbon blocks out of 32 blocks awarded under round II & III of Open Acreage Licensing Policy (OALP) by Government of India (GoI). The blocks awarded to the Group comprise of 7 onshore and 3 offshore blocks. To effect the transaction, the company has entered into revenue sharing contracts ("RSCs") with the GoI on 16 July 2019. The bid cost of US$ 235 million represents the Group's estimated cost of committed work program in the blocks during the initial exploration phase. The company has provided bank guarantees for minimum work programme commitments amounting to US$ 69 million for the 10 exploration blocks.

(e) Discontinued operations - Copper Zambia (KCM):

On 21 May 2019, ZCCM Investments Holdings Plc (ZCCM), a company majority owned by the Government of the Republic of Zambia (GRZ), which owns 20.6% of the shares in Konkola Copper Mines Plc (KCM), filed a petition in the High Court of Zambia to wind up KCM (Petition) on "just and equitable" grounds. ZCCM also obtained an ex parte order from the High Court of Zambia appointing a Provisional Liquidator (PL) of KCM pending the hearing of the Petition. On

11 June 2019, without any prior notice, ZCCM amended the Petition to include an additional ground for winding up KCM, based on allegations that KCM is unable to pay its debts.

As a result of the appointment of the PL following ZCCM's ex parte application, the PL is currently exercising almost all the functions of the Board of Directors, to the exclusion of the Board.

The Group not only disputes the allegations and opposes the Petition, but also maintains that the complaints brought by ZCCM are in effect "disputes" between the shareholders. Per the KCM Shareholders' Agreement, the parties (including ZCCM and the Government of the Republic of Zambia) have agreed that any disputes must be resolved through international arbitration seated in Johannesburg, South Africa, applying the UNCITRAL Arbitration Rules; not the Zambian courts. Consequently, the Group maintains that the action brought by ZCCM before the Zambian High Court should not be heard until the dispute has been resolved in arbitration in accordance with the KCM Shareholders' Agreement.

Arbitration Application

Following the filing of the Petition, Vedanta Resources Holdings Limited (VRHL) and Vedanta Resources Limited (VRL or Company) commenced the dispute resolution procedures prescribed by the KCM Shareholders' Agreement, and have initiated arbitration consistent with their position that ZCCM is in breach of the KCM Shareholders' Agreement by reason of its actions in seeking to wind up KCM before the Zambian High Court and applying for the appointment of the PL, as opposed to pursuing its alleged grievances through arbitration under the KCM Shareholders' Agreement. As part of the dispute resolution process under the KCM Shareholders' Agreement, VRHL obtained injunctive relief from the High Court of South Africa requiring ZCCM to withdraw the Petition such that the PL is discharged from office and declaring ZCCM to be in breach of the arbitration clause in the KCM Shareholders' Agreement. ZCCM was further prohibited by the High Court of South Africa from taking any further steps to wind up KCM until the conclusion of the arbitration. ZCCM had sought leave to appeal to the Supreme Court of South Africa, which was granted, and the matter is pending to be heard.

The arbitration proceedings against ZCCM continue and a sole arbitrator has been appointed. The hearing is currently scheduled to take place in early 2021. Arbitration awards are enforceable in Zambia under the New York Convention.

Proceedings in the Zambian Courts

VRHL has also made a number of applications before the Zambian High Court in connection with the Petition, including an application for a stay of the Petition, pending the determination of the arbitration. Although, this application was dismissed at first instance by the High Court, VRHL was granted leave to appeal to the Zambian Court of Appeal. The appeal hearing is listed for 25 August 2020. In the meantime, the Petition remains stayed.

An Order given by the Zambian High Court staying certain of the PL's powers (i.e. those relating to the PL's ability to sell assets and make compromises with creditors) was set aside until the Petition returns to the High Court, subject to the outcome of the appeals to the Zambian Court of Appeal. The PL has given evidence in the Zambian High Court that he would not be able to sell assets (beyond that which is necessary to carry on KCM's ordinary business) without seeking the Court's approval. Notwithstanding this, on 10 September 2019, the PL caused KCM to enter into a consent order disposing of certain surface rights owned by KCM. On 28 November 2019, VRHL and KCM (acting through the lawyers appointed by the directors of KCM) obtained an ex-parte injunction restraining the PL from taking action to implement the consent order, halting the sale of surface rights and preventing any sale of the land itself. A challenge to the ex-parte injunction has been heard and the ruling has been reserved.

In connection with the response to the Petition, VRL has provided to the Board of KCM a commitment to provide certain financial support to KCM. This commitment is subject to certain conditions, including the dismissal of the Petition and discharge of the PL. Additionally since the conditions to the funding support were not satisfied by 30 September 2019, VRL has reserved the right to withdraw the offer set out in the letter.

At the date of approval of these financial statements, the PL remains in office and the Petition remains stayed.

Notice of Deemed Transfer of Shares

On 14 July 2020, ZCCM served a notice entitled "Notice of Deemed Transfer of Shares" on VRL and VRHL (Notice). The Notice is stated to be given under clause 10.1.2 of the KCM Shareholders' Agreement, notifying VRL and VRHL of various alleged breaches of the KCM Shareholders' Agreement having a Material Adverse Effect (as defined in the KCM Shareholders' Agreement) or other material breaches of the SHA, and requiring VRL and VRHL to remedy the notified breaches within 30 days, and reserving its rights in the event VRHL does not or cannot remedy the breaches within that time period to treat the event as deemed service by VRHL of an irrevocable offer under clause 10.2 to sell its shares in KCM to ZCCM at 'Fair Value'. Fair Value is to be determined in accordance with a mechanism set out in the KCM Shareholders' Agreement. If ZCCM thereafter notifies VRHL that it wishes to exercise these rights, VRHL will be deemed to have served an exit notice under clause 9.6 of the Shareholders' Agreement, giving rise to the application of a number of the exit provisions under the Shareholders' Agreement, including the requirement to make payment of budgeted capex for the succeeding 12 month period and any capital expenditure underspend in previous financial years on a cumulative basis, as determined by KCM's auditors.

VRL and VRHL intend to challenge the Notice in accordance with the provisions of the Shareholders' Agreement, and note that the effectiveness and validity of the Notice is to be determined by the arbitrator as part of the arbitration proceedings referred to above before any further steps can be taken by ZCCM to acquire VRHL's shares in KCM pursuant to the mechanism in clause 10 of the KCM Shareholders' Agreement.

Accounting Considerations – loss of control

Since all the significant decision-making powers, including carrying on the business of KCM and taking control over all the assets of KCM, rests with the PL, the Group believes that the appointment of PL has caused loss of its control over KCM. Accordingly, the Group has deconsolidated KCM with effect from 21 May 2019 and has presented the same in the income statement as a discontinued operation. This has also resulted in derecognition of non-controlling interests in KCM of US$ 86 million. The loss with respect to KCM operations along with the loss on fair valuation of the Group's interest in KCM has been presented as a special item in the income statement.

The Group has total exposure of US$ 1,952 million (including equity investment in KCM of US$ 266 million) to KCM in the form of loans, receivables, investments and amounts relating to the guarantees issued by VRL, which have been accounted for at fair value on initial recognition and disclosed under non-current assets in the Consolidated Statement of Financial Position.

Recognising the uncertainty inherent to the litigation, the Group believes, based on the legal advice it has obtained, that it is probable that it will succeed with its appeal to the Zambian Court of Appeal, which would result in the Petition being stayed until the outcome of the arbitration and the Group believes at some stage the Petition will be dismissed and the PL discharged.

i. The profit/ (loss) from discontinued operations i.e. KCM:

	For the year ended 31 March 2020*	For the year ended 31 March 2019
Revenue	94	1,025
Cost of sales	(160)	(1,081)
Gross loss	**(66)**	**(56)**
Other operating income	1	4
Distribution costs	(3)	(32)

Administrative expenses	(12)	(81)
Operating loss	**(80)**	**(165)**
Investment revenue	(11)	(53)
Finance costs	(9)	(54)
Loss before taxation (a)	**(100)**	**(272)**
Net tax credit/ (expense) (b)	23	(61)
Loss after tax from discontinued operations (a+b)	**(77)**	**(333)**

(US$ million)

** Till the date of appointment of PL i.e. 21 May 2019*

ii. Loss on deconsolidation:

On loss of control of KCM all assets and liabilities of KCM have been derecognised at their carrying value on the date of loss of control, 21 May 2019. On deconsolidation, the investment in KCM and the loans, receivables and obligations of KCM towards the Group have been recognised on the balance sheet at their fair value, at the date of loss of control. The resulting loss on deconsolidation, recognised in special items in the consolidated income statement, has been calculated as shown in the table below.

(US$ million)

	As at 21 May 2019
Fair value of assets recognised on deconsolidation:	
Investment in KCM (Original cost of investment: US $ 266 million)	-
Loans, receivables and obligations of KCM towards the Group*	693
Total (a)	**693**
Assets derecognised on deconsolidation:	
External Net assets of KCM (refer note iii below)	**1,268**
Non-controlling Interest	86
External Net assets of KCM attributable to the Group (b)	**1,354**
Loss on deconsolidation (a) – (b)	**(661)**

**consists of unsecured loans advanced by the Group of US $ 265 million, which is past due, secured borrowings of KCM where the Group has provided guarantee to the lenders/ creditors of US $ 355 million, monies advanced for goods and other receivables of US $ 73 million (Refer note 18).*

iii. The carrying amount of assets and liabilities:

(US$ million)

	External	**VRL Group***	**Total**
Property, plant and equipment	1,470	-	1,470
Other non-current assets	68	-	68
Trade and other receivables	240	-	240
Total assets	**1,778**	**-**	**1,778**
Borrowings	-	1,187	1,187
Trade and other payables	510	499	1,009
Total liabilities	**510**	**1,686**	**2,196**
Net assets/ (liabilities) of KCM	**1,268**	**(1,686)**	**(418)**

* Loans, receivables and obligations of KCM towards the Group

iv. The profit/ (loss) from discontinued operations i.e. KCM including loss on its deconsolidation has been presented below:

	Year ended 31 March 2020
Loss after tax from discontinued operations (refer note i above)	(77)
Loss on deconsolidation (refer note ii above)	(661)

Fair value change during the year (refer note v below)	(33)
Total	**(771)**

(US$ million)

Key sources of estimation uncertainty

The investment in KCM and loans, receivables and obligations of KCM towards the Group recognised following deconsolidation of the subsidiary are initially recognized at fair value on the date of loss of control. Subsequently, the equity investment in KCM is measured at fair value through profit or loss and the loans, receivables and obligations of KCM towards the Group are measured at amortised cost, subject to impairment.

The Group employed third-party experts ("Expert") to undertake valuations of the investment in KCM and loans, receivables and obligations of KCM towards the Group at the date of loss of control, 21 May 2019, and at 31 March 2020. The income approach method was applied for the purposes of the valuation. In this approach, the discounted cash flow method was used to capture the present value of the expected future economic benefits to be derived from the ownership of these assets. The resulting valuation is adjusted to reflect a number of factors, including the uncertainty and risks inherent in litigation and recovery. The third-party valuation provides a range of reasonable fair values, based on which management calculated the fair value to be recognised in the financial statements as the mid-point of the range.

Cash flow projections are based on financial budgets and life of mine plans on a going concern basis, and are sensitive to changes in input assumptions. Input assumptions into the valuation that involve management judgement include:

- The expectation that the large-scale mining licence expiring in 2025 will be extended to the end of the life of mine under the Mines & Mineral Development Act on payment of requisite fees and submission of the proposed programme of mining operation for the period of renewal. We believe this licence renewal process is in line with globally accepted procedural requirement to be followed by a mining company backed by a robust life of mine plan and as such, would get extended for the next permissible period post fulfilment of procedural requirement in ordinary course of business.
- Expected delay between success of the litigation proceedings and receipt of any amounts due.
- Liquidity of the market in the event of a sale of KCM, which has been considered through benchmarking the resulting valuation against other recent transactions for similar mines.
- The discount rate used to discount the cash flow projection, which has been calculated on a post-tax basis at 12.125%, using the input of third-party expert.

The key sources of estimation uncertainty, to which the valuation is most sensitive, are:

- The long-term copper price. Copper prices are based on the median of analyst forecasts.
- Throughput at the Konkola concentrator. The timing of ramp up of through put at the Konkola concentrator is based on internal management forecasts. The forecasts incorporate management experience and expectations as well as the risks associated therewith (for example availability of required fleets, skill sets for level developments at critical areas)
- The probability of achieving an award or positive settlement outcome in respect of the litigation proceedings. As discussed above, the Group believes, based on the legal advice it has obtained, that it is probable that it will succeed with its appeal to the Zambian Court of Appeal, which would result in the Petition being stayed until the outcome of the arbitration and the Group believes at some stage the Petition will be dismissed and the

appointment of the PL discharged. The probability used in the valuation is based on the Expert's assumption based on external legal advice that it is probable that the Group will succeed with its appeal to the Zambian Court of Appeal and benchmarked using external data on historical outcomes for similar claims.

- The potential proportion of the claim value that may be expected to be recovered in the event of achieving an award or positive settlement outcome. This includes the ability of ZCCM to make payments in the event of a successful award or settlement outcome.

Where discounted cash flow models based on management's assumptions are used, the resulting fair value measurements are considered to be at level 3 in the fair value hierarchy, as defined in IFRS 13 Fair Value Measurement, as they depend to a significant extent on unobservable valuation inputs.

v. Fair value measurements

The valuation of the investment in KCM and the loans, receivables and obligations of KCM towards the group is determined using discounted future cash flows and adjusted to reflect Expert's current views on litigation risk and other unobservable inputs as described below. These assets are considered to be level 3 in the fair value hierarchy. Quantitative information about the significant unobservable inputs used in level 3 fair value measurements are set out in the table below:

(US$ million, unless stated otherwise)

Financial asset	Fair value at		Significant unobservable Inputs	Relationship of unobservable inputs to fair value
	31 March 2020	21 May 2019		
Investments and Loans, receivables and obligations of KCM towards the Group	660	693	Probability of achieving an award or positive settlement outcome in respect of litigation proceedings	A decrease in probability of success would decrease the fair value. A 10% decrease in the probability of success, with no change to any other inputs, would decrease the fair value by US$ 80 million. We have used a 10% assumption to calculate our exposure as it represents a change in the probability of success that we deem to be reasonably probable.
			Potential proportion of the claim value that may expected to be recovered in the event of achieving an award or positive settlement outcome	A decrease in the recovery percentage would decrease the fair value. A 10% decrease in the recovery percentage, with no change to any other inputs, would decrease the fair value by US$ 132 million. We have used a 10% assumption to calculate our exposure as it represents a change in the recovery probability that we deem to be reasonably probable.
			Copper price Long term price of US$ 6,559 / tonne (31 March 2020) and US$ 6,503 / tonne (21 May 2019)	A decrease in the copper price would decrease the fair value. A 10% reduction in the copper price, with no change to any other inputs, would decrease the fair value by US$ 302 million. We have used a 10% assumption to calculate our exposure as it represents the annual copper price movement that we deem to be reasonably probable (on an annual basis over the long run).

4. Segment information

The Group is a diversified natural resources Group engaged in exploring, extracting and processing minerals and oil and gas. The Group produces zinc, lead, silver, copper, aluminium, iron ore, oil and gas and commercial power and have a presence across India, Zambia, South Africa, Namibia, UAE, Ireland, Australia, Liberia, Japan, South Korea and Taiwan. The Group is also in the business of port operations and manufacturing of glass substrate and steel.

The Group's reportable segments defined in accordance with IFRS 8 are as follows:

- Zinc- India
- Zinc-International
- Oil & Gas
- Iron Ore
- Copper-India/Australia
- Aluminium
- Power

'Others' segment mainly comprises of port/berth, steel and glass substrate business and those segments which do not meet the quantitative threshold for separate reporting.
Each of the reportable segments derives its revenues from these main products and hence these have been identified as reportable segments by the Group's chief operating decision maker ("CODM").

Management monitors the operating results of reportable segments for the purpose of making decisions about resources to be allocated and for assessing performance. Segment performance is evaluated based on the EBITDA of each segment. Business segment financial data includes certain corporate costs, which have been allocated on an appropriate basis. Inter-segment sales are charged based on prevailing market prices except for power segment sales to aluminium segment amounting to US$ Nil million for the year ended 31 March 2020 (31 March 2019: US$ 10 million), which were at cost.

The following tables present revenue and profit information and certain asset and liability information regarding the Group's reportable segments for the years ended 31 March 2020 and 31 March 2019. Items after operating profit are not allocated by segment.

(a) Reportable segments

Year ended 31 March 2020

(US$ million)

	Zinc-India	Zinc-International	Oil and gas	Iron Ore	Copper-India/ Australia	Aluminium	Power	Others	Elimination	Total operations
REVENUE										
Sales to external customers	2,563	441	1,787	487	1,277	3,746	827	662	-	11,790
Inter-segment sales	-	-	-	2	0	5	-	13	(20)	-
Segment revenue	**2,563**	**441**	**1,787**	**489**	**1,277**	**3,751**	**827**	**675**	**(20)**	**11,790**
Segment Result										
EBITDA[1]	1,230	54	1,032	117	(40)	281	232	97	-	3,003
Depreciation and amortisation[2]	319	90	566	34	21	233	81	68	-	1,412
Operating profit / (loss) before special items	**911**	**(36)**	**466**	**83**	**(61)**	**48**	**151**	**29**	**-**	**1,591**
Investment revenue										382
Finance costs										(1,179)
Other gains and (losses) [net]										(87)
Special items										(2,053)
Loss before taxation from continuing operations										**(1,346)**
Segments assets	2,762	692	2,079	461	879	6,560	2,333	1,072	-	16,838
Financial asset investments										12
Deferred tax assets										1,114
Short-term investments										4,385
Cash and cash equivalents										705
Tax assets										355
Others										777
TOTAL ASSETS										**24,186**
Segment liabilities	637	164	1,344	164	606	2,396	214	207	-	5,732
Borrowings										15,095
Current tax liabilities										26
Deferred tax liabilities										397
Others										663
TOTAL LIABILITIES										**21,913**
Other segment information										
Additions to property, plant and equipment, exploration and evaluation assets and intangible assets	651	107	642	15	31	200	10	44	-	1,700
Impairment charge [3]	-	-	1,906	-	94	-	-	72	-	2,072

Year ended 31 March 2019

(US$ million)

	Zinc-India	Zinc-International	Oil and gas	Iron Ore	Copper-India/Australia	Aluminium	Power	Others	Elimination	Total operations
REVENUE										
Sales to external customers	2,955	392	1,892	415	1,537	4,180	924	711	-	13,006
Inter-segment sales	-	-	-	1	0	3	10	7	(21)	-
Segment revenue	**2,955**	**392**	**1,892**	**416**	**1,537**	**4,183**	**934**	**718**	**(21)**	**13,006**
Segment Result										
EBITDA[1]	1,516	100	1,100	90	(36)	316	219	151	-	3,456
Depreciation and amortisation[2]	(268)	(61)	(611)	(35)	(21)	(240)	(86)	(58)	-	(1,380)
Operating profit / (loss) before special items	**1,248**	**39**	**489**	**55**	**(57)**	**76**	**133**	**93**	**-**	**2,076**
Investment revenue										533
Finance costs										(1,213)
Other gains and (losses) [net]										(75)
Special items										47
Profit before taxation from continuing operation										**1,368**

	Zinc-India	Zinc-International	Oil and gas	Iron Ore	Copper-India/Australia	Copper-Zambia	Aluminium	Power	Others	Elimination	Total operations
Segments assets	2,704	872	3,983	547	1,074	1,844	7,432	2,635	1,270	-	22,361
Financial asset investments											707
Deferred tax assets											778
Short-term investments											4,164
Cash and cash equivalents											1,133
Tax assets											505
Others											133
TOTAL ASSETS											**29,781**
Segment liabilities	733	197	1,421	190	585	578	2,909	243	207	-	7,063
Borrowings											15,980
Current tax liabilities											61
Deferred tax liabilities											776
Others											648
TOTAL LIABILITIES											**24,528**
Other segment information											
Additions to property, plant and equipment, exploration and evaluation assets and intangible assets	522	228	550	5	39	39	245	8	776	-	2,412
Impairment reversal[3]	-	-	38	-	-	-	-	-	-	-	38

(1) EBITDA is a non-IFRS measure and represents earnings before special items, depreciation, amortisation, other gains and losses, interest and tax.
(2) Depreciation and amortisation is also provided to the chief operating decision maker on a regular basis.
(3) Included under special items (Note 6).

4. Segment information (continued)

(b) Geographical segmental analysis

The Group's operations are located in India, Zambia, Namibia, South Africa, UAE, Liberia, Ireland, Australia, Japan, South Korea and Taiwan. The following table provides an analysis of the Group's revenue by region in which the customer is located, irrespective of the origin of the goods.

(US$ million)

	Year ended 31 March 2020	Year ended 31 March 2019*
India	7,652	8,465
China	380	542
UAE	116	145
Malaysia	1,079	696
Others	2,563	3,158
Total	**11,790**	**13,006**

* ***Restated refer Note 1(b)***

The following is an analysis of the carrying amount of non-current assets, excluding deferred tax assets, derivative financial assets, financial asset investments and other non-current financial assets analysed by the geographical area in which the assets are located:

(US$ million)

	Carrying amount of non-current assets	
	As at 31 March 2020	**As at 31 March 2019**
India	13,091	16,094
Zambia (refer note 3(e))	-	1,534
Namibia	100	144
South Africa	498	605
Taiwan	155	176
Others	145	147
Total	**13,989**	**18,700**

Information about major customer

No customer contributed 10% or more to the Group's revenue during the year ended 31 March 2020 and 31 March 2019.

Disaggregation of revenue

Below table summarises the disaggregated revenue from contracts with customers:

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Zinc Metal	2,223	2,437
Lead Metal	490	563
Silver Bars	349	367
Oil	1,539	1809
Gas	112	75
Iron ore	209	99
Pig Iron	316	294
Metallurgical coke	8	8
Copper Products	1,037	1,330
Aluminium Products	3,589	4,017
Power	622	682
Steel Products	534	600
Others	529	604
Revenue from contracts with customers*	**11,557**	**12,885**
Revenue from contingent rents (refer note 33E(ii))	**236**	**242**
Gains/(losses) on provisionally priced contracts under IFRS 9 (refer note 5)	**(183)**	**(121)**
JV partner's share of the exploration costs approved under the OM (refer note 5)	**180**	**-**
Total Revenue	**11,790**	**13,006**

**Includes revenues from sale of services aggregating to US$ 30 million (FY 2018-19: US$ 31 million) which is recorded over a period of time and the balance revenue is recognised at a point in time.*

5. Total Revenue

(US$ million)

	Year ended 31 March 2020	Year ended 31 March 2019
Sale of products[a,b]	11,524	12,733
Sale of services[a]	30	31
Revenue from contingent rents (refer note 33E(ii))	236	242
Total Revenue	**11,790**	**13,006**

a) Revenue from sale of products and from sale of services for the year ended 31 March 2020 includes revenue from contracts with customers of US$ 11,557 million (FY 2018-19: US$ 12,885 million) and a net loss on mark-to-market of US$ 183 million (FY 2018-19: US$ 121 million) on account of gains/ losses relating to sales that were provisionally priced as the beginning of the respective year with the final price settled in the subsequent year, gains/ losses relating to sales fully priced during the respective year, and marked to market gains/ losses relating to sales that were provisionally priced as at the beginning of the respective year

b) Government of India (GoI) vide Office Memorandum ("OM") No. O-19025/10/2005-ONG-DV dated

February 01, 2013 allowed for Exploration in the Mining Lease Area after expiry of Exploration period and prescribed the mechanism for recovery of such Exploration Cost incurred. Vide another Memorandum dated October 24, 2019, GoI clarified that all approved Exploration costs incurred on Exploration activities, both successful and unsuccessful, are recoverable in the manner as prescribed in the OM and as per the provisions of PSC. Accordingly, during the current year, the Group has recognized revenue of US $ 180 million, for past exploration costs, through increased share in the joint operations revenue as the Group believes that cost recovery mechanism prescribed under OM for profit petroleum payable to GOI is not applicable to its Joint operation partner, view which is also supported by an independent legal opinion. However, the Joint operation partner carries a different understanding and the matter is pending resolution.

c) Majority of the Group's sales are against advance or are against letters of credit/ cash against documents/ guarantees of banks of national standing. Where sales are made on credit, the amount of consideration does not contain any significant financing component as payment terms are within three months.

As per the terms of the contract with its customers, either all performance obligations are to be completed within one year from the date of such contracts or the Group has a right to receive consideration from its customers for all completed performance obligations. Accordingly, the Group has availed the practical expedient available under paragraph 121 of IFRS 15 and dispensed with the additional disclosures with respect to performance obligations that remained unsatisfied (or partially unsatisfied) at the balance sheet date. Further, since the terms of the contracts directly identify the transaction price for each of the completed performance obligations, in all material respects, there are no elements of transaction price which have not been included in the revenue recognised in the financial statements.

Further, there is no material difference between the contract price and the revenue from contract with customers

6. Special items

(US$ million)

	Year ended 31 March 2020			Year ended 31 March 2019		
	Special items	Tax effect of Special items	Special items after tax	Special items	Tax effect of Special items	Special items after tax
Revision of Renewable Purchase Obligation (RPO)[5]	24	(8)	16	-	-	-
Gross profit special items (a)	**24**	**(8)**	**16**	-	-	-
Impairment (charge)/reversal of oil and gas assets[1]	(1,906)	742	(1,164)	38	(13)	25
Impairment (charges) of copper CWIP & capital advances[2]	(94)	33	(61)	-	-	-
Impairment (charge) of ASI assets[3]	(72)	11	(61)	-	-	-
Total impairment reversal/ (charge) (net) (b)	**(2,072)**	**786**	**(1,286)**	**38**	**(13)**	**25**
Provision on Iron ore assets[4] (c)	(17)	6	(11)	-	-	-
Operating special items (a+b+c)	**(2,065)**	**784**	**(1,281)**	**38**	**(13)**	**25**
Financing special items[8]	-	-	-	9	(3)	6
Investment Revenue Special item[7]	12	(3)	9	-	-	-
Loss on Discontinued Operations[6]	(771)	-	(771)	(333)	-	(333)
Total of Special items	**(2,824)**	**781**	**(2,043)**	**(286)**	**(16)**	**(302)**

1 During the year ended 31 March 2020 and 31 March 2019, the Group has recognized impairment charge of US$ 1,906 and reversal of US$ 38 million respectively, on its assets in the oil and gas segment comprising of:

I. Impairment charge of US$ 1,795 million relating to Rajasthan oil and gas block ("RJ CGU") triggered by the significant fall in the crude oil prices. Of this charge, US$ 1,648 million impairment charge has been recorded against oil and gas producing facilities and US$ 147 million impairment charge has been recorded against exploration intangible assets under development. The valuation remains dependent on price and further deterioration in long term prices may result in additional impairment.

For oil & gas assets, CGU's identified are on the basis of a production sharing contract (PSC) level, as it is the smallest group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or group of assets.

The recoverable amount of the RJ CGU, US$ 1,405 million, was determined based on the fair value less costs of disposal approach, a level-3 valuation technique in the fair value hierarchy. Also, as it more accurately reflects the recoverable amount based on our view of the assumptions that would be used by a market participant. This is based on the cash flows expected to be generated by the projected oil and natural gas production profiles up to the expected dates of cessation of production sharing contract

(PSC)/cessation of production from each producing field based on the current estimates of reserves and risked resources. Reserves assumptions for fair value less costs of disposal tests consider all reserves that a market participant would consider when valuing the asset, which are usually broader in scope than the reserves used in a value-in-use test. Discounted cash flow analysis used to calculate fair value less costs of disposal uses assumption for short-term oil price of US$ 38 per barrel for the next one year and scales upto long-term nominal price of US$ 57 per barrel three years thereafter derived from a consensus of various analyst recommendations. Thereafter, these have been escalated at a rate of 2% per annum. The cash flows are discounted using the post-tax nominal discount rate of 10.35% derived from the post-tax weighted average cost of capital after factoring the risks ascribed to the successful implementation of key growth projects. Additionally, in computing the recoverable value, the effects of market participant's response on production sharing contract matters have also been appropriately considered (refer note 2(c)(I)(viii) for PSC extension matters) . Based on the sensitivities carried out by the Group, change in crude price assumptions by US$ 1/bbl and changes to discount rate by 1% would lead to a change in recoverable value by US$ 45 million and US$ 66 million respectively.

II. Impairment charge of US$ 36 million relating to KG-ONN-2003/1 CGU mainly due to the reduction in crude oil price forecast.

The recoverable amount of the CGU, US$ 20 million was determined based on fair value less cost of disposal approach, a level-3 valuation technique in the fair value hierarchy as described in above paragraph. Discounted cash flow analysis used to calculate fair value less costs of disposal uses assumption for oil price as described in above paragraph. The cash flows are discounted using the post-tax nominal discount rate of 11.1% derived from the post-tax weighted average cost of capital. The sensitivities around change in crude price and discount rate are not material to the financial statements.

III. In exploration block KG-OSN-2009/3, the Group had represented to DGH to grant a 12-month excusable delay along with unfettered and unrestricted access to the block. Based on the said representation, the DGH granted an extension of upto 04 December 2020. However, in view of the ongoing restricted access to the block and low oil price outlook, the carrying value of US$ 75 million has been impaired.

IV. During the year ended 31 March 2019, the Group has recognized net impairment reversal of US$ 38 million in respect of Oil & Gas Block KG-ONN-2003/1 (CGU) on booking of commercial reserves and subsequent commencement of commercial production. The impairment reversal has been recorded against Oil & Gas producing facilities. The recoverable amount of the Group's share in KG-ONN-2003/1 (CGU) was determined to be US$ 30 million. The recoverable amount of the KG-ONN-2003/1 CGU was determined based on the fair value less costs of disposal approach, a level-3 valuation technique in the fair value hierarchy, as it more accurately reflects the recoverable amount based on our view of the assumptions that would be used by a market participant. This is based on the cash flows expected to be generated by the projected oil and natural gas production profiles up to the expected dates of cessation of production sharing contract (PSC)/cessation of production from each producing field based on the current estimates of reserves and risked resources. Reserves assumptions for fair value less costs of disposal tests consider all reserves that a market participant would consider when valuing the asset, which are usually broader in scope than the reserves used in a value-in-use test. Discounted cash flow analysis used to calculate fair value less costs of disposal uses assumption for short-term oil price of US $ 62 per barrel for the year ended 31 March 2019 and scales upto long-term nominal price of US $ 65 per barrel by year ended 31 March 2022 derived from a consensus of various analyst recommendations. Thereafter, these have been escalated at a rate of 2.5% per annum. The cash flows are discounted using the post-tax nominal discount rate of 11.8% derived from the post-tax weighted average cost of capital. The sensitivities around change in crude price and discount rate are not material to the financial statements.

2. Refer note 2(c)(I)(vii).

3. During the year ended 31 March 2020, the Group has recognized impairment charge of US$ 72 million on the assets of AvanStrate Inc (ASI) mainly due to the significant changes in the market and economic environment in which ASI operates leading to decrease in demand and profitability in the glass substrate business. The charge relates to ASI business in Japan, Taiwan and Korea classified in the 'others' segment. Given the significant interdependence of these entities on each other, these are considered as a single cash-generating unit.

   The net recoverable value of assets and liabilities has been assessed at US$ 205 million based on the value in use approach. Based on the sensitivities carried out by the Group, decrease in volume assumptions by 1% would lead to decrease in recoverable value by US$ 2 million and increase in discount rate by 1% would lead to a decrease in recoverable value by US$ 6 million.

4. During the year, a parcel of land relating to the Iron Ore business having carrying value of US$ 17 million was reclassified from freehold land to other financial asset due to an ongoing legal dispute relating to title of the land. Subsequently, during the year, the financial asset was fully provided for impairment and recognized under special items.

5. During the current year, Vedanta Limited has restated its Renewable Power Obligation (RPO) liability pursuant to Odisha Electricity Regulatory Commission (OERC) notification dated 31 December 2019 which clarified that for CPP's commissioned before 01 April 2016, RPO should be pegged at the RPO obligation applicable for 2015-16. Based on the notification, liability of Vedanta Limited's Jharsuguda and Lanjigarh plants have been revised and US$ 24 million reversal relating to previous years has been recognised under special items.

6. Refer note 3(e).

7. On the contempt petition filed by TSPL, the Hon'ble Supreme Court of India vide its order dated 07 August 2019 allowed gross calorific value (GCV) on as received basis (ARB) and actual cost of coal in the Energy Charge Formula and directed Punjab State Power Corporation Limited (PSPCL) to make the payments within 8 weeks. Pursuant to the order, PSPCL has paid US$ 142 million in September 2019 and October 2019. TSPL has booked an interest of US$ 20 million due to the delay in receipt of payment as per the Supreme Court order dated 07 March, 2018 allowing the interest on delay in payment. Of this interest of US$ 12 million pertaining to period prior to 31 March 2019 is booked as special item and amount of US$ 8 million for current period is booked in investment income.

8. During the year ended 31 March 2019, the Group had partly reversed the provision for interest of US$ 9 million for dues towards a vendor pursuant to the Honourable Supreme Court of India order.

7. Investment revenue

(US$ million)

	Year ended 31 March 2020	Year ended 31 March 2019
Net gain on financial assets held at fair value through profit or loss (FVTPL)*	97	265
Interest Income:		
Interest income- financial assets held at FVTPL	140	129
Interest income- bank deposits at amortised cost	33	22
Interest income- loans and receivables at amortised cost	67	85
Interest income- others	4	17
Investment Revenue – Special item	12	-
Dividend Income:		
Dividend income- financial assets held at FVTPL	7	6
Foreign exchange gain (net)	7	27
Net Gain/(loss) arising on qualifying hedges and non-qualifying hedges	27	(18)
Total	**394**	**533**

**Includes loss of US$ 51 million (March 31, 2019: mark to market gain of US$ 149 million) relating to structured investment (Refer note 35)*

8. Finance costs

(US$ million)

	Year ended 31 March 2020	Year ended 31 March 2019
Interest expense – financial liabilities at amortised cost	1,245	1,253
Other finance costs (including bank charges)	61	63
Total interest cost	**1,306**	**1,316**
Unwinding of discount on provisions (note 26)	14	13
Net interest on defined benefit arrangements	3	3
Special items (note 6)	-	(9)
Capitalisation of finance costs/borrowing costs (note 16)	(144)	(119)
Total	**1,179**	**1,204**

All borrowing costs are capitalised using rates based on specific borrowings and general borrowings with the interest rate of 7.49% (8.0% for 31 March 2019) per annum for the year ended 31 March 2020.

9. Other gains and (losses) (net)

(US$ million)

	Year ended 31 March 2020	Year ended 31 March 2019
Foreign exchange loss (net)	(79)	(65)
Change in fair value of financial liabilities measured at fair value	(1)	(1)
Net loss arising on qualifying hedges and non-qualifying hedges	(7)	(9)
Total	**(87)**	**(75)**

10(a). Profit/ (Loss) for the year has been stated after charging/ (crediting):

(US$ million)

	Year ended 31 March 2020	Year ended 31 March 2019
Depreciation & amortization	1,412	1,380
Costs of inventories recognised as an expense	3,186	3,677
Auditor's remuneration for audit services (note 37)	4	3
Research and development	1	1
Net Loss on disposal of Property plant and equipment	8	9
Provision for receivables	15	(0)
Impairment charge/(reversal) of oil & gas assets (refer note 6)	1,906	(38)
Impairment of other assets (refer note 6)	166	-
Employee costs (note 28)	388	451

10(b). Exchange gain/ (loss) recognised in the consolidated income statement:

(US$ million)

	Year ended 31 March 2020	Year ended 31 March 2019
Cost of sales	(60)	(43)
Investment revenue (refer note 7)	34	9
Other gains and losses (refer note 9)	(86)	(74)
Total	**(112)**	**(108)**

11. Tax

(a) Tax charge/ (credit) recognised in Consolidated Income Statement (including on special items)

(US$ million)

	Year ended 31 March 2020	Year ended 31 March 2019
Current tax:		
Current tax on profit for the year	258	554
Credit in respect of current tax for earlier years	-	(1)
Total current tax (a)	**258**	**553**
Deferred tax:		
Origination and reversal of temporary differences	153	42
(Credit)/ Charge in respect of Special items (Refer Note 6)	(781)	16
Total deferred tax (b)	**(628)**	**58**
Total Income tax (benefit)/ expense for the year((a)+(b))	**(370)**	**611**
(Loss)/ Profit before tax from continuing operations	**(1,346)**	**1,368**
Effective Income tax rate (%)	**27.5%**	**44.7%**

Tax (benefit)/ expense

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Tax effect on special items	(781)	16
Tax expense – others	411	595
Net tax (benefit)/ expense	**(370)**	**611**

(b) A reconciliation of income tax expense/ (credit) applicable to profit/ (loss) before tax at the Indian statutory income tax rate to income tax expense/ (credit) at the Group's effective income tax rate for the year indicated are as follows.

Given majority of the Group's operations are located in India, the reconciliation has been carried out from Indian statutory income tax rate.

(US$ million)

	Year ended 31 March 2020	Year ended 31 March 2019
(Loss)/ Profit before tax from continuing operations	**(1,346)**	**1,368**
Indian statutory income tax rate	34.944%	34.944%
Tax at statutory income tax rate	**(470)**	**478**
Disallowable expenses	30	60
Non-taxable income	(20)	(27)
Tax holidays and similar exemptions	(70)	(116)
Effect of tax rate differences of subsidiaries operating at other tax rates	55	(22)
Tax on distributable reserve of/ dividend from subsidiary	276	158
Unrecognized tax assets (Net)	66	83
Change in deferred tax balances due to change in tax law*	(251)	-
Capital Gains subject to lower tax rate	(39)	(16)
Credit in respect of earlier years	-	(1)
Other permanent differences	53	14
Total	**(370)**	**611**

**Deferred tax charge for the year ended 31 March 2020 includes deferred tax credit of US$ 233 million on deferred tax balances as at 31 March 2019 being recognized during the current year (Refer Note 2(c)(I)(ix)).*

Certain businesses of the Group within India are eligible for specified tax incentives which are included in the table above as tax holidays and similar exemptions. Most of such tax exemptions are relevant for the companies operating in India. These are briefly described as under:

The location based exemption

In order to boost industrial and economic development in undeveloped regions, provided certain conditions are met, profits of newly established undertakings located in certain areas in India may benefit from tax holiday under section 80IC of the Income Tax Act, 1961. Such tax holiday works to exempt 100% of the profits for the first five years from the commencement of the tax holiday, and 30% of profits for the subsequent five years. This deduction is available only for units established up to 31 March 2012. However, such undertaking would continue to be subject to the Minimum Alternative tax ('MAT').

In the current year, undertaking at Pantnagar, which is part of Hindustan Zinc Limited (Zinc India), is the only unit eligible for deduction at 30% of taxable profit.

The location based exemption: SEZ Operations

In order to boost industrial development and exports, provided certain conditions are met, profits of undertaking located in Special Economic Zone ('SEZ') may benefit from tax holiday. Such tax holiday works to exempt 100% of the profits for the first five years from the commencement of the tax holiday, 50% of profits for five years thereafter and 50% of the profits for further five years provided the amount allowable in respect of deduction is credited to Special Economic Zone Re-Investment Reserve account. However, such undertaking would continue to be subject to the Minimum Alternative tax ('MAT').

The Group has setup SEZ Operations in its aluminium division of Vedanta Limited (where no benefit has been drawn).

Sectoral Benefit - Power Plants and Port Operations

To encourage the establishment of infrastructure certain power plants and ports have been offered income tax exemptions of upto 100% of profits and gains for any ten consecutive years within the 15 year period following commencement of operations subject to certain conditions under section 80IA of the Income Tax Act, 1961. The Group currently has total operational capacity of 8.4 Giga Watts (GW) of thermal based power generation facilities and wind power capacity of 274 Mega Watts (MW) and port facilities. However, such undertakings would continue to be subject to MAT provisions.

The Group has power plants which benefit from such deductions, at various locations of Hindustan Zinc Limited (where such benefits have been drawn), Talwandi Sabo Power Limited, Vedanta Limited and Bharat Aluminium Company Limited (where no benefit has been drawn).

The Group operates a zinc refinery in Export Processing Zone, Namibia which has been granted tax exempt status by the Namibian government.

In addition, the subsidiaries incorporated in Mauritius are eligible for tax credit to the extent of 80% of the applicable tax rate on foreign source income.

The total effect of such tax holidays and exemptions was US$ 70 million for the year ended 31 March 2020 (31 March 2019: US$ 116 million).

(c) Deferred tax assets/liabilities

The Group has accrued significant amounts of deferred tax. The majority of the deferred tax liability represents accelerated tax relief for the depreciation of property, plant and equipment, the depreciation of mining reserves and the fair value uplifts created on acquisitions, net of losses carried forward by Vedanta Limited and unused tax credits in the form of MAT credits carried forward in Vedanta Limited, Cairn Energy Hydrocarbons Limited and Hindustan Zinc Limited. Significant components of Deferred tax (assets) and liabilities recognized in the Consolidated Statement of financial position are as follows:

For the year ended 31 March 2020:

(US$ million)

Significant components of deferred tax (assets)/ liabilities	Opening balance as at 01 April 2019	Charged/ (credited) to Income Statement	Charged/ (credited) to other comprehensive income	Discontinued operations	Exchange difference transferred to translation of foreign operation	Closing balance as at 31 March 2020
Property, plant and equipment, Exploration and Evaluation and other intangible assets	2,442	(860)	-	427	(964)	1,045
Voluntary retirement scheme	(5)	1	-	-	-	(4)
Employee benefits	(17)	-	(10)	-	2	(25)
Fair value of derivative asset/ liability	(8)	(9)	4	-	1	(12)
Fair valuation of other asset/liability	130	13	-	-	(3)	140
MAT credit entitlement	(1,492)	167	-	-	104	(1,221)
Unabsorbed depreciation and business losses	(879)	(130)	-	(244)	521	(732)
Other temporary differences	(173)	190	-	(69)	144	92
Total	**(2)**	**(628)**	**(6)**	**114**	**(195)**	**(717)**

For the year ended 31 March 2019:

(US$ million)

Significant components of deferred tax (assets)/ liabilities	Opening balance as at 01 April 2018	Charged/ (credited) to Income Statement	Charged/ (credited) to other comprehensive income	Discontinued Operations	Exchange difference transferred to translation of foreign operation	Closing balance as at 31 March 2019
Property, plant and equipment, Exploration and Evaluation and other intangible assets	2,484	135	-	(22)	(155)	2,442
Voluntary retirement scheme	(6)	-	-	-	1	(5)
Employee benefits	(27)	-	(4)	-	14	(17)
Fair value of derivative asset/ liability	(9)	6	(2)	-	(3)	(8)
Fair valuation of other asset/liability	145	(21)	-	-	6	130
MAT credit entitlement	(1,705)	110	-	-	103	(1,492)
Unabsorbed depreciation and business losses	(914)	(158)	-	80	113	(879)
Other temporary differences	(136)	(14)	-	3	(26)	(173)
Total	**(168)**	**58**	**(6)**	**61**	**(53)**	**(2)**

Deferred tax assets and liabilities have been offset where they arise in the same taxing jurisdiction with a legal right to offset current income tax assets against current income tax liabilities but not otherwise. Accordingly, the net deferred tax (assets)/liability has been disclosed in the Consolidated Statement of financial position as follows:

(US$ million)

	As at 31 March 2020	As at 31 March 2019
Deferred tax assets	(1,114)	(778)
Deferred tax liabilities	397	776
Net Deferred tax (assets) / Liabilities	**(717)**	**(2)**

Recognition of deferred tax assets on MAT credits entitlement is based on the respective legal entity's present estimates and business plans as per which the same is expected to be utilized within the stipulated fifteen year period from the date of origination (Refer Note 2(c)(I)(vi)).

Deferred tax assets in the Group have been recognised to the extent there are sufficient taxable temporary differences relating to the same taxation authority and the same taxable entity which are expected to reverse. For certain components of the Group, deferred tax assets on carry forward unused tax losses have been recognised to the extent of deferred tax liabilities on taxable temporary differences available. It is expected that any reversals of the deferred tax liability would be offset against the reversal of the deferred tax asset at respective entities.

Unused tax losses / unused tax credit for which no deferred tax asset has been recognized amount to US$ 5,193 million and US$ 4,129 million as at 31 March 2020 and 31 March 2019 respectively.

As at 31 March 2020

(US$ million)

Unused tax losses/ Unused tax credit Particulars	Within one year	Greater than one year, less than five years	Greater than five years	No expiry date	Total
Unutilized business losses	143	550	657	2,098	3,448
Unabsorbed depreciation	-	-	-	1,072	1,072
Unutilized R&D credit	-	-	-	1	1
Unabsorbed interest allowance*	-	-	-	672	672
Total	**143**	**550**	**657**	**3,843**	**5,193**

As at 31 March 2019

(US$ million)

Unused tax losses/ Unused tax credit Particulars	Within one year	Greater than one year, less than five years	Greater than five years	No expiry date	Total
Unutilized business losses	389	812	88	1,679	2,968
Unabsorbed depreciation	-	-	-	975	975
Unutilized R&D credit	-	-	-	1	1
Unabsorbed interest allowance*	-	-	-	185	185
Total	**389**	**812**	**88**	**2,840**	**4,129**

** As per UK's corporate interest restriction rules, the disallowed interest expense for any year can be carried forward and claimed in future years for unlimited life subject to specified conditions*

No deferred tax assets have been recognised on these unused tax losses/ unused tax credit as there is no evidence that sufficient taxable profit will be available in future against which these can be utilised by the respective entities.

MAT credits are taxes paid to Indian tax authorities which can be offset against future tax liabilities, subject to certain restrictions, within a period of 15 years from the year of origination. The Group recognises MAT assets only to the extent it expects to realise the same within the prescribed period.

Further, the Group has unused MAT credit amounting to US$ 57 million as at 31 March 2020 and 31 March 2019. Such tax credits have not been recognised on the basis that recovery is not probable in the foreseeable future. Unrecognised MAT credit expires, if unutilized, based on the year of origination as follows:

(US$ million)

Year of Expiry	As at 31 March 2020	As at 31 March 2019
2022	15	15
2023	2	2
2024	7	7
2025	7	7
2026	15	15
2027	9	9
2028	1	1
2029	1	1
Total	**57**	**57**

The Group has not recognised any deferred tax liabilities for taxes that would be payable on the Group's share in unremitted earnings of certain of its subsidiaries because the Group controls when the liability will be incurred and it is probable that the liability will not be incurred in the foreseeable future. The amount of unremitted earnings is US$ 3,312 million and US$ 4,260 million as at 31 March 2020 and 31 March 2019 respectively.

(d) Non-current tax assets

Non-current tax assets of US$ 354 million (31 March 2019: US$ 504 million) mainly represents income tax receivable from Indian Tax authorities by Vedanta Limited relating to the refund arising consequent to the Scheme of Amalgamation & Arrangement made effective in August 2013 pursuant to approval by the jurisdiction High Court and receivables relating to matters in tax disputes in Group companies including tax holiday claim.

(e) The tax department had raised demands on account of remeasurement of certain tax incentives, as described below, under section 80IA and 80 IC of the Income Tax Act. During the current year, based on the favourable orders from Income Tax Appellate Tribunal relating to AY 09-10 to AY 12-13, the Commissioner of Income Tax (Appeals) has allowed these claims for AY 14-15 to AY 15-16, which were earlier disallowed and has granted refund of amounts deposited under protest. Against the Tribunal order, department had filed an appeal in Hon'ble Rajasthan High Court in financial year 17-18 which is yet to be admitted. As per the view of external legal counsel, Department's appeal seeks re-examination of facts rather than raising any substantial question of law and hence it is unlikely that appeal will be admitted by the High Court. Due to this there is a strong prima facie case that ITAT order will stand confirmed and department's appeal would be dismissed. The amount involved in this dispute as at 31 March 2020 is US$ 1,412 million (31 March 2019: US$ 870 million) plus applicable interest upto the date of settlement of the dispute.

12. Underlying Attributable Profit/(Loss) for the year

Underlying earnings is an alternative earnings measure, which the management considers to be a useful additional measure of the Group's performance. The Group's Underlying profit/ loss is the profit/ loss for the year after adding back special items, other losses/(gains) [net] (note 9) and their resultant tax (including taxes classified as special items) & non-controlling interest effects and (Gain)/ loss on discontinued operations. This is a Non-IFRS measure.

(US$ million)

	Note	Year ended 31 March 2020	Year ended 31 March 2019
Loss for the year attributable to equity holders of the parent		(1,568)	(237)
Special items	6	2,053	(47)
Other (gains)/losses [net]	9	87	75
Tax effect of special items (including taxes classified as special items) and other gains/ (losses) [net]		(799)	(1)
Non-controlling interest on special items and other gains/ (losses)		(684)	(16)
(Gain)/ loss on discontinued operations	3(e)	771	333
Non-controlling interest on loss after tax from discontinued operations		(30)	(69)
Underlying attributable (loss)/profit for the year		**(170)**	**38**

13. Dividends

(US$ million)

	Year ended 31 March 2020	Year ended 31 March 2019
Amounts recognised as distributions to equity holders:		
Equity dividends on ordinary shares:		
1st Interim Dividend for 2019-20: 53.0 US cents per share	152	-
2nd Interim dividend for 2019-20: 70.0 US cents per share**	200	-
Final dividend paid for 2018-19: 65.0 US cents per share (2017-18: 41.0 US cents per share)	185	114*
Proposed for approval by shareholders:		
Final Dividend for 2018-19: 65.0 US cents per share	-	185

** This includes US$ 1 million dividend on equity shares held by a separate investment trust holding treasury shares of the Company.*

***$ 1 Mn is payable as at 31 March 2020*

14. Goodwill

(US$ million)

	As at 31 March 2020	As at 31 March 2019
At 01 April	12	12
Impairment during the year	-	-
At 31 March	**12**	**12**

Goodwill is allocated for impairment testing purposes to the following CGU's.

- US $12 million Copper India (As at 31 March 2020 & 31 March 2019)

The Group tests goodwill annually for impairment or more frequently if there are indications that goodwill might be impaired.

The Company has undertaken an impairment review of goodwill of US$ 12 million as at 31 March 2020. The carrying amount of goodwill allocated to the relevant cash generating unit is considered to be insignificant in comparison with the total carrying value of the cash generating unit. The carrying amount of goodwill was evaluated using the higher of Fair value less cost of disposal ('FVLCD') or value in use based on discounted future cash flows of the cash generating unit to which the goodwill pertains and comparing this to the total carrying value of the relevant cash generating units. It was determined that the carrying amount of goodwill is not impaired and nor was impairment indicated following a reasonably possible change in a key assumption.

15. Intangible assets

Intangible assets include Port concession rights to operate a general cargo berth for handling coal at the outer harbour of the Visakhapatnam port on the east coast of India, software licences, technological know-how, acquired brand and others.

(US$ million)

	Port concession rights[(1)]	Software license	Others[(2)]	Total
Cost				
As at 1 April 2018	**92**	**18**	**44**	**154**
Addition	0	1	0	1
Disposals/Adjustments	(0)	(0)	-	(0)
Acquisition through business combination (note 3(a))	-	0	-	0
Exchange differences	(5)	(2)	(2)	(9)
As at 1 April 2019	**87**	**17**	**42**	**146**
Addition	1	1	1	3
Discontinued operations	-	(11)	-	(11)
Transfers	-	-	5	5
Exchange differences	(8)	(2)	-	(10)
As at 31 March 2020	**80**	**5**	**48**	**133**
Accumulated amortisation				
As at 1 April 2018	**17**	**13**	**1**	**31**
Charge for the year	**3**	**3**	**4**	**10**
Disposals/Adjustments	(0)	0	-	(0)
Exchange differences	(1)	(1)	(1)	(3)
As at 1 April 2019	19	15	4	38
Charge for the year	3	2	4	9
Discontinued operations	-	(11)	-	(11)
Exchange differences	(1)	(2)	-	(3)
As at 31 March 2020	**21**	**4**	**8**	**33**
Net book value				
As at 1 April 2018	**75**	**5**	**43**	**123**
As at 1 April 2019	68	2	38	108
As at 31 March 2020	59	1	40	100

(1) *Vizag General Cargo Berth Private Limited (VGCB), a special purpose vehicle, was incorporated for the coal berth mechanization and upgrades at Visakhapatnam port. VGCB is wholly owned by Vedanta Limited. The project is to be carried out on a design, build, finance, operate, transfer basis and the concession agreement between Visakhapatnam Port and VGCB was signed in June 2010. In October 2010, VGCB was awarded with the concession after fulfilling conditions stipulated as a precedent to the concession agreement. Visakhapatnam Port has provided, in lieu of license fee an exclusive license to VGCB for designing, engineering, financing, constructing, equipping, operating, maintaining, and replacing the project/project facilities and services. The concession period is 30 years from the date of the award of the concession. The capacity of upgraded berth would be 10.18 mmtpa and the Vishakhapatnam Port would be entitled to receive 38.10% share of the gross revenue as royalty. VGCB is entitled to recover a tariff from the user(s) of the project facilities and services as per its tariff notification. The tariff rates are linked to the Wholesale Price Index (WPI) and would accordingly be adjusted as specified in the concession agreement every year. The ownership of all infrastructure assets, buildings, structures, berths, wharfs, equipment and other immovable and movable assets constructed, installed, located, created or provided by VGCB at the project site and/or in the port's assets pursuant to concession agreement would be with VGCB until expiry of this concession agreement. The cost of any repair, replacement or restoration of the project facilities and services shall be borne by VGCB during the concession period. VGCB has to transfer all its rights, titles and interest in the project facilities and services free of cost to Visakhapatnam Port at the end of the concession period. The project is in commercial operations since 2013.*

(2) *Others include technological know-how and acquired brand relating to acquisition of AvanStrate Inc.*

16. Property, plant and equipment

(US $ million)

	Mining property and leases	Freehold Land and buildings	Plant and equipment	Assets under construction	Oil & Gas properties[4]	ROU Assets	Others	Total Property, plant and equipment	Exploratory and evaluation assets[5]	Grand Total
Cost										
At 1 April 2018	**3,180**	**1,806**	**14,275**	**2,379**	**10,089**		**128**	**31,857**	**9,815**	**41,672**
Additions	164	73	281	602	468		26	**1,614**	79	**1,693**
Transfers	321	167	441	(967)	8,468		38	**8,468**	(8,468)	**-**
Unsuccessful Exploration cost	-	-	-	-	-		-	**-**	(7)	**(7)**
Reclassification	-	-	-	1	-		-	**1**	-	**1**
Disposals/Adjustments	(8)	(2)	(169)	(17)	(2)		(7)	**(205)**	-	**(205)**
Acquisition through business combination (note 3(c))	-	134	517	66	-		1	**718**	-	**718**
Exchange differences	(216)	(122)	(774)	(160)	-		(10)	**(1,282)**	-	**(1,282)**
At 1 April 2019	**3,441**	**2,056**	**14,571**	**1,904**	**19,023**	**-**	**176**	**41,171**	**1,419**	**42,590**
ROU assets as at 1 April 2019	-	-	(2)	-	-	83	-	**81**	-	**81**
Additions	210	52	284	408	465	154	22	**1,595**	97	**1,692**
Transfers [2]	98	(9)	121	(237)	32	-	5	**10**	(32)	**(22)**
Unsuccessful Exploration cost	-	-	-	-	-	-	-	**-**	-	**-**
Disposals/Adjustments	(18)	(1)	(107)	(142)	(2)	(32)	(5)	**(307)**	(7)	**(314)**
Discontinued operations[1]	(805)	(99)	(2,208)	(18)	-	-	(34)	**(3,164)**	-	**(3,164)**
Acquisition through business combination (note 3(b))	-	3	2	-	-	-	-	**5**	-	**5**
Exchange differences	(289)	(153)	(997)	(145)	-	(6)	(17)	**(1,607)**	(0)	**(1,607)**
At 31 March 2020	**2,637**	**1,849**	**11,664**	**1,770**	**19,518**	**199**	**147**	**37,784**	**1,477**	**39,261**
Accumulated depreciation, amortization and impairment										**-**
At 1 April 2018	**2,258**	**431**	**4,631**	**124**	**8,970**	**-**	**42**	**16,456**	**7,489**	**23,945**
Charge for the year	219	66	568	-	609	-	15	**1,477**	-	**1,477**
Disposals/Adjustments	-	(1)	(96)	-	(2)	-	(7)	**(106)**	-	**(106)**
Transfers	-	-	(3)	-	6,474	-	3	**6,474**	(6,474)	**-**
Reclassification	-	-	1	-	-	-	-	**1**	-	**1**
Impairment/(impairment reversal) of assets (note 6)	-	-	-	-	(38)	-	-	**(38)**	-	**(38)**
Exchange differences	(119)	(34)	(253)	(3)	-	-	(6)	**(415)**	-	**(415)**
At 1 April 2019	**2,358**	**462**	**4,848**	**121**	**16,013**	**-**	**47**	**23,849**	**1,015**	**24,864**
ROU assets as at 1 April 2019	-	-	(0)	-	-	0	-	**-**	-	**-**
Charge for the year	250	73	486	-	563	15	24	**1,411**	-	**1,411**
Disposals/Adjustments	-	-	(57)	-	-	(4)	(4)	**(65)**	-	**(65)**
Discontinued operations[1]	(377)	(68)	(1,216)	-	-	-	(33)	**(1694)**	-	**(1694)**
Transfers	-	-	(1)	-	-	-	1	**-**	-	**-**
Impairment/(impairment reversal) of assets (note 6)	-	2	73	89	1,683	3	-	**1,850**	222	**2,072**
Exchange differences	(171)	(45)	(335)	(11)	-	-	(10)	**(572)**	-	**(572)**
At 31 March 2020	**2,060**	**424**	**3,798**	**199**	**18,259**	**14**	**25**	**24,779**	**1,237**	**26,016**
Net book value										**-**
At 1 April 2018	922	1,375	9,644	2,255	1,119	-	86	**15,401**	2,326	**17,727**
At 1 April 2019	**1,083**	**1,594**	**9,723**	**1,783**	**3,010**	-	**129**	**17,322**	**404**	**17,726**
At 31 March 2020	**577**	**1,425**	**7,866**	**1,571**	**1,259**	**185**	**122**	**13,005**	**240**	**13,245**

1) Net block of property, plant and equipment as on April 01, 2019 includes US$ 1,470 million pertaining to KCM, which has been deducted as a result of loss of control over KCM during the period. (Refer note 3(e))
2) A parcel of land aggregating to US$ 17 million relating to Iron Ore business has been reclassified during the year, due to existing litigation, to Financial Assets and later impaired (Refer note 6) and US$ 5 million transferred to intangible assets from "Asset under construction".
3) During the year ended 31 March 2020, interest and foreign exchange losses capitalised was US$ 144 million (31 March 2019: US$ 119 million).
4) Oil and Gas Properties includes development assets under construction of carrying value US$648 million (31 March 2019: US$ 1,517 million).
5) Oil & Gas properties and exploration and evaluation assets net block includes share of jointly owned assets with the joint venture partners US$ 1,555 million (31 March, 2019 US$ 3,331 million). Consequent to the Rajasthan PSC extension as detailed in note 2(c)(I)(viii), in the previous year the group has recomputed it's reserves till 2030 and has classified exploration cost of US$ 1,994 million to property, plant and equipment.

Disclosure of Right of Use (ROU) Assets as per IFRS 16 "Leases" (US $ million)

	Land & Building	Plant and Equipment	Total
For the FY 2019-20			
ROU asset as at April 01, 2019	79	4	83
Additions	59	95	154
Deductions	(28)	-	(28)
Depreciation	(12)	(3)	(15)
Impairment	(3)	-	(3)
Exchange difference	(4)	(2)	(6)
Net book value as at 31 March 2020	**91**	**94**	**185**

17. Financial asset investments

Financial asset investments represent investments classified and accounted for at fair value through profit or loss or through other comprehensive income (refer note 25).

Financial Asset Investments

(US$ million)

	As at 31 March 2020	As at 31 March 2019
At 1 April 2019	707	25
(Sale)/purchase of structured investment (refer note 35)	(639)	541
Movements in fair value (including on investments purchased during the year)	(61)	143
Investment in Bonds*	7	-
Exchange difference	(2)	(2)
At 31 March 2020	**12**	**707**

*Reclassified during the year from short-term investments

Financial asset investment represents quoted investments in equity shares and other investments that present the Group with an opportunity for returns through dividend income and gains in value. These securities are held at fair value. These are classified as non-current as at 31 March 2020 and 31 March 2019.

18. Other non-current assets and trade and other receivables

(US$ million)

	As at 31 March 2020			As at 31 March 2019		
	Non- Current	Current	Total	Non- Current	Current	Total
Bank Deposits(2)	5	-	5	3	-	3
Site restoration assets	83	-	83	79	-	79
Trade Receivables(1)	416	361	777	533	593	1,126
Others(4)	164	124	288	108	55	163
Trade receivables from related parties	-	14	14	-	5	5
Cash call / receivables from joint operations	-	183	183	-	298	298
Receivable from KCM(5)	602	-	602	-	-	-
Financial (A)	**1,270**	**682**	**1,952**	**723**	**951**	**1,674**
Balance with Government authorities	74	131	205	120	208	328
Advance for supplies	-	189	189	-	221	221
Others(3)	146	100	246	167	124	291
Receivable from KCM(5)	58	-	58	-	-	-
Non-financial (B)	**278**	**420**	**698**	**287**	**553**	**840**
Total (A+B)	**1,548**	**1,102**	**2,650**	**1,010**	**1,504**	**2,514**

The credit period given to customers ranges from zero to 90 days.

(1) In July 2017, the Appellate Tribunal for Electricity dismissed the appeal filed by one of the Group's subsidiaries, Talwandi Sabo Power Limited (TSPL) with respect to the interpretation of how the calorific value of coal and costs associated with it should be determined. However, APTEL had allowed payment of shunting and unloading charges. TSPL filed an appeal before the Honourable Supreme Court, which by an order dated 07 March 2018 has decided the matter in favour of TSPL. PSPCL had not paid the due amount as per the direction of the Supreme court. Therefore, TSPL filed its contempt petition before the Supreme court. Hon'ble Supreme Court vide its order dated 07 August 2019 allowed GCV as received basis (ARB) and actual cost of coal in the Energy Charge Formula. PSPCL was directed to make the payments within 8 weeks. PSPCL has paid $ 123 million in September 2019 and further $ 18 million in October 2019. The company has booked an interest of $ 18 million due to the delay in receipt of payments basis the order of Supreme Court dated 07 March 2018.TSPL has also filed a second contempt petition on 13 November 2019 in Supreme Court regarding the remaining amount receivable from PSCPL which is under adjudication. The outstanding trade receivables including interest in relation to this dispute as at 31 March 2020 is US$ 52 million (31 March 2019: US$ 164 million).
In another matter relating to assessment of whether there has been a change in law following the execution of the Power Purchase Agreement, the Appellate Tribunal for Electricity has dismissed the appeal in July 2017 filed by TSPL. TSPL filed an appeal before the

Honourable Supreme Court to seek relief which is yet to be listed. The outstanding trade receivables in relation to this dispute and other matters as at 31 March 2020 is US$ 173 million (US$ 154 million as at 31 March 2019). The Group, based on external legal opinion and its own assessment of the merits of the case, remains confident that it is highly probable that the Supreme court will uphold TSPL's appeal and has thus continued to treat these balances as recoverable.
Additionally, at Vedanta Limited there were certain disputes with Grid Corporation of Odisha (GRIDCO) relating to computation of tariffs and differential revenues recognised with respect to tariffs pending finalisation by the Odisha state regulatory commission (OERC). During the previous year the said disputes were settled. However, GRIDCO has raised certain claims on the company in respect of short supply of power for which a provision of $ 29 million has been made. A Minutes of Meeting (MOM) has been signed with GRIDCO and subsequently Vedanta Limited has received payment of US$ 8 million in March 2019. Based on short supply debit note raised by GRIDCO and adjudication on power tariff computation disputes by APTEL, GRIDCO has withheld US$ 180 million, which the company is confident of recovering. On 22nd June 2020, OERC has pronounced the order on short supply compensation calculation methodology which is largely in favour of Vedanta Limited. As per the order, both parties have to reconcile and settle the matter in two months from the date of the order. Based on the said order the Group does not expect any material change to the provision already recognised.

(2) *Includes US$ 3 million (31 March 2019: US$ 3 million) under lien with banks and US$ 1 million (31 March 2019: US$ 0 million) under margin money.*
(3) *Includes claim receivables, advance recoverable (oil and gas business), prepaid expenses, export incentive receivables and others.*
(4) *Includes claims receivables, advance recoverable (oil and gas business) and others. It also includes advance profit petroleum US$ 43 million (31 March 2019: US$ 43 million) (refer note 34(ii)).*

(5) *Refer footnote 3(e). Out of total receivables from KCM of US $ 660 million, US $ 58 million is on account of advance for supplies and hence classified as non-financial.*

19. Inventories

(US$ million)

	As at 31 March 2020	As at 31 March 2019
Raw materials and consumables	901	1,369
Work-in-progress	445	454
Finished goods	169	237
Total	**1,515**	**2,060**

Inventory held at net realizable value amounted to US$ 315 million (31 March 2019: US$ 642 million). The write down of inventories amounts to US$ 16 million (31 March 2019: US$ 40 million) and this has been charged to the Consolidated Income Statement.

20. Short-term investments

(US$ million)

	As at 31 March 2020	As at 31 March 2019
Bank deposits(1)	1,101	122
Other investments	3,284	4,042
Total	**4,385**	**4,164**

(1) Includes US$ 34 million (31 March 2019: US$ 28 million) on lien with banks, US$ 19 million (31 March 2019: US$ 19 million) of margin money, US$ 23 million (31 March 2019: US$ 47 million) maintained as debt service reserve account and US$ 8 million (31 March 2019: US$ 9 million) of restricted funds held as collateral in respect of closure costs.

Bank deposits are made for periods of between three months and one year depending on the cash requirements of the companies within the Group and earn interest at the respective fixed deposit rates.

Other investments include mutual fund investments and investment in bonds which are recorded at fair value with changes in fair value reported through the consolidated income statement. These investments do not qualify for recognition as cash and cash equivalents due to their maturity period and risk of change in value of the investments. Refer Note 25 for further details.

21. Cash and cash equivalents

(US$ million)

	As at 31 March 2020	As at 31 March 2019
Cash and cash equivalents consist of the following		
Cash at bank and in hand	321	620
Short-term deposits	371	441
Restricted cash and cash equivalents(1)	13	72
Total	**705**	**1,133**

(1) *Restricted cash and cash equivalents includes US$ 13 million (31 March 2019: US$ 15 million) kept in a specified bank account to be utilised solely for the purposes of payment of dividends to non-controlling shareholders, which is being carried as a current liability. Restricted cash and cash equivalents further include US$ Nil million (31 March 2019 : US $ 57 million) kept in short term deposits under lien with banks as margin money.*

Short-term deposits are made for periods of between one day and three months, depending on the immediate cash requirements of the Group, and earn interest at the respective short-term deposit rates.

22(a) Borrowings

(US$ million)

	As at 31 March 2020	As at 31 March 2019
Current borrowings consist of:		
Banks and financial institutions	1,644	4,132
Total short-term borrowings	**1,644**	**4,132**
Add: Current maturities of long-term borrowings	8,542	1,324
Current borrowings (A)	**10,186**	**5,456**
Non-current borrowings consist of:		
Banks and financial institutions	7,099	6,585
Non- convertible bonds	4,141	3,142
Non-convertible debentures	2,191	2,034
Redeemable Preference shares	0	0
Others	20	87
Total long-term borrowings	**13,451**	**11,848**
Less: Current maturities of long-term borrowings	(8,542)	(1,324)
Non-current borrowings (B)	**4,909**	**10,524**
Total (A+B)	**15,095**	**15,980**

The Group has discounted trade receivables on recourse basis US$ 4 million (31 March 2019: US$ 196 million). Accordingly, the monies received on this account are shown as borrowings as the trade receivables do not meet de-recognition criteria. The Group facilities are subject to certain financial and non-financial covenants. The primary covenants which must be complied with include fixed charge cover ratio, net borrowing to EBITDA ratio, total net assets to borrowings ratio and EBITDA to net interest expense ratio.

As at 31 March 2020, the Group could not meet one of the covenant requirements of borrowings of US$ 3,248 million. Further, as per the terms of the bond agreement, in case any acceleration notice is served by any of these lenders, the Group would not satisfy the requirement of IAS 1 of unconditional right to defer payment beyond one year from the balance sheet date in case of non-convertible bonds of US$ 4,140 million. Subsequent to the balance sheet date, the Group has obtained a waiver on the covenant requirements.

Accordingly, non-current portion of US$ 6,276 million of borrowings have been reclassified under the current maturities of long-term borrowings.

Details of the Non-convertible bonds and Non-convertible debentures issued by the Group have been provided below (carrying value):

(US$ million)

	As at 31 March 2020	As at 31 March 2019
Non-Convertible Bonds :		
0.28 % bonds due October 2032	20	18
9.25% bonds due April 2026	596	-
6.12 % bonds due August 2024	994	993
7.13 % bonds due June 2023	495	495
7.99 % bonds due April 2023	398	-
6.38 % bonds due July 2022	996	995
8.25 % bonds due June 2021	642	641
	4,141	**3,142**

(US$ million)

	As at 31 March 2020	As at 31 March 2019
Non-Convertible Debentures		
9.20% due February-2030	267	-
9.20% due December-2022	100	-
8.75% due June-2022	170	-
8.90% due December-2021	120	-
8.75% due September-2021	33	36
9.18% due July-2021	134	145
9.27% due July-2021	134	144
8.50% due June-2021	221	238
8.75% due April-2021	33	36
8.50% due April-2021	314	340
8.55% due April-2021	134	145
9.00% due November-2020*	20	29
8.25% due September-2020	57	62
7.85% due August-2020	67	72
9.45% due August-2020	267	289
7.90% due July-2020	40	43
8.70% due April-2020	80	87
7.80% due December-2020***	-	72
8.00% due June-2020**	-	29
7.95% due April-2020**	-	43
7.50% due November-2019	-	29
8.20% due November-2019	-	43
8.25% due October-2019	-	43
7.75% due September-2019	-	36
8.65% due September-2019	-	22
7.60% due May-2019	-	51
	2,191	**2,034**

* *The debenture holders of these NCDs and the company have put and call option at the end of 1 year from the respective date of the allotment of the NCDs*

** *Put option was excercised by the NCD holders, basis which NCDs became due for repayment*

*** *Repaid during the year*

Security Details

The Group has taken borrowings in various countries towards funding of its acquisitions, capital expenditure and working capital requirements. The borrowings comprise of funding arrangements from various banks and financial institutions taken by the parent and subsidiaries. Out of the total borrowings of US$ 15,095 million (31 March 2019: US$ 15,980 million) shown above, total secured borrowings are US$ 6,421 million (31 March 2019: US$ 6,547 million) and unsecured borrowings are US$ 8,674 million (31 March 2019: US$ 9,433million). The details of security provided by the Group in various countries, to various lenders on the assets of Parent and subsidiaries are as follows:

(US$ million)

Facility Category	Security details	As at 31 March 2020	As at 31 March 2019
Working Capital Loans (grouped under banks and financial institutions)	First pari passu charge on all rights, title, claim and benefit in all the whole of the current assets of Vedanta Limited, both present and future, including stock and raw material, stock in process, semi finished and finished goods, stores and spares not relating to plant and machinery (consumable stores and spares)	0	-
	First pari passu charge on current assets of Vedanta Limited	0	-
	Secured by hypothecation of inventory of Vedanta Limited including other movables like book debts and bills outstanding	1	-
	Secured by receivables on sale of crude oil of Vedanta Limited	1	-
	Secured by hypothecation of stock of raw materials, work-in-progress, semi-finished, finished products, consumable stores and spares, bills receivables, book debts and all other movables, both present and future in BALCO. The charges rank pari passu among banks under the multiple banking arrangements for fund based facilities	47	18
	Secured by a first pari passu charge on all present and future inventories, book debts and all other current assets of TSPL	33	40
	Other secured working capital loans		161
External commercial borrowings (grouped under banks and financial institutions)	The facility is secured by first pari passu charge on all movable property, plant and equipments related to power plants and aluminium smelters of BALCO located at Korba both present and future along with secured lenders	45	45
	The facility is secured by first pari passu charge on all movable project assets related to 1200 MW power project and 3.25 LTPA smelter project both present and future along with secured lenders at BALCO	37	50
Non convertible debentures	First pari passu charge over the immovable property (excluding of leasehold land and coal block assets) of BALCO. First pari passu charge on the hypothecated assets (excluding current assets) of BALCO	40	72
	Secured by way of first pari passu charge on the specific movable and/or immovable Fixed Assets of VGCB, as may be identified and notified by the Issuer to the Security Trustee from time to time, with minimum asset coverage of 1 time of the aggregate face value of Bonds outstanding at any point of time	57	61
	Secured by the whole of the movable fixed assets of (i) Alumina Refinery having output of 1 MTPA along with co-generation captive power plant with an aggregate capacity of 90 MW at Lanjigarh, Odisha and (ii) Aluminium Smelter having output of 1.6 MTPA along with 1215 (9*135) MW CPP at Jharsuguda, Odisha	657	-
	Secured by way of "movable fixed assets" in relation to the 1.6 MTPA Aluminium Smelter alongwith 1215 MW (135MW * 9) captive power plant located in Jharsuguda and 1 MTPA Alumina Refinery alongwith 90 MW Co-generation power plant located at Lanjigarh in Odisha State and shall include all present movable plant and machinery, machinery spares, tools and accessories, fixtures, mechanical and electrical equipments, machinery and all other movable fixed assets and all estate, right, title, interest, property, claims and demands whatsoever in relation to assets	267	289
	Secured by a first pari passu charge on the whole of the present and future of the movable fixed assets of 2400 MW (600 MW*4) Power Plant of Vedanta Limited at Jharsuguda location	535	578
	Secured by way of first ranking pari passu charge on movable fixed assets in relation to the Lanjigarh Refinery Expansion Project (having capacity beyond 2 MTPA and upto 6 MTPA) situated at Lanjigarh, Odisha. The Lanjigarh Refinery Expansion Project shall specifically exclude the 1 MTPA alumina refinery of Vedanta Limited along with 90 MW power plant in Lanjigarh and all its related capacity expansions	147	181
	Secured by way of first pari passu charge on all present and future of the movable fixed assets of 2400 MW (600 MW*4) Power Plant of Vedanta Limited at Jharsuguda location, as may be identified and notified by the Issuer to the Security Trustee from time to time, with minimum asset coverage of 1 time of the aggregate face value of debentures outstanding at any point of time	134	145
	Secured by first pari passu charge on movable and/or immovable fixed assets of TSPL with a minimum asset cover of 1 time during the tenure of NCD	354	470

(US$ million)

Facility Category	Security details	As at 31 March 2020	As at 31 March 2019
	Other secured non-convertible debentures	-	239
Term loan from banks (grouped under banks and financial institutions)	Secured by first pari passu charge on fixed assets of TSPL both present and future	426	524
	First pari passu charge by way of hypothecation/ equitable mortgage on the movable/ immovable assets of the Aluminium division comprising of alumina refinery having output of 1 MTPA along with co-generation captive power plant with an aggregate capacity of 90 MW at Lanjigarh, Odisha; aluminium smelter having output of 1.6 MTPA along with 1215 (9x135) MW CPP at Jharsuguda , Odisha, both present and future	452	738
	Secured by a pari passu charge by way of hypothecation of all the movable fixed assets of Vedanta Limited pertaining to its Aluminium division project consisting of (i) alumina refinery having output of 1 MTPA (Refinery) along with co-generation captive power plant with aggregate capacity of 90 MW at Lanjigarh, Odisha (Power Plant); and (ii) aluminium smelter having output of 1.6 MTPA along with 1215 (9x135) MW CPP at Jharsuguda, Odisha (Smelter) (the Refinery, Power Plant and Smelter). Also, a first pari passu charge by way of equitable mortgage on the land pertaining to the mentioned project of aluminium division	386	513
	Secured by a pari passu charge by way of hypothecation on the movable fixed assets of the Lanjigarh Refinery Expansion Project including 210 MW Power Project.Lanjigarh Refinery Expansion Project shall specifically exclude 1 MTPA alumina refinery of the company along with 90 MW power plant in Lanjigarh and all its related expansions	61	70
	Secured by a pari-passu charge by way of hypothecation on the movable fixed assets of Vedanta Limited pertaining to its Aluminium division comprising of 1 mtpa alumina refinery plant with 90 MW captive power plant at Lanjigarh, Odisha and 1.6 mtpa aluminium smelter plant with 1215 MW captive power plant at Jharsuguda, Odisha	184	251
	First pari passu charge by way of hypothecation/ equitable mortgage on the movable/ immovable assets of the Aluminium division of Vedanta Limited comprising of alumina refinery having output of 1 MTPA along with co-generation captive power plant with an aggregate capacity of 90 MW at Lanjigarh, Odisha; aluminium smelter having output of 1.6 MTPA along with 1215 (9x135) MW CPP at Jharsuguda , Odisha and additional charge on Lanjigarh Expansion project, both present and future	152	171
	Secured by a pari passu charge by way of hypothecation/equitable mortgage of the movable/immovable fixed assets of Vedanta Limited pertaining to its Aluminium division comprising of 1 mtpa alumina refinery plant with 90 MW captive power plant at Lanjigarh, Odisha and 1.6 mtpa aluminium smelter plant with 1215 MW captive power plant at Jharsuguda, Odisha	399	431
	Secured by charge on Cairn Energy Hydrocarbons Limited's (CEHL) all banks accounts, cash & investments, all receivables and current assets (but excluding any shares issued to CEHL by its subsidaries, all of its right, title and interest in and to Production Sharing Contract and all of its fixed assets of any nature)	493	379
	Pledge of 49% of shares & other securities and rights to any claims held by THL Zinc Limited in and against BMM	54	60
	The facility is secured by first pari passu charge on all movable property, plant and equipments related to power plants and aluminium smelters of BALCO located at Korba both present and future along with secured lenders	30	30
	Secured by first pari passu charge on all present and future movable fixed assets including but not limited to plant & machinery,spares, tools and accessories of BALCO (excluding coal block assets) by way of a deed of hypothecation.	216	140
	Secured by first pari passu charge on all present and future movable fixed assets including but not limited to plant & machinery, spares, tools and accessories of BALCO by way of a deed of hypothecation.	173	-
	First ranking pari passu charge by way of hypothecation/mortgage on all fixed/ immovable assets of Electrosteel Steels Limited but excluding any current assets or pledge over any shares	451	488
	Secured by pari passu charge on the whole of the movable fixed assets of 1.6 MTPA Aluminium smelter including 1215 MW power plant of Vedanta Limited situated at Jharsuguda and movable fixed assets of 1 MTPA Alumina refinery including 90 MW thermal power plant (operating capacity) situated at Lanjigarh, including movable plant and machinery, machinery spares, tools and accessories, condensers, generators, cooling systems, pumps, tanks, transformers and all other equipment's, furniture, fittings, fixtures, vehicles and all other movable fixed assets both present and future	67	-

(US$ million)

Facility Category	Security details	As at 31 March 2020	As at 31 March 2019
	Secured by first pari passu charge by way of hypothecation over all the movable assets(save and except Current Assets) of Vedanta Limited, present or future, pertaining to Lanjigarh refinery expansion project beyond 1.7 MTPA to 6.0 MTPA located at Lanjigarh Odisha including but not limited to plant and machinery, machinery spares, tools and accessories in relation to aforementioned expansion project. Among others, the Lanjigarh Refinery Expansion Project shall specifically exclude the alumina refinery upto 1.7 MTPA of the company along with 90 MW power plant in Lanjigarh and all its related expansions	98	-
	Secured by charge on investment of Vedanta Limited in INR bonds	139	-
	Secured by first pari passu charge by way of whole of the movable fixed assets of (i) Alumina Refinery having output of 1 MTPA along with co-generation captive power plant with an aggregate capacity of 90MW at Lanjigarh, Odisha and (ii) Aluminium Smelter having output of 1.6 MTPA along with 1215 (9*135) MW CPP at Jharsuguda, Odisha	199	-
	Other secured term loans	-	326
Others(grouped under banks and financial institutions)	Secured by Fixed asset (rare metals) of AvanStrate	76	75
	First charge by way of hypothecation on the entire stocks of raw materials, semi-finished and finished goods, consumable stores and spares and such other movables including book-debts, bills whether documentary or clean, outstanding monies, receivables and all other current assets of Vedanta limited, both present and future, ranking pari passu with other participating banks	10	-
Project buyers credit from banks (grouped under banks and financial institutions)	Other secured project buyer's credit	-	2
	Total	**6,421**	**6,547**

22(b). Movement in net debt[1]

(US$ million)

	Cash and cash equivalents	Short term investments	Financial asset investment net of related liabilities and derivatives[1]	Total cash and short-term investments	Short-term borrowing	Long-term borrowing *	Total Net Debt
					Debt carrying value	Debt carrying value	
At 1 April 2018	**798**	**4,808**	**-**	**5,606**	**(3,607)**	**(11,587)**	**(9,588)**
Cash flow from continuing operations[3]	758	(639)	254	373	1,062	(2,486)	(1,051)
Cash flow from discontinued operations	(417)	-	-	(417)	137	92	(188)
Net debt on acquisition through business combination	36	46	-	82	(1)	-	81
Other non-cash changes[2]	-	187	137	324	(1,978)	1,927	273
Foreign exchange currency translation differences	(42)	(238)	-	(280)	255	206	181
At 1 April 2019	**1,133**	**4,164**	**391**	**5,688**	**(4,132)**	**(11,848)**	**(10,292)**
Cash flow from continuing operations[3]	(364)	282	(365)	(447)	1,838	(1,644)	(253)
Cash flow from discontinued operations (note 3(e))	(1)	-	-	(1)	-	-	(1)
Derecognition due to discontinued operation (note 3(e))	(1)	-	-	(1)	128	22	149
Other non-cash changes[2]	-	185	(26)	159	372	(439)	92
Foreign exchange currency translation differences	(62)	(246)	-	(308)	150	458	300
At 31 March 2020	**705**	**4,385**	**-**	**5,090**	**(1,644)**	**(13,451)**	**(10,005)**

* Includes current maturities of long-term borrowings of US$ 8,542 million as at 31 March 2020 (31 March 2019: US$ 1,324 million)

(1) *Net debt is a Non-IFRS measure and represents total debt after fair value adjustments under IAS 32 and IFRS 9 as reduced by cash and cash equivalents, short-term investments and structured investment, net of the deferred consideration payable for such investments (referred above as Financial asset investment net of related liabilities) (refer note 35), if any*

(2) *Other non-cash changes comprise of amortisation of borrowing costs, foreign exchange difference on net debt. It also includes US$ 159 million (31 March 2019: US$ 324 million) of fair value movement in investments and accrued interest on investments.*

(3) *Consists of net repayment of working capital loan, proceeds and repayments of short-term and long-term borrowings.*

23. Non-equity non-controlling interests

As at 31 March 2019, non-equity non-controlling interests amounts to US$ 12 million, being deferred shares in KCM held by ZCCM. The deferred shares have no voting rights or rights to KCM's dividends, but are entitled on a winding up to a return of up to US$ 0.99 per share once all of KCM's ordinary shares have received a distribution equal to their par value and any share premium created on their issue and which remains distributable to them.

The deferred shares are held at historic cost, being the fair value attributed to them at the time of initial acquisition of KCM in the year ended 31 March 2005. They are classified as non-current liabilities as they are repayable only on the winding up of KCM, for an amount different than the pro rata share of net assets upon liquidation. The shares have been valued at US$0.99 per share, which is the maximum amount payable to the deferred shareholders. These deferred shares have not been discounted as the effect would not be material.

During the current financial year ended 31 March 2020, the net assets of KCM including above balance have been deconsolidated (refer note 3(e)).

24. Trade and other payables

(US $ million)

	As at 31 March 2020			As at 31 March 2019		
	Non-Current	Current	Total	Non-Current	Current	Total
Operational buyers' credit/ suppliers' credit	-	1,361	1,361	-	1,173	1,173
Lease Liability(4)	36	62	98	-	-	-
Dividend payable to NCI	-	13	13	-	24	24
Trade payables	-	1,061	1,061	-	1,680	1,680
Liabilities for capital expenditure	108	788	896	7	864	871
Profit petroleum Payable	-	92	92	-	148	148
Other payables (1)	32	808	840	189	1,024	1,213
Security deposits and retentions	0	27	27	2	23	25
Put option liability with non-controlling interests (2)	33	-	33	29	-	29
Financial (A)	**209**	**4,212**	**4,421**	**227**	**4,936**	**5,163**
Statutory liabilities	-	422	422	-	484	484
Advance from customers (3)	23	1,055	1,078	17	1,408	1,425
Other payables	0	30	30	-	50	50
Non-financial (B)	**23**	**1,507**	**1,530**	**17**	**1,942**	**1,959**
Total (A+B)	**232**	**5,719**	**5,951**	**244**	**6,878**	**7,122**

Trade payables are majorly non-interest bearing and are normally settled upto 180 days terms.

Operational buyers' credit/ suppliers' credit are interest-bearing liabilities and are normally settled within a period of twelve months. These represent arrangements whereby operational suppliers of raw materials are paid by financial institutions, with the Group settling with the institutions at a later date.

The fair value of trade and other payables is not materially different from the carrying value presented.

(1) *Includes US$ Nil million (31 March 2019: US$ 299 million) of deferred consideration payable as at 31 March 2020 in relation to purchase of structured investment. (Refer note 35)*

(2) *The non-controlling shareholders of ASI have an option to offload their shareholding to the Group. The option is exercisable at any time within the period of three years following the fifth anniversary of the date of shareholders' agreement (22 December 2017) at a price higher*

of US$ 0.757 per share and the fair market value of the share. Therefore, the liability is carried at higher of the two. Subsequent changes to the put option liability are treated as equity transaction and hence accounted for in equity.

(3) *Advance from customers are contract liabilities to be settled through delivery of goods. The amount of such balances as on 01 April 2019 was US$ 1,425 million (01 April 2018: US$ 952 million). During the current year, the Group has refunded US$ 92 million (FY 2018-19: US$ 148 million) to the customers and recognised revenue of US$ 1,198 million (FY 2018-19: US$ 547 million) out of such opening balances. All other changes are either due to receipt of fresh advances or exchange differences*

(4) *Movement in Lease liabilities is as follows :*

(US$ million)

At 01 April 2019	17
Additions during the year	154
Interest on lease liabilities	4
Payments made	(45)
Deletions	(32)
At 31 March 2020	98

25. *Financial instruments*

Financial Assets and Liabilities:

The following tables present the carrying value and fair value of each category of financial assets and liabilities as at 31 March 2020 and 31 March 2019:

(US$ million)

As at 31 March 2020	**Fair value through profit or loss**	**Fair value through other comprehensive income**	**Derivatives designated as hedging instruments**	**Amortised cost**	**Total carrying value**	**Total fair value**
Financial Assets						
Financial instruments (derivatives)	37	-	56	-	**93**	**93**
Financial asset investments held at fair value	7	5	-	-	**12**	**12**
Short term investments						
- Bank deposits	-	-	-	1,101	**1,101**	**1,101**
- Other investments	3,284	-	-	-	**3,284**	**3,284**
Cash and cash equivalents	-	-	-	705	**705**	**705**
Other non-current assets and trade and other receivables	7	-	-	1,945	**1,952**	**1,952**
Total	**3,335**	**5**	**56**	**3,751**	**7,147**	**7,147**

(US$ million)

As at 31 March 2020	**Fair value through profit or loss**	**Derivatives designated as hedging instruments**	**Amortised cost**	**Others***	**Total carrying value**	**Total fair value**
Financial Liabilities						
Financial instruments (derivatives)	6	13	-	-	19	19
Trade and other payables	69	-	4,319	33	4,421	4,421
Borrowings	-	-	15,095	-	15,095	12,563
Total	**75**	**13**	**19,414**	**33**	**19,535**	**17,003**

**Represents put option liability accounted for at fair value*

(US$ million)

As at 31 March 2019	**Fair value through profit or loss**	**Fair value through other comprehensive income**	**Derivatives designated as hedging instruments**	**Amortised cost**	**Total carrying value**	**Total fair value**
Financial Assets						
Financial instruments (derivatives)	5	-	6	-	11	11
Financial asset investments held at fair value**	690	17	-	-	707	707
Short term investments						
- Bank deposits	-	-	-	122	122	122
- Other investments	4,042	-	-		4,042	4,042
Cash and cash equivalents	-	-	-	1,133	1,133	1,133
Other non-current assets and trade and other receivables	35	-	-	1,639	1,674	1,674
Total	**4,772**	**17**	**6**	**2,894**	**7,689**	**7,689**

*** Includes structured investment (refer note 35)*

(US$ million)

As at 31 March 2019	**Fair value through profit or loss**	**Derivatives designated as hedging instruments**	**Amortised cost**	**Others***	**Total carrying value**	**Total fair value**
Financial Liabilities						
Financial instruments (derivatives)	79	1	-	-	80	80
Trade and other payables	221	-	4,913	29	5,163	5,163
Borrowings	-	-	15,980	-	15,980	15,873
Total	**300**	**1**	**20,893**	**29**	**21,223**	**21,116**

**Represents put option liability accounted for at fair value*

Fair value hierarchy

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices)
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs)

The below tables summarise the categories of financial assets and liabilities as at 31 March 2020 and 31 March 2019 measured at fair value:

US$ million

	As at 31 March 2020		
	Level 1	**Level 2**	**Level 3**
Financial assets			
At fair value through profit or loss			
- Short term investments	1,016	2,268	-
- Financial asset investments held at fair value	-	-	7
- Financial instruments (derivatives)	-	37	-
- Other non-current assets and trade and other receivables	-	7	-
At fair value through other comprehensive income			
- Financial asset investments held at fair value	4	-	1
Derivatives designated as hedging instruments			
- Financial instruments (derivatives)	-	56	-
Total	**1,020**	**2,368**	**8**
Financial liabilities			
At fair value through profit or loss			
- Financial instruments (derivatives)	-	6	-
- Trade and other payables	-	69	-
Derivatives designated as hedging instruments			
- Financial instruments (derivatives)	-	13	-
Trade and other payables- Put option liability with non- controlling interest	-	-	33
Total	**-**	**88**	**33**

(US$ million)

	As at 31 March 2019		
	Level 1	**Level 2**	**Level 3**
Financial assets			
At fair value through profit or loss			
- Short term investments	939	3,091	12
- Financial asset investments held at fair value*	-	690	-
- Financial instruments (derivatives)	-	5	-
- Other non-current assets and trade and other receivables		35	
At fair value through other comprehensive income			
- Financial asset investments held at fair value	15	-	2
Derivatives designated as hedging instruments			
- Financial instruments (derivatives)	-	6	-
Total	**954**	**3,827**	**14**
Financial liabilities			
At fair value through profit or loss			
- Financial instruments (derivatives)	-	79	-
- Trade and other payables		221	
Derivatives designated as hedging instruments			
- Financial instruments (derivatives)	-	1	-
Trade and other payables- Put option liability with non -controlling interest	-	-	29
Total	**-**	**301**	**29**

** Includes structured investment (refer note 35)*

The below table summarizes the fair value of borrowings and Loans, receivables and obligations relating to KCM which are carried at amortised cost as at 31 March 2020 and 31 March 2019:

(US$ million)

	As at 31 March 2020		As at 31 March 2019	
	Level 1	**Level 2**	**Level 1**	**Level 2**
Borrowings	1,568	10,995	3,068	12,805
Total	**1,568**	**10,995**	**3,068**	**12,805**

	As at 31 March 2020			As at 31 March 2019		
	Level 1	**Level 2**	**Level 3**	**Level 1**	**Level 2**	**Level 3**
Loans, receivables and obligations of KCM towards the Group	-	-	660	-	-	-
Total	**-**	**-**	**660**	**-**	**-**	**-**

The changes in Level 3 items for the year ended 31 March 2020 and 31 March 2019 are set out in the table below:

Loans, receivables and obligations of KCM towards the Group	US $ million
1 April 2018	-
1 April 2019	-
On deconsolidation of KCM	693
Fair value change during the year	(33)
31 March 2020	**660**

The fair value of the financial assets and liabilities are at the amount that would be received to sell an asset and paid to transfer a liability in an orderly transaction between market participants at the measurement date. The following methods and assumptions were used to estimate the fair values:

- Investments traded in active markets are determined by reference to quotes from the financial institutions; for example: Net asset value (NAV) for investments in mutual funds declared by mutual fund house. For other listed securities traded in markets which are not active, the quoted price is used wherever the pricing mechanism is same as for other marketable securities traded in active markets. Other current investments and structured investments are valued by referring to market inputs including quotes, trades, poll, primary issuances for securities and /or underlying securities issued by the same or similar issuer for similar maturities and movement in benchmark security, etc.
- Financial assets forming part of Trade and other receivables, cash and cash equivalents (including restricted cash and cash equivalents), bank deposits, financial liabilities forming part of trade and other payables and short-term borrowings: Approximate their carrying amounts largely due to the short-term maturities of these instruments.
- Other non-current financial assets and financial liabilities: Fair value is calculated using a discounted cash flow model with market assumptions, unless the carrying value is considered to approximate to fair value.
- Long-term fixed-rate and variable rate borrowings: Listed bonds are fair valued based on the prevailing market price. For all other long-term fixed-rate and variable-rate borrowings, either the carrying amount approximates the fair value, or fair value has been estimated by discounting the expected future cash flows using a discount rate equivalent to the risk-free rate of return adjusted for the appropriate credit spread.
- Quoted financial asset investments: Fair value is derived from quoted market prices in active markets.
- Derivative financial assets/liabilities: The Group enters into derivative financial instruments with various counterparties. Interest rate swaps, foreign exchange forward contracts and

commodity forward contracts are valued using valuation techniques, which employs the use of market observable inputs. The most frequently applied valuation techniques by the Group include forward pricing and swap models, using present value calculations. The models incorporate various inputs including the foreign exchange spot and forward rates, yield curves of the respective currencies, currency basis spreads between the respective currencies, interest rate curves and forward rate curves of the underlying commodity. Commodity contracts are valued using the forward LME rates of commodities actively traded on the listed metal exchange i.e. London Metal Exchange, United Kingdom (UK).

For all other financial instruments, the carrying amount is either the fair value, or approximates the fair value.

The changes in counterparty credit risk had no material effect on the hedge effectiveness assessment for derivatives designated in hedge relationship and the value of other financial instruments recognised at fair value.

The estimated fair value amounts as at 31 March 2020 have been measured as at that date. As such, the fair values of these financial instruments subsequent to reporting date may be different than the amounts reported at each year-end.

There were no significant transfers between level 1, level 2 and level 3 during the current year.

Risk management framework

The Group's businesses are subject to several risks and uncertainties including financial risks.

The Group's documented risk management polices act as an effective tool in mitigating the various financial risks to which the businesses are exposed to in the course of their daily operations. The risk management policies cover areas such as liquidity risk, commodity price risk, foreign exchange risk, interest rate risk, counterparty credit risk and capital management.

Risks are identified at both the corporate and individual subsidiary level with active involvement of senior management. Each operating subsidiary in the Group has in place risk management processes which are in line with the Group's policy. Each significant risk has a designated 'owner' within the Group at an appropriate senior level. The potential financial impact of the risk and its likelihood of a negative outcome are regularly updated.

The risk management process is coordinated by the Management Assurance function and is regularly reviewed by the Group's Audit Committee. The Audit Committee is aided by the other committees of the Board including the Risk Management Committee, which meets regularly to review risks as well as the progress against the planned actions. Key business decisions are discussed at the periodic meetings of the Executive Committee. The overall internal control environment and risk management programme including financial risk management is reviewed by the Audit Committee on behalf of the Board.

The risk management framework aims to:

- improve financial risk awareness and risk transparency
- identify, control and monitor key risks
- identify risk accumulations
- provide management with reliable information on the Group's risk situation
- improve financial returns

Treasury management

Treasury management focuses on liability management, capital protection, liquidity maintenance and yield maximization. The treasury policies are approved by the Committee of the Board. Daily treasury operations of the subsidiary companies are managed by their respective finance teams within the framework of the overall Group treasury policies. Long-term fund raising including strategic treasury initiatives are managed jointly by the business treasury team and the central team at corporate treasury while short-term funding for routine working capital requirements is delegated to subsidiary companies. A monthly reporting system exists to inform senior management of the Group's investments and debt position, exposure to currency, commodity and interest rate risk and their mitigants including the derivative position. The Group has a strong system of internal control which enables effective monitoring of adherence to Group's policies. The internal control measures are effectively supplemented by regular internal audits.

The investment portfolio at the Group is independently reviewed by CRISIL Limited and Group portfolio has been rated as Tier I or "Very Good" meaning highest safety. The investments are made keeping in mind safety, liquidity and yield maximization.

The Group uses derivative instruments to manage the exposure in foreign currency exchange rates, interest rates and commodity prices. The Group does not acquire or issue derivative financial instruments for trading or speculative purposes. The Group does not enter into complex derivative transactions to manage the treasury and commodity risks. Both treasury and commodities derivative transactions are normally in the form of forward contracts, interest rate and currency swaps and these are in line with the Group's policies.

Equity price risk

As at 31 March 2019, the Group held economic interest in a structured investment for the equity shares of Anglo American Plc (AA Plc), a company listed on the London Stock Exchange, having fair value of US$ 690 million. The instrument is exposed to equity price movements of AA Plc, subject to a put option embedded therein (Refer note 35).

Set out below is the impact of 10% increase/ decrease in equity prices on pre-tax profit/ (loss) for the year and pre-tax equity as a result of changes in value of the investment:

For the year ended 31 March 2019:

(US$ million)

Financial asset investment	Total Exposure (fair value)	Effect on pre-tax profit/(loss) of a 10% increase in the equity price	Effect on pre-tax equity of a 10% increase in the equity price	Effect on pre-tax profit/(loss) of a 10% decrease in the equity price	Effect on pre-tax equity of a 10% decrease in the equity price
Structured investment	690	60	-	(28)	-

The above sensitivities are based on change in price of the underlying equity shares of AA plc and provide the estimated impact of the change on profit and equity assuming that all other variables remain constant.

There are no material equity risk exposures as at 31 March 2020.

Commodity Price risk

The Group is exposed to the movement of base metal commodity prices on the London Metal Exchange. Any decline in the prices of the base metals that the Group produces and sells will have an immediate and direct impact on the profitability of the businesses. As a general policy, the Group aims to sell the products at prevailing market prices. The commodity price risk in import of input commodities such as Copper Concentrate & Alumina, for our Copper and Aluminium business respectively, is hedged on back-to back basis ensuring no price risk for the business. Hedging is used primarily as a risk management tool and, in some cases, to secure future cash flows in cases of high volatility by entering into forward contracts or similar instruments. The hedging activities are subject to strict limits set out by the Board and to a strictly defined internal control and monitoring mechanism. Decisions relating to hedging of commodities are taken at the Executive Committee level, basis clearly laid down guidelines.

Whilst the Group aims to achieve average LME prices for a month or a year, average realised prices may not necessarily reflect the LME price movements because of a variety of reasons such as uneven sales during the year and timing of shipments.

The Group is also exposed to the movement of international crude oil price and the discount in the price of Rajasthan crude oil to Brent price.

Financial instruments with commodity price risk are entered into in relation to following activities:

- economic hedging of prices realised on commodity contracts
- cash flow hedging of revenues, forecasted highly probable transactions

Aluminium

The requirement of the primary raw material, alumina, is partly met from own sources and the rest is purchased primarily on negotiated price terms. Sales prices are linked to the LME prices. At present the Group on selective basis hedges the aluminium content in outsourced alumina to protect its margins.

The Group also enters into hedging arrangements for its aluminium sales to realise average month of sale LME prices.

Copper

The Group’s custom smelting copper operations at Tuticorin is benefitted by a natural hedge except to the extent of a possible mismatch in quotational periods between the purchase of concentrate and the sale of finished copper. The Group’s policy on custom smelting is to generate margins from Refining charges or “Rc”, improving operational efficiencies, minimising conversion cost, generating a premium over LME on sale of finished copper, sale of by-products and from achieving import parity on domestic sales. Hence, mismatches in quotational periods are managed to ensure that the gains or losses are minimised. The Group hedges this variability of LME prices through forward contracts and tries to make the LME price a pass-through cost between purchases of anodes/blisters and sales of finished products, both of which are linked to the LME price.

Rc is a major source of income for the Indian copper smelting operations. Fluctuation in Rc is influenced by factors including demand and supply conditions prevailing in the market for mine output. The Group’s copper business has a strategy of securing a majority of its anodes/blisters requirement under long-term contracts with mines.

Zinc, lead and silver

The sales prices are linked to the LME prices. The Group also enters into hedging arrangements for its Zinc, Lead and Silver sales to realise average month of sale LME prices.

Zinc International

Raw material for zinc and lead is mined in Namibia and South Africa with sales prices linked to the LME prices.

Iron ore

The Group sells its Iron Ore production from Goa on the prevailing market prices and from Karnataka through e-auction route as mandated by State Government of Karnataka in India.

Oil and Gas

The prices of various crude oils are based upon the price of the key physical benchmark crude oil such as Dated Brent, West Texas Intermediate, and Dubai/Oman etc. The crude oil prices move based upon market factors like supply and demand. The regional producers price their crude basis these benchmark crude with a premium or discount over the benchmark based upon quality differential and competitiveness of various grades.

Natural gas markets are evolving differently in important geographical markets. There is no single global market for natural gas. This could be owing to difficulties in large-scale transportation over long distances as compared to crude oil. Globally, there are three main regional hubs for pricing of natural gas, which are USA (Henry Hub Prices), UK (NBP Price) and Japan (imported gas price, mostly linked to crude oil).

Provisionally priced financial instruments

On 31 March 2020, the value of net financial liabilities linked to commodities (excluding derivatives) accounted for on provisional prices was US$ 59 million (31 March 2019: asset of US$ 45 million). These instruments are subject to price movements at the time of final settlement and the final price of these instruments will be determined in the financial year beginning 01 April 2020.

Set out below is the impact of 10% increase in LME prices on pre-tax profit/ (loss) for the year and pre-tax equity as a result of changes in value of the Group's commodity financial instruments:

For the year ended 31 March 2020:

(US$ million)

Commodity price sensitivity	Total Exposure	Effect on pre-tax profit/(loss) of a 10% increase in the LME	Effect on pre-tax equity of a 10% increase in the LME
Copper	(137)	(14)	-

For the year ended 31 March 2019:

(US$ million)

Commodity price sensitivity	Total Exposure	Effect on profit/(loss) of a 10% increase in the LME	Effect on total equity of a 10% increase in the LME
Copper	(21)	(2)	-

The above sensitivities are based on volumes, costs, exchange rates and other variables and provide the estimated impact of a change in LME prices on profit and equity assuming that all other variables remain constant. A 10% decrease in LME prices would have an equal and opposite effect on the Group's financial statements.

The impact on pre-tax profit/(loss) mentioned above includes the impact of a 10% increase in closing copper LME for provisionally priced copper concentrate purchased at Vedanta Limited Copper division custom smelting operations of US$ 10 million (31 March 2019: US$ 11 million), which is pass through in nature and as such will not have any impact on the profitability.

Financial risk:

The Group's Board approved financial risk policies include monitoring, measuring and mitigating the liquidity, currency, interest rate and counterparty risk. The Group does not engage in speculative treasury activity but seeks to manage risk and optimise interest and commodity pricing through proven financial instruments.

(a) Liquidity risk

The Group requires funds both for short-term operational needs as well as for long-term investment programmes mainly in growth projects. The Group is currently forecasting to generate sufficient cash flows from the current operations which together with the available cash and cash equivalents and short term investments provide liquidity both in the short term as well as in the long term (refer note 1(d)). Anticipated future cash flows, together with undrawn fund based committed facilities of US$ 424 million, and cash and short term investments of US$ 5,090 million as at 31 March 2020, are expected to be sufficient to meet the liquidity requirement of the Group in the near future.

During FY2020, Moodys downgraded Corporate Family Rating of Vedanta Resources from Ba3 to B1 (and the rating of senior unsecured notes from B2 to B3) and subsequently placed the rating under review for downgrade in March 2020 on account of expectation of weaker credit metrics in low commodity price environment in wake of Covid-19. On 28th July 2020, Moody's confirmed Vedanta Resources Limited's B1 Corporate Family Rating and B3 rating on the senior unsecured notes of the company and changed the outlook on the rating to negative from ratings under review for downgrade. The confirmation of the ratings is driven by Moody's expectation of stretched credit profile in fiscal year 2021 in wake of Covid 19 pandemic and recovery in credit metrics appropriate for current rating in fiscal year 2022. The negative outlook takes into account heightened refinancing risk in challenging market conditions. Further to the downgrade of VRL by S&P to B / Stable in November 2019, S&P downgraded the ratings to B- with stable outlook in March 2020 on account of weakened liquidity and increased refinancing risk due to volatility in commodity prices.

The Group remains committed to maintaining a healthy liquidity, a low gearing ratio, deleveraging and strengthening our balance sheet. The maturity profile of the Group's financial liabilities based on the remaining period from the balance sheet date to the contractual maturity date is given in the table below. The figures reflect the contractual undiscounted cash obligation of the Group:

At 31 March 2020

(US$ million)

Payment due by period	< 1 year	1-3 years	3-5 years	> 5 years	Total
Trade and other payables(1)	3,882	152	0	-	4,034
Bank and other borrowings(2)	5,600	6,262	4,571	1,981	18,414
Lease liability	62	16	9	11	98
Derivative liabilities	13	6	-	-	19
Total	9,557	6,436	4,580	1,992	22,565

At 31 March 2019

(US$ million)

Payment due by period	< 1 year	1-3 years	3-5 years	> 5 years	Total
Trade and other payables(1)	4,748	172	29	-	4,949
Bank and other borrowings(2)	6,481	6,098	3,914	2,900	19,393
Derivative liabilities	66	14	-	-	80
Total	**11,295**	**6,284**	**3,943**	**2,900**	**24,422**

(1) *Excludes accrued interest which has been included with borrowings*
(2) *Includes current and non-current borrowings and committed interest payments*

As at 31 March 2020, the Group could not meet one of the covenant requirements of borrowings of US$ 3,248 million. Further, as per the terms of the bond agreement, in case any acceleration notice is served by any of these lenders, the Group would not satisfy the requirement of IAS 1 of unconditional right to defer payment beyond one year from the balance sheet date in case of non-convertible bonds of US$ 4,140 million. Subsequent to the balance sheet date, the Group has obtained a waiver on the covenant requirements.

Accordingly, non-current portion of US$ 6,276 million of borrowings have been reclassified under the current maturities of long-term borrowings. Given all waivers have been subsequently received, for the liquidity risk disclosure, the above-mentioned borrowings along with contractual interest of US$ 1,360 million has been presented based on original contractual maturity.

At 31 March 2020, the Group had access to following funding facilities:

(US$ million)

As at 31 March 2020	Total facility	Drawn	Undrawn
Fund/Non-fund based	11,767	10,280	1,487

(US$ million)

As at 31 March 2019	Total facility	Drawn	Undrawn
Fund/Non-fund based	13,176	10,952	2,224

Collateral

The Group has pledged financial instruments with carrying amount of US$ 2,887 million and inventories with carrying amount of US$ 1,138 million as per the requirements specified in various financial facilities in place. The counterparties have an obligation to release the securities to the Group when financial facilities are surrendered.

(b) Foreign currency risk

Fluctuations in foreign currency exchange rates may have an impact on the consolidated income statement, the consolidated statements of change in equity, where any transaction references more than one currency or where assets/liabilities are denominated in a currency other than the functional currency of the respective consolidated entities.

Considering the countries and economic environment in which the Group operates, its operations are subject to risks arising from the fluctuations primarily in the US dollar, Australian dollar, Namibian dollar, AED, ZAR, GBP, INR, JPY and Euro against the functional currencies of its subsidiaries.

Exposures on foreign currency loans are managed through the Group wide hedging policy, which is reviewed periodically to ensure that the results from fluctuating currency exchange rates are appropriately managed. The Group strives to achieve asset liability offset of foreign currency exposures and only the net position is hedged.

The Group's presentation currency is the US dollar. The majority of the assets are located in India and the Indian Rupee is the functional currency for the Indian operating subsidiaries except for Oil and Gas business operations which have a US dollar functional currency. Natural hedges available in the business are identified at each entity level and hedges are placed only for the net exposure. Short-term net exposures are hedged progressively based on their maturity. A more conservative approach has been adopted for project expenditures to avoid budget overruns, where cost of the project is calculated taking into account the hedge cost. The hedge mechanisms are reviewed periodically to ensure that the risk from fluctuating currency exchange rates is appropriately managed.

The following analysis is based on the gross exposure as at the reporting date which could affect the consolidated income statement. The exposure summarised below is mitigated by some of the derivative contracts entered into by the Group as disclosed under the section on "Derivative financial instruments"

The carrying amount of the Group's financial assets and liabilities in different currencies are as follows:

(US$ million)

	As at 31 March 2020		As at 31 March 2019	
	Financial Assets	**Financial liabilities**	**Financial Assets**	**Financial liabilities**
USD	2,331	11,143	2,108	10,548
INR	4,717	8,081	4,764	10,049
Others	99	311	817	626
Total	**7,147**	**19,535**	**7,689**	**21,223**

The Group's exposure to foreign currency arises where a Group company holds monetary assets and liabilities denominated in a currency different to the functional currency of that entity, with USD (US Dollar) being the major non-functional currency of the Group's main operating subsidiaries.

The foreign exchange rate sensitivity is calculated by the aggregation of the net foreign exchange rate exposure with a simultaneous parallel foreign exchange rates shift in the currencies by 10 % against the functional currencies of the respective entities.

Set out below is the impact of a 10% strengthening in the functional currencies of the respective entities on pre-tax profit/(loss) and pre-tax equity arising as a result of the revaluation of the Group's foreign currency monetary financial assets/liabilities:

(US$ million)

	For the year ended 31 March 2020		
	Closing exchange rate	Effect on pre-tax profit/(loss) of 10% strengthening in currency	Effect on pre-tax equity of 10% increase in currency
USD	74.8109	177	-

(US$ million)

	For the year ended 31 March 2019		
	Closing exchange rate	Effect on pre-tax profit/(loss) of 10% strengthening in currency	Effect on pre-tax equity of 10% increase in currency
USD	69.1713	149	-

A 10% weakening of the functional currencies of the respective entities would have an equal and opposite effect on the Group's financial statements.

(c) Interest rate risk

At 31 March 2020, the Group's net debt of US$ 10,005 million (31 March 2019: US$ 10,292 million net debt) comprises debt of US$ 15,095 million (31 March 2019: US$ 15,980 million) offset by cash, cash equivalents and short-term investments of US$ 5,090 million (31 March 2019: US$ 5,688 million).

The Group is exposed to interest rate risk on short-term and long-term floating rate instruments and on the refinancing of fixed rate debt. The Group's policy is to maintain a balance of fixed and floating interest rate borrowings and the proportion of fixed and floating rate debt is determined by current market interest rates. The borrowings of the Group are principally denominated in Indian Rupees and US dollars with mix of fixed and floating rates of interest. The USD floating rate debt is linked to US dollar LIBOR and INR Floating rate debt to Bank's base rate. The Group has a policy of selectively using interest rate swaps, option contracts and other derivative instruments to manage its exposure to interest rate movements. These exposures are reviewed by appropriate levels of management on a monthly basis.

The Group invests cash and short term investments in short-term deposits and debt mutual funds, some of which generate a tax-free return, to achieve the Group's goal of maintaining liquidity, carrying manageable risk and achieving satisfactory returns.

Floating rate financial assets are largely mutual fund investments which have debt securities as underlying assets. The returns from these financial assets are linked to market interest rate movements; however the counterparty invests in the agreed securities with known maturity tenure and return and hence has manageable risk.

The exposure of the Group's financial assets to interest rate risk is as follows:

(US$ million)

	As at 31 March 2020			As at 31 March 2019		
	Floating rate financial assets	**Fixed rate financial assets**	**Non-interest bearing financial assets**	**Floating rate financial assets**	**Fixed rate financial assets**	**Non-interest bearing financial assets**
Financial assets	1,618	4,171	1,358	2,120	2,676	2,893

The exposure of the Group's financial liabilities to interest rate risk is as follows:

(US$ million)

	As at 31 March 2020			As at 31 March 2019		
	Floating rate financial liabilities	**Fixed rate financial liabilities**	**Non-interest bearing financial liabilities**	**Floating rate financial liabilities**	**Fixed rate financial liabilities**	**Non-interest bearing financial liabilities**
Financial liabilities	7,413	9,119	3,003	7,753	9,447	4,023

Considering the net debt position as at 31 March 2020 and the investment in bank deposits, corporate bonds and debt mutual funds, any increase in interest rates would result in a net loss and any decrease in interest rates would result in a net gain. The sensitivity analysis below has been determined based on the exposure to interest rates for financial instruments at the balance sheet date.

The below table illustrates the impact of a 0.5% to 2.0% movement in interest rate of floating rate financial assets/liabilities (net) on profit/(loss) and equity assuming that the changes occur at the reporting date and has been calculated based on risk exposure outstanding as of date. The year end balances are not necessarily representative of the average debt outstanding during the year. This analysis also assumes that all other variables, in particular foreign currency rates, remain constant.

(US$ million)

Increase in interest rates	**Effect on pre-tax profit/(loss) during the year ended 31 March 2020**	**Effect on pre-tax profit/(loss) during the year ended 31 March 2019**
0.5%	(29)	(28)
1.0%	(58)	(56)
2.0%	(116)	(112)

A reduction in interest rates would have an equal and opposite effect on the Group's financial statements.

(d) Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group has adopted a policy of only dealing with creditworthy counterparties and obtaining sufficient collateral, where appropriate, as a means of mitigating the risk of financial loss from defaults.

The Group is exposed to credit risk from trade receivables, contract assets, cash and cash equivalents, short term investments and other financial instruments.

The Group has clearly defined policies to mitigate counterparty risks. For short-term investments, counterparty limits are in place to limit the amount of credit exposure to any one counterparty. This, therefore, results in diversification of credit risk for our mutual fund and bond investments. For derivative and financial instruments, the Group attempts to limit the credit risk by only dealing with reputable banks and financial institutions.

Credit risk on receivables is limited as almost all credit sales are against letters of credit and guarantees of banks of national standing. Moreover, given the diverse nature of the Group's businesses trade receivables are spread over a number of customers with no significant concentration of credit risk. No single customer accounted for 10% or more of revenue on a consolidated basis in any of the years presented. The history of trade receivables shows a negligible provision for bad and doubtful debts. Therefore, the Group does not expect any material risk on account of non-performance by any of our counterparties.

The Group's maximum gross exposure to credit risk as at 31 March 2020 is US$ 7,147 million (31 March 2019: US$ 7,689 million).

Of the year end trade and other receivable balance the following, though overdue, are expected to be realised in the normal course of business and hence, are not considered impaired as at:

(US$ million)

	31 March 2020	31 March 2019
Neither past due nor impaired	997	972
Past due but not impaired		
- Less than 1 month	106	129
- Between 1 - 3 months	191	49
- Between 3 - 12 months	223	76
- Greater than 12 months	347	366
Total	**1,864**	**1,592**

Receivables are deemed to be past due or impaired with reference to the Group's normal terms and conditions of business. These terms and conditions are determined on a case to case basis with reference to the customer's credit quality and prevailing market conditions. Receivables that are classified as 'past due' in the above table are those that have not been settled within the terms and conditions that have been agreed with that customer.

The credit quality of the Group's customers is monitored on an ongoing basis. Where receivables have been impaired, the Group actively seeks to recover the amounts in question and enforce compliance with credit terms.

Movement in allowances for Financial Assets (other non-current assets and trade and other receivables)

Particulars	*US$ million*
As at 01 April 2018	**150**
Allowance made during the year	7
Reversals/write off during the year	(7)
Foreign Exchange difference	1
As at 31 March 2019	**151**
Allowance made during the year	37
Reversals/write off during the year	(5)
Foreign Exchange difference	(10)
As at 31 March 2020	**173**

Derivative financial instruments

The Group uses derivative instruments as part of its management of exposure to fluctuations in foreign currency exchange rates, interest rates and commodity prices. The Group does not acquire or issue derivative financial instruments for trading or speculative purposes. The Group does not enter into complex derivative transactions to manage the treasury and commodity risks. Both treasury and commodities derivative transactions are normally in the form of forward contracts and these are subject to the Group guidelines and policies.

The fair value of all derivatives are separately recorded on the balance sheet within other financial assets (derivatives) and other financial liabilities (derivatives), current and non-current. Derivatives that are designated as hedges are classified as current or non-current depending on the maturity of the derivative.

The use of derivatives can give rise to credit and market risk. The Group tries to control credit risk as far as possible by only entering into contracts with reputable banks and financial institutions. The use of derivative instruments is subject to limits, authorities and regular monitoring by appropriate levels of management. The limits, authorities and monitoring systems are periodically reviewed by management and the Board. The market risk on derivatives is mitigated by changes in the valuation of the underlying assets, liabilities or transactions, as derivatives are used only for risk management purposes.

Cash flow hedges

The Group enters into forward exchange and commodity price contracts for hedging highly probable forecast transaction and account for them as cash flow hedges and states them at fair value. Subsequent changes in fair value are recognised in consolidated statement of comprehensive income until the hedged transaction occurs, at which time, the respective gain or losses are reclassified to the consolidated income statement. These hedges have been effective for the year ended 31 March 2020.

The Group uses foreign exchange contracts from time to time to optimize currency risk exposure on its foreign currency transactions. The Group hedged part of its foreign currency exposure on capital commitments during fiscal year 2020. Fair value changes on such forward contracts are recognised in the consolidated statement of comprehensive income.

The majority of cash flow hedges taken out by the Group during the year comprise non-derivative hedging instruments for hedging the foreign exchange rate of highly probable forecast transactions and commodity price contracts for hedging the commodity price risk of highly probable forecast transactions.

The cash flows related to above are expected to occur during the year ending 31 March 2021 and consequently may impact the consolidated income statement for that year depending upon the change in the commodity prices and foreign exchange rates movements. For cash flow hedges regarded as basis adjustments to initial carrying value of the property, plant and equipment, the depreciation on the basis adjustments made is expected to affect the consolidated income statement over the expected useful life of the property, plant and equipment.

Fair value hedges

The fair value hedges relate to forward covers taken to hedge currency exposure and commodity price risks.

The Group's sales are on a quotational period basis, generally one month to three months after the date of delivery at a customer's facility. The Group enters into forward contracts for the respective quotational period to hedge its commodity price risk based on average LME prices. Gains and losses on these hedge transactions are substantially offset by the amount of gains or losses on the underlying sales. Net gains and losses are recognised in the consolidated income statement.

The Group uses foreign exchange contracts from time to time to optimize currency risk exposure on its foreign currency transactions. Fair value changes on such forward contracts are recognised in the consolidated income statement.

Non-qualifying/economic hedge

The Group enters into derivative contracts which are not designated as hedges for accounting purposes, but provide an economic hedge of a particular transaction risk or a risk component of a transaction. Hedging instruments include copper, aluminium and zinc future contracts on the

LME and certain other derivative instruments. Fair value changes on such derivative instruments are recognised in the consolidated income statement.

The fair value of the Group's open derivative positions as at 31 March 2020, recorded within financial instruments (derivative) is as follows:

(US$ million)

	As at 31 March 2020		As at 31 March 2019	
	Liability	**Asset**	**Liability**	**Asset**
Current				
Cash flow hedges				
And other- Commodity contracts	-	15	1	0
- Interest rate swap	0	-	-	-
- Forward foreign currency contracts	-	0	0	5
Fair value hedges				
- Commodity contracts	1	13	-	0
- Forward foreign currency contracts	6	28	-	1
Non Qualifying hedges				
- Commodity contracts	3	1	11	1
- Forward foreign currency contracts	3	36	53	4
- Other (Foreign currency swap)	0	0	1	0
Total	**13**	**93**	**66**	**11**
Non-current				
Cash flow hedges				
- Interest rate swap	1	-	-	-
Fair value hedges				
- Forward foreign currency contracts	5	0	14	-
Total	**6**	**0**	**14**	**-**
Grand Total	**19**	**93**	**80**	**11**

26. Provisions

(US $ million)

	As at 31 March 2020			As at 31 March 2019		
	Current	**Non-Current**	**Total**	**Current**	**Non-Current**	**Total**
Provision for restoration, rehabilitation and environmental	3	355	358	2	369	371
Provision for employee benefits	22	1	23	29	2	31
Others	7	0	7	7	-	7
Total	**32**	**356**	**388**	**38**	**371**	**409**

(US$ million)

	Restoration, rehabilitation and environmental	Other
As at 1 April 2018	**351**	**7**
Additions	3	0
Utilised	(2)	-
Unused amounts reversed	(1)	-
Unwinding of discount (note 8)	13	-
Revision in estimates	23	-
Exchange differences	(16)	(0)
Acquisition through business combination (net of disposal)	0	-
As at 1 April 2019	**371**	**7**
Additions	10	0
Utilised	(2)	-
Unused amounts reversed	-	-
Unwinding of discount (note 8)	14	-
Revision in estimates	(7)	-
Exchange differences	(12)	(0)
Discontinued operations (refer note 3(e))	(16)	-
As at 31 March 2020	**358**	**7**

Restoration, rehabilitation and environmental

The provisions for restoration, rehabilitation and environmental liabilities represent the management's best estimate of the costs which will be incurred in the future to meet the Group's obligations under existing Indian, Australian, Namibian, South African and Irish law and the terms of the Group's mining and other licences and contractual arrangements.

Within India, the principal restoration and rehabilitation provisions are recorded within Cairn India where a legal obligation exists relating to the oil and gas fields, where costs are expected to be incurred in restoring the site of production facilities at the end of the producing life of an oil field. The Group recognises the full cost of site restoration as a liability when the obligation to rectify environmental damage arises.

These amounts are calculated by considering discount rates within the range of 2% to 10% and become payable on closure of mines and are expected to be incurred over a period of one to thirty years. The discount rates at major units are in the range of 2% to 10% at Zinc International with lower range at operations in Ireland and higher range at operations in African Countries, 2% to 3% at Oil & Gas division.

An obligation to incur restoration, rehabilitation and environmental costs arises when environmental disturbance is caused by the development or ongoing production from a producing field.

Others

Others mainly include provision for disputed cases and claims.

27. Retirement benefits

The Group participates in defined contribution and benefit plans, the assets of which are held (where funded) in separately administered funds.

For defined contribution plans the amount charged to the consolidated income statement is the total amount of contributions payable in the year.

For defined benefit plans, the cost of providing benefits under the plans is determined by actuarial valuation separately each year for each plan using the projected unit credit method by independent qualified actuaries as at the year end. Re-measurement gains and losses arising in the year are recognized in full in Consolidated Statement of Comprehensive Income for the year.

(i) Defined contribution plans

The Group contributed a total of US$ 12 millions and US$ 17 million for the year ended 31 March 2020 and 31 March 2019 respectively, to the following defined contribution plans.

(US $ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Employer's contribution to Recognised Provident fund and family pension fund	9	8
Employer's contribution to superannuation and National Pension Scheme	3	2
	12	**10**

Indian pension plans

Central recognised provident fund

In accordance with the 'The Employees Provident and Miscellaneous Provisions Act ,1952', employees are entitled to receive benefits under the Provident Fund. Both the employee and the employer make monthly contributions to the plan at a predetermined rate (12% for the year ended 31 March 2020 and 31 March 2019) of an employee's basic salary. All employees have an option to make additional voluntary contributions. These contributions are made to the fund administered and managed by the Government of India (GOI) or to independently managed and approved funds. The Group has no further obligations under the fund managed by the GOI beyond its monthly contributions which are charged to the consolidated income statement in the year they are incurred.

Family Pension Fund

The Pension Fund was established in 1995 and is managed by the Government of India. The employee makes no contribution to this fund but the employer makes a contribution of 8.33% of salary each month subject to a specified ceiling per employee. This is provided for every permanent employee on the payroll.

At the age of superannuation, contributions ceases and the individual receives a monthly payment based on the level of contributions through the years, and on their salary scale at the time they retire, subject to a maximum ceiling of salary level. The Government funds these payments, thus the Group has no additional liability beyond the contributions that it makes, regardless of whether the central fund is in surplus or deficit.

Superannuation

Superannuation, another pension scheme applicable in India, is applicable only to executives above certain grade. However, in case of oil & gas (applicable from the second year of employment) and Iron Ore Segment, the benefit is applicable to all executives. Vedanta Limited and each relevant Indian subsidiary holds policy with the Life Insurance Corporation of India ("LIC"), to which each of these entities contributes a fixed amount relating to superannuation and the pension annuity is met by the LIC as required, taking into consideration the contributions made. The Group has no further obligations under the scheme beyond its monthly contributions which are charged to the consolidated income statement in the year they are incurred.

National Pension Scheme

National Pension Scheme is a retirement savings account for social security and welfare applicable for executives covered under the superannuation benefit of Vedanta Limited and each relevant Indian subsidiary, on a choice basis. It was introduced to enable employees to select the treatment of superannuation component of their fixed salaries and avail the benefits offered by National Pension Scheme launched by Government of India. Vedanta Limited and each relevant entity holds a corporate account with one of the pension fund managers authorized by the

Government of India to which each of the entity contributes a fixed amount relating to superannuation and the pension annuity will be met by the fund manager as per rules of National Pension Scheme. The Group has no further obligations under the scheme beyond its monthly contributions which are charged to the consolidated statement of profit and loss in the year they are incurred.

Australian pension Scheme

The Group also participates in defined contribution superannuation schemes in Australia. The contribution of a proportion of an employee's salary into a superannuation fund is a compulsory legal requirement in Australia. The employer contributes, into the employee's fund of choice 9.5% of the employee's gross remuneration where the employee is covered by the industrial agreement and 12.50% of the basic remuneration for all other employees. All employees have an option to make additional voluntary contributions. The Group has no further obligations under the scheme beyond its monthly contributions which are charged to the consolidated income statement in the year they are incurred.

Zambian Pension Scheme

The Konkola Copper Mines (KCM) Pension Scheme is applicable to full-time permanent employees of KCM (subject to the fulfilment of certain eligibility criteria). The management of the scheme is vested in the trustees consisting of representatives of the employer and the members. The employer makes a monthly contribution of 5% to the KCM Pension Scheme and the member makes monthly contribution of 5%.

All contributions to the KCM Pension Scheme in respect of a member cease to be payable when the member attains normal retirement age of 55 years, or upon leaving the service of the employer, or when the member is permanently medically incapable of performing duties in the service of the employer. Upon such cessation of contribution on the grounds of normal retirement, or being rendered medically incapable of performing duties, or early voluntary retirement, the member is entitled to receive his accrued pension. The member is allowed to commute his/her accrued pension subject to certain rules and regulations.

The Group has no additional liability beyond the contributions that it makes. Accordingly, this scheme has been accounted for on a defined contribution basis and contributions are charged directly to the consolidated income statement *(refer note 3(e)).*

Skorpion Zinc Provident Fund, Namibia

The Skorpion Zinc Provident Fund is a defined contribution fund and is compulsory to all full time employees under the age of 60. The contribution to the fund is a fixed percentage of 9% per month of pensionable salary, whilst the employee contributes 7% with the option of making additional contributions, over and above the normal contribution, up to a maximum of 12%.

Normal retirement age is 60 years and benefit payable is the member's fund credit which is equal to all employer and employee contributions plus interest. The same applies when an employee resigns from Skorpion Zinc. The Fund provides disability cover which is equal to the member's fund credit and a death cover of 2 times annual salary in the event of death before retirement.

The Group has no additional liability beyond the contributions that it makes. Accordingly, this scheme has been accounted for on a defined contribution basis and contributions are charged directly to the consolidated income statement in the year they are incurred.

Black Mountain (Pty) Limited, South Africa Pension & Provident Funds

Black Mountain Mining (Pty) Ltd has two retirement funds, both administered by Alexander Forbes, a registered financial service provider. The purpose of the funds is to provide retirement and death benefits to all eligible employees. Group contributes at a fixed percentage of 10.5% for up to supervisor grade and 15% for others.

Membership of both funds is compulsory for all permanent employees under the age of 60 years.

The Group has no additional liability beyond the contributions that it makes. Accordingly, this scheme has been accounted for on a defined contribution basis and contributions are charged directly to the consolidated income statement in the year they are incurred.

(ii) Defined benefit plans

(a) Contribution to provident fund trust (the "trusts") of Iron ore division, Bharat Aluminium Company Limited (BALCO), Hindustan Zinc Limited (HZL), Sesa Resources Limited (SRL) and Sesa Mining Corporation Limited (SMCL)

The provident funds of Iron ore division, BALCO, HZL, SRL and SMCL are exempted under section 17 of The Employees Provident Fund and Miscellaneous Provisions Act, 1952. Conditions for grant of exemption stipulates that the employer shall make good deficiency, if any, between the return guaranteed by the statute and actual earning of the Fund. Based on actuarial valuation in accordance with IAS 19 and Guidance note issued by Institute of Actuaries of India for interest rate guarantee of exempted provident fund liability of employees, there is no interest shortfall that is required to be met by Iron ore division, BALCO, HZL, SRL and SMCL as at March 31,2020 and March 31,2019. Having regard to the assets of the fund and the return on investments, the Group does not expect any deficiency in the foreseeable future. The Group contributed a total of US$ 7 million & US$ 10 million for the years ended 31 March 2020 and 2019 respectively in relation to the independently managed and approved funds.

The present value of obligation and the fair value of plan assets of the trust are summarized below.

(US$ million)

Particulars	As at 31 March 2020	As at 31 March 2019
Fair value of plan assets of trusts	313	317
Present value of defined benefit obligation	(307)	(306)
Net liability arising from defined benefit obligation	**-**	**-**

Percentage allocation of Plan assets of the trust

Assets by Category	As at 31 March 2020	As at 31 March 2019
Government Securities	61.68%	53.1%
Debentures / Bonds	36.67%	45.7%
Equity	1.65%	1.2%
Fixed Deposits	0.0%	0.0%

The remeasurement loss of US$22 million (31 March 2020: Nil) has been charged to Other Comprehensive Income (OCI) during the year.

(b) Post-Retirement Medical Benefits:

The Group has a scheme of medical benefits for employees at BMM and BALCO subsequent to their retirement on completion of tenure including retirement on medical grounds and voluntary retirement on contributory basis. The scheme includes employee's spouses as well. Based on an actuarial valuation conducted as at year-end, a provision is recognised in full for the benefit obligation. The obligation relating to post-retirement medical benefits as at 31 March 2020 was US$ 11 million (31 March 2019: US$ 9 million). The obligation under this plan is unfunded. The Group considers these amounts as not material and accordingly has not provided further disclosures as required by IAS 19 'Employee benefits'. The remeasurement loss/(gain) and net interest on the obligation of post-retirement medical benefits of US$ 2 million (31 March 2019: US$ 0 million) and US$ 1 million (31 March 2019: US$ 1 million) for the year ended 31 March 2020 have been recognised in other comprehensive income and finance cost respectively.

(c) Other Post-employment Benefits:

India- Gratuity Plan

In accordance with the Payment of Gratuity Act of 1972, Vedanta Limited and its Indian subsidiaries contributes to a defined benefit plan (the "Gratuity Plan") covering certain categories of employees. The Gratuity Plan provides a lump sum payment to vested employees at retirement, disability or termination of employment being an amount based on the respective employee's last drawn salary and the number of years of employment with the Group.

Based on actuarial valuations conducted as at year end using the projected unit credit method, a provision is recognized in full for the benefit obligation over and above the funds held in the Gratuity Plan. For entities where the plan is unfunded, full provision is recognized in the consolidated statements of financial position.

The iron ore and oil & gas division of Vedanta Limited, SRL, SMCL and HZL have constituted a trust recognized by Indian Income Tax Authorities for gratuity to employees, contributions to the trust are funded with Life Insurance Corporation of India (LIC), ICICI Prudential Life Insurance Company Limited and HDFC Standard life insurance.

Zambia

Specified permanent employees of KCM are entitled to receive medical and retirement severance benefits. This comprises two months' basic pay for every completed year of service with an earliest service start date of 1 July 2004. Under this scheme, benefits are provided based on final pensionable pay and a full actuarial valuation of the scheme is carried out on an annual basis. The accruals are not contributed to any fund and are in the form of provisions in KCM's accounts.

On the death of an employee during service, a lump sum amount is paid to his or her dependants. This amount is equal to sixty months' basic pay for employees who joined before 1 April 2000 and thirty months' basic pay for employees who joined on or after 1 April 2000. For fixed term contract employees, the benefit payable on death is thirty months' basic pay *(refer note 3(e)).*

<u>*Principal actuarial assumptions*</u>

Principal actuarial assumptions used to determine the present value of Other post-employment benefit plan obligation are as follows:

Particulars	**Year ended 31 March 2020**	**Year ended 31 March 2019**
Discount rate	6.80%	7.8% to 17.0%
Expected rate of increase in compensation level of covered employees	2.0%-15.0%	2.0%-15.0%

Assumptions regarding mortality for Indian entities are based on mortality table of 'Indian Assured Lives Mortality (2012-2014) published by the Institute of Actuaries of India.

Assumptions regarding mortality for KCM are based on World Health Organisation Life Tables for 1999 applicable to Zambia which has been taken as a reference point. Based on this a mortality table which is appropriate for the workers of Konkola Copper Mines plc has been derived. (Refer note 3(e))

Amount recognised in the Consolidated Statement of Financial Position consists of:

(US$ million)

Particulars	**As at 31 March 2020**	**As at 31 March 2019**
Fair value of plan assets	59	56
Present value of defined benefit obligation	(85)	(135)
Net liability arising from defined benefit obligation	**(26)**	**(79)**

Amounts recognised in Consolidated income statement in respect of Other post-employment benefit plan are as follows:

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Current service cost	6	6
Net Interest cost	2	2
Components of defined benefit costs recognised in consolidated income statement	**8**	**8**

Amounts recognised in the Consolidated Statement of Comprehensive Income in respect of Other post-employment benefit plan are as follows:

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Remeasurement of the net defined benefit obligation:		
Actuarial losses arising from changes in demographic assumptions	0	0
Actuarial losses / (gains) arising from changes in financial assumptions	2	(1)
Actuarial losses / (gains) arising from experience adjustments	4	7
Actuarial (gains) / losses on plan assets (excluding amounts included in net interest cost)	(0)	0
Components of defined benefit costs recognised in consolidated statement of comprehensive income- losses/(gains)	**6**	**6**

The movement of the present value of Other post-employment benefit plan obligation is as follows:

(US$ million)

Particulars	Year ended 31 March 2020	Year ended 31 March 2019
Opening balance	(135)	(122)
Acquired in business combination	-	(2)
Discontinued operations *(refer note 3(e))*	50	(9)
Current service cost	(6)	(6)
Benefits paid	12	16
Interest cost	(6)	(6)
Actuarial (losses)/gains arising from changes in assumptions	(6)	(6)
Foreign currency translation	6	-
Closing balance	**(85)**	**(135)**

The movement in the fair value of Other post-employment benefit plan assets is as follows:

(US$ million)

Particulars	**Year ended 31 March 2020**	**Year ended 31 March 2019**
Opening balance	56	52
Acquired in business combination	-	2
Contributions received	12	12
Benefits paid	(9)	(11)
Remeasurement gain/ (loss) arising from return on plan assets	0	(0)
Interest income	4	4
Foreign currency translation	(4)	(3)
Closing balance	**59**	**56**

The above plan assets have been invested in the qualified insurance policies.

The actual return on plan assets was US$ 4 million and US$ 4 million for the year ended 31 March 2020 and 31 March 2019 respectively.

The weighted average duration of the defined benefit obligation is 15 years and 15 years as at 31 March 2020 and 31 March 2019 respectively.

The company expects to contribute US$ 8 million to the funded Gratuity plan during the year ending 31 March 2021.

Sensitivity analysis for Defined Benefit Plan

Below is the sensitivity analysis determined for significant actuarial assumptions for the determination of defined benefit obligations and based on reasonably possible changes of the respective assumptions occurring at the end of reporting year while holding all other assumptions constant.

(US$ million)

	Increase/(Decrease) in defined benefit obligation
Discount rate	
Increase by 0.50 %	(3)
Decrease by 0.50%	3
Change in salary assumption	
Increase by 0.50 %	3
Decrease by 0.50%	(3)

The above sensitivity analysis may not be representative of the actual benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

In presenting the above sensitivity analysis, the present value of defined benefit obligation has been calculated using the projected unit credit method at the end of reporting period, which is the same as that applied in calculating the defined obligation liability recognized in the consolidated statement of financial position.

Risk analysis

Group is exposed to a number of risks in the defined benefit plans. Most significant risks pertaining to defined benefits plans and management estimation of the impact of these risks are as follows:

Investment risk

Most of the Indian defined benefit plans are funded with Life Insurance Corporation of India (LIC), ICICI Prudential Life (ICICI) and HDFC Standard Life. Group does not have any liberty to manage the fund provided to LIC, ICICI prudential and HDFC Standard Life.

The present value of the defined benefit plan obligation is calculated using a discount rate determined by reference to Government of India bonds for Group's Indian operations. If the return on plan asset is below this rate, it will create a plan deficit.

Interest risk

A decrease in the interest rate on plan assets will increase the net plan obligation.

Longevity risk/ Life expectancy

The present value of the defined benefit plan obligation is calculated by reference to the best estimate of the mortality of plan participants both during and at the end of the employment. An increase in the life expectancy of the plan participants will increase the plan obligation.

Salary growth risk

The present value of the defined benefit plan obligation is calculated by reference to the future salaries of plan participants. An increase in the salary of the plan participants will increase the plan obligation.

28. Employee numbers and costs

Average number of persons employed by the Group in the year*

Class of business	**Year ended 31 March 2020**	**Year ended 31 March 2019**
Zinc	**5,698**	**5,905**
- India	4,213	4,325
- International	1,485	1,580
Iron ore	2,617	2,688
Copper	**966**	**7,525**
- India/Australia	966	1,113
- Zambia *(refer note 3(e))*	-	6,412
Aluminium	6,473	6,784
Power	226	98
Oil & Gas	1,573	1,847
Other	2,894	3,080
	20,447	**27,927**

Costs incurred during the year in respect of Employees and Executive Directors recognized in Consolidated Income Statement

(US$ million)

	Year ended 31 March 2020	**Year ended 31 March 2019**
Salaries and wages	441	496
Defined contribution pension scheme costs (refer note 27)	12	10
Defined benefit pension scheme costs (refer note 27)	13	16
Share- based payments charge (refer note 29)	10	21
Voluntary retirement scheme cost	2	-
Less: cost allocated/directly booked in joint ventures	(90)	(92)
	388	**451**

**Non IFRS measure*

29. Share-based payments

Employee share schemes

The Group aims to provide superior rewards for outstanding performance and a high proportion of 'at risk' remuneration for Executive Directors. Three employee share schemes were approved by shareholders on Listing in 2003. In 2014, the Board introduced a Performance Share Plan ('PSP') which is the primary arrangement under which share-based incentives are provided to the Executive Directors and the wider management group. In 2015, the Board also introduced a Deferred Share Bonus Plan (DSBP). In 2016, Vedanta Limited (subsidiary of Vedanta Resources Limited) introduced an Employee Stock Option Scheme 2016 ("ESOS"), which was approved by the Vedanta Limited shareholders.

The Vedanta Resources Long-Term Incentive Plan (the 'LTIP') and Employee Share Ownership Plan (the 'ESOP') and Performance Share Plan (the 'PSP')

The maximum value of shares that can be conditionally awarded to an Executive Director in a year is 150% of annual salary. The maximum value of shares that can be awarded to members of the wider management group is calculated by reference to the grade average CTC and individual grade of the employee. The performance conditions attaching to outstanding awards are as follows:

Performance Share Plan (the 'PSP')

Dependent on the level of employee, part of these awards will be subject to a continued service condition only with the remainder measured in terms of Total Shareholder Return ('TSR') (being the movement in a company's share price plus reinvested dividends), compared over the performance period with the performance of the companies as defined in the scheme from the grant date. The extent to which an award vests will depend on the Company's TSR rank against a group or groups of peer companies at the end of the performance period and as moderated by the Remuneration Committee. The awards granted under PSP plans are either equity-settled or cash-settled. The equity settled plans have an exercise price of 10 US cents per share and the performance period is three years, with no re-testing being allowed. In the cash-based scheme, business performance set against business plan for the financial year is included as an additional condition.

Employee Share Ownership Plan (the 'ESOP')

The awards under this plan are measured in terms of business performance set against business plan for the financial year comprising operational deliverables, enabler parameters and sustainability performance specific to each company. The vesting schedule is graded over three years and varies from company to company.

The exercise price of the awards is 10 US cents per share and the performance period is one year. The exercise period is six months from the date of vesting.

The Vedanta Resources Long-Term Incentive Plan (the 'LTIP')

The awards under this plan are measured in terms of Total Shareholder Return ('TSR') (being the movement in a company's share price plus reinvested dividends), compared over the performance period with the performance of the companies as defined in the scheme from the grant date. The extent to which an award vests will depend on the Company's TSR rank against a group of peer companies ("Adapted Comparator Group") at the end of the performance period and as moderated by the Remuneration Committee. The exercise price of the awards is 10 US cents per share and the performance period is three years, with no re-testing being allowed.

The Vedanta Resources Deferred Share Bonus Plan (the DSBP)

Under this plan, a portion of the annual bonus is deferred into shares and the awards granted under this scheme are not subject to any performance conditions, but only to service conditions being met. The vesting schedule is staggered over a period of one to three years. In case of DSBP, the shares are purchased from open market and allotted to employees, officers and directors. As on 31 March 2019, there are no options outstanding under the DSBP scheme.

In general, the awards will be settled in equity. The awards are accounted for in accordance with the requirements applying to equity settled share-based payment transactions. The fair value of each award on the day of grant is equal to the average of the middle market quotations of its share price for 5 dealing days before the grant date.

The details of share options for the year ended 31 March 2019 is presented below:

Year of Grant	Exercise Period	Exercise price US cents per share	Options outstanding 1 April 2018	Options granted during the year	Options lapsed during the year	Options lapsed during the year owing to performance conditions	Options exercised during the year	Options outstanding at 31 March 2019
2014	17 November 2017- 17 May 2018	10	483,340	-	(28,547)	-	(454,793)	-
2015	1 January 2018 – 1 July 2018	10	8,845	-	-	-	(8,845)	-
2015	30 December 2018 – 30 June 2019	10	4,499,326	-	(167,587)	(1,125,804)	(3,205,935)	-
2016	12 May 2019 - 12 November 2019	10	32,000	-	(7,422)	-	(24,578)	-
2016	11 November 2019 - 11 May 2020	10	371,944	-	(132,776)	(155,277)	(83,891)	-
2017	2 March 2020 – 2 September 2020 (cash based plan)	-	627,660	-	(328,097)	(155,351)	(144,212)	-
2017	14 November 2020 – 14 May 2021 (cash based plan)	-	780,180	-	(566,222)	(169,392)	(44,566)	-
2017	14 November 2020 - 14 May 2021	10	300,670	-	(219,942)	(80,728)	-	-
			7,103,965	**-**	**(1,450,093)**	**(1,686,552)**	**(3,966,820)**	**-**

During the previous year, through a cash offer all the outstanding equity settled options were bought back by Vedanta Resources Limited's parent, Volcan Investments Limited. All the TSR based options were vested based on the TSR performance from the date of grant to the date on which buy-back offer on these options went unconditional. For the service condition related options, no. of options were prorated as per remaining period left till the date of actual vesting except for options issued in December 2015 which got vested in full. For options outstanding under DSBP all options were vested in full. On account of delisting of the Company, the cash based options were also early settled. The accelerated charge on account of early settlement of both the equity settled and cash settled options was recognised in the consolidated income statement.

Hence, as at 31 March 2019, no options were exercisable at the year end. The weighted average share price for the share options exercised during the year ended 31 March 2019 was GBP 9. The weighted average maturity period for the options outstanding as on 31 March 2019 was Nil.

Most of the share-based awards of the Group are equity-settled as defined by IFRS 2 "Share-based Payment". The fair value of these awards has been determined at the date of grant of the award allowing for the effect of any market-based performance conditions. This fair value, adjusted by the Group's estimate of the number of awards that will eventually vest as a result of non-market conditions, is expensed on a straight-line basis over the vesting period. Where an award is cash-settled the fair value is recalculated at each reporting date until the liability is settled.

The fair values were calculated using the Stochastic valuation model with suitable modifications to allow for the specific performance conditions of the respective schemes. The inputs to the model include the share price at date of grant, exercise price, expected volatility, expected dividends, expected term and the risk-free rate of interest. Expected volatility has been calculated using historical return indices over the period to date of grant that is commensurate with the performance period of the award. The volatilities of the industry peers have been modelled based on historical movements in the return indices over the period to date of grant which is also commensurate with the performance period for the option. The history of return indices is used to determine the volatility and correlation of share prices for the comparator companies and is needed for the Stochastic valuation model to estimate their future TSR performance relative to the Company's TSR performance. All options are assumed to be exercised immediately after vesting.

The Group recognised total expenses of US$ 6 million (including expenses on DSBP of US$ 1 million) related to equity settled share-based payment transactions in the year ended 31 March 2019.

The total expense recognised on account of cash settled share based plan during the year ended 31 March 2019 was US$ 0 million and the carrying value of cash settled share based compensation liability as at 31 March 2019 was Nil.

The Vedanta Limited Plans

Employee Stock Option Scheme (ESOS) 2016

During the year 2016, Vedanta Limited (subsidiary of Vedanta Resources Limited) introduced an Employee Stock Option Scheme 2016 ("ESOS"), which was approved by the Vedanta Limited shareholders. The maximum value of shares that can be conditionally awarded to an Executive Committee in a year is 125% of annual salary. The maximum value of options that can be awarded to members of the wider management group is calculated by reference to the grade average CTC and individual grade of the employee. The performance conditions attached to the award is measured by comparing company's performance in terms of TSR over the performance period with the performance of the companies as defined in the scheme. The extent to which an award vests will depend on the Vedanta Limited's TSR rank against a group or groups of peer companies at the end of the performance period and as moderated by the Remuneration Committee. Dependent on the level of employee, part of these awards will be subject to a continued service condition only with the remainder measured in terms of TSR. Further in some schemes under the plan, business performance set against business plan for the financial year is included as an additional condition.

Options granted during the year ended March 31, 2020 includes business performance based, sustained individual performance based and market performance based stock options. Business performances will be measured using Volume, Cost, Net Sales Realisation, EBITDA, free cash flow or a combination of these for the respective business/ SBU entities.

The exercise price of the options is INR 1 per share and the performance period is three years, with no re-testing being allowed.

The details of share options for the year ended 31 March 2020 and 31 March 2019 is presented below:

Financial Year of Grant	Exercise Period	Options outstanding April 1, 2019	Options granted during the year	Options forfeited during the year	Options exercised during the year *	Options outstanding March 31, 2020	Options exercisable March 31, 2020
2016-17	December 15, 2019 - June 14, 2020	6,508,226	-	4,819,269	620,441	1,068,516	1,068,516
2017-18	September 1, 2020 - February 28, 2021	8,274,393	-	1,246,468	-	7,027,925	-
2017-18	October 16, 2020 - April 15, 2021	11,126	-	-	-	11,126	-
2017-18	November 1, 2020 - April 30, 2021	27,638	-	27,638	-	-	-
2018-19	November 1, 2021 - April 30, 2022	13,566,200	-	2,146,154	-	11,420,046	-
2018-19	Cash settled	3,847,494	-	1,610,550	-	2,236,944	-
2019-20	November 29, 2022 - May 28, 2023	-	16,713,640	832,310	-	15,881,330	-
2019-20	Cash settled	-	4,097,030	140,990	-	3,956,040	-
		32,235,077	**20,810,670**	**10,823,379**	**620,441**	**41,601,927**	**1,068,516**

**excludes 58,420 options exercised during the year regarding which the transaction could not be completed before March 31, 2020 and hence, the corresponding shares were not transferred to the concerned employees.

Financial Year of Grant	Exercise Period	Options outstanding April 1, 2018	Options granted during the year	Options forfeited during the year	Options exercised during the year	Options outstanding March 31, 2019	Options exercisable March 31, 2019
2016-17	December 15, 2019 - June 14, 2020	7,098,602	-	590,376	-	6,508,226	-
2017-18	September 1, 2020 - February 28, 2021	9,617,340	-	1,342,947	-	8,274,393	-
2017-18	October 16, 2020 - April 15, 2021	11,570	-	444	-	11,126	-
2017-18	November 1, 2020 - April 30, 2021	28,740	-	1,102	-	27,638	-
2018-19	November 1, 2021 - April 30, 2022	-	13,793,980	227,780	-	13,566,200	-
2018-19	Cash settled	-	3,889,980	42,486	-	3,847,494	-
		16,756,252	**17,683,960**	**2,205,135**	**-**	**32,235,077**	**-**

The fair value of all awards has been determined at the date of grant of the award allowing for the effect of any market-based performance conditions. This fair value, adjusted by the Group's estimate of the number of awards that will eventually vest as a result of non-market conditions, is expensed on a straight-line basis over the vesting period.

Business Performance-Based and Sustained Individual Performance-Based Options:

The fair value of stock options following these types of vesting conditions have been estimated using the Black-Scholes-Merton Option Pricing model. The value arrived at under this model has been then multiplied by the expected % vesting based on business performance conditions (only for business performance-based options) and the expected multiplier on account of sustained individual performance (for both type of options). The inputs used in the Black-Scholes-Merton Option Pricing model include the share price considered as of the valuation date, exercise price as per the scheme/ plan of the options, expected dividend yield (estimated based on actual/ expected dividend trend of the company), expected tenure (estimated as the remaining vesting period of the options), the risk-free rate (considered as the zero coupon yield as of the valuation date for a term commensurate with the expected tenure of the options) and expected volatility (estimated based on the historical volatility of the return in company's share prices for a term commensurate with the expected tenure of the options). The exercise period of 6 months post vesting period has not been considered as the options are expected to be exercised immediately post the completion of the vesting period.

Total Shareholder Returns-Based Options:

The fair value of stock options following this type of vesting condition has been estimated using the Monte Carlo Simulation method. This method has been used to simulate the expected share prices for Vedanta Limited and the companies of the comparator group over the vesting period of the options. Based on the simulated prices, the expected pay-off at the end of the vesting period has been estimated and present valued to the valuation date. Further, based on the simulated share prices and expected dividends the relative rank of Vedanta Limited's share price return has been estimated vis-à-vis the Indian and Global Group of the comparator group. This rank has been used to estimate expected % vesting of the options under this type of vesting condition. The inputs to the monte carlo simulation method include expected tenure (estimated as the remaining vesting period of the options), the risk-free rate (considered as the zero coupon yield as of the valuation date for a term commensurate with the expected tenure of the options), expected dividend yield (estimated based on the actual dividend trend of the companies), expected volatility (estimated based on the historical volatility of the return in the company's share prices for a term commensurate with the expected tenure of the options). The exercise period of 6 months post the vesting period has not been considered as the options are expected to be exercised immediately post the completion of the vesting period.

The assumptions used in the calculations of the charge in respect of the ESOS awards granted during the year ended 31 March 2020 and 31 March 2019 are set out below:

	Year ended March 2020	**Year ended March 2019**
	ESOS 2019	**ESOS November 2018**
Number of instruments	4,097,030 (cash settled) 16,713,640 (equity settled)	3,889,980 (cash settled) 13,793,980 (equity settled)
Exercise price	INR 1	INR 1
Share price at the date of grant	INR 144.60	INR 195.0
Contractual life	3 years	3 years
Expected volatility	36.64%	44.3%
Expected option life	3 years	3 years
Expected dividends	7.96%	6.5%
Risk free interest rate	5.68%	7.7%
Expected annual forfeitures	10%p.a.	10%p.a.
Fair value per option granted (Non-market performance based and market performance based)	INR 102.30/INR 72.12	INR 159.9/INR 96.3

Weighted average share price at the date of exercise of stock options was INR 126.02 (2019: NA)

The weighted average remaining contractual life for the share options outstanding was 2.28 years (2019: 2.32 years).

The Group recognized total expenses of US$ 10 million (2019: US$ 12 million) related to equity settled share-based plans under the above scheme in the year ended 31 March 2020.

The Group has awarded certain other cash settled option plans indexed to shares of its subsidiaries. As the amounts under these plans are not material, accordingly no further disclosures have been provided.

The total expense recognised on account of these cash settled option plans during the year ended 31 March 2020 is US$ 3 million (2019: US$ 3 million) and the carrying value of cash settled share based compensation liability as at 31 March 2020 is US$ 7 million (2019: US$ 5 million).

Out of the total expense pertaining to equity settled and cash settled options for the year ended March 31, 2020, the Group has capitalised US$ 3 million (2019: US$ 0 million) expense for the year ended March 31, 2020.

30. Share capital

	As at 31 March 2020		As at 31 March 2019	
Shares in issue	**Number**	**Paid up amount (US$ million)**	**Number**	**Paid up amount (US$ million)**
Ordinary shares of 10 US cents each	285,246,698	29	285,246,698	29
Deferred shares of £1 each	50,000	0	50,000	0
Total	**285,296,698**	**29**	**285,296,698**	**29**

Rights and obligations attaching to shares

The rights and obligations attaching to the ordinary and deferred shares are set out in the Articles.

Each ordinary share carries the right to one vote at general meetings of the Company and is entitled to dividends. The Company did not issue any shares during the year ended 31 March 2020.

The holders of deferred shares do not have the right to receive notice of any general meeting of the Company nor the right to attend, speak or vote at any such general meeting. The deferred shares have no rights to dividends and, on a winding-up or other return of capital, entitle the holder only to the payment of the amounts paid on such shares after repayment to the holders of Ordinary Shares of the nominal amount paid up on the Ordinary Shares plus the payment of £100,000 per Ordinary Share. Of the 50,000 deferred shares, one deferred share was issued at par and has been fully paid, and 49,999 deferred shares were each paid up as to one-quarter of their nominal value.

31. Non-controlling interests ('NCI')

The Group consists of a parent Company, Vedanta Resources Limited, incorporated in UK and a number of subsidiaries held directly and indirectly by the Group which operate and are incorporated around the world. Note 39 to the financial statements lists details of the interests in the subsidiaries.

Non-controlling interests that are material to the Group relate to Hindustan Zinc Limited (HZL), Cairn India Holdings Limited (CIHL) and its subsidiaries and Vedanta Limited.

As at 31 March 2020 and 31 March 2019, NCIs hold an economic interest of 67.33%, 49.67%, 74.33%, 62.76% and 49.67% respectively in HZL, CIHL and its wholly owned subsidiaries, Bharat Aluminium Company Limited (BALCO), Black Mountain Mining (BMM) and Vedanta Limited. In ASI (partly owned subsidiary of CIHL), the NCI's economic interest is 74.01%.

Principal place of business of HZL, CIHL and its subsidiaries and Vedanta Limited is set out under note 39.

The table below shows summarised financial information of subsidiaries of the Group that have material non-controlling interests. The amounts are presented before intercompany elimination.

(US$ million)

	Year ended 31 March 2020					Year ended 31 March 2019***				
Particulars	**HZL**	**CIHL and its subsidiaries**	**Vedanta Limited**	**Others***	**Total**	**HZL**	**CIHL and it's subsidiaries**	**Vedanta Limited**	**Others***	**Total**
Profit/ (loss) Attributable to NCI	643	(308)	(447)	(67)	(179)	748	98	330	(515)	661
Equity Attributable to NCI**	3,662	668	4,988	(3,782)	5,536	3,312	1,096	5,826	(4,053)	6,181
Dividends paid / payable to NCI	-	-	(101)	-	(101)	(512)	-	(496)	-	(1,008)

* *Others consist of investment subsidiaries of Vedanta Limited, other individual non-material subsidiaries and consolidation adjustments.*

** *US$ 5 million (31 March 2019 : US$ 17 million) gain attributable to NCI of CIHL and its subsidiaries transferred to put option liability. Refer note 24.*

****Restated. Refer note 1(b)*

(US$ million)

	As at 31 March 2020					As at 31 March 2019				
Particulars	**HZL**	**CIHL and its subsidiaries**	**Vedanta Limited**	**Others***	**Total**	**HZL**	**CIHL and its subsidiaries**	**Vedanta Limited**	**Others***	**Total**
Non-current assets	2,856	1,400	16,400	(4,271)	16,385	2,932	3,031	18,635	(3,690)	20,908
Current assets	3,317	1,258	2,614	612	7,801	3,119	1,117	3,284	1,353	8,873
Current liabilities	709	544	5,859	8,879	15,991	1,108	1,061	7,039	3,308	12,516
Non-current liabilities	25	782	3,112	2,003	5,922	24	871	3,150	7,967	12,012
Net assets	**5,439**	**1,332**	**10,043**	**(14,541)**	**2,273**	**4,919**	**2,216**	**11,730**	**(13,612)**	**5,253**

* *Others consist of investment subsidiaries of Vedanta Limited, Vedanta Resources Limited, other individual non-material subsidiaries and consolidation adjustments.*

(US$ million)

	Year ended 31 March 2020					Year ended 31 March 2019***				
Particulars	**HZL**	**CIHL and its subsidiaries**	**Vedanta Limited**	**Others***	**Total**	**HZL**	**CIHL and its subsidiaries**	**Vedanta Limited**	**Others***	**Total**
Revenue	2,587	874	4,998	3,331	11,790	2,981	969	5,442	3,614	13,006
Profit/ (loss) for the year	955	(578)	(899)	(1,225)	(1,747)	1,111	217	664	(1,568)	424
Other comprehensive income / (loss)**	(14)	-	(6)	(0)	(20)	5	-	(17)	(6)	(18)
Net cash inflow/ (outflow) from operating activities	982	282	703	(717)	1,250	1,259	148	1,645	(1,168)	1,884
Net cash inflow/ (outflow) from investing activities	(445)	(350)	(287)	(179)	(1,261)	(173)	114	(540)	(1,076)	(1,675)
Net cash inflow/ (outflow) from financing activities	(272)	(198)	(666)	781	(355)	(1,368)	(46)	(807)	2,388	167

* *Others consist of Investment subsidiaries of Vedanta Limited, Vedanta Resources Limited, other Individual non-material subsidiaries and consolidation adjustments.*

** *Excluding exchange differences arising on translation of foreign operations*

****Restated. Refer note 1(b)*

The effect of changes in ownership interests in subsidiaries that did not result in a loss of control is as follows:

(US$ million)

For the year ended 31 March 2020	HZL	CIHL and its subsidiaries	Vedanta Limited	Others	Total
Other changes in non-controlling interests	**-**	**-**	**8**	**(33)**	**(25)**

(US$ million)

For the year ended 31 March 2019	HZL	CIHL and its subsidiaries	Vedanta Limited	Others	Total
Other changes in non-controlling interests	**-**	**-**	**3**	**-**	**3**

32. Capital management

The Group's objectives when managing capital are to safeguard continuity, maintain a strong credit rating and healthy capital ratios in order to support its business and provide adequate return to shareholders through continuing growth.

The Group sets the amount of capital required on the basis of annual business and long-term operating plans which include capital and other strategic investments. The funding requirement is met through a mixture of equity, internal accruals and other borrowings.

The Group monitors capital using a gearing ratio, being the ratio of net debt as a percentage of total capital.

(US$ million)

	As at 31 March 2020	As at 31 March 2019
Total equity	2,273	5,253
Net debt	10,005	10,292
Total capital	12,278	15,545
Gearing Ratio	***81%***	***66 %***

The increase in the gearing ratio compared to 2019 is primarily due to impairment losses booked during current year.

33. Commitments, guarantees, contingencies and other disclosures

A. Commitments

The Group has a number of continuing commitments in the normal course of business including:

Exploratory mining commitments;

Oil and gas commitments;

Mining commitments arising under production sharing agreements; and

Completion of the construction of certain assets.

(US$ million)

	As at 31 March 2020	As at 31 March 2019
Capital commitments contracted but not provided	1,413	2,003

Estimated amount of contracts remaining to be executed on capital accounts and not provided for:

(US$ million)

	As at 31 March 2020	As at 31 March 2019
Oil & Gas sector		
Cairn India	421	797
Aluminium sector		
Lanjigarh Refinery (Phase II)	210	209
Jharsuguda 1.25 MTPA smelter	55	67
Zinc sector		
Zinc India (mines expansion, solar and smelter)	122	280
Gamsberg mining & milling project	17	26
Copper sector		
Tuticorin Smelter 400 KTPA*	373	404
Others	215	220
Total	**1,413**	**2,003**

**currently contracts are under suspension under the force majeure clause as per the contract*

Committed work programme (Other than capital commitment):

(US$ million)

	As at 31 March 2020	As at 31 March 2019
Oil & Gas sector		
Cairn India (OALP - New Oil and Gas blocks)	781	551

B. Guarantees

The aggregate amount of indemnities and other guarantees on which the Group does not expect any material losses, was US$ 866 million (31 March 2019: US$ 1,120 million).

The Group has given guarantees in the normal course of business as stated below:

Guarantees and bonds advanced to the customs authorities in India of US$ 63 million relating to the export and payment of import duties on purchases of raw material and capital goods (31 March 2019: US$ 98 million).

Guarantees issued for Group's share of minimum work programme commitments of US$ 388 million (31 March 2019: US$ 342 million).

Guarantee issued against liabilities for structured investment (refer note 35 for details of the transactions) worth US$ 277 million as of 31 March 2019 (relinquished during the year due to liquidation of these investment)

Guarantees of US$ 7 million issued under bid bond for placing bids (31 March 2019: US$ 78 million).

Bank guarantees of US$ 15 million (31 March 2019: US$ 17 million) has been provided by the Group on behalf of Volcan Investments Limited to Income tax department, India as a collateral in respect of certain tax disputes

Other guarantees worth US$ 393 million (31 March 2019: US$ 308 million) issued for securing supplies of materials and services, in lieu of advances received from customers, litigation, for provisional valuation of custom duty and also to various agencies, suppliers and government authorities for various purposes. The Group does not anticipate any liability on these guarantees.

Cairn PSC/RSC guarantee to Government

The Group has provided guarantees for the Cairn India Group's obligation under the Production Sharing Contract ('PSC') and Revenue Sharing Contract ('RSC').

C. Export Obligations

The Indian entities of the Group have export obligations of US$ 512 million (31 March 2019: US$ 467 million) on account of concessional rates of import duty paid on capital goods under the Export Promotion Capital Goods Scheme and under the Advance Licence Scheme for the import of raw material laid down by the Government of India.

In the event of the Group's inability to meet its obligations, the Group's liability would be US$ 81 million (31 March 2019: US$ 78 million) plus applicable interest.

The Group has given bonds of US$ 227 million (31 March 2019: US$ 225 million) to custom authorities against these export obligations.

D. Contingencies

The Group discloses the following legal and tax cases as contingent liabilities.

Hindustan Zinc Limited: Department of Mines and Geology

The Department of Mines and Geology of the State of Rajasthan issued several show cause notices in August, September and October 2006 to HZL, totalling US$ 45 million as at 31 March 2020 (31 March 2019: US$ 48 million). These notices alleged unlawful occupation and unauthorised mining of associated minerals other than zinc and lead at HZL's Rampura Agucha, Rajpura Dariba and Zawar mines in Rajasthan during the period from July 1968 to March 2006. HZL believes it is unlikely that the claim will lead to a future obligation and thus no provision has been made in the financial statements. HZL had filed appeals (writ petitions) in the High Court of Rajasthan in Jodhpur. The High Court restrained the Department of Mines and Geology from undertaking any coercive measures to recover the penalty. In January 2007, the High Court issued another order granting the Department of Mines and Geology additional time to file their reply and also ordered the Department of Mines and Geology not to issue any order cancelling the lease. The case is yet to be listed in the Rajasthan High Court.

Vedanta Limited: Income tax

In March 2014, Vedanta Limited (notice was served on Cairn India Limited which subsequently merged with Vedanta Limited, accordingly now referred to as Vedanta Limited) received a show cause notice from the Indian Tax Authorities ('Tax Authorities') for not deducting withholding tax on the payments made to Cairn UK Holdings Limited (CUHL), for acquiring shares of Cairn India Holdings Limited (CIHL), as part of their internal reorganisation. The Tax Authorities have stated in the notice that a short-term capital gain has accrued to CUHL on transfer of the shares of CIHL to Vedanta Limited, in the financial year 2006–2007, on which tax should have been withheld by Vedanta Limited. Pursuant to this, various replies were filed with the Tax Authorities. After several hearings, the Income Tax Authority, in March 2015, issued an order holding Vedanta Limited as 'assessee in default' and raised a demand totalling US$ 2,740 million (including interest of US$ 1,370 million). Vedanta Limited had filed an appeal before the First Appellate Authority, Commissioner of Income Tax (Appeals) which vide order dated 03 July 2017 confirmed the tax demand against Vedanta Limited. Vedanta Limited has challenged the Commissioner of Income Tax's (Appeals) order before the Income Tax Appellate Tribunal (ITAT).

Vedanta Limited also filed a writ petition before the Delhi High Court wherein it has raised several points for assailing the aforementioned Income Tax Authority's order. The matter came up for hearing on 05 February 2020 before Delhi High Court but adjourned and the next date of hearing is 28 September 2020.

Separately CUHL, on whom the primary liability of tax lies, had received an Order from the ITAT in the financial year 2016-17 holding that the transaction is taxable in view of the clarification made in the Act but also acknowledged that being a retrospective transaction, interest would not be levied. Hence affirming a demand of US$ 1,370 million excluding the interest portion that had previously been claimed. The tax department has appealed this order before the Delhi High Court. As a result of the above order from ITAT, the Group considers the risk in respect of the interest portion of claim to be remote. Further, as per the recent recovery notice dated October 12 2018 received from the Tax Recovery Officer (TRO) appointed for CUHL, tax demand of CUHL of approx. US$ 668 million along with interest is outstanding. Further, in the said notice, tax department had also instructed to remit the preference shares redemption amount including dividend payable thereon to the TRO. Accordingly, amount aggregating to US$ 81 million has been paid to the TRO on October 26 2018 thus reducing the liability to US$ 587 million. Vedanta Limited has also paid interim dividend of US$ 1 million to the TRO. Accordingly, the Group has revised the contingent liability to US$ 586 million (31 March 2019: US$ 634 million). In the event, the case is finally decided against the Company, the demand payable along with interest as per the above mentioned order would be US$ 2,740 million, of which only US$ 586 million is considered as possible. Separately, but in connection with this litigation, the Company has filed a Notice of Claim against the Government of India ('GOI') under the UK India Bilateral Investment Treaty (the BIT). The International Arbitration Tribunal passed a favourable order on jurisdiction and Transparency and hearing on merits have been completed in May 2019 and order will be passed in due course. The Government of India has challenged the jurisdiction and Transparency orders of Arbitration Tribunal before the High Court of Singapore. The Singapore High court heard the Transparency matter on 24 February 2020 and passed favorable order and held that it will take up the Jurisdiction issue after receiving Tribunal's award on merits. GOI has appealed the above High Court order before Singapore Supreme Court.

Ravva Joint Operations arbitration proceedings

ONGC Carry

The Ravva Production Sharing Contract (PSC) obliges the contractor parties to pay a proportionate share of ONGC's exploration, development, production and contract costs in consideration for ONGC's payment of costs related to the construction and other activities it conducted in Ravva prior to the effective date of the Ravva PSC (the ONGC Carry). The question as to how the ONGC Carry is to be recovered and calculated, along with other issues, was submitted to an International Arbitration Tribunal in August 2002 which rendered a decision on the ONGC Carry in favour of the contractor parties (including Vedanta Limited (Cairn India Limited which subsequently merged with Vedanta Limited, accordingly now referred to as Vedanta Limited)) whereas four other issues were decided in favour of Government of India (GOI) in October 2004 (Partial Award). The GOI then proceeded to challenge the ONGC Carry decision before the Malaysian courts, as Kuala Lumpur was the seat of the arbitration. The Federal Court of Malaysia upheld the Partial Award. As the Partial Award did not quantify the sums, therefore, contractor parties approached the same Arbitration Tribunal to pass a Final Award in the subject matter since it had retained the jurisdiction to do so. The Arbitral Tribunal was reconstituted and the Final Award was passed in October 2016 in Vedanta Limited's favour. GOI's challenge of the Final Award has been dismissed by the Malaysian High Court and the next appellate court in Malaysia i.e. Malaysian Court of Appeal. GOI then filed an appeal at Federal Court of Malaysia. The matter was heard on 28 February 2019 and the Federal Court dismissed GOI's leave to appeal. Vedanta Limited has also filed for the enforcement of the Partial Award and Final Award with Delhi High Court.

Base Development Cost

Ravva joint operations had received a claim from the Ministry of Petroleum and Natural Gas, Government of India (GOI) for the period from Year 2000-2005 for US$ 129 million for an alleged underpayment of profit petroleum (by recovering higher Base Development Costs ("BDC") against the cap imposed in the PSC) to the Government of India (GOI), out of which, Vedanta Limited's (Cairn India Limited which subsequently merged with Vedanta Limited, accordingly now referred to as Vedanta Limited) share will be US$ 29 million plus interest. Joint venture partners initiated the arbitration proceedings and Arbitration Tribunal published the Award allowing claimants (including Vedanta Limited) to recover the development costs spent to the tune of US$ 278 million and disallowed over run of US$ 22 million spent in respect of BDC along with 50% legal costs. The High Court of Kuala Lumpur as well as the Court of Appeal dismissed GOI's application of setting aside the part of the Award. GOI challenge to the same before the Federal Court of Malaysia was also dismissed on 17 May 2016. Vedanta Limited has filed an application for enforcement of award before Delhi High Court.

In connection with the above two matters, Vedanta Limited has received an order dated 22 October 2018 from the GOI directing oil marketing companies (OMCs) who are the offtakers for Ravva to divert the sale proceeds to GOI's account. GOI alleges that the Ravva Joint Operations has short paid profit petroleum of US$ 314 million (Vedanta Limited's share approximately - US$ 93 million) on account of the two disputed issues of ONGC Carry and BDC matters, out of which US$ 64 million pertains to ONGC Carry and US$ 29 million pertains to BDC Matter. Against an interim application, filed by Vedanta Limited and other joint venture partner, seeking stay of such action from GOI, before the Delhi High Court, where enforcement petitions for both matters are pending, the Court directed the OMCs to deposit above sums to the Court for both BDC and ONGC Carry matters. However, Vedanta Limited (and other joint venture partner) has been given the liberty to seek withdrawal of the proportionate amounts (fallen due as of the date of Court order) from the Court upon furnishing a bank guarantee of commensurate value. As on date, the company has submitted bank guarantee of US$ 84 million and received the corresponding proceeds.

Separately, GOI has also filed an interim application seeking deposit by the said OMCs of an amount of US$ 87 million (Vedanta's share of US$ 56 million) towards interest on the alleged short payment of profit petroleum. The Hon'ble Delhi High Court vide its order dated 19 February 2020 allowed the petition for enforcement of the arbitration award in relation to BDC including declaratory relief and rejected the objections of GOI. The GOI has filed an SLP against this order before the Supreme Court which was listed on 17 June 2020 where in the Court directed the parties to file their written submissions by 15 July 2020. The case is listed for further hearing in due course. The SC has also directed the parties to maintain status quo till any further orders in the matter.

The Hon'ble Delhi High Court vide its order dated 28 May 2020 has directed that all future sale proceeds of Ravva Crude w.e.f. 5 June 2020 be paid directly to Vedanta Limited by the OMCs. The interim application filed by GOI and the ONGC Carry matter has been listed for hearing on 17 August 2020. While the Group does not believe the GOI will be successful in its challenge, if the Arbitral Awards in above matters are reversed and such reversals are binding, the Group would be liable for approximately US$ 93 million plus interest (31 March 2019: US$ 93 million) plus interest.

Proceedings related to the imposition of entry tax

Vedanta Limited and other Group companies i.e. Bharat Aluminium Company Limited (BALCO) and Hindustan Zinc Limited (HZL) challenged the constitutional validity of the local statutes and related notifications in the states of Chhattisgarh, Odisha and Rajasthan pertaining to the levy of entry tax on the entry of goods brought into the respective states from outside.

Post some contradictory orders of High Courts across India adjudicating on similar challenges, the Supreme Court referred the matters to a nine judge bench. Post a detailed hearing, although the bench rejected the compensatory nature of tax as a ground of challenge, it maintained status quo with respect to all other issues which have been left open for adjudication by regular benches hearing the matters.

Following the order of the nine judge bench, the regular bench of the Supreme Court proceeded with hearing the matters. The regular bench remanded the entry tax matters relating to the issue of discrimination against domestic goods bought from other States to the respective High Courts for final determination but retained the issue of jurisdiction for levy on imported goods, for determination by the regular bench of the Supreme Court. Following the order of the Supreme Court, the Group filed writ petitions in respective High Courts.

On 09 October 2017, the Supreme Court has held that states have the jurisdiction to levy entry tax on imported goods. With this Supreme Court judgement, imported goods will rank pari-passu with domestic goods for the purpose of levy of Entry tax. Vedanta Limited and its subsidiaries have amended their appeals (writ petitions) in Odisha and Chhattisgarh to include imported goods as well. With respect to Rajasthan, the State Government has filed a counter petition in the Rajasthan High Court, whereby it has admitted that it does not intend to levy the entry tax on imported goods.

The issue pertaining to the levy of entry tax on the movement of goods into a Special Economic Zone (SEZ) remains pending before the Odisha High Court. The Group has challenged the levy of entry tax on any movement of goods into SEZ based on the definition of 'local area' under the Odisha Entry Tax Act which is very clear and does not include a SEZ. In addition, the Government of Odisha further through its SEZ Policy 2015 and the operational guidelines for administration of this policy dated 22 August 2016, exempted the entry tax levy on SEZ operations.

The total claims against Vedanta Limited and its subsidiaries are US$ 183 million (31 March 2019: US$ 190 million) net of provisions made.

BALCO: Challenge against imposition of Energy Development Cess

BALCO challenged the imposition of Energy Development Cess levied on generators and distributors of electrical energy @ 10 paise per unit on the electrical energy sold or supplied before the High Court on the grounds that the Cess is effectively on production and not on consumption or sale since the figures of consumption are not taken into account and the Cess is discriminatory since captive power plants are required to pay @ 10 paise while the State Electricity Board is required to pay @ 5 paise. The High Court of Chhattisgarh by order dated 15 December 2006 declared the provisions imposing ED Cess on CPPs as discriminatory and therefore ultra vires the Constitution. BALCO has sought refund of ED Cess paid till March 2006 amounting to US$ 5 million.

The State of Chhattisgarh moved an SLP in the Supreme Court and whilst issuing notice has stayed the refund of the Cess already deposited and the Supreme Court has also directed the State of Chhattisgarh to raise the bills but no coercive action be taken for recovery for the same. Final argument in this matter started before the Supreme Court. In case the Supreme Court overturns the decision of the High Court, the Group would be liable to pay an additional amount of US$ 112 million (31 March 2019: US$ 108 million). Accordingly the total exposure on the Group would be US$ 117 million (31 March 2019: US$ 113 million).

Class actions against KCM on behalf of Zambian nationals

Vedanta and KCM had challenged the jurisdiction of the English courts to hear and adjudicate the claims by Zambian residents in relation to KCM's operations in Zambia. The allegations relate to claims of personal injury, significant pollution, environmental damage and claims for aggravated and exemplary damages and for injunctive relief. These allegations are currently defended by KCM. On 27 May 2016, the English High Court of Justice, Queen's Bench Division, Technology and Construction Court ruled that the English courts have jurisdiction to hear and adjudicate the claims. Vedanta and KCM appealed this ruling.

The English Court of Appeal released a judgement on 13 October 2017, dismissing this appeal and ruling that the English courts have jurisdiction to hear and adjudicate the claims. This judgement was solely related to the jurisdiction of the English courts to hear these claims.

Vedanta and KCM had sought permission from the Supreme Court of London to appeal the Court's decision, which was granted by the Supreme Court on 23 March 2018.

The UK Supreme Court hearing on jurisdiction of the UK courts to adjudicate the substantive claims took place on 15 and 16 January 2019. Both parties presented their arguments and submissions on the days. On 10 April 2019, the UK Supreme Court delivered its decision on jurisdiction matter and held that the English Court has jurisdiction to try such claims. The Supreme Court, however, agreed with arguments put forward by Vedanta and KCM that England is not the proper place for the trial of these claims and consequently overturned the lower courts on this point. The Court further added that the High Court was entitled to conclude on the evidence before it that there is a real risk that "substantial justice" will not be obtainable in Zambia and because of this, the claims may nonetheless be heard in the English Court.

Owing to the ZCCM action of initiating liquidation proceedings against KCM and the Provisional Liquidator taking over control, the English class action proceedings did not move further for sometime. Post which the date for the trial in the English trail court was tentatively set for October 11, 2021. Vedanta and KCM were directed to submit a defense by May 07, 2020 which was later extended to June 04, 2020. Before the expiry of this period, Vedanta filed an application seeking 2 months' extension to file its defense statement. The hearing date for the application is yet to be fixed. KCM has also filed an application seeking a stay on the matter, the date for which has also not been fixed. Any stay if granted will be applicable on all the parties including VRL. The amount of the claims has not been specified. Given the stage of proceedings the amount is presently not quantifiable.

Miscellaneous disputes- Income tax

The Group is involved in various tax disputes amounting to US$ 255 million (31 March 2019: US$ 200 million) relating to income tax. It also includes similar matters where initial assessment is pending for subsequent periods and where the Group has made claims and assessments are in progress. These mainly relate to the disallowance of tax holiday for 100% Export Oriented Undertaking under section 10B of the Income Tax Act, 1961, disallowance of tax holiday benefit on production of gas under section 80IB of the Income Tax Act, 1961, on account of depreciation disallowances of the Income Tax Act and interest thereon which are pending at various appellate levels. Interest and penalty, if any would be additional. Refer note 11 for other income tax disputes.

The Group believes that these disallowances are not tenable and accordingly no provision is considered necessary.

Miscellaneous disputes- Others

The Group is subject to various claims and exposures which arise in the ordinary course of conducting and financing its business from the excise, indirect tax authorities and others. These claims and exposures mostly relate to the assessable values of sales and purchases or to incomplete documentation supporting the companies' returns or other claims.

The approximate value of claims (excluding the items as set out separately above) against the Group companies total US$ 534 million (31 March 2019: US$ 581 million).

The Group considers that it can take steps such that the risks can be mitigated and that there are no significant unprovided liabilities arising.

Except as described above, there are no pending litigations which the Group believes could reasonably be expected to have a material adverse effect on the results of operations, cash flows or the financial position of the Group.

Based on reassessments and developments during the period, the following matters that were reported as contingent liability as at 31 March 2019 are no more considered as contingent liability:

1. *Richter and Westglobe, Income Tax matter of US$ 123 million basis the favorable order received from High Court*
2. *South Africa Carry Cost of US$ 62 million basis the acceptance of closure application by Petroleum Agency South Africa (PASA) to exit from South Africa block*

E. Operating Lease commitments: As lessee

(i) Refer to note 2(b) for details of the Group's transition to IFRS 16 "Leases". Commitments disclosed as non-cancellable operating leases under IAS 17 Leases have been recorded as lease liabilities from 1 April 2019, with the exception of short-term and low-value leases. Refer to note 25 for the maturity profile of the Company's lease liabilities.

The aggregate amounts of minimum lease payments under non-cancellable operating leases at 31 March 2019, prepared and reported under IAS 17 "Leases", were as follows:

(US$ million)

Particulars	As at 31 March 2019
Within one year of the balance sheet date	2
Within two to five years from the balance sheet date	3
After five years from the balance sheet date	0
Total	**5**

Lease payments recognised as expenses during the year ended 31 March 2019, on non-cancellable leases, is US$ 2 million

(ii) TSPL has ascertained that the Power Purchase Agreement (PPA) entered with Punjab State Power Corporation Limited (PSPCL) qualifies to be an operating lease under IAS 17 'Leases'. Based on the assessment that the lease payments by PSPCL are subject to variations on account of various factors like availability of coal, water, etc., the management has determined the entire consideration receivable under the PPA relating to recovery of capacity charges towards capital cost to be contingent rent under IAS 17. The contingent rent recognised as revenue in the consolidated income statement during the year ended 31 March 2020 and 31 March 2019 is US$ 236 million and US$ 242 million respectively.

34. Other matters

i). Share transactions Call options

a. HZL

Pursuant to the Government of India's policy of divestment, the Group in April 2002 acquired 26% equity interest in HZL from the Government of India. Under the terms of the Shareholder's Agreement ('SHA'), the Group had two call options to purchase all of the Government of India's shares in HZL at fair market value. The Group also acquired an additional 20% of the equity capital in HZL through an open offer. The Group exercised the first call option on 29 August 2003 and acquired an additional 18.9% of HZL's issued share capital, increasing its shareholding to 64.9%. The second call option provides the Group the right to acquire the Government of India's remaining 29.5% share in HZL. This call option is subject to the right of the Government of India to sell 3.5% of HZL shares to HZL employees. The Group exercised the second call option on 21 July 2009. The Government of India disputed the validity of the call option and has refused to act upon the second call option. Consequently, the Group invoked arbitration which is in the early stages. The next date of hearing is to be notified. The Government of India without prejudice to the position on the Put / Call option issue has received approval from the Cabinet for divestment and the Government is looking to divest through the auction route. Meanwhile, the Supreme Court has, in January 2016, directed status quo pertaining to disinvestment of Government of India's residual shareholding while hearing the public interest petition filed. Vedanta Limited has filed an early hearing application in Supreme Court. The hearings in the matter have started and will now be listed for further arguments in due course.

b. BALCO

Pursuant to the Government of India's policy of divestment, the Group in March 2001 acquired 51% equity interest in BALCO from the Government of India. Under the terms of the SHA, the Group has a call option to purchase the Government of India's remaining ownership interest in BALCO at any point from 02 March 2004. The Group exercised this option on 19 March 2004. However, the Government of India has contested the valuation and validity of the option and contended that the clauses of the SHA violate the (Indian) Companies Act, 1956 by restricting the rights of the Government of India to transfer its shares and that as a result such provisions of the SHA were null and void. In the arbitration filed by the Group, the arbitral tribunal by a majority award rejected the claims of the Group on the grounds that the clauses relating to the call option, the right of first refusal, the "tag-along" rights and the restriction on the transfer of shares violate the (Indian) Companies Act, 1956 and are not enforceable. The Group has challenged the validity of the majority award in the High Court of Delhi and sought for setting aside the arbitration award to the extent that it holds these clauses ineffective and inoperative. The Government of India also filed an application before the High Court of Delhi to partially set aside the arbitral award in respect of certain matters involving valuation. The matter will be listed for hearing in due course. Meanwhile, the Government of India without prejudice to its position on the Put / Call option issue has received approval from the Cabinet for divestment and the Government is looking to divest through the auction route.

On January 9, 2012, the Group offered to acquire the Government of India's interests in HZL and BALCO for US $ 2,071 and US $ 238 respectively. This offer was separate from the contested exercise of the call options, and Group proposed to withdraw the ongoing litigations in relation to the contested exercise of the options should the offer be accepted. To date, the offer has not been accepted by the Government of India and therefore, there is no certainty that the acquisition will proceed.
In view of the lack of resolution on the options, the non-response to the exercise and valuation request from the Government of India, the resultant uncertainty surrounding the potential transaction and the valuation of the consideration payable, the Group considers the strike price of the options to be at fair value, and hence the call options have not been recognised in the financial statements.

ii). Pursuant to Management Committee recommendation and minutes of Empowered Committee of Secretaries (ECS) filed by GoI, Vedanta Limited had considered cost recovery of US$ 251 million in FY 2017-18, being the cost incurred over the initially approved FDP of Pipeline Project. Vedanta Limited's claim for the resultant profit petroleum of US$ 43 million (31 March 2019: US$ 43 million), which had been previously paid, has been objected by the GoI. The Group believes that it has a good case on merits to recover the amount and has therefore treated it as a non-current recoverable amount.

iii) The Department of Mines and Geology (DMG) of the State of Rajasthan initiated the royalty assessment process from Jan 2008 to 2019 and issued a show cause notice vide an office order dated 31 January 2020 amounting to US $ 257 million. The Group has challenged (the show cause notice or/and) computation mechanism of the royalty on the ground that the State has not complied with the previous orders of Rajasthan High Court where a similar computation mechanism was challenged and Court had directed DMG to reassess basis the judicial precedents and mining concession rules. Pending compliance of previous orders, High Court has granted a stay on the notice and directed DMG not to take any coercive action. Based on the opinion of external council, the Group believes that it has strong grounds of a successful appeal, and the chances of an outcome which is not if favor of the Group is remote.

iv) In terms of various notifications issued by the Ministry of Environment, Forest and Climate Change (MoEF&CC), ash produced from thermal power plant is required to be disposed of by the Group in the manner specified in those notifications. However compliance with manner of disposal as specified in those notifications is not fully achieved due to lack of demand from user agencies. Consequently, the Group is storing some of the ash produced in ash dyke in accordance with conditions of the Environmental Clearance & Consent to Operate granted by the MOEF&CC & Odisha State Pollution Control Board (OSPCB) respectively while giving preference to supplying the same to user agencies. Management believes storage of ash in ash dykes/ ash pond in accordance with environmental clearances received by the Group are sufficient compliance with the applicable notifications issued by MoEF&CC which is supported by a legal opinion obtained.

The National Green Tribunal (NGT) has also taken cognizance of the matter and vide its order dated 12 February 2020 has ordered for levy of environmental compensation on generating companies on account of their failure to comply the aforesaid notifications. The Group has already filed an appeal against the said order with the Hon'ble Supreme Court of India (Apex Court) on the grounds that it is not in accordance with directions given by the Apex Court and methodology for determination of compensation is not reasonable. Management believes that the outcome of the appeal will not have any significant adverse financial impact on the Group which is supported by a legal opinion obtained.

v) The Scheme of Amalgamation and Arrangement amongst Sterlite Energy Limited ('SEL'), Sterlite Industries (India) Limited ('Sterlite'), Vedanta Aluminium Limited ('VAL'), Ekaterina Limited ('Ekaterina'), Madras Aluminium Company Limited ('Malco') and Vedanta Limited (the "Scheme") had been sanctioned by the Honourable High Court of Madras and the Honourable High Court of Judicature of Bombay at Goa and was given effect to in the year ended March 31, 2014. Subsequently the above orders of the Honourable High Court of Bombay and Madras have been challenged by Commissioner of Income Tax, Goa and Ministry of Corporate Affairs through a Special Leave Petition before the Honourable Supreme Court and also by a creditor and a shareholder of Vedanta Limited. The said petitions are currently pending for hearing.

35. Related party transactions

Related party transactions

The information below sets out transactions and balances between the Group and various related parties in the normal course of business for the year ended 31 March 2020.

HOLDING COMPANIES

Volcan Investments Limited

Volcan Investments Cyprus Limited

FELLOW SUBSIDIARY

Sterlite Technologies Limited ('STL')

Sterlite Power Transmission limited ('SPTL')

Sterlite Iron and Steel Company Limited ('SISCOL')

Sterlite Power Grid Ventures Limited

ASSOCIATES/JOINT VENTURES

RoshSkor Township (Pty) Ltd.

Gaurav Overseas Private Limited

Madanpur SouthCoal Company Limited

OTHERS

India Grid Trust*

Cairn Foundation**

Fujairah Gold Ghana

Vedanta Foundation

Sesa Goa Community Foundation Limited

Vedanta Medical Research Foundation

Sesa Goa Employees Provident Fund Trust

Sesa Group Employees Gratuity Fund and Sesa Group

Sesa Group Executives Superannuation scheme

Sesa Resources Limited Employees Provident Fund Trust

Sesa Resources Limited Employees Gratuity Fund

Sesa Mining Corporation Limited Employees Provident Fund Trust

Sesa Mining Corporation Limited Employees Gratuity

Sesa Resources Limited and Sesa Mining Corporation

Hindustan Zinc Limited Employees Contributory Provident Fund Trust

Hindustan Zinc Limited Employee group Gratuity Trust

Hindustan Zinc Limited Superannuation Trust

Balco Employees Provident Fund Trust

Runaya Refinery LLP

**Ceased to be related party w.e.f 7th May, 2019.*
***Cairn Foundation though not a related party as per the definition under IAS 24, related party disclosure has been included by way of a voluntary disclosure, following the best corporate governance practices.*

Details of transactions for the year ended 31 March, 2020 are as follows :

(US$ million)

	Particulars	Holding Company/Fellow Subsidiaries	Associates/ Joint Ventures	Others	Total
	Income:				
(i)	Revenue from operations	121	-	0	121
(ii)	Dividend Income	0	-	1	1
(iii)	Net Interest Received	2	-	0	2
	Expenditure :				
(i)	Purchases of goods/services	-	-	1	1
(ii)	Stock option (recovery)	-	-	(0)	(0)
(iii)	Management fees paid	2	-	1	3
(iv)	Reimbursement for other expenses (net of recovery)	0	-	(0)	0
(v)	Donation	-	-	15	15
(vi)	Interest paid	1	-	-	1

(vii)	Dividend Paid	536	-	-	536
(viii)	Contribution to Post retirement employees benefit trust/fund	-	-	16	16
	Other transactions during the year :				
(i)	Investments redeemed during the year*	639	-	-	639
(ii)	Loans given /(repayment thereof)	0	(0)	-	(0)
(iii)	Guarantees given during the period (net of relinquishment)	-	-	(4)	(4)

* **Structured Investment**

During the previous year ended March 31, 2019, as part of its cash management activities, Cairn India Holdings Limited (CIHL), a step-down subsidiary of the Company, entered into a tripartite agreement with Volcan and one of its subsidiaries. Under the agreement, CIHL purchased an economic interest in a structured investment for the equity shares of Anglo American Plc (AA Plc), a company listed on the London Stock Exchange, from Volcan for a total consideration of US$ 541 million (of which US$ 254 million and US$ 64 million was paid upto March 31, 2019 and during the year ended March 31, 2020 respectively) determined based on an independent third-party valuation. The ownership of the underlying shares, and the associated voting interests, remained with Volcan and the investment were to mature in two tranches in April 2020 and October 2020. In addition, CIHL also received a put option from Volcan. In July, 2019 , the transaction was unwound and the investments were redeemed for a total consideration of US$ 639 million, representing the actual price Volcan realised from selling the shares of AA Plc to an unrelated third-party net of applicable costs, out of which US$ 12 million is outstanding.

Details of balances as at 31 March, 2020 are as follows :

(US$ million)

	Particulars	Holding Company/Fellow Subsidiaries	Associates/ Joint Ventures	Others	Total
(i)	Net amounts receivable at year end	14	-	-	14
(ii)	Net amounts payable at year end	1	-	10	11
(iii)	Investment in equity Share	5	0	-	5
(iv)	Value of bonds held by Volcan	13	-	-	13
(v)	Interest payable	0	-	-	0
(vi)	Dividend Payable	1	-	-	1
(vii)	Net Advance received at year end	0	-	-	0
(viii)	Net advance given at year end	1	-	0	1
(ix)	Financial guarantee given *	15	-	3	18
(x)	Loans given	1**	1	-	2

*Bank guarantee has been provided by the Group on behalf of Volcan in favour of Income tax department, India as collateral in respect of certain tax disputes of Volcan. The guarantee amount is US$ 15 million (31 March 2019 : US$ 17 million).

** During the previous year ended March 31, 2019, the Group had renewed loan provided to Sterlite Iron and Steel Company Limited to finance project in earlier years. The loan balance as at March 31, 2020 was US$ 1 million (March 31,2019: US$ 0 million). The loan is unsecured in nature and carries an interest rate of 8.50% per annum. The loan was due in March 2020. The loan has been renewed for a further period of 12 months in March 2020 and is due in March 2021.

Details of transactions for the year ended 31 March, 2019 are as follows :

(US$ million)

	Particulars	**Holding Company/Fellow Subsidiaries**	**Associates/ Joint Ventures**	**Others**	**Total**
	Income:				
(i)	Revenue from operations	131	-	-	131
(ii)	Dividend Income	0	-	2	2
(iii)	Net Interest Received	1	-	-	1
(iv)	Management fees income	0	-	-	0
	Expenditure :				
(i)	Purchase of goods/ Services	0	-	0	0
(ii)	Management fees paid	2	-	-	2
(iii)	Recovery	0	-	-	0
(iv)	Donation	-	-	19	19
(v)	Interest paid	1	-	-	1
(vi)	Dividend Paid	73	-	-	73
(vii)	Contribution to Post retirement employees benefit trust/fund	-	-	18	18
(viii)	Reimbursement	0	-	-	0
(ix)	Other expenses	0	-	-	0
	Other transactions during the year :				
(i)	Investments redeemed during the year	8	-	-	8
(ii)	Loans given/(repayment thereof)	0	0	-	0
(iii)	Guarantees given during the period (net of relinquishment)	-	-	2	2
(iv)	Purchase of structured investment	541	-	-	541

Details of balances as at 31 March, 2019 are as follows :

(US$ million)

	Particulars	Holding Company/Fellow Subsidiaries	Associates/ Joint Ventures	Others	Total
(i)	Net amounts receivable at year end	3	-	-	3
(ii)	Net amounts payable at year end	3	-	14	17
(iii)	Investment in equity Share	17	-	15	32
(iv)	Value of bonds held by Volcan	13	-	-	13
(v)	Interest payable	-	-	-	-
(vi)	Dividend Payable	-	-	-	-
(vii)	Net Advance received at year end	-	-	-	-
(viii)	Net advance given at year end	-	-	0	0
(ix)	Financial guarantees given	-	-	7	7
(x)	Loan given	0	1	-	1
(xi)	Deferred Consideration payable	299	-	-	299
(xii)	Fair Value of structured Investment*	690	-	-	690

**refer note on structured investment above*

Remuneration of Key Management Personnel

(US$ million)

	Year ended 31 March 2020	Year ended 31 March 2019
Short-term employee benefits	22	24
Post-employment benefits	2	1
Share-based payments	2	4
	26	29
Compensation for Non-Executive Directors	1	1
Commission/Sitting Fees to KMP	0	0

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Group, directly or indirectly, including any director (whether executive or otherwise).

Other related party#

(US$ million)

	Year ended 31 March 2020	Year ended 31 March 2019

Remuneration to relatives	2	2
Commission/ sitting fees to relatives of KMP	0	0

\# *close relatives of the executive chairman*

Given that there is no specific requirement in IAS 24 to disclose transactions with each related party, the presentation has been revised during the year to aggregate the transactions based on categories of related parties. The disclosure of previous year has also been restated accordingly.

36. Subsequent events

On 12 May 2020, the Company announced its intention to acquire outstanding shares of Vedanta Limited from the market and take Vedanta Limited private by delisting it from all stock exchanges in India and SEC.

The Company also informed Vedanta Limited Board vide letter dated 12 May 2020 and in turn Vedanta Limited had informed the stock exchanges that it has received a letter from its Parent Company, Vedanta Resources Ltd. ("VRL"), wherein VRL has expressed its intention to, either individually or along with one or more subsidiaries, acquire all fully paid-up equity shares of Vedanta Limited ("Equity Shares") that are held by the public shareholders (as defined under the Delisting Regulations, to be referred to as "Public Shareholders") and consequently voluntarily delist the Equity Shares from BSE Limited and National Stock Exchange of India Limited, the recognized stock exchanges where the Equity Shares are presently listed ("Stock Exchanges"), in accordance with the Delisting Regulations ("Delisting Proposal") and if such delisting is successful, then to also delist the company's American Depositary Shares from the New York Stock Exchange ("NYSE") and deregister the company from the Securities and Exchange Commission ("SEC"), subject to the requirements of the NYSE and the SEC.

Further, the board of directors of Vedanta Limited in their meeting held on 18 May 2020 have considered and granted their approval for the said Delisting Proposal and to seek shareholders' approval for the said proposal via postal ballot. The Shareholder notices for postal ballot was posted on 24 May 2020 and shareholder approved the delisting of Vedanta Limited on 25 June 2020.

The Company is in discussion with banks to arrange financing in order to complete this transaction. The Company has received necessary bond amendment approvals from the bond holders and necessary waivers from the banks.

The Company will make further announcement on the progress and will take appropriate action as per regulatory requirement of listing regulation in India.

37. Auditor's remuneration

The table below shows the fees payable globally to the Company's auditor, Ernst & Young LLP and their associate firms, for statutory external audit and audit related services, as well as fees paid to other accountancy firms for statutory external audit and audit related services in each of the two years ended 31 March:

(US$ million)

	Year ended 31 March 2020	Year ended 31 March 2019
Fees payable to the Company's auditor for the audit of Vedanta Resources Limited (formerly Vedanta Resources Plc) annual accounts	2	1
The audit of the Company's subsidiaries pursuant to legislation	2	2
Total audit fees	**4**	**3**
Fees payable to the Company's auditor and their associates for other services to the Group		
Other services pursuant to legislation(1)	2	2
Tax services(2)	0	0
Corporate finance services(3)	0	1
Other services(4)	1	0
Total non-audit fees	**3**	**3**
Total fees paid to the Company's auditor	**7**	**6**
Audit fees payable to other auditors of the Group's subsidiaries	0	0
Non-audit fees payable to other auditors of the Group's subsidiaries	-	-
Total fees paid to other auditors	**0**	**0**

(1) *Other services pursuant to legislation principally comprise assurance services, being quarterly reviews of the Group's subsidiaries results and the half year review of the Group's results.*
(2) *Tax services principally comprise certification and assurance services as required by Indian and overseas tax regulations.*
(3) *Corporate finance services principally comprise services in connection with debt raising transactions, group simplification and other acquisition related certifications. These assurance-related services are ordinarily provided by the auditor.*
(4) *Includes certification related services.*

38. Joint Arrangements

Joint Operations

The Group's principal licence interests in oil and gas business are joint operations. The principal licence interests for the year ended 31 March 2020 and 31 March 2019 are as follows:

Oil & Gas blocks/fields*	Area	Participating Interest
Operating blocks		
Ravva block-Exploration, Development and Production	Krishna Godavari	22.50%
CB-OS/2 – Exploration	Cambay Offshore	60.00%
CB-OS/2 - Development & production	Cambay Offshore	40.00%
RJ-ON-90/1 – Exploration	Rajasthan Onshore	100.00%
RJ-ON-90/1 – Development & production	Rajasthan Onshore	70.00%
Non-operating blocks		
KG-ONN-2003/1	Krishna Godavari Onshore	49.00%

* *South Africa Block1-Exploration was relinquished on 10 September 2019.*

39. List of Subsidiaries

The Group owns directly or indirectly through subsidiaries, more than half of the voting power of all of its subsidiaries as mentioned in the list below, and has power over the subsidiaries, is exposed or has rights, to variable returns from its involvement with the subsidiaries and has the ability to affect those returns through its power over the subsidiaries.

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding 31 March 2020	The Company's economic percentage holding 31 March 2019	Immediate holding company	The Company's immediate percentage holding 31 March 2020	The Company's immediate percentage holding 31 March 2019
Direct Subsidiaries of the Parent Company								
Vedanta Resources Holdings Limited ('VRHL')	Holding company	8th Floor, 20 Farringdon Street, London EC4A 4AB, United Kingdom	United Kingdom	100.00%	100.00%	VRL	100.00%	100.00%
Vedanta Resources Jersey Limited('VRJL")	Investment company	47 Esplanade, St Helier JE1 0BD	Jersey(CI)	100.00%	100.00%	VRL	100.00%	100.00%
Vedanta Resources Jersey II Limited('VRJL-II')	Investment company	47 Esplanade, St Helier JE1 0BD	Jersey(CI)	100.00%	100.00%	VRL	100.00%	100.00%
Vedanta Finance (Jersey) Limited ('VFJL')	Investment company	47 Esplanade, St Helier JE1 0BD	Jersey(CI)	100.00%	100.00%	VRL	100.00%	100.00%
Vedanta Jersey Investments Limited('VJIL")	Investment company	13 Castle Street, St. Helier, Jersey JE4 5UT, Channel Islands	Jersey(CI)	100.00%	100.00%	VRL	100.00%	100.00%
Indirect Subsidiaries of the Parent Company								
Valliant (Jersey) Limited	Investment company	47 Esplanade, St Helier JE1 0BD, Jersey	Jersey(CI)	100.00%	100.00%	VRJ2L	100.00%	100.00%
Vedanta Holdings Jersey Ltd[4]	Investment company	47 Esplanade, St Helier JE1 0BD, Jersey	Jersey(CI)	100.00%	100.00%	VRHL	100.00%	100.00%
Vedanta Resources Finance II Plc	Investment company	8th Floor, 20 Farringdon Street, London EC4A 4AB, United Kingdom	United Kingdom	100.00%	100.00%	VRHL	100.00%	100.00%
Vedanta Resources Finance Limited ('VRFL')	Investment company	8th Floor, 20 Farringdon Street, London EC4A 4AB, United Kingdom	United Kingdom	100.00%	100.00%	VRHL	100.00%	100.00%
Vedanta Resources Cyprus Limited ('VRCL')	Investment company	66, Ippocratous Street. 1015 Nicosia, Cyprus	Cyprus	100.00%	100.00%	VRFL	100.00%	100.00%
Richter Holding Limited('Richter')	Investment company	66, Ippocratous Street. 1015 Nicosia, Cyprus	Cyprus	100.00%	100.00%	VRCL	100.00%	100.00%
Westglobe Limited	Investment company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	100.00%	100.00%	Richter	100.00%	100.00%
Finsider International Company Limited	Investment company	8th Floor, 20 Farringdon Street, London EC4A 4AB, United Kingdom	United Kingdom	100.00%	100.00%	Richter, Westglobe	100.00%	100.00%
Welter Trading Limited ('Welter')	Investment company	28th Oktovriou Street, 205 Louloupis Court, 1st Floor P.C. 3035, Limassol, Cyprus	Cyprus	100.00%	100.00%	VRCL	100.00%	100.00%
Vedanta Finance UK Limited	Investment company	8th Floor, 20 Farringdon Street, London EC4A 4AB, United Kingdom	United Kingdom	100.00%	100.00%	Welter	100.00%	100.00%

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2020	31 March 2019		31 March 2020	31 March 2019
Twin Star Holdings Limited ('Twin Star')	Holding company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	100.00%	100.00%	VRHL	100.00%	100.00%
Monte Cello Corporation NV (MCNV')	Investment company	Kaya Flamboyan 6, Curacao	Curacao	100.00%	100.00%	Twin Star Holdings Limited	100.00%	100.00%
Vedanta Limited	Copper smelting, Iron ore mining, Aluminium mining, refining and smelting, Power generation, Oil and Gas exploration, and production	Vedanta Limited 1st Floor, 'C' wing, Unit 103, Corporate Avenue, Atul Projects, Chakala, Andheri (East), Mumbai–400093, Maharashtra, India	India	50.33%	50.33%	Twin Star Holdings Limited, Welter, Westglobe and Finsider International company Limited	50.33%	50.33%
Cairn India Holdings Limited	Investment company	4th Floor, 22-24 New Street, St. Paul's Gate, St. Helier, Jersey, JE1 4TR	Jersey	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
Cairn Energy India Pty Limited	Oil and gas exploration, development and production	Level 12, 680 George Street, Sydney NSW 2000, Australia	Australia	50.33%	50.33%	Cairn India Holdings Limited	100.00%	100.00%
Cairn Energy Hydrocarbons Limited	Oil and gas exploration, development and production	Summit House, 4-5 Mitchell Street, Edinburgh, EH6 7BD, Scotland	Scotland***	50.33%	50.33%	Cairn India Holdings Limited	100.00%	100.00%
Cairn South Africa Pty Limited	Oil and gas exploration, development and production	22 Bree Street, Cape Town, 8001, South Africa	South Africa	50.33%	50.33%	Cairn Energy Hydrocarbons Limited	100.00%	100.00%
CIG Mauritius Holdings Private Limited	Investment Company	Ocorian Corporate Services (Mauritius) Limited, 6th Floor, Tower A, 1 CyberCity, Ebene, Mauritius	Mauritius	50.33%	50.33%	Cairn Energy Hydrocarbons Limited	100.00%	100.00%
CIG Mauritius Private Limited	Investment Company	Ocorian Corporate Services (Mauritius) Limited, 6th Floor, Tower A, 1 CyberCity, Ebene, Mauritius	Mauritius	50.33%	50.33%	CIG Mauritius Holdings Private Limited	100.00%	100.00%
Cairn Lanka Private Limited	Oil and gas exploration, development and production	Lanka Shipping Tower, No.99, St. Michael's Road, Colombo 03	Sri Lanka	50.33%	50.33%	CIG Mauritius Private Limited	100.00%	100.00%
Cairn Energy Discovery Limited[3]	Oil and gas exploration, development and production	Summit House, 4-5 Mitchell Street, Edinburgh, EH6 7BD, Scotland	Scotland	50.33%	50.33%	Cairn India Holdings Limited	100.00%	100.00%

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2020	31 March 2019		31 March 2020	31 March 2019
Cairn Energy Gujarat Block 1 Limited	Oil and gas exploration, development and production	Summit House, 4-5 Mitchell Street, Edinburgh, EH6 7BD, Scotland	Scotland	50.33%	50.33%	Cairn India Holdings Limited	100.00%	100.00%
Cairn Exploration (No. 2) Limited[3]	Oil and gas exploration, development and production	Summit House, 4-5 Mitchell Street, Edinburgh, EH6 7BD, Scotland	Scotland	50.33%	50.33%	Cairn India Holdings Limited	100.00%	100.00%
AvanStrate Inc. ('ASI')	Operating & holding Company	No.1-11-1 Nishi-Gotanda-1, Shinagawa-ku, Tokyo , Japan	Japan	25.99%	25.99%	Cairn India Holdings Limited	51.63%	51.63%
AvanStrate Korea Inc	Manufacturer of LCD glass substrate	84 ,Hyeongoksandan-ro, Cheongbuk -myeon,Pyeongtaek-city , Gyeonggi,,South Korea	South Korea	25.99%	25.99%	Avanstrate (Japan) Inc.	100.00%	100.00%
AvanStrate Taiwan Inc	Manufacturer of LCD glass substrate	No 8 , Industry III road Annan ,Tainan	Taiwan	25.99%	25.99%	Avanstrate (Japan) Inc.	100.00%	100.00%
Sesa Resources Limited ("SRL")	Iron ore mining	Sesa Ghor, 20 EDC Complex, Patto, Panaji (Goa)- 403001	India	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
Sesa Mining Corporation Limited	Iron ore mining	Sesa Ghor, 20 EDC Complex, Patto, Panaji (Goa)- 403001	India	50.33%	50.33%	Sesa Resources Limited	100.00%	100.00%
Bloom Fountain Limited	Operating (Iron ore) and Investment Company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
Sesa Sterlite Mauritius Holdings Limited **	Investment Company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	-	50.33%	Bloom Fountain Limited	-	100.00%
Twin Star Energy Holdings Limited ("TEHL") **	Holding company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	-	50.33%	Bloom Fountain Limited	-	100.00%
Western Cluster Limited	Iron ore mining	Amir Building, 18th Street, Sinkor, Tubman Boulevard, Sinkor, Monrovia, Liberia, West Africa	Liberia	50.33%	50.33%	Bloom Fountain Limited	100.00%	100.00%
Twin Star Mauritius Holdings Limited ("TMHL") **	Holding company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	-	50.33%	Twin Star Energy Holdings Limited	-	100.00%

				The Company's economic percentage holding			The Company's immediate percentage holding	
Subsidiaries	Principal activities	Registered Address	Country of incorporation	31 March 2020	31 March 2019	Immediate holding company	31 March 2020	31 March 2019
Paradip Multi Cargo Berth Private Limited	Infrastructure	SIPCOT Industrial Complex, Madurai Bypass Road, T. V. Puram P.O., Tuticorin, Thoothukudi TN 628002 IN	India	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
Electrosteel Steels Limited[2]	Manufacturing of Steel (Products : TMT, Wire Rod) & DI Pipe	801, Uma Shanti Apartments, Kanke Road, Ranchi – 834 008, Jharkhand	India	48.06%	45.30%	Vedanta Limited	95.49%	90.00%
Vedanta Star Limited[2]	Operating and holding Company	M 11, First Floor, VIP Road, Harmu Housing Colony, P.S. Argoda, Ranchi 834 002	India	-	50.33%	Vedanta Limited	-	100.00%
Sterlite (USA) Inc.*	Investment company	Corporation Service Company, 2711 Centerville Road, Suite 400, City of Wilmington, Country of New Castle, Delaware, 19808	United States of America	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
THL Zinc Ventures Limited	Investment company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
THL Zinc Limited	Investment company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	50.33%	50.33%	THL Zinc Ventures Limited	100.00%	100.00%
Black Mountain Mining (Proprietary) Limited	Mining	Penge Road, Aggeneys	South Africa	37.24%	37.24%	THL Zinc Ltd	74.00%	74.00%
THL Zinc Namibia Holdings (Proprietary) Limited ("VNHL")	Mining and Exploration and Investment company	24 Orban Street, Klein Windhoek, Windhoek	Namibia	50.33%	50.33%	THL Zinc Ltd	100.00%	100.00%
Skorpion Zinc (Proprietary) Limited ('SZPL')	Operating (Zinc) and Investment Company	24 Orban Street, Klein Windhoek, Windhoek	Namibia	50.33%	50.33%	THL Zinc Namibia Holdings (Proprietary) Limited	100.00%	100.00%
Amica Guesthouse (Proprietary) Limited	Accommodation and catering services	4 mokke street, Windhoek, Namibia	Namibia	50.33%	50.33%	Skorpion Zinc (Proprietary) Limited	100.00%	100.00%
Skorpion Mining Company (Proprietary) Limited ('NZ')	Exploration, development, production and sale of zinc ore	24 Orban Street, Klein Windhoek, Windhoek	Namibia	50.33%	50.33%	Skorpion Zinc (Proprietary) Limited	100.00%	100.00%

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2020	31 March 2019		31 March 2020	31 March 2019
Namzinc (Proprietary) Limited	Mining	24 Orban Street, Klein Windhoek, Windhoek	Namibia	50.33%	50.33%	Skorpion Zinc (Proprietary) Limited	100.00%	100.00%
THL Zinc Holding BV	Investment company	Atrium Building, 8th Floor, Strawinskylaan, 3127, Amsterdam, Netherlands	Netherlands	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
Lakomasko BV	Investment company	Atrium Building, 8th Floor, Strawinskylaan, 3127, Amsterdam, Netherlands	Netherlands	50.33%	50.33%	THL Zinc Holding BV	100.00%	100.00%
Vedanta Lisheen Holdings Limited	Investment company	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperay	Ireland	50.33%	50.33%	THL Zinc Holing BV	100.00%	100.00%
Killoran Lisheen Mining Limited	Zinc and lead mining	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperay	Ireland	50.33%	50.33%	Vedanta Lisheen Holdings Limited	100.00%	100.00%
Vedanta Lisheen Mining Limited	Zinc and lead mining	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperay	Ireland	50.33%	50.33%	Vedanta Lisheen Holdings Limited	100.00%	100.00%
Lisheen Mine Partnership	Mining Partnership Firm	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperay	Ireland	50.33%	50.33%	50% each held by Killoran Lisheen Mining Limited & Vedanta Lisheen Mining Limited	100.00%	100.00%
Killoran Lisheen Finance Limited	Investment company	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperay	Ireland	50.33%	50.33%	Vedanta Lisheen Holdings Limited	100.00%	100.00%
Lisheen Milling Limited	Manufacturing	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperay	Ireland	50.33%	50.33%	Vedanta Lisheen Holdings Limited	100.00%	100.00%
Vedanta Exploration Ireland Limited	Exploration company	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperay	Ireland	50.33%	50.33%	Vedanta Lisheen Holdings Limited	100.00%	100.00%
Hindustan Zinc Limited ("HZL")	Zinc mining and smelting	Yashad Bhawan, Udaipur (Rajasthan) – 313004	India	32.67%	32.67%	Vedanta Limited	64.92%	64.92%

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2020	31 March 2019		31 March 2020	31 March 2019
Bharat Aluminium Company Limited ("BALCO")	Aluminium mining and smelting	Aluminium Sadan, 2nd Floor, Core-6-Scope Complex, 7 Lodhi Road, New Delhi-110 003	India	25.67%	25.67%	Vedanta Limited	51.00%	51.00%
Monte Cello BV ("MCBV")	Holding company	Atrium Building, 8th Floor, Strawinskylaan, 3127, Amsterdam, Netherlands	Netherlands	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
Copper Mines of Tasmania Pty Limited ("CMT")	Copper mining	c/o MCullough Robertson lawyers 44 martin place, Sydney NSW 2000	Australia	50.33%	50.33%	Monte Cello BV	100.00%	100.00%
Thalanga Copper Mines Pty Limited ("TCM")	Copper mining	c/o MCullough Robertson lawyers 44 martin place, Sydney NSW 2000	Australia	50.33%	50.33%	Monte Cello BV	100.00%	100.00%
MALCO Energy Limited ("MEL")	Power generation	SIPCOT Industrial Complex, Madurai Bypass Road, T. V. Puram P.O., Tuticorin, Thoothukudi TN 628002 IN	India	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
Fujairah Gold FZC	Of sub Manufacturing of Copper Rod and Refining of Precious Metals (Gold & Silver)	P.O. Box 3992, Fujairah, United Arab Emirates	United Arab Emirates	50.33%	50.33%	Malco Energy Limited	100.00%	100.00%
Talwandi Sabo Power Limited ("TSPL")	Power generation	Vill. Banawala, Mansa - Talwandi Sabo Road, Mansa, Punjab – 151302	India	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
Vizag General Cargo Berth Private Limited	Infrastructure	SIPCOT Industrial Complex, Madurai Bypass Road, T. V. Puram P.O., Tuticorin, Thoothukudi Tuticorin Thoothukudi TN 628002 IN	India	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
Sterlite Ports Limited	Infrastructure	MALCO Power company limited, SIPCOT Industrial Complex, Madurai Bypass Road, T. V. Puram P.O., Tuticorin, Thoothukudi TN 628002 IN	India	50.33%	50.33%	Vedanta Limited	100.00%	100.00%
Goa Sea Port Private Limited	Infrastructure	SIPCOT Industrial Complex, Madurai Bypass Road, T. V. Puram P.O., Tuticorin, Thoothukudi Tuticorin Thoothukudi TN 628002 IN	India	50.33%	50.33%	Sterlite Ports Limited	100.00%	100.00%
Maritime Ventures Private Limited	Infrastructure	SIPCOT Industrial Complex, Madurai Bypass Road, T. V. Puram P.O., Tuticorin, Thoothukudi TN 628002 IN	India	50.33%	50.33%	Sterlite Ports Limited	100.00%	100.00%
KCM SmelterCO Limited [5]	Sale of copper and slimes	Private Bag KCM (C) 2000, Stand M 1408, Fern Avenue, Chingola, Zambia	Zambia	-	79.42%	VRHL	-	100.00%

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2020	31 March 2019		31 March 2020	31 March 2019
Konkola Copper Mines PLC ('KCM') [5]	Mining, production and marketing of copper and cobalt Alloys	Private Bag KCM (C) 2000, Stand M 1408, Fern Avenue, Chingola, Zambia	Zambia	-	79.42%	VRHL	-	79.42%

**Under liquidation **Liquidated during the year ***Principal place of business is in India*

(1) *The Group also has interest in certain trusts which are neither significant nor material to the Group.*

(2) *Vedanta star Limited has been merged with Electrosteels steel Limited w.e.f. 25th March 2020. (Refer note 3(c))*

(3) *Under the process of striking off, application already filed, Ministry order is awaited.*

(4) *Incorporated with effect from 15th March 2020.*

(5) *Refer note 3(e)*

40. Ultimate controlling party

At 31 March 2020, all of the issued shares of the Company were held by Volcan Investments Limited and its wholly owned subsidiary. Accordingly, the ultimate controlling party of the Group was Volcan, which is beneficially owned by the Anil Agarwal Discretionary Trust. Volcan Investments Limited is incorporated in the Bahamas and does not produce Group accounts.

Independent Auditor's Report

to the members of Vedanta Resources Limited

OPINION

In our opinion:

- Vedanta Resources Limited's group financial statements and parent company financial statements (the "financial statements") give a true and fair view of the state of the group's and of the parent company's affairs as at 31 March 2019 and of the group's profit for the year then ended;
- the group financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union;
- the parent company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice including FRS 101 "Reduced Disclosure Framework"; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

WHAT WE HAVE AUDITED

We have audited the group and parent company financial statements of Vedanta Resources Limited for the year ended 31 March 2019 which comprise:

Group	Parent company
the Consolidated Income Statement;	the Company Balance Sheet;
the Consolidated Statement of Comprehensive Income;	the Company Statement of Changes in Equity;
the Consolidated Statement of Financial Position;	the related notes 1 to 12 to the Company financial statements, including a summary of significant accounting policies.
the Consolidated Cash Flow Statement;	
the Consolidated Statement of Changes in Equity; and	
The related notes 1 to 40 to the group financial statements, including a summary of significant accounting policies.	

The financial reporting framework that has been applied in the preparation of the group financial statements is applicable law and International Financial Reporting Standards (IFRSs) as adopted by the European Union. The financial reporting framework that has been applied in the preparation of the parent company financial statements is applicable law and United Kingdom Accounting Standards, including FRS 101 "Reduced Disclosure Framework" (United Kingdom Generally Accepted Accounting Practice).

BASIS FOR OPINION

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law.
Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report below. We are independent of the group and parent company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard as applied to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

CONCLUSIONS RELATING TO GOING CONCERN

We have nothing to report in respect of the following matters in relation to which the ISAs (UK) require us to report to you where:

- the directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the group's or the parent company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

OVERVIEW OF OUR AUDIT APPROACH

Materiality	• Overall group materiality of $68m which represents approximately 2% of EBITDA. • EBITDA represents an earnings-based measure for determining materiality and we consider this to be the most relevant performance measure to the users of the financial statements.
Audit scope	• We performed an audit of the complete financial information of eleven components and audit procedures on specific balances for a further four components. • The components where we performed full or specific audit procedures accounted for 97% of EBITDA, 94% of revenue and 97% of total assets. • For the remaining 51 components in the group we have performed limited procedures appropriate to respond to the risk of material misstatement. • We have obtained an understanding of the entity-level controls of the group which assists us in identifying and assessing risks of material misstatement due to fraud or error, as well as assisting us in determining the most appropriate audit strategy.
What has changed	• Misstatement of CWIP balances is no longer considered a key audit matter due to the change in the associated risk profile. In prior audit periods this risk arose due to the many significant CWIP projects that the company had. However, many of these projects have been brought into commercial production, thereby reducing the opportunity to override any controls over the CWIP process. • Related party transactions continue to be an area of audit focus, however, for the current year, we have classified the structured investment transaction between CIHL and its ultimate parent Volcan Investments Limited as a key audit matter due to the complexity relating to the valuation of the instrument and the importance of the appropriate disclosure.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit; and directing the efforts of the engagement team. These matters were addressed in the context of our audit of the financial statements as a whole, and in our opinion thereon, and we do not provide a separate opinion on these matters.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Revenue recognition Refer to the Audit Committee Report (page 137); Accounting policies (page 174); and Note 5 of the Consolidated Financial Statements (page199)		
For the year ended 31 March 2019 the group recognised total revenue of $14,031 million (2018: $15,294 million). Revenue recognition has been identified as a key audit matter due to the diverse and complex revenue streams across the Group. We have identified the following key areas for consideration: • Complex calculation of power tariff agreements with Grid Corporation of Odisha Limited ("GRIDCO") and Punjab State Power Corporation Limited ("PSPCL"). • Complexity associated with the calculation of profit petroleum within the Vedanta Limited Oil and Gas division. • Cut-off: the variety of terms that define when title, risk and rewards are transferred to the customer, as well as the high value of the transactions, give rise to the risk that revenue is not recognised in the correct period. • Measurement: at the end of each reporting period there are a number of contracts that are either provisionally priced or subject to hedging arrangements through forward contracts. These calculations are based on estimations and susceptible to potential manipulation. The level of risk has remained consistent with the prior year, but we note that additional work has been performed on ensuring that the new accounting standards have been appropriately implemented.	We performed our audit procedures across the group's revenue streams considering the revenue recognition policies. Our procedures were performed mainly by the component teams under the direction and supervision of the group audit engagement team. **The procedures performed to address this key audit matter include:** • Performed walk throughs of the revenue recognition processes at each full and one specific scope component and assessed the design effectiveness of key controls. • For the components referred to above, tested the controls, including IT controls, over the revenue recognition process to confirm operating effectiveness. • Inspected the term of all the agreements to assess the reasonability of the inputs used in the calculation of the power tariff in respect of the revenue recognised for GRIDCO and PSPCL Other procedures relating to the revenue of the Power division are mentioned in the recoverability of disputed receivables key audit matter section. • Inspected the terms of all the Vedanta Oil and Gas profit sharing agreements and tested the underlying cost recovery and profit petroleum calculation used by management. • Selected a sample of sales across the group made pre and post year- end, agreeing the date of revenue recognition to third party support, such as bills of lading, to confirm sales are recognised according to contract conditions. • Examined invoice samples with complex shipping terms to ensure that revenue has been recognised appropriately. • Ensured that the impact of applying IFRS 15 has been appropriately accounted for within the financial statements, including in the relevant disclosures. • Re-calculated the provisional pricing adjustments and validated the prices used to third party data. • For the zinc and lead price forwards taken out during the year we tested any resulting realised and unrealised loss, including the agreement of market forward rates used in determining the unrealised fair value loss at year end. We performed audit procedures over this risk area in ten full scope components and one specific scope component, where revenue was present, which covered 94% of the revenue balance impacted by this risk.	Based on the procedures performed we consider revenue to be fairly stated in the financial statements and appropriately disclosed in accordance with IFRS 15.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Recoverability of Property, Plant & Equipment and Exploration & Evaluation assets Refer to the Audit Committee Report (page 137); Accounting policies (page 174-176); and Note 16 of the Consolidated Financial Statements (page 207)		
At 31 March 2019 the carrying value of Property, Plant and Equipment (PP&E) was $17,726 million (2018: $17,727 million), which includes $404 million of Evaluation and Exploration (E&E) assets (2018: $2,326 million). The recoverability of PP&E and E&E assets has been identified as a key audit matter due to: • The significance of the carrying value of the assets being assessed. • The size of recent impairment charges and reversals. • The recent challenges in respect of the group's license to operate in certain jurisdictions. • Our assessment that the recoverable amount of the group's Cash Generating Units ("CGUs") involves significant judgements about the future cash flow forecasts and the discount rate that is applied. We focused our effort on those CGU's with impairment and impairment reversal indicators. The key judgements centred on forecast production profiles, forecast volumes, prices and discount rate assumptions. An impairment reversal trigger was identified at the Vedanta Limited Oil and Gas division namely in the Krishna Godavari (KG) block. The commencement of commercial production and certainty over development activities have led to an impairment reversal being recorded. An impairment reversal test resulted in an impairment reversal of $38m (pre-tax). Although the magnitude of impairment and impairment reversals recognised in the year is reduced, the level of risk has remained consistent with the prior year.	In addressing this key audit matter procedures were performed by both our group and component teams. Macroeconomic assumptions and consistency of approach were ensured by the group team with location specific inputs addressed by component teams. **The procedures performed to address this key audit matter include:** • Critically assessed through an analysis of internal and external factors impacting the entity, whether there were any indicators of impairment (or reversal of impairment) in line with IAS 36 for PP&E and IFRS 6 for E&E assets across the Group. • Specifically, in relation to the CGUs where impairment and impairment reversal indicators were identified, we have obtained and evaluated the valuation models used to determine the recoverable amount by challenging the key assumptions used by management including: – Considering forecasted and achieved volumes in relation to asset development plans. – Critically assessing management's forecasting accuracy by comparing prior year forecasts to actual results and assessing the potential impact of any variances. – Corroborating the price assumptions used in the models against the analysts' consensus. – Testing the appropriateness of the weighted average cost of capital, used to discount the impairment models, by engaging our internal valuations experts. – Testing the integrity of the models alongside their clerical accuracy. • We assessed the competence and objectivity of the Group's external experts, to satisfy ourselves that they are appropriate in their roles within the estimation process. We performed audit procedures over this risk area in thirteen components (full and specific scope), which covered 97% of the risk amount. Impairment triggers were identified in two locations (Vedanta Limited Copper and KCM) where full impairment tests were prepared and audit procedures were performed over these valuation models. An impairment reversal trigger was identified at the KG Block only; a full impairment reversal test was carried out accordingly.	We are satisfied that the impairment reversal in relation to the Oil and Gas CGU is fairly stated and that there are no further impairments or impairment reversals at any CGUs in the group. We conclude that the related disclosures as per IAS 36 are appropriately presented in the financial statements.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Recoverability of disputed receivables Refer to the Audit Committee Report (page 137); Accounting policies (page 186); and Note 18 of the Consolidated Financial Statements (page 208)		
At 31 March 2019 the value of disputed receivables related to power contracts, to which we identified additional risk, was $505 million (2018: $402 million). There are entities within the group that have a significant value of receivables for which the recovery is subject to increased risk due to disagreements over the quantification or timing of the balance. Some of these balances are subject to litigation. The risk is specifically related to PSPCL (TPSL) and GRIDCO (Vedanta Limited Power). These receivables also have long outstanding elements of their balance. The level of risk has remained consistent with the prior year.	Our procedures were performed mainly by the component teams under the direction and supervision of the group audit engagement team. **The procedures performed to address this key audit matter include** • Assessed the recoverability of the GRIDCO and PSPCL receivables by: – Inspecting the relevant state regulatory commission, appellate tribunal and Supreme Court rulings. – Examining the underlying power purchase agreements. – Held inquiries with the company legal department on developments and expected timing of resolution of the disputes. – Inspecting external legal opinions in respect of the merits of the cases. – Challenged management on the penalty provision, the classification of the receivables and the discounting of the non-current portion. – Critically assessed the independence, objectivity and competence of relevant legal professionals to ensure the validity and accuracy of the legal opinions obtained. We performed audit procedures over this risk area in three full scope components, which covered 100% of the risk amount.	Based on the procedures performed we consider the disputed receivables to be fairly stated and appropriately disclosed in the financial statements.
Claims and exposures relating to taxation and litigation Refer to the Audit Committee Report (page 137); Accounting policies (page 183); and Note 33 of the Consolidated Financial Statements (page 237)		
The Group has disclosed in note 33 contingent liabilities $2,914 million for tax and legal claims (2018: $3,618 million) of which $1,827 million (2018: $2,704 million) relates to income tax matters. Taxation and litigation exposures have been identified as a key audit matter due to the large number of complex tax and legal claims across the group, particularly in relation to the operations located in India. There is significant judgment required by management in assessing the exposure of each case, and thus a risk exists that such cases may not be adequately provided for, or disclosed appropriately. There have been no significant developments during the current year regarding the ongoing tax litigations that are present within the group. We consider this risk as a key audit matter because of the potential financial impact on the financial statements. Additionally, the treatment of taxation and litigation cases require significant judgement due to the complexity of the cases, timescales for resolution, and the need to negotiate with various authorities and other parties. The level of risk has remained consistent with the prior year.	Our procedures were performed centrally where cases impacted a number of components. For location specific issues, component teams undertook the majority of the procedures under the direction and supervision of the Group audit engagement team. **The procedures performed to address this key audit matter include:** • Obtained the Group legal and tax summary and critically assessed management's position through discussions with the Heads of Legal, and of Tax and operational management, on both the probability of success in significant cases, and the magnitude of any potential loss. • Inspected external legal opinions (where considered necessary) and other evidence to corroborate management's assessment of the risk profile in respect of legal claims. • Engaged internal tax specialists to technically appraise the tax positions taken by management with respect to local tax issues. • Ensured that management's assessment is consistent across the group for similar cases, or that differences in positions are adequately justified. • Assessed the relevant disclosures made within the financial statements to ensure they appropriately reflect the facts and circumstances of the respective tax and legal exposures, and are in accordance with the requirements of IAS 37. We performed audit procedures over this risk area in eleven full scope components, which covered 91.5% of the risk amount.	We are satisfied that the accounting treatment in respect of potential tax exposures and legal cases is appropriate based on our procedures performed. We conclude that the related disclosures are appropriately presented in the financial statements.

Risk	Our response to the risk	Key observations communicated to the Audit Committee
Economic interest purchase from a related party Refer to the Audit Committee Report (page 137); Accounting policies (page 172-192); and Note 35 of the Consolidated Financial Statements (page 244)		
The Group, has purchased from Volcan (its ultimate parent company) the economic interests in a structured investment. The Group has disclosed the nature of the structured investment in note 35. We considered this to be a key audit matter due to the complexity involved regarding the valuation of this instrument and the fact that this is a related party transaction gives rise to the risk that the transaction is not recorded and disclosed appropriately by management. As the transaction occurred during the year, this is a new area of audit focus.	Our procedures were performed by the group audit engagement team. **The procedures performed to address this key audit matter include:** • Obtained and reviewed the valuation report of third party experts engaged by management to determine the fair value of the instrument. We have also evaluated the experience and competence of the experts used. • Engaged our EY Valuations team to evaluate the valuation methodology as well as corroborate the significant assumptions used, in the valuation of this instrument. • Reviewed the board minutes of all group entities involved in the transaction, for evidence of approval of the related party transaction. • Challenged management on Volcan's financial ability to meet it's obligations under the contract and read financial information to assess Volcan's financial position. • Assessed the adequacy of the related disclosures in the financial statements regarding this transaction. We performed audit procedures over the entire transaction.	We are satisfied that the investment has been accounted for appropriately. We have evaluated the valuation of the instrument and have found the fair value to be within a reasonable range. We have also ensured that all the required disclosures have been included in the 31 March 2019 financial statements.

In the prior year, our auditor's report included a key audit matter in relation to Accounting for assets under construction. In the current year, we no longer consider this risk to be a key audit matter due to:

- The reduced quantity of projects in the under-construction stage thereby reducing the opportunity for management to override any controls over the capital work in progress process.

AN OVERVIEW OF THE SCOPE OF OUR AUDIT

Tailoring the scope

Our assessment of audit risk, our evaluation of materiality and our allocation of performance materiality determine our audit scope for each entity within the Group. Taken together, this enables us to form an opinion on the consolidated financial statements. We take into account size, risk profile, the organisation of the group and effectiveness of group-wide controls, changes in the business environment and other factors such as recent internal audit results when assessing the level of work to be performed at each entity.

The group has decentralised processes and controls over the key areas of our audit focus with responsibility lying with component management for the majority of estimation processes and significant risk areas. We have tailored our audit response accordingly and thus for the majority of our focus areas, audit procedures were undertaken directly by the component audit teams, including testing on the verification of operational data and other routine processes, under the direction and supervision of the group engagement team.

In assessing the risk of material misstatement to the Group financial statements, and to ensure we had adequate quantitative coverage of significant accounts in the financial statements, of the 66 reporting components of the group, we selected 16 components covering entities within India, Zambia and South Africa, which represent the principal business units within the group.

Of the 16 components selected, we performed an audit of the complete financial information of eleven components ("full scope components") which were selected based on their size or risk characteristics. For four components ("specific scope components"), we performed audit procedures on specific accounts within that component that we considered had the potential for the greatest impact on the significant accounts in the financial statements either because of the size of these accounts or their risk profile. There was one component were review scope procedures were performed.

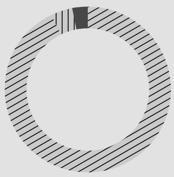
The reporting components where we performed audit procedures accounted for 96% (2018: 94%) of the group's EBITDA, 94% (2018: 91%) of the group's revenue and 97% (2018: 92%) of the group's total assets. For the current year, the full scope components contributed 93% (2018: 94%) of the group's EBITDA, 90% (2018: 91%) of the group's revenue and 90% (2018: 90%) of the group's total assets. The specific scope component contributed 3% (2018: 0%) of the group's EBITDA, 4% (2018: 0%) of the group's revenue and 7% (2018: 2%) of the group's total assets. The audit scope of these components may not have included testing of all significant accounts of the component but will have contributed to the coverage of the specified significant accounts tested for the group.

Of the remaining 51 components that together represent 3% of the group's EBITDA, none are individually greater than 2% of the group's EBITDA. For these components, we performed other procedures, including analytical reviews, consolidation adjustment audit procedures and in some instances completed statutory financial statement audits. This ensured we responded appropriately to any potential risks of material misstatement to the group financial statements.

We have obtained an understanding of the entity level controls of the group as a whole which assisted us in identifying and assessing risks of material misstatement due to fraud or error, as well as assisting us in determining the most appropriate audit strategy.

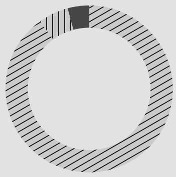
The charts below illustrate the coverage obtained from the work performed by our audit teams.

EBITDA



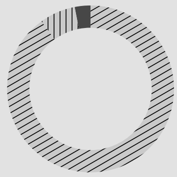
	(%)
Full	93
Other	4
Specific	3

REVENUE



	(%)
Full	90
Other	6
Specific	4

TOTAL ASSETS



	(%)
Full	90
Other	7
Specific	3

* Investments in companies within the Group have been eliminated in the calculation of the coverage of total assets.

CHANGES FROM THE PRIOR YEAR

Scoping is consistent with the prior year with the following exception: Electrosteel Steels Limited, which was acquired in the current year, has been designated as a new specific scope component for purposes of the 2019 audit, due to its contribution to specific accounts within the financial statements as well as the associated risk attached to those accounts.

INTEGRATED TEAM STRUCTURE

The overall audit strategy is determined by the senior statutory auditor, Mirco Bardella. The senior statutory auditor is based in the UK however, since group management and many operations reside in India, the group audit team includes members from both the UK and India. The senior statutory auditor visited India twice during the current year's audit and members of the group audit team in both jurisdictions work together as an integrated team throughout the audit process. Whilst in India, he focused his time on the significant risk and judgement areas of the audit, interactions with management and group and component teams. During the current year audit, Mr Bardella reviewed key working papers and met with key representatives of the integrated and Indian component audit teams for certain full scope components, to discuss the audit approach and issues arising from their work.

INVOLVEMENT WITH COMPONENT TEAMS

It was concluded that audit procedures on 11 full scope components would be performed directly by the component audit teams and the procedures on 1 full scope component, the parent company, would be performed by the group audit team. For the 4 specific scope components, where the work was performed by component auditors, we determined the appropriate level of involvement to enable us to determine that sufficient audit evidence had been obtained as a basis for our opinion on the Group as a whole. In addition, the integrated group team also included key members of certain full scope components ensuring knowledge was transferred effectively through the team. The work on specific scope components was either performed by the group audit team directly or by a component team and reviewed by the group audit team.

During the current year the Senior Statutory Auditor and senior members of the audit team visited KCM in Zambia and the various component audit teams in India. These visits involved key members of the group audit team meeting with local management and discussing the audit approach with the component teams together with any issues arising from their work. The primary team interacted regularly with the component teams where appropriate during various stages of the audit, reviewed key working papers and were responsible for the scope and direction of the audit process. The group audit team participated in key discussions, via conference calls with all full and specific scope entities. This, together with the additional procedures performed at group level, gave us appropriate evidence for our opinion on the group financial statements.

OUR APPLICATION OF MATERIALITY

The scope of our work is influenced by materiality. We apply the concept of materiality in planning and performing the audit, in evaluating the effect of identified misstatements on the audit and in forming our audit opinion.

As we develop our audit strategy, we determine materiality at the overall level and at the individual account level (referred to as our 'performance materiality').

Materiality
$68 million

»

Performance materiality
$34 million

»

Reporting threshold
$3.4 million

MATERIALITY
The magnitude of an omission or misstatement that, individually or in the aggregate, could reasonably be expected to influence the economic decisions of the users of the financial statements. Materiality provides a basis for determining the nature and extent of our audit procedures.

We determined materiality for the Group to be $68 million (2018: $81 million), which is 2% (2018: 2%) of EBITDA. The lower materiality threshold was due to a decrease in group EBITDA to $3,393 million (2018: $4,051 million) driven by lower commodity prices and higher costs of production compared to the prior year. Our materiality amount provides a basis for determining the nature and extent of risk assessment procedures, identifying and assessing the risk of material misstatement and determining the nature and extent of further audit procedures. Materiality is assessed on both quantitative and qualitative grounds. With respect to disclosure and presentational matters, amounts in excess of the quantitative thresholds above may not be adjusted if their effect is not considered to be material on a qualitative basis.

We believe that EBITDA provides us with an earnings-based measure that is significant to users of the financial statements on which we could set our materiality. EBITDA is a key performance indicator for the group and is also a key metric used by the group in the assessment of the performance of management. We also noted that market and analyst commentary on the performance of the group uses EBITDA as a key metric. We therefore considered EBITDA to be the most appropriate performance metric on which to base our materiality calculation as we considered that to be the most relevant performance measure to the stakeholders of the entity.

We determined materiality for the Parent company to be $14.86 million (2018: $13.1 million), which is 1% (2018: 1%) of Equity.

During the course of our audit, we reassessed initial materiality due to changes in the group's forecasted EBITDA, resulting in a marginally lower materiality.

PERFORMANCE MATERIALITY
The application of materiality at the individual account or balance level. It is set at an amount to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds materiality.

We set our performance materiality at 50% of our planning materiality, calculated as $34m (2018: $41m). This was based upon our overall risk analysis, our assessment of the group's control environment, the short reporting cycle and the number and amounts of individual misstatements (corrected and uncorrected) identified in the prior periods as well as the nature of misstatements.

Audit work at component locations for the purpose of obtaining audit coverage over significant financial statement accounts is undertaken based on a percentage of total performance materiality. The performance materiality set for each component is based on the relative scale and risk of the component to the group as a whole and our assessment of the risk of misstatement at that component. In the current year, the range of performance materiality allocated to components was $6.7m to $20.1m (2018: $6.8m to $22.0m).

REPORTING THRESHOLD
An amount below which identified misstatements are considered as being clearly trivial.

We agreed with the Audit Committee that we would report to them all uncorrected audit differences in excess of $3.4m (2018: $4.1m), which is set at 5% of planning materiality, as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds.

We evaluate any uncorrected misstatements against both the quantitative measures of materiality discussed above and in light of other relevant qualitative considerations in forming our opinion.

OTHER INFORMATION
The other information comprises the information included in the annual report other than the financial statements and our auditor's report thereon. The directors are responsible for the other information.

Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in this report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of the other information, we are required to report that fact.

We have nothing to report in this regard.

OPINIONS ON OTHER MATTERS PRESCRIBED BY THE COMPANIES ACT 2006
In our opinion, based on the work undertaken in the course of the audit:

- the information given in the Strategic Report and the Directors' Report for the financial year for
- which the financial statements are prepared is consistent with the financial statements; and
- the Strategic Report and Directors' Report have been prepared in accordance with applicable legal requirements.

MATTERS ON WHICH WE ARE REQUIRED TO REPORT BY EXCEPTION
In the light of the knowledge and understanding of the group and the parent company and its environment obtained in the course of the audit, we have not identified material misstatements in the Strategic Report or the Directors' Report.

We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept by the Parent Company, or returns adequate for our audit have not been received from branches not visited by us; or
- the Parent Company financial statements are not in agreement with the accounting records and returns; or
- certain disclosures of Directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.

RESPONSIBILITIES OF DIRECTORS

As explained more fully in the directors' responsibilities statement set out on page 146, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view,and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the group and parent company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the group or the parent company or to cease operations, or have no realistic alternative but to do so.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at https://www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

USE OF OUR REPORT

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Mirco Bardella (Senior statutory auditor)
for and on behalf of Ernst & Young LLP, Statutory Auditor
London
20 May 2019

Notes:

1. The maintenance and integrity of the Vedanta Resources Limited web site is the responsibility of the directors; the work carried out by the auditors does not involve consideration of these matters and, accordingly, the auditors accept no responsibility for any changes that may have occurred to the financial statements since they were initially presented on the web site.

2. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Consolidated Income Statement

for the year ended March 31, 2019

(US$ million)

	Note	Year ended 31 March 2019			Year ended 31 March 2018*		
		Before Special items	Special items (Note 6)	Total	Before Special items	Special items (Note 6)	Total
Revenue	5	14,031	-	14,031	15,294	-	15,294
Cost of sales		(11,532)	-	(11,532)	(12,062)	33	(12,029)
Gross profit		2,499	-	2,499	**3,232**	**33**	**3,265**
Other operating income		229	-	229	154	-	154
Distribution costs		(276)	-	(276)	(277)	-	(277)
Administrative expenses		(541)	-	(541)	(417)	-	(417)
Impairment reversal /(charge) [net], loss on PP&E	6	-	38	38	-	650	650
Operating profit		1,911	38	1,949	**2,692**	**683**	**3,375**
Investment revenue	7	480	-	480	465	-	465
Finance costs	8	(1,267)	9	(1,258)	(1,239)	(108)	(1,347)
Other gains and (losses) [net]	9	(75)	-	(75)	(16)	11	(5)
Profit before taxation (a)		1,049	47	1,096	**1,902**	**586**	**2,488**
Net tax expense (b)	11(a)	(656)	(16)	(672)	**(675)**	**(338)**	**(1,013)**
Profit for the year from continuing operations (a+b)		393	31	424	**1,227**	**248**	**1,475**
Attributable to:							
Equity holders of the parent		(253)	16	(237)	163	76	239
Non-controlling interests		646	15	661	1,064	172	1,236
Profit for the year from continuing operations		393	31	424	**1,227**	**248**	**1,475**

* Restated refer Note 1(b)

Consolidated Statement of Comprehensive Income

for the year ended March 31, 2019

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018*
Profit for the year from continuing operations	424	1,475
Items that will not be reclassified subsequently to income statement:		
Remeasurement of net defined benefit plans (note 27)	(6)	1
Tax effects on net defined benefit plans	4	1
Loss on fair value of financial asset investment (note 17)	(6)	-
Total (a)	(8)	2
Items that may be reclassified subsequently to income statement:		
Exchange differences arising on translation of foreign operations	(608)	58
Gain on fair value of available-for-sale financial assets (note 17)	-	14
Gains/ (losses) of cash flow hedges recognised during the year	16	(62)
Tax effects arising on cash flow hedges	(7)	24
(Gains)/ losses on cash flow hedges recycled to income statement	(28)	55
Tax effects arising on cash flow hedges recycled to income statement	9	(19)
Total (b)	(618)	70
Other comprehensive (loss)/ income for the year (a+b)	(626)	72
Total comprehensive (loss)/ income for the year	(202)	1,547
Attributable to:		
Equity holders of the parent	(484)	271
Non-controlling interests	282	1,276
Total comprehensive (loss)/ income for the year	(202)	1,547

* Restated refer Note 1(b)

Consolidated Statement of Financial Position

for the year ended March 31, 2019

(US$ million)

	Note	As at 31 March 2019	As at 31 March 2018*
ASSETS			
Non-current assets			
Goodwill	14	**12**	12
Intangible assets	15	**108**	123
Property, plant and equipment	16	**17,322**	15,401
Exploration and evaluation assets	16	**404**	2,326
Leasehold land		**63**	57
Financial asset investments	17	**707**	25
Non-current tax assets	11(d)	**504**	521
Other non-current assets	18	**1,010**	659
Deferred tax assets	11(c)	**778**	917
		20,908	**20,041**
Current assets			
Inventories	19	**2,060**	2,038
Trade and other receivables	18	**1,504**	1,527
Financial instruments (derivatives)	25	**11**	24
Current tax assets		**1**	2
Short-term investments	20	**4,164**	4,808
Cash and cash equivalents	21	**1,133**	798
		8,873	**9,197**
Total assets		**29,781**	**29,238**
LIABILITIES			
Current liabilities			
Borrowings	22(a)	**5,456**	5,460
Trade and other payables	24	**6,878**	6,078
Financial instruments (derivatives)	25	**66**	22
Retirement benefits	27	**17**	18
Provisions	26	**38**	22
Current tax liabilities		**61**	54
		12,516	**11,654**
Net current liabilities		**3,643**	**2,457**
Non-current liabilities			
Borrowings	22(a)	**10,524**	9,734
Trade and other payables	24	**244**	118
Financial instruments (derivatives)	25	**14**	18
Deferred tax liabilities	11(c)	**776**	749
Retirement benefits	27	**71**	62
Provisions	26	**371**	351
Non equity non-controlling interests	23	**12**	12
		12,012	**11,044**
Total liabilities		**24,528**	**22,698**
Net assets		**5,253**	**6,540**
Equity			
Share capital	30	**29**	30
Share premium		**202**	202
Treasury shares	30	**-**	(558)
Share-based payment reserve	29	**-**	13
Hedging reserve		**(98)**	(93)
Other reserves		**(97)**	155
Retained earnings		**(964)**	(79)
Equity attributable to equity holders of the parent		**(928)**	**(330)**
Non-controlling interests	31	**6,181**	6,870
Total equity		**5,253**	**6,540**

* Restated refer Note 1(b)

Financial Statements of Vedanta Resources Limited (formerly Vedanta Resources plc) with registration number 4740415 were approved by the Board of Directors on 20 May 2019 and signed on their behalf by

Srinivasan Venkatakrishnan
Chief Executive Officer

Consolidated Cash Flow Statement

for the year ended March 31, 2019

(US$ million)

	Note	Year ended 31 March 2019	Year ended 31 March 2018
Operating activities			
Profit before taxation		1,096	2,488
Adjustments for:			
Depreciation and amortisation		1,482	1,271
Investment revenues		(480)	(465)
Finance costs		1,258	1,347
Other (gains) and losses (net)		75	5
Loss /(Profit) on disposal of PP&E		9	(1)
Write-off of unsuccessful exploration costs		7	-
Share-based payment charge		18	19
Impairment (reversal)/ charge (net), loss on PP&E		(38)	(650)
Other non-cash items		-	10
Operating cash flows before movements in working capital		3,427	4,024
Increase in inventories		(10)	(355)
Increase in receivables		(335)	(607)
Increase in payables		577	247
Cash generated from operations		3,659	3,309
Dividend received		6	4
Interest income received		159	224
Interest paid		(1,278)	(1,312)
Income taxes paid		(547)	(567)
Dividends paid		(113)	(164)
Net cash inflow from operating activities		1,886	1,494
Cash flows from investing activities			
Purchases of property, plant and equipment and intangibles		(1,327)	(1,104)
Proceeds on disposal of property, plant and equipment		18	10
Proceeds from redemption of short-term investments	22(b)	12,588	16,863
Purchases of short-term investments	22(b)	(11,949)	(13,422)
Purchases of financial asset investments	17 & 22(b)	(254)	-
Consideration paid for business acquisition (net of cash and cash equivalents acquired)	3(a) & 3(b)	(752)	(134)
Net cash (used in)/ from investing activities		(1,676)	2,213
Cash flows from financing activities			
Issue of ordinary shares		1	0
Purchase of shares under DSBP scheme		-	(2)
Dividends paid to non-controlling interests of subsidiaries		(1,028)	(1,414)
Share purchase by subsidiary		(21)	(31)
Sale of treasury shares		19	-
Exercise of stock options in subsidiary		1	5
Repayment of working capital loan (net)	22(b)	(90)	(612)
Proceeds from other short-term borrowings	22(b)	1,324	1,115
Repayment of other short-term borrowings	22(b)	(2,433)	(4,362)
Buyback of non-convertible bond	22(b)	-	(1,129)
Proceeds from medium and long term borrowings	22(b)	2,855	3,640
Repayment of medium and long term borrowings	22(b)	(461)	(1,817)
Net cash from/ (used in) financing activities		167	(4,607)
Net increase/ (decrease) in cash and cash equivalents		377	(900)
Effect of foreign exchange rate changes		(42)	16
Cash and cash equivalents at beginning of the year		798	1,682
Cash and cash equivalents at end of the year	**21 & 22(b)**	1,133	798

Consolidated Statement of Changes in Equity

for the year ended March 31, 2019

(US$ million)

	Attributable to equity holders of the parent								Non-controlling Interests	Total equity
	Share capital (Note 30)	Share premium	Treasury Shares	Share-based payment reserves	Hedging reserve	Other reserves	Retained earnings	Total		
At 1 April 2018	**30**	**202**	**(558)**	**13**	**(93)**	**155**	**(79)**	**(330)**	**6,870**	**6,540**
Profit/(loss) for the year	-	-	-	-	-	-	(237)	(237)	661	424
Other comprehensive loss for the year	-	-	-	-	(5)	(242)	-	(247)	(379)	(626)
Total comprehensive income/ (loss) for the year	**-**	**-**	**-**	**-**	**(5)**	**(242)**	**(237)**	**(484)**	**282**	**(202)**
Transfers	-	-	-	-	-	(10)	10	-	-	-
Dividends paid (note 13)	-	-	-	-	-	-	(113)	(113)	(1,008)	(1,121)
Sale/cancellation of treasury shares	(2)	-	557	-	-	-	(536)	19	-	19
Exercise of stock options	1	-	1	(19)	-	-	18	1	-	1
Recognition of share-based payment	-	-	-	6	-	-	-	6	-	6
Non-controlling interest on business combination (Note 3(a))	-	-	-	-	-	-	-	-	29	29
Change in fair value of put option liability/conversion option asset/ derecognition of non controlling interest	-	-	-	-	-	-	(15)	(15)	5	(10)
Other changes in non-controlling interests**	-	-	-	-	-	-	(12)	(12)	3	(9)
At 31 March 2019	**29**	**202**	**-**	**-**	**(98)**	**(97)**	**(964)**	**(928)**	**6,181**	**5,253**

** Includes purchase of shares by Vedanta Limited through ESOP trust for its stock options and share based payment charge by subsidiaries.

For the year ended 31 March 2018*

(US$ million)

	Attributable to equity holders of the parent								Non-controlling Interests	Total equity
	Share capital (Note 30)	Share premium	Treasury Shares	Share-based payment reserves	Hedging reserve	Other reserves	Retained earnings	Total		
At 1 April 2017	**30**	**202**	**(558)**	**28**	**(91)**	**140**	**(160)**	**(409)**	**6,424**	**6,015**
Profit for the year	-	-	-	-	-	-	239	239	1,236	1,475
Other comprehensive income/ (loss) for the year	-	-	-	-	(2)	34	-	32	40	72
Total comprehensive income/ (loss) for the year	**-**	**-**	**-**	**-**	**(2)**	**34**	**239**	**271**	**1,276**	**1,547**
Acquisition of shares under DSBP scheme	-	-	(1)	-	-	-	(2)	(3)	-	(3)
Transfers	-	-	-	-	-	(19)	19	-	-	-
Dividends paid/ payable (Note 13)	-	-	-	-	-	-	(164)	(164)	(828)	(992)
Exercise of stock options	0	-	1	(27)	-	-	26	0	-	0
Recognition of share-based payment	-	-	-	12	-	-	-	12	-	12
Non-controlling interest on business combination (Note 3(b))	-	-	-	-	-	-	-	-	17	17
Recognition of put option liability/conversion option asset/ derecognition of non controlling interest	-	-	-	-	-	-	(15)	(15)	(22)	(37)
Other changes in non-controlling interests**	-	-	-	-	-	-	(22)	(22)	3	(19)
At 31 March 2018	**30**	**202**	**(558)**	**13**	**(93)**	**155**	**(79)**	**(330)**	**6,870**	**6,540**

* Restated refer Note 1(b)

** Includes purchase of shares by Vedanta Limited through ESOP trust for its stock options and additional stake purchased during the year in erstwhile Cairn India Limited and share based payment charge by subsidiaries

Other Reserves Comprise

(US$ million)

	Currency translation reserve	Merger reserve[2]	Financial asset investment revaluation reserve	Other reserves[3]	Total
At 1 April 2017	**(2,168)**	**4**	**7**	**2,297**	**140**
Exchange differences on translation of foreign operations	26	-	-	-	26
Gain on fair value of available-for-sale financial assets	-	-	7	-	7
Remeasurements	-	-	-	1	1
Transfer from/(to) retained earnings[1]	-	-	-	(19)	(19)
At 1 April 2018	**(2,142)**	**4**	**14**	**2,279**	**155**
Exchange differences on translation of foreign operations	(238)	-	-	-	(238)
Loss on fair value of financial asset investments	-	-	(3)	-	(3)
Remeasurements	-	-	-	(1)	(1)
Transfer from/(to) retained earnings[1]	-	-	-	(10)	(10)
At 31 March 2019	**(2,380)**	**4**	**11**	**2,268**	**(97)**

(1) Transfer to other reserve during the year ended 31 March 2019 includes US$ Nil million of legal reserve (31 March 2018: US$4 million) and withdrawal of US$12 million from debenture redemption reserve (31 March 2018: US$23 million of debenture redemption reserve). Further, US$2 million has been transferred to Capital redemption reserve on account of reduction in share capital due to cancellation of treasury shares.

(2) The merger reserve arose on incorporation of the Company during the year ended 31 March 2004. The investment in Twin Star had a carrying amount value of US$20 million in the accounts of Volcan. As required by the Companies Act 1985, Section 132, upon issue of 156,000,000 Ordinary shares to Volcan, Twin Star's issued share capital and share premium account have been eliminated and a merger reserve of US$4 million arose, being the difference between the carrying value of the investment in Twin Star in Volcan's accounts and the nominal value of the shares issued to Volcan.

(3) Other reserves includes legal reserves of US$4 million (31 March 2018: US$4 million), debenture redemption reserve of US$144 million (31 March 2018 US$156 million) and balance mainly includes general reserve and capital redemption reserve. Debenture redemption reserve is required to be created under the Indian Companies Act from annual profits until such debentures are redeemed. Legal reserve is required to be created by Fujairah Gold by appropriation of 10 % of profits each year until the balance reaches 50% of the paid up share capital. This reserve is not available for distribution except in circumstances stipulated by the Articles of Incorporation. Under the erstwhile Indian Companies Act, 1956, general reserve was created in relation to Group's Indian subsidiaries through an annual transfer of net income to general reserve at a specified percentage in accordance with applicable regulations. The purpose of these transfers is to ensure that the total dividend distribution is less than total distributable reserves for that year. The said requirement was dispensed with w.e.f. 1 April 2013 and there are no restrictions of use of these reserves.

Notes to the Financial Statements

for the year ended 31 March 2019

GROUP OVERVIEW:

Vedanta Resources Limited ((“Vedanta” or “VRL” or “Company”) formerly known as Vedanta Resources plc or “VRPLC”) is a company incorporated and domiciled in the United Kingdom. Vedanta and its consolidated subsidiaries (collectively, the “Group”) is a diversified natural resource group engaged in exploring, extracting and processing minerals and oil and gas. The Group engages in the exploration, production and sale of zinc, lead, silver, copper, aluminium, iron ore and oil & gas and have a presence across India, South Africa, Namibia, Ireland, Australia, Liberia and UAE. The Group is also in the business of commercial power generation, steel manufacturing and port operations in India and manufacturing of glass substrate in South Korea and Taiwan.

Buy back and delisting of Vedanta Resources plc Shares

On 31 July 2018, Volcan Investments (“Volcan”) and Vedanta announced that they had reached agreement on the terms of a recommended cash offer (the “Offer”) by Volcan for the remaining issued and to-be-issued share capital of Vedanta not currently owned by Volcan.

The Volcan Offer was declared unconditional in all respects on 3 September 2018 and Volcan announced that Vedanta had applied for its shares to be cancelled from listing on the Official List of the UK Listing Authority and to trading on the main market for listed securities of the London Stock Exchange, such cancellation took effect on 1 October 2018.

At the General Meeting of Vedanta shareholders held on 1 October 2018, the resolution put to shareholders in relation to the re-registration of VRPlc as a private limited company was duly passed on a poll. Re-registration of VRPlc as a private limited company became effective on 29 October 2018 pursuant to which the name has been changed to Vedanta Resources Limited.

Following the delisting of the Company’s shares from the Official list of the London Stock Exchange, 6,904,995 ordinary shares of US 10 Cents each, which were issued on the conversion of certain convertible bonds issued by one of Vedanta’s subsidiaries and held through a global depositary receipt (GDR), were redeemed and the GDR listing was cancelled.

Details of Group’s various businesses are as follows. The Group’s percentage holdings in each of the below businesses are disclosed in note 39.

- Zinc India business is owned and operated by Hindustan Zinc Limited (“HZL”).
- Zinc international business is comprised of Skorpion mine and refinery in Namibia operated through THL Zinc Namibia Holdings (Proprietary) Limited (“Skorpion”), Lisheen mine in Ireland operated through Vedanta Lisheen Holdings Limited (“Lisheen”) (Lisheen mine ceased operations in December 2015) and Black Mountain Mining (Proprietary) Limited (“BMM”), whose assets include the operational Black Mountain mine and the Gamsberg mine project located in South Africa.
- The Group’s oil and gas business is owned and operated by Vedanta Limited (prior to merger this was owned and operated by erstwhile Cairn India Limited) and its subsidiary, Cairn Energy Hydrocarbons Limited and consists of exploration and development and production of oil and gas.
- The Group’s iron ore business is owned by Vedanta Limited, and by two wholly owned subsidiaries of Vedanta Ltd. i.e. Sesa Resources Limited and Sesa Mining Corporation Limited and consists of exploration, mining and processing of iron ore, pig iron and metallurgical coke and generation of power for captive use. Pursuant to Honourable Supreme Court order, operations in the state of Goa are currently suspended. The Group’s iron ore business includes Western Cluster Limited (“WCL”) in Liberia which has iron ore assets and is wholly owned by the Group. WCL’s assets include development rights to Western Cluster and a network of iron ore deposits in West Africa. WCL’s assets have been fully impaired.
- The Group’s copper business comprises three operations divided into two segments, namely (i) Copper India/Australia, comprising Vedanta Limited’s custom smelting operations in India (including captive power plants at Tuticorin in Southern India) and (ii) Copper Zambia comprising Konkola Copper Mines plc’s (“KCM”) mining and smelting operations in Zambia.
- The Group’s copper business in India has received an order from Tamil Nadu Pollution Control Board (“TNPCB”) on 09 April 2018, rejecting the Group’s application for renewal of consent to operate under the Air and Water Acts for the 400,000 tpa copper smelter plant in Tuticorin for want of further clarification and consequently the operations were suspended. The Group has filed an appeal with TNPCB Appellate authority against the said order. During the pendency of the appeal, TNPCB through its order dated 23 May 2018 ordered for disconnection of electricity supply and closure of our copper smelter plant. Post such order, the state government on 28 May 2018 ordered the permanent closure of the plant. (Refer Note 2(c)(I)(x))
- In addition, the Group owns and operates the Mt. Lyell copper mine in Tasmania, Australia through its subsidiary, CMT and a precious metal refinery and copper rod plant in Fujairah, UAE through its subsidiary Fujairah Gold FZC. The operations of Mt Lyell copper mine were suspended in January 2014 following a mud slide incident

and were put into care and maintenance since 09 July 2014 following a rock fall incident in June 2014.

- Furthermore, the Group's Zambia operations (i.e. KCM) is largely an integrated copper producer with various facilities at Konkola, Nchanga, Nkana and Nampundwe, Zambia including mines, concentrators, smelters, acid plants, a tailings leach plant ("TLP") and a refinery.
- The Group's Aluminium business is owned and operated by Vedanta Limited and by Bharat Aluminium Company Limited ("BALCO"). The aluminium operations include a refinery and captive power plant at Lanjigarh and a smelter and captive power plants at Jharsuguda both situated in the State of Odisha in India. BALCO's partially integrated aluminium operations are comprised of two bauxite mines, captive power plants, smelting and fabrication facilities in central India.
- The Group's power business is owned and operated by Vedanta Limited, BALCO, and Talwandi Sabo Power Limited ("TSPL"), a wholly owned subsidiary of Vedanta Limited, which are engaged in the power generation business in India. Vedanta Limited power operations include a thermal coal- based commercial power facility of 600 MW at Jharsuguda in the State of Odisha in Eastern India. BALCO power operations included 600 MW (2 units of 300 MW each) thermal coal based power plant at Korba, of which a unit of 300 MW was converted to be used for captive consumption vide order from Central Electricity Regulatory Commission (CERC) dated 1 January 2019. Talwandi Sabo Power Limited ("TSPL") power operations include 1,980 MW (three units of 660 MW each) thermal coal- based commercial power facilities. Power business also includes the wind power plants commissioned by HZL and a power plant at MALCO Energy Limited ("MEL") (under care and maintenance) situated at Mettur Dam in State of Tamil Nadu in southern India.
- The Group's other activities include Electrosteel Steels Limited ("ESL") acquired on 4 June 2018. ESL is engaged in the manufacturing and supply of billets, TMT bars, wire rods and ductile iron pipes in India.
- The Group's other activities also include Vizag General Cargo Berth Private Limited ("VGCB") and Maritime Ventures Private Limited ("MVPL"). Vizag port project includes mechanisation of coal handling facilities and upgradation of general cargo berth for handling coal at the outer harbour of Visakhapatnam Port on the east coast of India. MVPL is engaged in the business of rendering logistics and other allied services inter alia rendering stevedoring, and other allied services in ports and other allied sectors. VGCB commenced operations in the fourth quarter of fiscal 2013. The Group's other activities also include AvanStrate Inc. ("ASI"). ASI is involved in manufacturing of glass substrate in South Korea and Taiwan.

1. BASIS OF PREPARATION AND BASIS OF MEASUREMENT OF FINANCIAL STATEMENTS

a) Basis of preparation

The consolidated financial statements have been prepared in accordance with those parts of the Companies Act 2006 applicable to companies reporting under International Financial Reporting Standards (IFRS) and IFRS as adopted by the European Union and related interpretations.

These financial statements have been prepared in accordance with the accounting policies, set out below and were consistently applied to all periods presented unless otherwise stated.

These financial statements are approved for issue by the Board of Directors on 20 May 2019.

Certain comparative figures appearing in these consolidated financial statements have been regrouped and/or reclassified to better reflect the nature of those items.

These financial statements are presented in US dollars being the functional currency of the Company and all values are rounded off to the nearest million except where otherwise indicated. Amounts less than US$0.5 million have been presented as "0".

b) Restatement/Reclassification

(i) The Group has revised the presentation of forward premium relating to derivative instruments to present it along with the mark-to-market gain/loss on these instruments, as these more appropriately reflect the substance of the forward premiums on derivative transactions. As a result of the change, forward premium expense amounting to US$103 million has been reclassified from 'Finance cost' to 'Cost of sales' (31 March 2019 : US$40 million and 31 March 2018 : US$88 million) and 'Other gains and losses' (31 March 2019 : US$9 million and 31 March 2018 : US$15 million). The net cash inflow from operating activities in the consolidated cash flow statement remains unchanged.

(ii) The classification of export incentives from government has also been revised to present it under 'other operating income', as the revised classification is more appropriate. As a result of the change, export incentives amounting to US$66 million has been reclassified from 'revenue' to 'other operating income' for the comparative year ended 31 March 2018.

(iii) In the comparative period, the Group acquired equity stake in AvanStrate Inc. (ASI). As permitted by IFRS 3, the Group had used provisional fair values that were determined as at 31 March 2018 for consolidation. In the current year, these fair values were finalised. Hence, the comparative year amounts have been restated accordingly. Please refer note 3(b) for further details.

None of the above had any effect on the equity as at 01 April 2017.

c) Basis of Measurement

The consolidated financial statements have been prepared on a going concern basis using historical cost convention and on an accrual method of accounting, except for certain financial assets and liabilities which are measured at fair value as explained in the accounting policies below.

d) Parent Company financial statements

The financial statements of the parent company, Vedanta Resources Limited, incorporated in the United Kingdom, have been prepared in accordance with FRS 101 and UK company law. The Company financial statements and associated notes have been presented separately.

2(a) ACCOUNTING POLICIES

(i) Basis of consolidation

Subsidiaries:

The consolidated financial statements incorporate the results of the Company and all its subsidiaries (the "Group"), being the entities that it controls. Control is evidenced where the Group has power over the investee, is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Power is demonstrated through existing rights that give the ability to direct relevant activities, which significantly affect the entity returns.

The financial statements of subsidiaries are prepared for the same reporting year as the Company. Where necessary, adjustments are made to the financial statements of subsidiaries to align the accounting policies in line with accounting policies of the Group.

For non-wholly owned subsidiaries, a share of the profit/(loss) for the financial year and net assets is attributed to the non-controlling interests as shown in the consolidated income statement, consolidated statement of comprehensive income and consolidated statement of financial position.

Liability for put option issued to non-controlling interests which do not grant present access to ownership interest to the Group is recognised at present value of the redemption amount, and is reclassified from equity. At the end of each reporting period, the non-controlling interests subject to put option is derecognised and the difference between the amount derecognised and present value of the redemption amount, which is recorded as a financial liability, is accounted for as an equity transaction.

For acquisitions of additional interests in subsidiaries, where there is no change in control, the Group recognises a reduction to the non-controlling interest of the respective subsidiary with the difference between this figure and the cash paid, inclusive of transaction fees, being recognised in equity. Similarly, upon dilution of controlling interests the difference between the cash received from sale or listing of the subsidiary shares and the increase to non-controlling interest is also recognised in equity. The results of subsidiaries acquired or disposed off during the year are included in the consolidated income statement from the effective date of acquisition or up to the effective date of disposal, as appropriate.

Intra-Group balances and transactions, and any unrealised profits arising from intra-Group transactions, are eliminated. Unrealised losses are eliminated unless costs cannot be recovered.

Joint arrangements

A Joint arrangement is an arrangement of which two or more parties have joint control. Joint control is considered when there is contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control. Investments in joint arrangements are classified as either joint operations or joint venture. The classification depends on the contractual rights and obligations of each investor, rather than the legal structure of the joint arrangement. A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement, have rights to the assets, and obligations for the liabilities, relating to the arrangement. A joint venture is a joint arrangement whereby, the parties that have joint control of the arrangement have rights to the net assets of the arrangement.

The group has both joint operations and joint ventures.

Joint operations
The Group has Joint operations within its Oil and gas segment. It participates in several unincorporated joint operations which involve the joint control of assets used in oil and gas exploration and producing activities. The Group accounts for its share of assets, liabilities, income and expenditure of joint operations in which the Group holds an interest. Liabilities in unincorporated joint operations where the Group is the operator, is accounted for at gross values (including share of other partners) with a corresponding receivable from the venture partners. These have been included in the consolidated financial statements under the appropriate headings.

Details of joint operations are set out in note 38.

Joint Venture
The Group accounts for its interest in joint venture using the equity method, after initially being recognised at cost in the consolidated statement of financial position. Goodwill arising on the acquisition of joint venture is included in the carrying value of investments in joint venture.

Investments in associates:
An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control over those policies. Investments in associates are accounted for using the equity method. Goodwill arising on the acquisition of associates is included in the carrying value of investments in associate.

Equity method of accounting
Under the equity method of accounting applicable for investments in associates and joint ventures, investments are initially recorded at the cost to the Group and then, in subsequent periods, the carrying value is adjusted to reflect the Group's share of the post-acquisition profits or losses of the investee, and the Group's share of other comprehensive income of the investee, other changes to the investees net assets and is further adjusted for impairment losses, if any. Dividend received or receivable from associate and joint ventures are recognised as a reduction in carrying amount of the investment.

The consolidated income statement and consolidated statements of comprehensive income include the Group's share of investee's results, except where the associate is generating losses, share of such losses in excess of the Group's interest in that associate are not recognised. Losses recognised under the equity method in excess of the Group's investment in ordinary shares are applied to the other components of the Group's interest that forms part of Group's net investment in the investee in the reverse order of their seniority (i.e. priority in liquidation).

If the Group's share of losses in an associate or joint venture equals or exceeds, its interests in the associate or joint venture, the Group discontinues the recognition of further losses. Additional losses are provided for, only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate/joint venture.

Unrealised gains arising from transactions with associates are eliminated against the investment to the extent of the Group's interest in these entities. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment of the asset transferred. Accounting policies of associates have been changed where necessary to ensure consistency with the policies adopted by the Group.

The carrying amount of equity accounted investments are tested for impairment in accordance with the policy described in note 2 (a)(x) below.

(ii) Business combinations
Business combinations are accounted for under the acquisition method. The acquiree's identifiable assets, liabilities and contingent liabilities that meet the conditions for recognition are recognised at their fair value at the acquisition date, except certain assets and liabilities required to be measured as per the applicable standards.

Excess of fair value of purchase consideration and the acquisition date non-controlling interest over the acquisition date fair value of identifiable assets acquired and liabilities assumed is recognised as goodwill. Goodwill arising on acquisitions is reviewed for impairment annually. Where the fair values of the identifiable assets and liabilities exceed the purchase consideration, the Group re-assesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognised at the acquisition date. If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the surplus is credited to the consolidated income statement in the period of acquisition. Where it is not possible to complete the determination of fair values by the date on which the first post-acquisition financial statements are approved, a provisional assessment of fair value is made and any adjustments required to those provisional fair values are finalised within 12 months of the acquisition date.

Those provisional amounts are adjusted through goodwill during the measurement period, or additional assets or liabilities are recognised to reflect new information obtained about facts and circumstances that existed as of the acquisition date that, if known, would have affected the amounts recognised at that date. These adjustments are called as measurement period adjustments. The measurement period does not exceed twelve months from the acquisition date.

Any non-controlling interest in an acquiree is measured at fair value or as the non-controlling interest's proportionate share of the acquiree's net identifiable assets. This accounting choice is made on a transaction by transaction basis.

Acquisition expenses are charged to the income statement.

If the Group acquires a group of assets in a company that does not constitute a business combination in accordance with IFRS 3 Business Combinations, the cost of the acquired group of assets is allocated to the individual identifiable assets acquired based on their relative fair value.

(iii) Revenue recognition
Sale of goods/ rendering of services (Revenue from contracts with customers)
The Group's revenue from contracts with customers comprises is mainly from the sale of copper, aluminium, iron ore, zinc, oil and gas, power, steel, glass substrate and port operations. Revenue from contracts with customers is recognised when control of the goods or services is transferred to the customer which usually is on delivery of the goods to the shipping agent at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services. Revenue is recognised net of discounts, volume rebates, outgoing sales taxes/ goods and service tax and other indirect taxes excluding excise duty. Revenues from sale of by-products are included in revenue.

Certain of the Group's sales contracts provide for provisional pricing based on the price on the London Metal Exchange (LME) and crude index, as specified in the contract. Revenue in respect of such contracts is recognised when control passes to the customer and is measured at the amount the entity expects to be entitled – being the estimate of the price expected to be received at the end of the measurement period. Post transfer of control of goods, provisional pricing features are accounted in accordance with IFRS 9 'Financial Instruments' rather than IFRS 15 and therefore the IFRS 15 rules on variable consideration do not apply. These 'provisional pricing' adjustments i.e. the consideration received post transfer of control are included in total revenue from operations on the face of the Consolidated Income Statement and disclosed by way of note to the financial statements. Final settlement of the price is based on the applicable price for a specified future period. The Group's provisionally priced sales are marked to market using the relevant forward prices for the future period specified in the contract and is adjusted in revenue.

Revenue from oil, gas and condensate sales represent the Group's share of oil, gas and condensate production, recognised on a direct entitlement basis, when control is transferred to the buyers. Direct entitlement basis represents entitlement to variable physical volumes of hydrocarbons, representing recovery of the costs incurred and a stipulated share of the production remaining after such cost recovery. The stipulated share of production is arrived at after reducing government's share of profit petroleum which is accounted for when the obligation in respect of the same arises.

Revenue from sale of power is recognised when delivered and measured based on rates as per bilateral contractual agreements with buyers and at a rate arrived at based on the principles laid down under the relevant Tariff Regulations as notified by the regulatory bodies, as applicable.

Where the Group acts as a port operator, revenues relating to operating and maintenance phase of the port contract are measured at the amount that Group expects to be entitled to for the services provided.

A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Group performs part of its obligation by transferring goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognised for the earned consideration when that right is conditional on Group's future performance.

A contract liability is the obligation to transfer goods or services to a customer for which the Group has received consideration from the customer. If a customer pays consideration before the Group transfers goods or services to the customer, a contract liability is recognised when the payment is received. Contract liabilities are recognised as revenue when the Group performs under the contract.

The Group does not expect to have any contracts where the period between the transfer of the promised goods or services to the customer and payment by the customer exceeds one year. As a consequence, the Group does not adjust any of the transaction prices for the time value of money.

Interest income
Interest income from debt instruments is recognised using the effective interest rate method. The effective interest rate is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to the gross carrying amount of a financial asset. When calculating the effective interest rate, the Group estimates the expected cash flows by considering all the contractual terms of the financial instrument (for example, prepayment, extension, call and similar options) but does not consider the expected credit losses.

Dividends
Dividend income is recognised in the consolidated income statement only when the right to receive payment is established, provided it is probable that the economic benefits associated with the dividend will flow to the Group, and the amount of the dividend can be measured reliably.

(iv) Special items
Special items are those items that management considers, by virtue of their size or incidence (including but not limited to impairment charges and acquisition and restructuring related costs), should be disclosed separately to ensure that the financial information allows an understanding of the underlying performance of the business in the year, so as to facilitate comparison with prior years. Also tax charges related to Special items and certain one-time tax effects are considered Special. Such items are material by nature or amount to the year's result and require separate disclosure in accordance with IFRS. The determination as to which items should be disclosed separately requires a degree of judgement.

(v) Property, plant and equipment (PP&E)
Mining properties and leases
When a decision is taken that a mining property is viable for commercial production (i.e. when the Group determines that the mining property will provide sufficient and sustainable return relative to the risks and the Group decided to proceed with the mine development), all further pre-production primary development expenditure other than that on land, buildings, plant, equipment and capital work in progress is capitalised as property, plant and equipment under the heading "Mining

properties and leases" together with any amount transferred from "Exploration and evaluation" assets. The costs of mining properties and leases include the costs of acquiring and developing mining properties and mineral rights.

The stripping cost incurred during the production phase of a surface mine is deferred to the extent the current period stripping cost exceeds the average period stripping cost over the life of mine and recognised as an asset if such cost provides a benefit in terms of improved access to ore in future periods and certain criteria are met. When the benefit from the stripping costs are realised in the current period, the stripping costs are accounted for as the cost of inventory. If the costs of inventory produced and the stripping activity asset are not separately identifiable, a relevant production measure is used to allocate the production stripping costs between the inventory produced and the stripping activity asset. The Company uses the expected volume of waste compared with the actual volume of waste extracted for a given value of ore/mineral production for the purpose of determining the cost of the stripping activity asset.

Deferred stripping costs are included in mining properties within property, plant and equipment and disclosed as a part of mining properties. After initial recognition, the stripping activity asset is depreciated on a unit of production method over the expected useful life of the identified component of the ore body.

In circumstances where a mining property is abandoned, the cumulative capitalised costs relating to the property are written off in the period in which it occurs i.e. when the Group determines that the mining property will not provide sufficient and sustainable returns relative to the risks and the Group decides not to proceed with the mine development.

Commercial reserves are proved and probable reserves as defined by the 'JORC' Code, 'MORC' code or 'SAMREC' Code. Changes in the commercial reserves affecting unit of production calculations are dealt with prospectively over the revised remaining reserves.

Oil & gas assets- (developing/producing assets)
For oil and gas assets a successful efforts based accounting policy is followed. Costs incurred prior to obtaining the legal rights to explore an area are expensed immediately to the consolidated income statement.

All costs incurred after the technical feasibility and commercial viability of producing hydrocarbons has been demonstrated are capitalised within property, plant & equipment - development/producing assets on a field-by-field basis. Subsequent expenditure is capitalised only where it either enhances the economic benefits of the development/ producing asset or replaces part of the existing development/ producing asset. Any remaining costs associated with the part replaced are expensed.

Net proceeds from any disposal of development/producing assets are credited against the previously capitalised cost. A gain or loss on disposal of a development/producing asset is recognised in the consolidated income statement to the extent that the net proceeds exceed or are less than the appropriate portion of the net capitalised costs of the asset.

Exploration and evaluation assets
Exploration and evaluation expenditure incurred prior to obtaining the mining right or the legal right to explore are expensed as incurred.

Exploration and evaluation expenditure incurred after obtaining the mining right or the legal right to explore, are capitalised as exploration and evaluation assets (property, plant and equipment) and stated at cost less impairment, if any. Exploration and evaluation assets are transferred to the appropriate category of property, plant and equipment when the technical feasibility and commercial viability has been determined. Exploration and evaluation assets are assessed for impairment and impairment loss, if any, is recognised prior to reclassification.

Exploration expenditure includes all direct and allocated indirect expenditure associated with finding specific mineral resources which includes depreciation and applicable operating costs of related support equipment and facilities and other costs of exploration activities:

- Acquisition costs - costs associated with acquisition of licences and rights to explore, including related professional fees.
- General exploration costs - costs of surveys and studies, rights of access to properties to conduct those studies (e.g., costs incurred for environment clearance, defence clearance, etc.), and salaries and other expenses of geologists, geophysical crews and other personnel conducting those studies.
- Costs of exploratory drilling and equipping exploratory and appraisal wells.

Exploration expenditure incurred in the process of determining oil and gas exploration targets is capitalised within "exploration and evaluation assets "and subsequently allocated to drilling activities. Exploration drilling costs are initially capitalised on a well-by-well basis until the success or otherwise of the well has been established. The success or failure of each exploration effort is judged on a well-by-well basis. Drilling costs are written off on completion of a well unless the results indicate that hydrocarbon reserves exist and there is a reasonable prospect that these reserves are commercial.

Following appraisal of successful exploration wells, if commercial reserves are established and technical feasibility for extraction demonstrated, then the related capitalised exploration costs are transferred into a single field cost centre within property, plant & equipment - development/ producing assets (oil and gas properties) after testing for impairment. Where results of exploration drilling indicate the presence of hydrocarbons which are ultimately not considered commercially viable, all related costs are written off to the income statement.

Expenditure incurred on the acquisition of a licence interest is initially capitalised on a licence-by-licence basis. Costs are held undepleted, within exploration and evaluation assets until such time as the exploration phase on the licence area is complete or commercial reserves have been discovered.

Net proceeds from any disposal of an exploration asset are initially credited against the previously capitalised costs. Any surplus/ deficit is recognised in the income statement.

Other property, plant and equipment
The initial cost of property, plant and equipment comprises its purchase price, including import duties and non-refundable purchase taxes, and any directly attributable costs of bringing an asset to working condition and location for its intended use. It also includes the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located. If significant parts of an item of property, plant and equipment have different useful lives, then they are accounted for as separate items (major components) of property, plant and equipment. All other expenses on existing property, plant and equipment, including day-to-day repair and maintenance expenditure and cost of replacing parts, are charged to the consolidated income statement for the period during which such expenses are incurred.

Gains and losses on disposal of an item of property, plant and equipment computed as the difference between the net disposal proceeds and the carrying amount of the asset is included in the consolidated income statement when the asset is derecognised. Major inspection and overhaul expenditure is capitalised, if the recognition criteria are met.

(vi) Assets under construction
Assets under construction are capitalised in the assets under construction account. At the point when an asset is capable of operating in the manner intended by management, the cost of construction is transferred to the appropriate category of property, plant and equipment. Costs associated with the commissioning of an asset and any obligatory decommissioning costs are capitalised until the period of commissioning has been completed and the asset is ready for its intended use.

(vii) Depreciation, depletion and amortisation expense
Mining properties and other assets in the course of development or construction, freehold land and goodwill are not depreciated or amortised.

Relating to mining properties
The capitalised mining properties are amortised on a unit-of-production basis over the total estimated remaining commercial proved and probable reserves of each property or Group of properties and are subject to impairment review. Costs used in the unit of production calculation comprise the net book value of capitalised costs plus the estimated future capital expenditure required to access the commercial reserves. Changes in the estimates of commercial reserves or future capital expenditure are dealt with prospectively.

Leasehold land and buildings are depreciated on a straight-line basis over the period of the lease or, if shorter, their useful economic life.

Oil & gas assets
All expenditures carried within each field are amortised from the commencement of production on a unit of production basis, which is the ratio of oil and gas production in the period to the estimated quantities of commercial reserves at the end of the period plus the production in the period, generally on a field-by-field basis or group of fields which are reliant on common infrastructure.

Commercial reserves are proven and probable oil and gas reserves, which are defined as the estimated quantities of crude oil, natural gas and natural gas liquids which geological, geophysical and engineering data demonstrate with a specified degree of certainty to be recoverable in future years from known reservoirs and which are considered commercially producible.

Costs used in the unit of production calculation comprise the net book value of capitalised costs plus the estimated future field development costs required to access the commercial reserves. Changes in the estimates of commercial reserves or future field development costs are dealt with prospectively.

Other Assets
Depreciation on Property, plant and equipment is calculated using the straight-line method (SLM) to allocate their cost, net of their residual values, over their estimated useful lives (determined by the management) as given below. Management's assessment takes into account, inter alia, the nature of the assets, the estimated usage of the assets, the operating conditions of the assets, past history of replacement and maintenance support.

Estimated useful life of assets are as follows:

Buildings operations and administration	3-60 years
Plant and machinery	15-40 years
Railway Sidings	15 years
Office equipment	3–6 years
Furniture and fixtures	8-10 years
Vehicles	8-10 years

Major inspection and overhaul costs are depreciated over the estimated life of the economic benefit to be derived from such costs. The carrying amount of the remaining previous overhaul cost is charged to the income statement if the next overhaul is undertaken earlier than the previously estimated life of the economic benefit.

The Group reviews the residual value and useful life of an asset at least at each financial year end and, if expectations differ from previous estimates, the change is accounted for as a change in accounting estimate.

The Group has reassessed the economic lives of commercial thermal power plants to be the lower of its technical useful life or the term of the power purchase agreement. This has had no material impact on these financial statements.

(viii) Intangible assets
Intangible assets acquired separately are measured on initial recognition at cost. Subsequently, intangibles assets are measured at cost less accumulated amortisation and accumulated impairment losses, if any.

The Group recognises port concession rights as "Intangible Assets" arising from a service concession arrangement, in which the grantor controls or regulates the services provided and the prices charged, and also controls any significant residual interest in the infrastructure such as property, plant and equipment, irrespective whether the infrastructure is existing infrastructure of the grantor or the infrastructure is constructed or purchased by the Group as part of the service concession arrangement. Such an intangible asset is recognised by the Group initially at cost determined as the fair value of the consideration received or receivable for the construction service delivered and is capitalised when the project is complete in all respects. Port concession rights are amortised on straight line basis over the balance of license period. The concession period is 30 years from the date of the award. Any addition to the port concession rights are measured at fair value on recognition. Port concession rights also include certain property, plant and equipment in accordance with IFRIC 12 "Service Concession Arrangements".

Intangible assets are amortised over their estimated useful life on a straight line basis Software is amortised over the estimated useful life ranging from 0 – 5 years. Amounts paid for securing mining rights are amortised over the period of the mining lease ranging from 16-25 years. Technological know-how and acquired brand are amortised over the estimated useful life of ten years.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognised in the consolidated income statement when the asset is derecognised.

The amortisation period and the amortisation method are reviewed at least at each financial year end. If the expected useful life of the asset is different from previous estimates, the change is accounted for prospectively as a change in accounting estimate.

(ix) Non-current assets held for sale
Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the asset (or disposal group) is available for immediate sale in its present condition. Management must be committed to the sale which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

Non-current assets and disposal groups classified as held for sale are not depreciated and are measured at the lower of carrying amount and fair value less costs to sell. Such assets and disposal groups are presented separately on the face of the consolidated statement of financial position.

(x) Impairment
Non-financial assets
Impairment charges and reversals are assessed at the level of cash-generating units. A cash-generating unit (CGU) is the smallest identifiable group of assets that generate cash inflows that are largely independent of the cash inflows from other assets or group of assets.

The Group assesses at each reporting date, whether there is an indication that an asset may be impaired. The Group conducts an internal review of asset values annually, which is used as a source of information to assess for any indications of impairment or reversal of previously recognised impairment losses. Internal and external factors, such as worse economic performance than expected, changes in expected future prices, costs and other market factors are also monitored to assess for indications of impairment or reversal of previously recognised impairment losses.

If any such indication exists or in case of goodwill where annual testing of impairment is required then an impairment review is undertaken, the recoverable amount is calculated, as the higher of fair value less costs of disposal and the asset's value in use.

Fair value less costs of disposal is the price that would be received to sell the asset in an orderly transaction between market participants and does not reflect the effects of factors that may be specific to the entity and not applicable to entities in general. Fair value for mineral and oil and gas assets is generally determined as the present value of the estimated future cash flows expected to arise from the continued use of the asset, including any expansion prospects, and its eventual disposal, using assumptions that an independent market participant may take into account. These cash flows are discounted at an appropriate post-tax discount rate to arrive at the net present value.

Value in use is determined as the present value of the estimated future cash flows expected to arise from the continued use of the asset in its present form and its eventual disposal. The cash flows are discounted using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which estimates of future cash flows have not been adjusted. Value in use is determined by applying assumptions specific to the Group's continued use and cannot take into account future development. These assumptions are different to those used in calculating fair value and consequently the value in use calculation is likely to give a different result to a fair value calculation.

The carrying amount of the CGU is determined on a basis consistent with the way the recoverable amount of the CGU is determined. The carrying value is net of deferred tax liability recognised in the fair value of assets acquired in the business combination.

If the recoverable amount of an asset or CGU is estimated to be less than it's carrying amount, the carrying amount of the asset or CGU is reduced to its recoverable amount. An impairment loss is recognised in the consolidated income statement.

Any reversal of the previously recognised impairment loss is limited to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined if no impairment loss had previously been recognised except if initially attributed to goodwill.

Exploration & evaluation assets:
In assessing whether there is any indication that an exploration and evaluation asset may be impaired, the Group considers, as a minimum, the following indicators:

- the period for which the Group has the right to explore in the specific area has expired during the period or will expire in the near future, and is not expected to be renewed;
- substantive expenditure on further exploration for and evaluation of mineral resources in the specific area is neither budgeted nor planned;
- exploration for and evaluation of mineral resources in the specific area have not led to the discovery of commercially viable quantities of mineral resources and the Group has decided to discontinue such activities in the specific area;
- sufficient data exist to indicate that, although a development in the specific area is likely to proceed, the carrying amount of the exploration and evaluation asset is unlikely to be recovered in full from successful development or by sale; and
- reserve information prepared annually by external experts.

When a potential impairment is identified, an assessment is performed for each area of interest in conjunction with the group of operating assets (representing a cash-generating unit) to which the exploration and evaluation assets is attributed. Exploration areas in which reserves have been discovered but require major capital expenditure before production can begin, are continually evaluated to ensure that commercial quantities of reserves exist or to ensure that additional exploration work is under way or planned. To the extent that capitalised expenditure is no longer expected to be recovered, it is charged to the consolidated income statement.

(xi) Financial Instruments
A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

(a) Financial Assets – Recognition
All financial assets are recognised initially at fair value plus, in the case of financial assets not recorded at fair value through profit or loss, transaction costs that are attributable to the acquisition of the financial asset. Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognised on the trade date, i.e., the date that the Group commits to purchase or sell the asset.

For purposes of subsequent measurement, financial assets are classified in four categories:

Debt instruments at amortised cost
A 'debt instrument' is measured at amortised cost if both the following conditions are met:

a) The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and

b) Contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding.

After initial measurement, such financial assets are subsequently measured at amortised cost using the Effective Interest Rate (EIR) method. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in interest income in consolidated income statement. The losses arising from impairment are recognised in consolidated income statement.

Debt instruments at fair value through other comprehensive income (FVOCI)
A 'debt instrument' is classified as at the FVOCI if both of the following criteria are met:

a) The objective of the business model is achieved both by collecting contractual cash flows and selling the financial assets, and

b) The asset's contractual cash flows represent SPPI.

Debt instruments included within the FVOCI category are measured initially as well as at each reporting date at fair value. Fair value movements are recognised in other comprehensive income (OCI). However, interest income, impairment losses and reversals and foreign exchange gain or loss are recognised in the consolidated income statement. On derecognition of the asset, cumulative gain or loss previously recognised in other comprehensive income is reclassified from the equity to consolidated income statement. Interest earned whilst holding fair value through other comprehensive income debt instrument is reported as interest income using the EIR method.

Debt instruments at fair value through profit or loss (FVTPL)
FVTPL is a residual category for debt instruments. Any debt instrument, which does not meet the criteria for categorisation as at amortised cost or as FVOCI, is classified as at FVTPL.

In addition, the Group may elect to designate a debt instrument, which otherwise meets amortised cost or FVOCI criteria, as at FVTPL. However, such election is allowed only if doing so reduces or eliminates a measurement or recognition inconsistency (referred to as 'accounting mismatch'). The Group has not designated any debt instrument as at FVTPL.

Debt instruments included within the FVTPL category are measured at fair value with all changes being recognised in consolidated income statement.

Equity instruments
All equity investments in scope of IFRS 9 are measured at fair value. Equity instruments which are held for trading and contingent consideration recognised by an acquirer in a business combination to which IFRS 3 applies are classified as at FVTPL. For all other equity instruments, the Company may make an irrevocable election to present in other comprehensive income subsequent changes in the fair value. The Group makes such election on an instrument-by-instrument basis. The classification is made on initial recognition and is irrevocable.

If the Group decides to classify an equity instrument as at FVOCI, then all fair value changes on the instrument, excluding dividends, are recognised in the OCI. There is no recycling of the amounts from OCI to profit and loss, even on sale of investment. However, the Group may transfer the cumulative gain or loss within equity. For equity instruments which are classified as FVTPL, all subsequent fair value changes are recognised in the consolidated income statement.

(b) Financial Asset - Derecognition
The Group derecognises a financial asset when the contractual rights to cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred.

(c) Impairment of financial assets
In accordance with IFRS 9, the Group applies expected credit loss ("ECL") model for measurement and recognition of impairment loss on the following financial assets:

i) Financial assets that are debt instruments, and are measured at amortised cost e.g., loans, debt securities and deposits

ii) Financial assets that are debt instruments and are measured as at FVOCI

iii) Trade receivables or any contractual right to receive cash or another financial asset that result from transactions that are within the scope of IFRS 15.

The Group follows 'simplified approach' for recognition of impairment loss allowance on trade receivables, contract assets and lease receivables. The application of simplified approach does not require the Group to track changes in credit risk. Rather, it recognises impairment loss allowance based on lifetime ECLs at each reporting date, right from its initial recognition.

At each reporting date, for recognition of impairment loss on other financial assets and risk exposure, the Group determines whether there has been a significant increase in the credit risk since initial recognition. If credit risk has not increased significantly, 12-month ECL is used to provide for impairment loss. However, if credit risk has increased significantly, lifetime ECL is used. If, in a subsequent period, credit quality of the instrument improves such that there is no longer a significant increase in credit risk since initial recognition, then the Group reverts to recognising impairment loss allowance based on 12-month ECL.

Lifetime ECL are the expected credit losses resulting from all possible default events over the expected life of a financial instrument. The 12-month ECL is a portion of the lifetime ECL which results from default events that are possible within 12 months after the reporting date.

ECL is the difference between all contractual cash flows that are due to the Group in accordance with the contract and all the cash flows that the entity expects to receive, discounted at the original EIR.

ECL impairment loss allowance (or reversal) during the year is recognised as income/expense in profit or loss. The consolidated statement of financial position presentation for various financial instruments is described below:

i) Financial assets measured at amortised cost: ECL is presented as an allowance, i.e., as an integral part of the measurement of those assets in the balance sheet. The Company does not reduce impairment allowance from the gross carrying amount.

ii) Debt instruments measured at FVOCI: Since financial assets are already reflected at fair value, impairment allowance is not further reduced from its value. Rather, ECL amount is presented as 'accumulated impairment amount' in the OCI.

For assessing increase in credit risk and impairment loss, the Group combines financial instruments on the basis of shared credit risk characteristics with the objective of facilitating an analysis that is designed to enable significant increases in credit risk to be identified on a timely basis.

The Group does not have any purchased or originated credit-impaired (POCI) financial assets, i.e., financial assets which are credit impaired on purchase/origination.

(d) Financial liabilities – Recognition & Subsequent measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, or as loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognised initially at fair value, and in the case of financial liabilities at amortised cost, net of directly attributable transaction costs.

The Group's financial liabilities include trade and other payables, loans and borrowings including bank overdrafts, financial guarantee contracts and derivative financial instruments.

The measurement of financial liabilities depends on their classification, as described below:

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by IFRS 9. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognised in the consolidated income statement.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated as such at the initial date of recognition, and only if the criteria in IFRS 9 are satisfied. For liabilities designated as FVTPL, fair value gains/ losses attributable to changes in own credit risk are recognised in OCI. These gains/ losses are not subsequently transferred to profit or loss. However, the Group may transfer the cumulative gain or loss within equity. All other changes in fair value of such liability are recognised in the consolidated income statement. The Group has not designated any financial liability as at fair value through profit or loss.

Financial liabilities at amortised cost (Loans and Borrowings and Trade and Other payables)

After initial recognition, interest-bearing loans and borrowings and trade and other payables are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in consolidated income statement when the liabilities are derecognised as well as through the EIR amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance costs in the consolidated income statement.

(e) Financial liabilities – Derecognition

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in the consolidated income statement.

(f) Embedded Derivatives
An embedded derivative is a component of a hybrid (combined) instrument that also includes a non-derivative host contract – with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative. An embedded derivative causes some or all of the cash flows that otherwise would be required by the contract to be modified according to a specified interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index, or other variable, provided in the case of a non-financial variable that the variable is not specific to a party to the contract. Reassessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss.

If the hybrid contract contains a host that is a financial asset within the scope of IFRS 9, the Group does not separate embedded derivatives. Rather, it applies the classification requirements contained in IFRS 9 to the entire hybrid contract. Derivatives embedded in all other host contracts are accounted for as separate derivatives and recorded at fair value if their economic characteristics and risks are not closely related to those of the host contracts and the host contracts are not held for trading or designated at fair value though profit or loss. These embedded derivatives are measured at fair value with changes in fair value recognised in Consolidated Income Statement, unless designated as effective hedging instruments.

(g) Equity instruments
An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Group are recognised at the proceeds received, net of direct issue costs.

(h) Offsetting of financial instruments
Financial assets and financial liabilities are offset and the net amount is reported in the consolidated statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis or to realise the asset and settle the liability simultaneously.

(i) Derivative financial instruments and hedge accounting
Initial recognition and subsequent measurement
In order to hedge its exposure to foreign exchange, interest rate, and commodity price risks, the Group enters into forward, option, swap contracts and other derivative financial instruments. The Group does not hold derivative financial instruments for speculative purposes.

Such derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently re-measured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

Any gains or losses arising from changes in the fair value of derivatives are taken directly to consolidated income statement, except for the effective portion of cash flow hedges, which is recognised in OCI and later reclassified to consolidated income statement when the hedge item affects profit or loss or treated as basis adjustment if a hedged forecast transaction subsequently results in the recognition of a non-financial asset or non-financial liability.

For the purpose of hedge accounting, hedges are classified as:

- Fair value hedges when hedging the exposure to changes in the fair value of a recognised asset or liability or an unrecognised firm commitment
- Cash flow hedges when hedging the exposure to variability in cash flows that is either attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction or the foreign currency risk in an unrecognised firm commitment
- Hedges of a net investment in a foreign operation

At the inception of a hedge relationship, the Group formally designates and documents the hedge relationship to which the Group wishes to apply hedge accounting. The documentation includes the Group's risk management objective and strategy for undertaking hedge, the hedging/economic relationship, the hedged item or transaction, the nature of the risk being hedged, hedge ratio and how the entity will assess the effectiveness of changes in the hedging instrument's fair value in offsetting the exposure to changes in the hedged item's fair value or cash flows attributable to the hedged risk. Such hedges are expected to be highly effective in achieving offsetting changes in fair value or cash flows and are assessed on an ongoing basis to determine that they actually have been highly effective throughout the financial reporting periods for which they were designated.

Hedges that meet the strict criteria for hedge accounting are accounted for, as described below:

(i) Fair value hedges
Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognised in consolidated income statement immediately, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.

When an unrecognised firm commitment is designated as a hedged item, the subsequent cumulative change in the fair value of the firm commitment attributable to the hedged risk is recognised as an asset or liability with a corresponding gain or loss recognised in consolidated income statement. Hedge accounting is discontinued when the Company revokes the hedge relationship, the hedging instrument or hedged item expires or is sold, terminated, or exercised or no longer meets the criteria for hedge accounting.

(ii) Cash flow hedges
The effective portion of the gain or loss on the hedging instrument is recognised in OCI in the cash flow hedge reserve, while any ineffective portion is recognised immediately in the consolidated income statement.

Amounts recognised in OCI are transferred to consolidated income statement when the hedged transaction affects profit or loss, such as when the hedged financial income or financial expense is recognised or when a forecast sale occurs. When the hedged item is the cost of a non-financial asset or non-financial liability, the amounts recognised in OCI are transferred to the initial carrying amount of the non-financial asset or liability

If the hedging instrument expires or is sold, terminated or exercised without replacement or rollover (as part of the hedging strategy), or if its designation as a hedge is revoked, or when the hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss previously recognised in OCI remains separately in equity until the forecast transaction occurs or the foreign currency firm commitment is met.

(iii) Hedges of a net investment
Hedges of a net investment in a foreign operation, including a hedge of a monetary item that is accounted for as part of the net investment, are accounted for in a way similar to cash flow hedges. Gains or losses on the hedging instrument relating to the effective portion of the hedge are recognised in OCI while any gains or losses relating to the ineffective portion are recognised in the consolidated income statement. On disposal of the foreign operation, the cumulative value of any such gains or losses recorded in equity is reclassified to the consolidated income statement (as a reclassification adjustment).

(j) Financial guarantees
Financial guarantees issued by the Group on behalf of related parties are designated as 'Insurance Contracts'. The Group assesses at the end of each reporting period whether its recognised insurance liabilities (if any) are adequate, using current estimates of future cash flows under its insurance contracts. If that assessment shows that the carrying amount of its insurance liabilities is inadequate in the light of the estimated future cash flows, the entire deficiency is recognised in consolidated income statement.

(xii) Leases
Determining whether an arrangement contains lease
At inception of an arrangement, the Group determines whether the arrangement is or contains a lease.
The arrangement is, or contains, a lease if fulfilment of the arrangement is dependent on the use of a specific asset or assets and the arrangement conveys a right to use the asset or assets, even if that right is not explicitly specified in an arrangement.

At inception or on reassessment of an arrangement that contains lease, the Group separates payments and other consideration required by the arrangement into those for the lease and those for other elements on the basis of their relative fair values. If the Group concludes for a finance lease that it is impracticable to separate the payments reliably, then an asset and a liability are recognised at an amount equal to the fair value of the underlying asset; subsequently the liability is reduced as payments are made and an imputed finance cost on the liability is recognised using the Group's incremental borrowing rate.

Group as a lessee
A lease is classified at the inception date as a finance lease or an operating lease. A lease that transfers substantially all the risks and rewards incidental to ownership to the Group is classified as a finance lease.

Finance leases are capitalised at the commencement of the lease at the inception date fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are recognised in finance costs in the consolidated income statement, unless they are directly attributable to qualifying assets, in which case they are capitalised in accordance with the Group's policy on the general borrowing costs. Contingent rentals are recognised as expenses in the periods in which they are incurred.

A leased asset is depreciated over the useful life of the asset. However, if there is no reasonable certainty that the Group will obtain ownership by the end of the lease term, the asset is depreciated over the shorter of the estimated useful life of the asset and the lease term.

Operating lease payments are recognised as an expense in the consolidated income statement on a straight-line basis over the lease term.

Group as a lessor
Leases in which the Group does not transfer substantially all the risks and rewards of ownership of an asset are classified as operating leases. Rental income from operating lease is recognised on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

Leases are classified as finance leases when substantially all of the risks and rewards of ownership transfer from the Group to the lessee. Amounts due from lessees under finance leases are recorded as receivables at the Group's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the net investment outstanding in respect of the lease.

(xiii) Inventories
Inventories and work-in-progress are stated at the lower of cost and net realisable value.

Cost is determined on the following basis:

- Purchased copper concentrate is recorded at cost on a first-in, first-out ("FIFO") basis; all other materials including stores and spares are valued on weighted average basis; except in Oil and Gas business where stores and spares are valued on a FIFO basis.
- Finished products are valued at raw material cost plus costs of conversion, comprising labour costs and an attributable proportion of manufacturing overheads based on a weighted average basis (except in copper business where FIFO is being followed); and
- By-products and scrap are valued at net realisable value.

Net realisable value is determined based on estimated selling price, less further costs expected to be incurred for completion and disposal.

(xiv) Government grants
Grants and subsidies from the government are recognised when there is reasonable assurance that (i) the Group will comply with the conditions attached to them, and (ii) the grant/subsidy will be received.

When the grant or subsidy relates to revenue, it is recognised as income on a systematic basis in the consolidated income statement over the periods necessary to match them with the related costs, which they are intended to compensate.

Government grants relating to tangible fixed assets are deducted in calculating the carrying amount of the assets and recognised in the consolidated income statement over the expected useful lives of the assets concerned as a reduced depreciation expense.

When loans or similar assistance are provided by governments or related institutions, with an interest rate below the current applicable market rate, the effect of this favourable interest is regarded as a government grant. The loan or assistance is initially recognised and measured at fair value and the government grant is measured as the difference between the initial carrying value of the loan and the proceeds received. The loan is subsequently measured as per the accounting policy applicable to financial liabilities.

(xv) Taxation
Tax expense represents the sum of current tax and deferred tax.

Current tax is provided at amounts expected to be paid (or recovered) using the tax rates and laws that have been enacted or substantively enacted by the reporting date and includes any adjustment to tax payable in respect of previous years.

Subject to the exceptions below, deferred tax is provided, using the balance sheet method, on all temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes and on carry forward of unused tax credits and unused tax losses:

- Tax payable on the future remittance of the past earnings of subsidiaries where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future;
- Deferred income tax is not recognised on initial recognition as well as on the impairment of goodwill which is not deductible for tax purposes or on the initial recognition of an asset or liability in a transaction that is not a business combination, and at the time of the transaction, affects neither the accounting profit nor taxable profit (tax loss) ; and
- Deferred tax assets (including MAT credit entitlement) are recognised only to the extent that it is more likely than not that they will be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date. Tax relating to items recognised outside consolidated income statement is recognised outside consolidated income statement (either in other comprehensive income or equity).

The carrying amount of deferred tax assets (including MAT credit entitlement) is reviewed at each reporting date and is adjusted to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the asset to be recovered.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set off current income tax assets against current income tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

Deferred tax is provided on temporary differences arising on acquisitions that are categorised as Business Combinations. Deferred tax is recognised at acquisition as part of the assessment of the fair value of assets and liabilities acquired. Subsequently deferred tax is charged or credited in the income statement/other comprehensive income as the underlying temporary difference is reversed.

(xvi) Retirement benefit schemes
The Group operates or participates in a number of defined benefits and contribution schemes, the assets of which are (where funded) held in separately administered funds.

For defined benefit schemes, the cost of providing benefits under the plans is determined by actuarial valuation each year separately for each plan using the projected unit credit method by third party qualified actuaries.

Remeasurement including, effects of asset ceiling and return on plan assets (excluding amounts included in interest on the net defined benefit liability) and actuarial gains and losses arising in the year are recognised in full in other comprehensive income and are not recycled to the consolidated income statement.

Past service costs are recognised in the consolidated income statement on the earlier of:

- the date of the plan amendment or curtailment, and
- the date that the Group recognises related restructuring costs

Net interest is calculated by applying a discount rate to the net defined benefit liability or asset at the beginning of the period. Defined benefit costs are split into current service cost, past service cost, net interest expense or income and remeasurement, and gains and losses on curtailments and settlements.

Current service cost and past service costs are recognised within cost of sales and administrative expenses and distribution expenses. Net interest expense or income is recognised within finance costs.

For defined contribution schemes, the amount charged to the consolidated income statement in respect of pension costs and other post-retirement benefits is the contributions payable in the year, recognised as and when the employee renders related service.

(xvii) Share-based payments
Certain employees (including executive directors) of the Group receive part of their remuneration in the form of share-based payment transactions, whereby employees render services in exchange for shares or rights over shares ('equity-settled transactions').

The cost of equity-settled transactions with employees is measured at fair value of share awards at the date at which they are granted. The fair value of share awards is determined with the assistance of an external valuer and the fair value at the grant date is expensed on a proportionate basis over the vesting period based on the Group's estimate of shares that will eventually vest. The estimate of the number of awards likely to vest is reviewed at each balance sheet date up to the vesting date at which point the estimate is adjusted to reflect the current expectations.

The resultant increase in equity is recorded in share-based payment reserve.

In case of cash-settled transactions, a liability is recognised for the fair value of cash-settled transactions. The fair value is measured initially and at each reporting date up to and including the settlement date, with changes in fair value recognised in employee benefits expense. The fair value is expensed over the period until the vesting date with recognition of a corresponding liability. The fair value is determined with the assistance of an external valuer.

(xviii) Provisions, contingent liabilities and contingent assets
The assessments undertaken in recognising provisions and contingencies have been made in accordance with the applicable IFRS.

Provisions represent liabilities for which the amount or timing is uncertain. Provisions are recognised when the Group has a present obligation (legal or constructive), as a result of past events, and it is probable that an outflow of resources, that can be reliably estimated, will be required to settle such an obligation. If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows to net present value using an appropriate pre-tax discount rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. Unwinding of the discount is recognised in the consolidated income statement as a finance cost. Provisions are reviewed at each reporting date and are adjusted to reflect the current best estimate.

A contingent liability is a possible obligation that arises from past events whose existence will be confirmed by the occurrence or non-occurrence of one or more uncertain future events beyond the control of Group or a present obligation that is not recognised because it is not probable that an outflow of resources will be required to settle the obligation. A contingent liability also arises in extremely rare cases where there is a liability that cannot be recognised because it cannot be measured reliably. The Group does not recognise a contingent liability but discloses its existence in the consolidated financial statements.

In the normal course of business, contingent liabilities may arise from litigation and other claims against the Group. There are certain obligations which management has concluded, based on all available facts and circumstances, are not probable of payment or are very difficult to quantify reliably, and such obligations are treated as Contingent liabilities and disclosed in the notes but are not reflected as liabilities in the financial statements. Although there can be no assurance regarding the final outcome of the legal proceedings in which the Group is involved, it is not expected that such contingencies will have a material effect on its financial position or profitability.

Contingent assets are not recognised but disclosed in the financial statements when an inflow of economic benefit is probable.

The Group has significant capital commitments in relation to various capital projects which are not recognised in the consolidated statement of financial position.

(xix) Restoration, rehabilitation and environmental costs
An obligation to incur restoration, rehabilitation and environmental costs arises when environmental disturbance is caused by the development or ongoing production of a mine or oil fields. Such costs, discounted to net present value, are provided for and a corresponding amount is capitalised at the start of each project, as soon as the obligation to incur such costs arises. These costs are charged to the consolidated income statement over the life of the operation through the depreciation of the asset and the unwinding of the discount on the provision. The cost estimates are reviewed periodically and are adjusted to reflect known developments which may have an impact on the cost estimates or life of operations. The cost of the related asset is adjusted for changes in the provision due to factors such as updated cost estimates, changes to lives of operations, new disturbance and revisions to discount rates. The adjusted cost of the asset is depreciated prospectively over the lives of the assets to which they relate. The unwinding of the discount is shown as a finance cost in the consolidated income statement.

Costs for restoration of subsequent site damage which is caused on an ongoing basis during production are provided for at their net present value and charged to the consolidated income statement as extraction progresses. Where the costs of site restoration are not anticipated to be material, they are expensed as incurred.

(xx) Accounting for Foreign currency transactions and translations
The functional currency for each entity in the Group is determined as the currency of the primary economic environment in which it operates. For all principal operating subsidiaries, the functional currency is normally the local currency of the country in which it operates with the exception of KCM and Oil and gas business operations which have a US Dollar functional currency as that is the currency of the primary economic environment in which they operate. The financial statements are presented in US Dollars.

In the financial statements of individual group companies, transactions in currencies other than the respective functional currencies are translated into their functional currencies at the exchange rates ruling at the date of the transaction. Monetary assets and liabilities denominated in other currencies are translated into functional currencies at exchange rates prevailing on the reporting date. Non-monetary assets and liabilities denominated in other currencies and measured at historical cost or fair value are translated at the exchange rates prevailing on the dates on which such values were determined.

All exchange differences are included in the consolidated income statement except those where the monetary item is designated as an effective hedging instrument of the currency risk of designated forecasted sales or purchases, which are recognised in the other comprehensive income.

Exchange differences which are regarded as an adjustment to interest costs on foreign currency borrowings, are capitalised as part of borrowing costs in qualifying assets.

For the purposes of consolidation of financial statements, items in the consolidated income statement of those businesses for which the US dollar is not the functional currency are translated into US dollars at the average rates of exchange during the year/ exchange rates as on the date of transaction. The related consolidated statement of financial position is translated into US dollars at the rates as at the reporting date. Exchange differences arising on translation are recognised in the consolidated statement of comprehensive income. On disposal of such entities the deferred cumulative exchange differences recognised in equity relating to that particular foreign operation are recognised in the consolidated income statement.

(xxi) Buyers' credit / suppliers' credit
The Group enters into arrangements whereby financial institutions make direct payments to suppliers for raw materials and project materials. The financial institutions are subsequently repaid by the Group at a later date providing working capital timing benefits. These are normally settled up to twelve months (for raw materials) and up to 36 months (for project materials). Where these arrangements are for raw materials with a maturity of up to twelve months, the economic substance of the transaction is determined to be operating in nature and these are recognised as Operational buyers' credit/suppliers' credit (under Trade and other payables). Where these arrangements are for project materials with a maturity up to thirty-six months, the economic substance of the transaction is determined to be financing in nature, and these are presented within borrowings in the statement of financial position. Interest expense on these are recognised in the finance cost.

(xxii) Current and non-current classification
The Group presents assets and liabilities in the consolidated statement of financial position based on current / non-current classification. An asset is classified as current when it satisfies any of the following criteria:

- it is expected to be realised in, or is intended for sale or consumption in, the Group's normal operating cycle.
- it is held primarily for the purpose of being traded;
- it is expected to be realised within 12 months after the reporting date; or
- it is cash or cash equivalent unless it is restricted from being exchanged or used to settle a liability for at least 12 months after the reporting date.

All other assets are classified as non-current.

A liability is classified as current when it satisfies any of the following criteria:

- it is expected to be settled in the Group's normal operating cycle;
- it is held primarily for the purpose of being traded;
- it is due to be settled within 12 months after the reporting date; or
- the Group does not have an unconditional right to defer settlement of the liability for at least 12 months after the reporting date. Terms of a liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification.

All other liabilities are classified as non-current.

Deferred tax assets and liabilities are classified as non-current only.

(xxiii) Borrowing costs
Borrowing cost includes interest expense as per effective interest rate (EIR) and exchange differences arising from foreign currency borrowings to the extent they are regarded as an adjustment to the interest cost.

Borrowing costs directly relating to the acquisition, construction or production of a qualifying capital project under construction are capitalised and added to the project cost during construction until such time that the assets are substantially ready for their intended use i.e. when they are capable of commercial production. Borrowing costs relating to the construction phase of a service concession arrangement is capitalised as part of the cost of the intangible asset. Where funds are borrowed specifically to finance a qualifying capital project, the amount capitalised represents the actual borrowing costs incurred. Where surplus funds are available out of money borrowed specifically to finance a project, the income generated from such short-term investments is deducted from the total capitalised borrowing cost. If any specific borrowing remains outstanding after the related asset is ready for its intended use or sale, that borrowing then becomes part of general borrowing. Where the funds used to finance a project form part of general borrowings, the amount capitalised is calculated using a weighted average of rates applicable to relevant general borrowings of the Group during the year.

All other borrowing costs are recognised in the consolidated income statement in the period in which they are incurred.

Capitalisation of interest on borrowings related to construction or development projects is ceased when substantially all the activities that are necessary to make the assets ready for their intended use are complete or when delays occur outside of the normal course of business.

EIR is the rate that exactly discounts the estimated future cash payments or receipts over the expected life of the financial liability or a shorter period, where appropriate, to the amortised cost of a financial liability. When calculating the effective interest rate, the Group estimates the expected cash flows by considering all the contractual terms of the financial instrument (for example, prepayment, extension, call and similar options).

(xxiv) Cash and cash equivalents
Cash and cash equivalents comprise cash at bank and on hand and short-term money market deposits which have a maturity of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

For the purpose of the consolidated statement of cash flows, cash and cash equivalents consist of cash and short-term deposits, as defined above and additionally includes unpaid dividend account.

2(b) APPLICATION OF NEW AND REVISED STANDARDS
The Group has adopted with effect from 01 April 2018, the following new standards and amendments.

IFRS 15 – Revenue from contracts with customers
The Group has adopted IFRS 15 Revenue from contracts with Customers with effect from April 1, 2018 which outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers. The standard replaces most of the current revenue recognition guidance. The core principle of the new standard is for companies to recognise revenue when the control of the goods and services is transferred to the customer as against the transfer of risk and rewards. As per the Group's current revenue recognition practices, transfer of control happens at the same point as transfer of risk and rewards thus not effecting the revenue recognition. The amount of revenue recognised reflects the consideration to which the Group expects to be entitled in exchange for those goods or services.

Under this standard, services provided post transfer of control of goods are treated as separate performance obligation and requires proportionate revenue to be deferred along with associated costs and to be recognised over the period of service. The Group provides shipping and insurances services after the date of transfer of control of goods and therefore has identified it as a separate performance obligation. As per the result of evaluation of contracts of the relevant revenue streams, it is concluded that the impact of this change is immaterial to the Group and hence no accounting changes have been done.

The Group has products which are provisionally priced at the date revenue is recognised. Revenue in respect of such contracts are recognised when control passes to the customer and is measured at the amount the entity expects to be entitled – being the estimate of the price expected to be received at the end of the measurement period. Post transfer of control of goods, subsequent movements in provisional pricing are accounted for in accordance with IFRS 9 "Financial Instruments" rather than IFRS 15 and therefore the IFRS 15 rules on variable consideration do not apply. These 'provisional pricing' adjustments i.e. the consideration received post transfer of control has been included in total revenue on the face of the Consolidated Income statement. The accounting for revenue under IFRS 15 does not, therefore, represent a substantive change from the Group's previous practice for recognising revenue from sales to customers.

Further, export incentives received from Government that were included within revenue are now included within other operating income.

The Group has adopted the modified transitional approach as permitted by the standard under which the comparative financial information is not restated. The accounting changes required by the standard are not having material effect on the recognition or measurement of revenues and no transitional adjustment is recognised in retained earnings at 01 April 2018. Additional disclosures as required by IFRS 15 have been included in these financial statements.

Previous period Accounting Policy: Revenue Recognition
Revenues are measured at the fair value of the consideration received or receivable, net of discounts, volume rebates, outgoing sales taxes, goods and service tax, excise duty and other indirect taxes. Revenues from sales are recognised when all significant risks and rewards of ownership of the commodity sold are transferred to the customer and the commodity has been delivered to the shipping agent. Revenues from sale of by-products are included in revenue.

Certain of the Group's sales contracts provide for provisional pricing based on the price on the London Metal Exchange ("LME") and crude index, as specified in the contract, when shipped. Final settlement of the price is based on the applicable price for a specified future period. The Group's provisionally priced sales are marked to market using the relevant forward prices for the future period specified in the contract and is adjusted in revenue.

Revenue from oil, gas and condensate sales represent the Group's share of oil, gas and condensate production, recognised on a direct entitlement basis, when significant risks and rewards of ownership are transferred to the buyers. Direct entitlement basis represents entitlement to variable physical volumes of hydrocarbons, representing recovery of the costs incurred and a stipulated share of the production remaining after such cost recovery. The stipulated share of production is arrived after reducing government's share of profit petroleum which is accounted for when the obligation, in respect of the same arises.

Revenue from sale of power is recognised when delivered and measured based on rates as per bilateral contractual agreements with buyers and at rate arrived at based on the principles laid down under the relevant Tariff Regulations as notified by the regulatory bodies, as applicable.

Where the Group acts as a port operator, revenues and costs relating to each construction contract of service concession arrangements are recognised over the period of each arrangement only to the extent of costs incurred that are probable of recovery. Revenues and costs relating to operating phase of the port contract are measured at the fair value of the consideration received or receivable for the services provided.

Revenue from rendering of services is recognised on the basis of work performed.

IFRS 9: Financial Instruments
IFRS 9 has reduced the complexity of the current rules on financial instruments as mandated in IAS 39. It has fewer classification and measurement categories as compared to IAS 39. It eliminates the rule-based requirement of segregating embedded derivatives from financial assets and tainting rules pertaining to held to maturity investments. For financial assets which are debt instruments, IFRS 9 establishes a principle-based approach for classification based on cash flow characteristics of the asset and the business model in which an asset is held. For an investment in an equity instrument which is not held for trading, IFRS 9 permits an irrevocable election, on initial recognition, on an individual share-by- share basis, to present all fair value changes from the investment in other comprehensive income. No amount recognised in other comprehensive income on such equity investment would ever be reclassified to profit or loss. It requires the entity, which chooses to designate a liability as at fair value through profit or loss, to present the portion of the fair value change attributable to the entity's own credit risk in the other comprehensive income. IFRS 9 replaces the 'incurred loss model' in IAS 39 with an 'expected credit loss' model. The measurement uses a dual measurement approach, under which the loss allowance is measured as either 12 month expected credit losses or lifetime expected credit losses. The standard also introduces new presentation and disclosure requirements.

For transition, the Group has elected to apply the limited exemptions in IFRS 9 relating to the classification, measurement and impairment requirements for financial assets and accordingly has not restated comparative periods.

The Group has adopted IFRS 9 from 01 April 2018. The areas impacted on adopting IFRS 9 on the Group are detailed below.

Classification and measurement
The measurement and accounting treatment of the Group's financial assets is materially unchanged with the exception of equity securities previously categorised as available for sale. These will be held at fair value through other comprehensive income, meaning the recycling of gains and losses on disposal and impairment losses is no longer permitted for this category.

Impairment
Based on the Group's assessment, under expected credit loss model, the impairment of financial assets held at amortised cost does not have a material impact on the Group's results, given the low exposure to counterparty default risk as a result of the credit risk management processes that are in place.

Hedge accounting
The Group has adopted the IFRS 9 hedge accounting requirements. The adoption of the new standard has no effect on the amounts recognised in relation to the existing hedging arrangements.

Previous period Accounting Policy: Financial Instruments
Financial asset investments
Financial asset investments are classified as available for sale under IAS 39 and are initially recorded at fair value plus transaction costs that are directly attributable to the acquisition of financial asset investments and then remeasured at subsequent reporting dates to fair value. Unrealised gains and losses on financial asset investments are recognised through other comprehensive income. On disposal or impairment of the investments, the gains and losses in equity are recycled to the income statement.

Investments in equity instruments are recorded in non-current assets unless they are expected to be sold within one year.

The Group assesses at each reporting date whether there is objective evidence that a financial asset or a group of financial assets is impaired. An impairment exists if one or more events that has occurred since the initial recognition of the asset (an incurred 'loss event') has an impact on the estimated future cash flows of the financial asset or the group of financial assets that can be reliably estimated.

Short-term investments
Short-term investments represent short-term investments that do not meet the definition of cash and cash equivalents for one or more of the following reasons:

- They have a maturity profile greater than 90 days;
- They may be subject to a greater risk of changes in value than cash;
- They are held for investment purposes.

These include Short-term marketable securities and other Bank Deposits.

Short-term marketable securities are categorised as held for trading and are initially recognised at fair value with any gains or losses arising on remeasurement recognised in the consolidated income statement.

Other bank deposits are subsequently measured at amortised cost using the effective interest method.

Cash and cash equivalents
Cash and cash equivalents in the statement of financial position comprise cash at bank and in hand, short-term deposits with banks and short-term highly short-term investments that are readily convertible into cash which are subject to insignificant risk of changes in value and are held for the purpose of meeting short-term cash commitments.

Trade receivables
Trade receivables are stated at their transaction value as reduced by appropriate allowances for estimated irrecoverable amounts. An allowance for impairment of trade receivables is made where there is an event, which based on previous experience, is an indication of a reduction in the recoverability of the carrying value of the trade receivables.

Trade receivables are subsequently measured at amortised cost using the effective interest method, less any impairment. Interest income is recognised on non-current receivables on specific items by applying the effective interest rate method.

Trade payables
Trade and other payables are recognised at their transaction cost, which is its fair value, and subsequently measured at amortised cost except for the put option liability that is measured at fair value.

Equity instruments
Equity instruments issued by the Company are recorded at the proceeds received, net of direct issue costs.

Borrowings
Interest bearing loans and overdrafts are recorded initially at the fair value. Finance charges, including premiums payable on settlement or redemption and direct issue costs, are accounted for on an accruals basis and charged to the income statement using the effective interest method. They are netted against the carrying amount of the instrument to the extent that they are not settled in the period in which they arise.

Convertible bonds
Convertible bonds denominated in the functional currency of the issuing entity are accounted for as compound instruments. The equity components and the liability components are separated out on the date of the issue. The equity component is recognised in a separate reserve and is not subsequently remeasured. The liability component (net of transaction cost) is held at amortised cost. The interest expense on the liability component is calculated by applying the effective interest rate, being the prevailing market interest rate at the date of issuance for similar non-convertible debt. The difference between this amount and interest paid is added to the carrying amount of the liability component.

Convertible bonds not denominated in the functional currency of the issuing entity or where a cash conversion option exists, are split into two components: a debt component and a component representing the embedded derivative in the convertible bond. The debt component represents a liability for future coupon payments and the redemption of the principal amount. The embedded derivative, a financial liability, represents the value of the option that bondholders have to convert into ordinary shares. At inception the embedded derivative is recorded at fair value and the remaining balance, after deducting a share of issue costs, is recorded as the debt component. Subsequently, the debt component is measured at amortised cost and the embedded derivative is measured at fair value at each balance sheet date with the change in the fair value recognised in the income statement. The embedded derivative and the debt component are disclosed together and the current/non-current classification follows the classification of the debt component which is the host contract.

Financial instruments fair valued through profit and loss
Held for trading financial assets
Financial assets are classified as held for trading if they have been acquired principally for the purpose of selling in the near term. The change in fair value of trading investments incorporates any dividend and interest earned on the held for trading investments and is accounted for in the income statement.

Derivative financial instruments
In order to hedge its exposure to foreign exchange, interest rate and commodity price risks, the Group enters into forward contracts, option contracts, swap contracts and other derivative financial instruments. The Group does not hold derivative financial instruments for speculative purposes.

Derivative financial instruments are initially recorded at their fair value on the date of the derivative transaction and are re-measured at their fair value at subsequent balance sheet dates. The resultant gains or losses are recognised in the income statement unless these are designated as effective hedging instruments.

Hedge accounting
At the inception of the hedge relationship, the entity documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Group documents whether the hedging instrument is highly effective in offsetting changes in fair values or cash flows of the hedged item attributable to the hedged risk.

Fair Value Hedges
Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognised in income statement immediately, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk. Hedge accounting is discontinued when the Group revokes the hedge relationship, the hedging instrument or hedged item expires or is sold, terminated, or exercised or no longer meets the criteria for hedge accounting.

Cash flow Hedges
The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges are recorded in the consolidated statements of comprehensive income. The gain or loss relating to the ineffective portion is recognised immediately in the income statement. Amounts recognised in the consolidated statement of comprehensive income are transferred to the income statement when the hedged transaction affects profit or loss, such as when the hedged financial income or financial expense is recognised or when a forecast transaction occurs. When the hedged item is a non-financial asset, the amount recognised in the consolidated statement of comprehensive income is transferred to the carrying amount of the asset when it is recognised. Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated or exercised, or no longer qualifies for hedge accounting. If a hedged transaction is no longer expected to occur, the net cumulative gain or loss recognised in the consolidated statement of comprehensive income is transferred to the income statement.

Hedge of net investment in foreign operation-
For derivative instruments that are designated and qualify as a hedge of a net investment in a foreign operation, the gain or loss is reported in the consolidated statement of comprehensive income as part of the exchange difference on translation of foreign operations to the extent it is effective. Any ineffective portions of net investment hedges are recognised in the income statement immediately. Under a hedge of a net investment, the cumulative gain or loss remains in the consolidated statement of comprehensive income when the hedging instrument expires or is sold, terminated or exercised, or when the hedge no longer qualifies for hedge accounting or the Group revokes designation of the hedge relationship. The cumulative gain or loss is recognised in the income statement as part of the gain / loss on disposal when the net investment in the foreign operation is disposed.

Derivative financial instruments that do not qualify for hedge accounting are marked to market at the financial position date and gains or losses are recognised in the income statement immediately.

Derivatives embedded in other financial instruments or other host contracts are treated as separate derivatives when their risks and characteristics are not closely related to those of host contracts and the host contracts are not carried at fair value with unrealised gains or losses recognised in the income statement.

Impairment:
A financial asset is assessed at each reporting date to determine whether there is any objective evidence that it is impaired. A financial asset is considered to be impaired if objective evidence indicates that one or more events have had a negative effect on the estimated future cash flows of that asset.

An impairment loss in respect of a financial asset measured at amortised cost is calculated as the difference between its carrying amount, and the present value of the estimated future cash flows discounted at the original effective interest rate. An impairment loss in respect of an available-for-sale financial asset is calculated by reference to its fair value.

Significant financial assets are tested for impairment on an individual basis. The remaining financial assets are assessed collectively in groups that share similar credit risk characteristics. All impairment losses are recognised in the consolidated statements of income. Any cumulative loss in respect of an available-for-sale financial asset recognised previously in the consolidated statements of comprehensive income is transferred to the consolidated statements of income on recognition of impairment. An impairment loss is reversed, if the reversal can be related objectively to an event occurring after the impairment loss was recognised. For financial assets measured at amortised cost and available-for-sale financial assets that are debt securities, the reversal is recognised in the consolidated statements of income. For available-for-sale financial assets that are equity securities, the change in fair value is recognised directly in the consolidated statement of comprehensive income.

In respect of trade and other receivables, the Group would provide for impairment losses unless the Company is satisfied that no recovery of the amount owing is possible; at that point the amounts are considered irrecoverable and are written off against the financial asset directly.

Amendment to IAS 23: Borrowing Cost

The amendment clarifies that an entity considers any borrowings made specifically for the purpose of obtaining a qualifying asset as part of the general borrowings, when substantially all of the activities necessary to prepare that asset for its intended use or sale are complete. The amendment is applicable to borrowing costs incurred on or after the beginning of the annual reporting period in which the entity first applies those amendments.
The amendment is effective from 01 January 2019, with earlier application permitted. The Group has applied the amendment prospectively from the current reporting year i.e. for the borrowing costs incurred on or after 01 April 2018.

Based on the Amendment, the Group has now capitalised certain borrowing costs on general borrowings. This has resulted in capitalisation of interest expense of US$78 million for the year ended March 31, 2019 and a corresponding increase in depreciation of US$1 million. The consequent incremental impact on profit for the year net of tax was US$53 million.

The change did not have any significant impact on the Group's consolidated balance sheet and the consolidated statement of cash flows.

Other Amendments

The adoption of IFRIC 22 "Foreign Currency Transactions and Advance Consideration" and other minor changes to IFRS's applicable for the year ended 31 March 2019 did not have a significant impact on the Group's financial statements.

Standards issued but not yet effective

The following standards/amendments to standards have been issued but are not yet effective up to the date of issuance of the Group's Financial Statements. Except specifically disclosed below, the Group is evaluating the requirements of these standards, improvements and amendments and has not yet determined the impact on the financial statements.

IFRS 16: Lease

IFRS 16, Leases, replaces the existing standard on accounting for leases, IAS 17, with effect from 1 April 2019. This standard introduces a single lessee accounting model and requires a lessee to recognise a 'right of use asset' (ROU) and a corresponding 'lease liability' for all leases. Lease costs will be recognised in the income statement over the lease term in the form of depreciation on the ROU asset and finance charges representing the unwinding of the discount on the lease liability. In contrast, the accounting requirements for lessors remain largely unchanged.

The Groups acts as a lessee in lease arrangements mainly involving office premises and other properties. The Group has elected to apply the modified retrospective approach on transition, and accordingly the comparative figures will not be restated.
For contracts in place at this date, the Group will continue to apply its existing definition of leases under current accounting standards ("grandfathering"), instead of reassessing whether existing contracts are or contain a lease at the date of application of the new standard. Further, as permitted by IFRS 16, the Group will not bring leases of low value assets or short-term leases with 12 or fewer months remaining on to balance sheet.

Transition to IFRS 16 does not have a material effect on the Group's Financial Statements.

Other recently issued accounting pronouncements and not effective for the year ended March 31, 2019

Standards not yet effective for the financial statements for the year ended March 31, 2019	Effective for annual periods beginning on or after
IFRIC 23 Uncertainty over Income Tax Treatments	1 January 2019
Amendments to IFRS 9 Prepayment features with Negative Compensation	1 January 2019
Amendments to IAS 28 Long term interests in Associates and Joint Ventures	1 January 2019
Annual improvements to IFRS standards 2015-2017 cycle	1 January 2019
Amendments to IAS 19: Plan Amendment, Curtailment or Settlement	1 January 2019
Amendments to References to the Conceptual Framework in IFRS Standards	1 January 2020
Amendment to IFRS 3 Business Combinations	1 January 2020
Amendments to IAS 1 and IAS 8: Definition of Material	1 January 2020
IFRS 17 Insurance Contracts	1 January 2021

The Group is currently evaluating the impact of these pronouncements.

2(c) SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGMENTS

The preparation of consolidated financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions, that affect the application of accounting policies and the reported amounts of assets, liabilities, income, expenses and disclosures of contingent assets and liabilities at the date of these consolidated financial statements and the reported amounts of revenues and expenses for the years presented. These judgments and estimates are based on management's best knowledge of the relevant facts and circumstances, having regard to previous experience, but actual results may differ materially from the amounts included in the financial statements.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised and future periods affected.

The information about significant areas of estimation uncertainty and critical judgements in applying accounting policies that have the most significant effect on the amounts recognised in the financial statements are as given below:

I. Significant Estimates:
(i) Oil & Gas reserves
Significant technical and commercial judgements are required to determine the Group's estimated oil and natural gas reserves. Oil & Gas reserves are estimated on a proved and probable entitlement interest basis. Proven and probable reserves are estimated using standard recognised evaluation techniques. The estimate is reviewed annually. Future development costs are estimated taking into account the level of development required to produce the reserves by reference to operators, where applicable, and internal engineers.

Net entitlement reserves estimates are subsequently calculated using the Group's current oil price and cost recovery assumptions, in line with the relevant agreements.

Changes in reserves as a result of factors such as production cost, recovery rates, grade of reserves or oil and gas prices could impact the depletion rates, carrying value of assets (refer note 16) and environmental and restoration provisions.

(ii) Carrying value of exploration and evaluation oil and gas assets
The recoverability of a project is assessed under IFRS 6. Exploration assets are assessed by comparing the carrying value to higher of fair value less cost of disposal or value in use, if impairment indicator exists. Change to the valuation of exploration assets is an area of judgement. Further details on the Group's accounting policies on this are set out in accounting policy above. The amounts for exploration and evaluation assets represent active exploration projects. These amounts will be written off to the consolidated income statement as exploration costs unless commercial reserves are established, or the determination process is not completed and there are no indications of impairment. The outcome of ongoing exploration, and therefore whether the carrying value of exploration and evaluation assets will ultimately be recovered, is inherently uncertain.

During the financial year ended 31 March 2018, the Group had recognised impairment reversal (net) against exploration and evaluation oil and gas assets. The details of impairment reversal and the assumptions and sensitivities used are disclosed in note 6. Carrying values of exploration and evaluation assets are disclosed in note 16.

(iii) Carrying value of developing/producing oil and gas assets
Management performs impairment tests on the Group's developing/producing oil and gas assets where indicators of impairment or impairment reversal of previous recorded impairment are identified in accordance with IAS 36.

During the financial year ended 31 March 2018, the Group had recognised impairment reversal of its developing/producing oil and gas assets in Rajasthan. During the current year, an impairment reversal has been recorded in the oil and gas assets in Krishna Godavari (KG) basin. The details of impairment charge/reversal and the assumptions and sensitivities used are disclosed in note 6.

In the current year, the management has reviewed the key assumptions i.e. future production, oil prices, discount to price, Production sharing contract (PSC) life, discount rates, etc. for all of its oil and gas assets. Based on analysis of events that have occurred since then, there did not exist any indication that the assets may be impaired or previously recorded impairment charge may reverse except for the assets in KG basin. Hence, detailed impairment analysis has not been conducted in the current financial year, except for assets in KG basin.

Carrying values of oil & gas assets are disclosed in note 16.

(iv) Mining properties and leases
The carrying value of mining property and leases is arrived at by depreciating the assets over the life of the mine using the unit of production method based on proved and probable reserves. The estimate of reserves is subject to assumptions relating to life of the mine and may change when new information becomes available. Changes in reserves as a result of factors such as production cost, recovery rates, grade of reserves or commodity prices could thus impact the carrying values of mining properties and leases and environmental and restoration provisions.

Management performs impairment tests when there is an indication of impairment. The impairment assessments are based on a range of estimates and assumptions, including:

Estimates/ assumptions	Basis
Future production	proved and probable reserves, resource estimates (with an appropriate conversion factor) considering the expected permitted mining volumes and, in certain cases, expansion projects
Commodity prices	management's best estimate benchmarked with external sources of information, to ensure they are within the range of available analyst forecast
Exchange rates	management best estimate benchmarked with external sources of information
Discount rates	cost of capital risk-adjusted for the risk specific to the asset/ CGU

Details of impairment charge/reversal and the assumptions used and carrying values are disclosed in note 6 and note 16 respectively.

(v) Assessment of Impairment of Goa iron ore mines:
Pursuant to an order passed by the Hon'ble Supreme Court of India on 07 February 2018, the second renewal of the mining leases granted by the State of Goa in 2014-15 to all miners including Vedanta were cancelled. Consequentially all mining operations stopped with effect from 16 March 2018 until fresh mining leases (not fresh renewals or other renewals) and fresh environmental clearances are granted in accordance with the provisions of The Mines and Minerals (Development and Regulation) (MMDR) Act. Significant uncertainty exists over the resumption of mining at Goa under the current leases. The Group had assessed the recoverable value of all its assets and liabilities associated with existing mining leases which led to a non-cash impairment charge in March 2018. There are no significant changes subsequent to the financial year ended 31 March 2018.

Details of this impairment charge and method of estimating recoverable value is disclosed in note 6.

(vi) Restoration, rehabilitation and environmental costs
Provision is made for costs associated with restoration and rehabilitation of mining sites as soon as the obligation to incur such costs arises. Such restoration and closure costs are typical of extractive industries and they are normally incurred at the end of the life of the mine or oil fields. The costs are estimated on an annual basis on the basis of mine closure plans and the estimated discounted costs of dismantling and removing these facilities and the costs of restoration are capitalised as soon as the obligation to incur such costs arises. The provision for decommissioning oil and gas assets is based on the current estimate of the costs for removing and decommissioning producing facilities, the forecast timing and currency of settlement of decommissioning liabilities and the appropriate discount rate.

A corresponding provision is created on the liability side. The capitalised asset is charged to the consolidated income statement through the depreciation over the life of operation of the asset and the provision is increased each period via unwinding the discount on the provision. Management estimates are based on local legislation and/or other agreements. The actual costs and cash outflows may differ from estimates because of changes in laws and regulations, changes in prices, analysis of site conditions and changes in restoration technology. Details of such provision are set out in note 26.

(vii) Provisions and liabilities
Provisions and liabilities are recognised in the period when it becomes probable that there will be a future outflow of funds resulting from past operations or events that can be reasonably estimated. The timing of recognition requires the application of judgement to existing facts and circumstances which may be subject to change especially when taken in the context of the legal environment in India. The actual cash outflows may take place over many years in the future and hence the carrying amounts of provisions and liabilities are regularly reviewed and adjusted to take into account the changing circumstances and other factors that influence the provisions and liabilities. This is set out in note 26.

(viii) The HZL and BALCO call options
The Group had exercised its call option to acquire the remaining 49% interest in BALCO and 29.5% interest in HZL. The Government of India has however, contested the validity of the options and disputed their valuation performed in terms of the relevant agreements the details of which are set out in note 34 (I). In view of the lack of resolution on the options, the non-response to the exercise and valuation request from the Government of India, the resultant uncertainty surrounding the potential transaction and the valuation of the consideration payable, the Group considers the strike price of the options to be at fair value, accordingly, the value of the option would be nil, and hence, the call options have not been recognised in the financial statements.

(ix) Recoverability of deferred tax and other income tax assets
The Group has carry forward tax losses, unabsorbed depreciation and MAT credit that are available for offset against future taxable profit. Deferred tax assets are recognised only to the extent that it is probable that taxable profit will be available against which the unused tax losses or tax credits can be utilised. This involves an assessment of when those assets are likely to reverse, and a judgement as to whether or not there will be sufficient taxable profits available to offset the assets. This requires assumptions regarding future profitability, which is inherently uncertain. To the extent assumptions regarding future profitability change, there can be an increase or decrease in the amounts recognised in respect of deferred tax assets and consequential impact in the consolidated income statement.

Additionally, the Group has tax receivables on account of refund arising on account of past amalgamation and relating to various tax disputes. The recoverability of these receivables involve application of judgement as to the ultimate outcome of the tax assessment and litigations. This pertains to the application of the legislation, which in certain cases is based upon management's interpretation of country specific tax law, in particular India, and the likelihood of settlement. Management uses in-house and external legal professionals to make informed decision (refer note 11(d)).

The details of MAT assets (recognised and unrecognised) are set out in note 11(c).

(x) Copper operations India
In an appeal filed by the Group against the closure order of the Tuticorin Copper smelter by Tamil Nadu Pollution Control Board ("TNPCB"), the appellate authority National Green Tribunal ("NGT") passed an interim order on 31 May 2013 allowing the copper smelter to recommence operations and appointed an Expert Committee to submit a report on the plant operations. Post the interim order, the plant recommenced operations on 23 June 2013. Based on Expert Committee's report on the operations of the plant stating that the plant's emission were within prescribed standards and based on this report, NGT ruled on 08 August 2013 that the Copper smelter could continue its operations and recommendations made by the Expert Committee be implemented in a time bound manner. The Group has implemented all of the recommendations. TNPCB has filed an appeal against the order of the NGT before the Supreme Court of India.

In the meanwhile, the application for renewal of Consent to Operate (CTO) for existing copper smelter, required as per procedure established by law was rejected by TNPCB in April 2018. Vedanta Limited has filed an appeal before the TNPCB Appellate Authority challenging the Rejection Order. During the pendency of the appeal, there were protests by a section of local community raising environmental concerns and TNPCB vide its order dated 23 May 2018 ordered closure of existing copper smelter plant with immediate effect. Further, the Government of Tamil Nadu, issued orders dated 28 May 2018 with a direction to seal the existing copper smelter plant permanently. The company believes these actions were not taken in accordance with the procedure prescribed under applicable laws.

Subsequently, the Directorate of Industrial Safety and Health passed orders dated 30 May 2018, directing the immediate suspension and revocation of the Factory License and the Registration Certificate for the existing smelter plant. Separately, the company has filed a fresh application for renewal of the Environmental Clearance for the proposed Copper Smelter Plant 2 (Expansion Project) dated 12 March 2018 before the Expert Appraisal Committee of the MoEF wherein a sub-committee was directed to visit the Expansion Project site prior to prescribing the Terms of Reference.

In the meantime, the Madurai Bench of the High Court of Madras in a Public Interest Litigation held vide its order dated 23 May 2018 that the application for renewal of the Environmental Clearance for the Expansion Project shall be processed after a mandatory public hearing and in the interim, ordered the company to cease construction and all other activities on site for the proposed Expansion Project with immediate effect. The Ministry of Environment and Forests (MoEF) has delisted the expansion project since the matter is sub judice. Separately, SIPCOT vide its letter dated 29 May 2018, cancelled 342.22 acres of the land allotted for the proposed Expansion Project. Further the TNPCB issued orders on 07 June 2018 directing the withdrawal of the Consent to Establish (CTE) which was valid till 31 March 2023.

The company has approached Madras High Court by way of writ petition challenging the cancellation of lease deeds by SIPCOT pursuant to which an interim stay has been granted. The company has also filed Appeals before the TNPCB Appellate Authority challenging withdrawal of CTE by the TNPCB, the matter is pending for adjudication.

The company has appealed this before the National Green Tribunal (NGT). NGT vide its order on 15 December 2018 has set aside the impugned orders and directed the TNPCB to pass fresh orders for renewal of consent and authorisation to handle hazardous substances, subject to appropriate conditions for protection of environment in accordance with law. The State of Tamil Nadu and TNPCB approached Supreme Court in Civil Appeals on 02 January 2019 challenging the judgment of NGT dated 15 December 2018 and the previously passed judgment of NGT dated 08 August 2013. The Supreme Court vide its judgment dated 18 February 2019 set aside the judgments of NGT dated 15 December 2018 and 08 August 2013 on the basis of maintainability alone.

The company has also filed a writ petition before Madras High Court challenging the various orders passed against the company in 2018 and 2013. The case was heard on 01 March 2019 wherein the company pressed for interim relief for care and maintenance of the plant. The Madras High Court has directed the State of Tamil Nadu and TNPCB to file their counter to our petition for interim relief.

The company is taking appropriate legal measures to address the matters.

Even though there can be no assurance regarding the final outcome of the process and the timing of such process in relation to the approval for the expansion project, as per the company's assessment, it is in compliance with the applicable regulations and expects to get the necessary approvals in relation to the existing operations and the expansion project and is not expecting any material impairment loss on this account. The carrying value of the assets under operation and under expansion as at 31 March 2019 is US$290 million and US$147 million respectively.

The company has carried out an impairment analysis considering the key variables and concluded that there exists no impairment. The company has done an additional sensitivity with a delay in commencement of operations both at the existing and expansion plants by three years and noted that the recoverable amount of the assets would still be in excess of their carrying values.

(xi) Assessment of impairment at Konkola Copper Mines (KCM)

The KCM operations in Zambia have been experiencing lower equipment availability, throughput constraints and other operational challenges for quite some time which led to the production ramp-up, specifically at the Konkola mine, during the year being lower than expected.

Additionally, changes in fiscal regime during the year including imposition of customs duty on imported concentrate has further impacted the Company's ability to procure copper concentrate from outside Zambia, which is pertinent for optimised concentrate blending at smelter and generate enough acid from its dedicated 1,850 tpd acid facility at smelter for its integrated operation at Tail Leaching Plant (TLP).

Due to these factors, the Group has reviewed the carrying value of its property, plant and equipment at KCM as at balance sheet date, estimated the recoverable amounts of the assets and concluded that no impairment was required as the recoverable amount (estimated based on fair value less costs of disposal) exceeded the carrying amount as at 31 March 2019. Refer to 2(c)(I)(iv) for key estimates and assumptions. Additionally, the model assumes as a key assumption, the production ramp-up over a period of next four years through successful implementation of development plans at the Konkola mine and the associated capex and funding assumptions.

The Group has also carried out a sensitivity analysis on key variables like movement in copper prices, discount rate and delayed production ramp-up. Based on the sensitivity analysis carried out for each individual assumption while keeping other assumptions as constant, the recoverable amount is still expected to exceed the carrying value. Mining companies have made representations to the Government for roll back of the additional taxes. In the absence of this, which is a critical requirement from a future investment perspective in key identified areas, coupled with non-achievement of planned production ramp-up, there could be significant risk of impairment.

The carrying value of assets as at 31 March 2019 is US$1,513 million (31 March 2018: US$1,576 million).

(xii) PSC Extension
Rajasthan Block

On 26 October 2018, the Government of India (GoI), acting through the Directorate General of Hydrocarbons (DGH) has granted its approval for a ten-year extension of the Production Sharing Contract (PSC) for the Rajasthan Block (RJ), with effect from 15 May 2020 subject to certain conditions. The GoI has granted the extension under the Pre-NELP Extension Policy, the applicability whereof to PSC for RJ is sub-judice and pending before the Hon'ble Delhi High Court. To address two of the conditions stated by DGH, Vedanta Limited has taken the following steps:

- Submission of Audited Accounts and End of year statement: Vedanta Limited and one of the joint venture partners have divergent views on the cost oil entitlement and therefore the End of Year statement for the year ended March 31, 2018 and Investment Multiple as at 31 March 18 could not be finalised. To resolve this, the Company has initiated arbitration proceedings against the joint venture partner. Consequentially, profit petroleum pertaining to the said Block for the year ended March 31, 2019 and applicable Investment Multiple calculated based on management's cost oil computation (resulting into Government's share of profit petroleum @ 40% for DA-1 & DA-2 and @20% for DA-3 for FY2019), remains provisional. The computation is after considering relevant independent legal advice.
- Profit Petroleum: DGH has raised a demand for the period upto 31 March 2017 for Government's additional share of Profit Oil based on its computation of disallowance of cost incurred over the initially approved Field Development Plan (FDP) of pipeline project and retrospective allocation of certain common costs between Development Areas (DAs) of Rajasthan Block. The company believes that it has sufficient as well as reasonable basis (pursuant to PSC provisions & approvals) for having claimed such costs and for allocating common costs between different DAs and has responded to the government accordingly. Group's view is also supported by an independent legal opinion.

Pursuant to the aforesaid approval of 26 October 2018, the Group has recomputed its reserves till 2030 and has reclassified exploration costs of US$1,994 million to property plant and equipment. This has led to a reduction in depletion charge of US$126 million for the period from 26 October 2018 till 31 March 2019.

Ravva Block
The Government of India has granted its approval for a ten-year extension of PSC for Ravva Block with effect from 28 October 2019, subject to certain conditions. The extension has been granted with a 10% increase in GOI share of profit oil. Management has reviewed the conditions and is confident of fulfilling or disposing of such conditions.

The Group does not expect any material adjustment to the financial statements on account of the aforesaid matters.

II. Significant Judgements:
(i) Assessment of IFRIC 4- Determining whether an arrangement contains a lease
The Group has ascertained that the Power Purchase Agreement (PPA) entered into between one of the Subsidiary and a State Grid qualifies to be an operating lease under IAS 17 "Leases". Accordingly, the consideration receivable under the PPA relating to recovery of capacity charges towards capital cost have been recognised as operating lease rentals and in respect of variable cost that includes fuel costs, operations and maintenance etc. is considered as revenue from sale of products/services.

Significant judgement is required in segregating the capacity charges due from State Grid, between fixed and contingent payments. The Group has determined that since the capacity charges under the PPA are based on the number of units of electricity made available by its Subsidiary which would be subject to variation on account of various factors like availability of coal and water for the plant, there are no fixed minimum payments under the PPA, which requires it to be accounted for on a straight-line basis. The contingent rents recognised are disclosed in note 33.

(ii) Contingencies
In the normal course of business, contingent liabilities may arise from litigation, taxation and other claims against the Group. A tax provision is recognised when the Group has a present obligation as a result of past events, and it is probable that the Group will be required to settle that obligation.

Where it is management's assessment that the outcome cannot be reliably quantified or is uncertain the claims are disclosed as contingent liabilities unless the likelihood of an adverse outcome is remote. Such liabilities are disclosed in the notes but are not provided for in the financial statements.

When considering the classification of a legal or tax cases as probable, possible or remote there is judgement involved. This pertains to the application of the legislation, which in certain cases is based upon management's interpretation of country specific applicable law, in particular India, and the likelihood of settlement. Management uses in-house and external legal professionals to make informed decision.

Although there can be no assurance regarding the final outcome of the legal proceedings, the Group does not expect them to have a materially adverse impact on the Group's financial position or profitability. These are set out in note 33.

(iii) Revenue recognition and receivable recovery in relation to the power division
In certain cases, the Group's power customers are disputing various contractual provisions of Power Purchase Agreements (PPA). Significant judgement is required in both assessing the tariff to be charged under the PPA in accordance with IFRS 15 and to assess the recoverability of withheld revenue currently accounted for as receivables.

In assessing this critical judgment management considered favorable external legal opinions the Group has obtained in relation to the claims and favorable court judgements in the related matter. In addition the fact that the contracts are with government owned companies implies the credit risk is low. Refer note 18.

(iv) Special items
Special items are those items that management considers, by virtue of their size or incidence (including but not limited to impairment charges and acquisition and restructuring related costs), should be disclosed separately to ensure that the financial information allows an understanding of the underlying performance of the business in the year, so as to facilitate comparison with prior periods. Also, tax charges related to Special items and certain one-time tax effects are considered Special. Such items are material by nature or amount to the year's result and require separate disclosure in accordance with IFRS.

The determination as to which items should be disclosed separately requires a degree of judgement. The details of special items is set out in note 6.

3. BUSINESS COMBINATION AND OTHERS
a) Electrosteel Steels Limited
On 4 June 2018, the Group, through its subsidiary Vedanta Star Limited (VSL) acquired management control over Electrosteel Steels Limited (ESL) as the previous Board of Directors of ESL was reconstituted on that date. Further, on 15 June 2018, pursuant to the allotment of shares to VSL, the Group holds 90% of the paid-up share capital of ESL through VSL. The acquisition will complement the Group's existing Iron Ore business as the vertical integration of steel manufacturing capabilities has the potential to generate significant efficiencies. ESL was admitted under corporate insolvency resolution process in terms of the Insolvency and Bankruptcy Code, 2016 of India. The financial results of ESL from the date of acquisition to 31 March 2019 have been included in the Consolidated Financial Statements of the Group.

The fair value of the identifiable assets and liabilities of ESL as at the date of the acquisition were as follows:

(US$ million)

Particulars	Fair Value
Property, Plant and Equipment	718
Non-current tax assets	1
Other non-current assets	8
Non-current assets	**727**
Inventories	122
Trade and other receivables	57
Short-term investments	46
Cash and cash equivalents	36
Current Assets	261
Total Assets (A)	**988**
Liabilities	
Borrowings	1
Trade and other payables	168
Provisions (Non-Current)	2
Total Liabilities (B)	**171**
Net Assets (C=A-B)	**817**
Satisfied by:	
Total Cash Consideration (D)	**788**
Non-Controlling interest on acquisition (10% of net assets after adjustment of borrowings from immediate parent (VSL) of US$527 million) (E)	29
Bargain Gain/Goodwill (C-D-E)	-
Acquisition costs recognised in Consolidated Income Statement	**(3)**

Since the date of acquisition, ESL has contributed US$600 million and US$40 million to the Group revenue and profit before taxation respectively for the year ended 31 March 2019. If ESL had been acquired at the beginning of the year, the Group revenue would have been US$14,127 million and the profit before taxation of the Group would have been US$1,092 million.

The gross carrying amount of trade and other receivables equals the fair value of trade and other receivables.
None of the trade and other receivables was impaired and the full contractual amounts were expected to be realised. Property has been valued using the Market approach - Sales comparison method (SCM). This method models the behavior of the market by comparing with similar properties that have been recently sold/ rented or for which offers to purchase/ rentals have been made. Plant and equipment have been valued using the cost approach - Depreciated replacement cost (DRC) method. For estimating DRC, gross current replacement cost is depreciated in order to reflect the value attributable to the remaining portion of the total economic life of the plant and equipment. The method takes into account the age, condition, depreciation, obsolescence (economic and physical) and other relevant factors, including residual value at the end of the plant and equipment's economic life.

Non-controlling interest has been measured at the non-controlling interest's proportionate share of ESL's identifiable net assets.

(b) Avanstrate Inc.
(a) On 28 December 2017, the Group acquired 51.63% equity stake in AvanStrate Inc. (ASI) for a cash consideration of JPY 1 million ($ 0.01 million) and acquired debts for JPY 17,058 million (US$151 million). Additionally, a loan of JPY 815 million ($7 million) was extended to ASI. ASI is involved in manufacturing of glass substrate. Provisional fair values that were determined as at 31 March 2018 for consolidation were finalised during the current year.

As per the shareholding agreement (SHA) entered with the other majority shareholder holding 46.6% in ASI, the Group has call option, conversion option to convert part of its debt given to ASI into equity of ASI as well as it has issued put option to the other majority shareholder. These are exercisable as per the terms mentioned in the SHA.

The final fair value of the identifiable assets and liabilities of ASI as adjusted for measurement period adjustments as at the date of the acquisition were as follows. The comparative year amounts have been restated accordingly.

(US$ million)

Particulars	Provisional Fair Value	Fair Value Adjustments	Fair Value at Acquisition
Property, Plant and Equipment	242	-	242
Intangible assets	32	-	32
Deferred tax assets	20	-	20
Other non-current assets	6	-	6
Non-Current Assets	**300**	**-**	**300**
Inventories	22	-	22
Trade and other receivables	36	-	36
Cash and cash equivalents	24	-	24
Current Assets	82	-	82
Total Assets (A)	**382**	**-**	**382**
Borrowings (excluding borrowings from immediate parent)	99	-	99
Deferred tax liabilities	78	6	84
Trade and other payables	23	-	23
Total Liabilities (B)	**200**	**6**	**206**
Net Assets (C=A-B)	**182**	**(6)**	**176**
Satisfied by:			
Cash Consideration paid for 51.63% stake & Debt acquired	158	-	158
Less: Fair Value of Conversion option asset on debt acquired net of the fair value of Put option liability towards acquisition of Non-controlling interests	-	(17)	(17)
Total Purchase Consideration (D)	**158**	**(17)**	**141**
Non-Controlling interest on acquisition (48.37% of net assets after adjustment of fair value of borrowings from immediate parent of US$141 million) (E)	12	5	17
Bargain Gain (C-D-E)	**12**	**6**	**18**
Acquisition costs recognised in Consolidated Income Statement	**(7)**	**-**	**(7)**

The gross carrying amount of trade and other receivables equals the fair value of trade and other receivables. None of the trade and other receivables was impaired and the full contractual amounts were expected to be realised. Property, plant and equipment have been valued using cost approach - cost of reproduction new (CRN) method. For estimating CRN, appropriate indices were used to develop trend factors that have been applied on the acquisition/historical costs of the different assets over the period during which the asset has been commissioned or in other words life spent. The estimated CRN was further adjusted for applicable physical deterioration to arrive at fair value. The physical deterioration was based on the estimated age and remaining useful life. Fair value of assumed debt was determined using yield-method, wherein, the expected cash flows including interest component and principal repayments have been discounted at an appropriate market interest rate.

Non-controlling interest has been measured at the non-controlling interest's proportionate share of ASI's identifiable net assets.

(c) Acquisition of new hydrocarbon blocks

In August, 2018, Vedanta Limited was awarded 41 hydrocarbon blocks out of 55 blocks auctioned under the open acreage licensing policy (OALP) by Government of India (GOI). The blocks awarded to Vedanta Limited comprise of 33 onshore and 8 offshore blocks. Vedanta Limited will share a specified proportion of the net revenue from each block with GOI and has entered into 41 separate revenue sharing contracts (RSC) on 1 October 2018.

The bid cost of US$551 million represents Vedanta Limited's total committed capital expenditure on the blocks for the committed work programs during the exploration phase. Vedanta Limited has provided bank guarantees for minimum work programme commitments amounting to US$309 million for the 41 exploration blocks. These have been disclosed in note 33.

4. SEGMENT INFORMATION

The Group is a diversified natural resources Group engaged in exploring, extracting and processing minerals and oil and gas. The Group produces zinc, lead, silver, copper, aluminium, iron ore, oil and gas and commercial power and have a presence across India, Zambia, South Africa, Namibia, UAE, Ireland, Australia, Liberia, Japan, South Korea and Taiwan. The Group is also in the business of port operations and manufacturing of glass substrate and steel.

The Group's reportable segments defined in accordance with IFRS 8 are as follows:

- Zinc- India
- Zinc-International
- Oil & Gas
- Iron Ore
- Copper-India/Australia
- Copper-Zambia
- Aluminium
- Power

'Others' segment mainly comprises of port/berth, steel and glass substrate business and those segments which do not meet the quantitative threshold for separate reporting.

Management monitors the operating results of reportable segments for the purpose of making decisions about resources to be allocated and for assessing performance. Segment performance is evaluated based on the EBITDA of each segment. Business segment financial data includes certain corporate costs, which have been allocated on an appropriate basis. Inter-segment sales are charged based on prevailing market prices except for power segment sales to aluminium segment amounting to US$10 million for the year ended 31 March 2019 (31 March 2018: US$21 million), which were at cost.

The following tables present revenue and profit information and certain asset and liability information regarding the Group's reportable segments for the years ended 31 March 2019 and 31 March 2018. Items after operating profit are not allocated by segment.

Notes to the Financial Statements continued

for the year ended 31 March 2019

(a) Reportable segments

Year ended 31 March 2019

(US$ million)

	Zinc-India	Zinc-International	Oil and gas	Iron Ore	Copper-India*/ Australia	Copper-Zambia	Aluminium	Power	Others	Elimination	Total operations
REVENUE											
Sales to external customers	2,955	392	1,892	415	1,537	1,025	4,180	924	711	-	14,031
Inter-segment sales	-	-	-	1	0	60	3	10	7	(81)	-
Segment revenue**	2,955	392	1,892	416	1,537	1,085	4,183	934	718	(81)	14,031
Segment Result											
EBITDA(1)	1,516	100	1,100	90	(36)	(63)	316	219	151	-	3,393
Depreciation and amortisation(2)	(268)	(61)	(611)	(35)	(21)	(102)	(240)	(86)	(58)	-	(1,482)
Operating profit / (loss) before special items	1,248	39	489	55	(57)	(165)	76	133	93	-	1,911
Investment revenue											480
Finance costs											(1,267)
Other gains and (losses) [net]											(75)
Special items											47
PROFIT BEFORE TAXATION											1,096
Segments assets	2,704	872	3,983	547	1,074	1,844	7,432	2,635	1,270	-	22,361
Financial asset investments											707
Deferred tax assets											778
Short-term investments											4,164
Cash and cash equivalents											1,133
Tax assets											505
Others											133
Total Assets											29,781
Segment liabilities	733	197	1,421	190	585	578	2,909	243	207	-	7,063
Borrowings											15,980
Current tax liabilities											61
Deferred tax liabilities											776
Others											648
Total Liabilities											24,528
Other segment information											
Additions to property, plant and equipment, exploration and evaluation assets and intangible assets***	522	228	550	5	39	39	245	8	776	-	2,412
Impairment reversal(3)	-	-	38	-	-	-	-	-	-	-	38

Year ended 31 March 2018

(US$ million)

	Zinc-India	Zinc-International	Oil and gas	Iron Ore	Copper-India*/ Australia	Copper-Zambia	Aluminium	Power	Others	Elimination	Total operations
REVENUE											
Sales to external customers	3,354	535	1,480	481	3,828	1,181	3,541	854	40	-	15,294
Inter-segment sales	-	-	-	4	0	102	4	23	2	(135)	-
Segment revenue**	**3,354**	**535**	**1,480**	**485**	**3,828**	**1,283**	**3,545**	**877**	**42**	**(135)**	**15,294**
Segment Result											
EBITDA(1)	1,902	220	849	48	162	73	414	258	37	-	3,963
Depreciation and amortisation(2)	(233)	(28)	(461)	(69)	(25)	(112)	(257)	(75)	(11)	-	(1,271)
Operating profit/ (loss) before special items	1,669	192	388	(21)	137	(39)	157	183	26	-	2,692
Investment revenue											465
Finance costs											(1,239)
Other gains and (losses) [net]											(16)
Special items											586
PROFIT BEFORE TAXATION											**2,488**
Segments assets	2,575	862	3,706	613	1,447	2,017	7,440	2,950	425	-	22,035
Financial asset investments											25
Deferred tax assets											917
Short-term investments											4,808
Cash and cash equivalents											798
Tax assets											523
Others											132
Total Assets											**29,238**
Segment liabilities	638	170	851	250	1,368	758	2,061	268	30	-	6,394
Borrowings											15,194
Current tax liabilities											54
Deferred tax liabilities											749
Others											307
Total Liabilities											**22,698**
Other segment information											
Additions to property, plant and equipment, exploration and evaluation assets and intangible assets***	473	255	163	22	84	27	221	11	280		1,536
Impairment reversal/ (charge)(3)	-	-	1,448	(759)	-	-	-	-	-	-	689

(1) EBITDA is a non-IFRS measure and represents earnings before special items, depreciation, amortisation, other gains and losses, interest and tax.

(2) Depreciation and amortisation is also provided to the chief operating decision maker on a regular basis.

(3) Included under special items (Note 6).

* The annual consent to operate (CTO) under the Air and Water Acts for copper smelters in India was rejected by the State Pollution Control Board on 09 April 2018 for want of further clarification and consequently the operations have presently been suspended. The matter is presently pending in High Court (refer note 2(c)(I)(x)).

** Export incentive has been reclassified from 'segment revenue' to 'other operating income'. Refer Note 1 (b)

*** Including acquisition through business combination

(b) Geographical segmental analysis

The Group's operations are located in India, Zambia, Namibia, South Africa, UAE, Liberia, Ireland, Australia, Japan, South Korea and Taiwan. The following table provides an analysis of the Group's revenue by region in which the customer is located, irrespective of the origin of the goods.

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
India	8,643	8,212
China	1,089	2,181
UAE	164	613
Malaysia	696	826
Others	3,439	3,462
Total	14,031	15,294

The following is an analysis of the carrying amount of non-current assets, excluding deferred tax assets, derivative financial assets, financial asset investments and other non-current financial assets analysed by the geographical area in which the assets are located:

(US$ million)

	Carrying amount of non-current assets	
	As at 31 March 2019	As at 31 March 2018
India	16,094	16,045
Zambia	1,534	1,624
Namibia	144	171
South Africa	605	570
Taiwan	176	188
Others	147	130
Total	18,700	18,728

Information about major customer

No customer contributed 10% or more to the Group's revenue during the year ended 31 March 2019 and 31 March 2018.

Disaggregation of revenue

Below table summarises the disaggregated revenue from contracts with customers:

(US$ million)

Particulars	Year ended 31 March 2019
Zinc Metal	2,437
Lead Metal	563
Silver Bars	367
Oil	1,809
Gas	75
Iron ore	99
Pig Iron	294
Metallurgical coke	8
Copper Products	2,353
Aluminium Products	4,017
Power	682
Steel Products	600
Others	624
Revenue from contracts with customers	13,928
Revenue from contingent rents (refer note 33E(ii))	242
Gains/(losses) on provisionally priced contracts (refer note 5)	(139)
Total Revenue	14,031

5. TOTAL REVENUE

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Sale of products (including excise duty)	**13,758**	15,188
Less: Excise duty	-	(164)
Sale of products (net of excise duty)	**13,758**	15,024
Sale of services	**31**	31
Revenue from contingent rents (refer note 33E(ii))	**242**	239
Total Revenue	**14,031**	**15,294**

Revenue from sale of products and from sale of services for the year ended March 31, 2019 comprises of revenue from contracts with customers of US$13,928 million and a net loss on mark-to-market of US$139 million on account of gains/ losses relating to sales that were provisionally priced as at 31 March 2018 with the final price settled in the current year, gains/ losses relating to sales fully priced during the year, and marked to market gains/ losses relating to sales that were provisionally priced as at 31 March 2019. It further includes US$668 million for which contract liabilities existed at the beginning of the year.

Revenue from sale of products are recorded at a point in time and those from sale of services and are recognised over a period of time.

6. SPECIAL ITEMS

(US$ million)

	Year ended 31 March 2019			Year ended 31 March 2018		
	Special items	Tax effect of Special items	Special items after tax	Special items	Tax effect of Special items	Special items after tax
Reversal of provision of DMF[1]	-	-	-	46	(16)	30
Gratuity- change in limits[2]	-	-	-	(13)	3	(10)
Gross profit special items	-	-	-	33	(13)	20
Impairment reversal of oil and gas assets[3]	38	(13)	25	1,448	(570)	878
Impairment of iron ore assets[4]	-	-	-	(759)	225	(534)
Total impairment reversal/ (charge) (net)	38	(13)	25	**689**	**(345)**	**344**
Loss on unusable assets under construction- Aluminium[5]	-	-	-	(39)	14	(25)
Operating special items	38	(13)	25	683	(344)	339
Financing special items[6]	9	(3)	6	(108)	6	(102)
Bargain gain net of acquisition cost[7]	-	-	-	11	-	11
Special items	47	(16)	31	**586**	**(338)**	**248**

1. During the year ended 31 March 2018, the Group had recognised the reversal of provisions of US$46 million relating to contribution to the District Mineral Foundation. Effective 12 January 2015, the Mines and Minerals Development and Regulation Act, 1957 prescribed the establishment of the District Mineral Foundation (DMF) in any district affected by mining related operations. The provisions required contribution of an amount equivalent to a percentage of royalty not exceeding one-third thereof, as may be prescribed by the Central Government of India. The rates were prescribed on 17 September 2015 for minerals other than coal, lignite and sand and on 20 October 2015 for coal, lignite and sand as amended on 31 August 2016. The Supreme Court order dated 13 October 2017 had determined the prospective applicability of the contributions from the date of the notification fixing such rate of contribution and hence DMF would be effective;

a) for minerals other than coal, lignite and sand from the date when the rates were prescribed by the Central Government; and;

b) for coal, lignite and sand, DMF would be effective from the date when the rates were prescribed by the Central Government of India or from the date on which the DMF was established by the State Government by a notification, whichever is later.

Pursuant to the aforesaid order, the Group had recognised a reversal of DMF provision for the period for which DMF is no longer leviable.

2. The Indian subsidiaries of the Company participate in a defined benefit plan (the "Gratuity Plan") covering certain categories of employees. In a few of these companies, the maximum liability was capped at the statutory prescribed limit of INR 1 million (US$0.02 million). Consequent to the increase in the statutory limit to INR 2 million (US$0.03 million), the increase in provision representing past service cost had been recognised as a special item.

3. During the year, the Group has recognised net impairment reversal of US$38 million in respect of Oil & Gas Block KG-ONN-2003/1 (CGU) on booking of commercial reserves and subsequent commencement of commercial production. The impairment reversal has been recorded against Oil & Gas producing facilities. The recoverable amount of the Group's share in KG-ONN-2003/1 (CGU) was determined to be US$30 million.

The recoverable amount of the KG-ONN-2003/1 CGU was determined based on the fair value less costs of disposal approach, a level-3 valuation technique in the fair value hierarchy, as it more accurately reflects the recoverable amount based on our view of the assumptions that would be used by a market participant. This is based on the cash flows expected to be generated by the projected oil and natural gas production profiles up to the expected dates of cessation of production sharing contract (PSC)/cessation of production from each producing field based on the current estimates of reserves and risked resources. Reserves assumptions for fair value less costs of disposal tests consider all reserves that a market participant would consider when valuing the asset, which are usually broader in scope than the reserves used in a value-in-use test. Discounted cash flow analysis used to calculate fair value less costs of disposal uses assumption for short-term oil price of US $ 62 per barrel for the year ended March 31, 2019 and scales upto long term nominal price of US $ 65 per barrel by year ended March 31, 2022 derived from a consensus of various analyst recommendations. Thereafter, these have been escalated at a rate of 2.5%

per annum. The cash flows are discounted using the post-tax nominal discount rate of 11.8% derived from the post-tax weighted average cost of capital. The sensitivities around change in crude price and discount rate are not material to the financial statements.

During the year ended 31 March 2018, the Group had recognised net impairment reversal of US$1,448 million on its assets in the oil and gas segment comprising of:

a) reversal of previously recorded impairment charge of US$1,465 million relating to Rajasthan oil and gas block ('CGU') mainly following the progress on key Growth Projects expected to result in the enhanced recovery of resources in a commercially viable manner leading to a higher forecast of oil production and adoption of an integrated development strategy for various projects leading to savings in cost. Of this reversal, US$500 million reversal has been recorded against oil and gas properties and US$965 million reversal has been recorded against exploratory and evaluation assets. The recoverable amount of the CGU, US$2,514 million, was determined based on the fair value less costs of disposal approach, a Level-3 valuation technique in the fair value hierarchy, as it more accurately reflects the recoverable amount based on our view of the assumptions that would be used by a market participant. This is based on the cash flows expected to be generated by the projected oil and natural gas production profiles up to the expected dates of cessation of production sharing contract (PSC)/ cessation of production from each producing field based on current estimates of reserves and risked resources. Reserves assumptions for fair value less costs of disposal discounted cash flow tests consider all reserves that a market participant would consider when valuing the asset, which are usually broader in scope than the reserves used in a value-in-use test. Discounted cash flow analysis used to calculate fair value less costs of disposal is based on assumption for oil price of US$62 per barrel for FY2019 and scales up to the long term nominal price of US$65 per barrel over the next three years thereafter derived from a consensus of various analyst recommendations. Thereafter, these have been escalated at a rate of 2.5% per annum. The cash flows are discounted using the post-tax nominal discount rate of 10.1% derived from the post-tax weighted average cost of capital after factoring in the risks ascribed to PSC extension including successful implementation of key Growth Projects. Based on the sensitivities carried out by the Group, change in crude price assumptions by US$1/ bbl and changes to discount rate by 0.5% would lead to a change in recoverable value by US$64 million and US$53 million respectively.

b) Impairment charge of US$17 million representing the carrying value of assets relating to exploratory wells in Block PR-OSN-2004/1 which was relinquished during the year ended 31 March 2018.

4. During the year ended 31 March 2018, the Group had recognised an impairment charge of US$759 million as against the net carrying value of US$865 million on its iron ore assets in Goa in the Iron Ore segment. Pursuant to an order passed by the Hon'ble Supreme Court of India on 7 February 2018, the second renewal of the mining leases granted by the State of Goa in 2014–15 to all miners including Vedanta were cancelled. Consequently, all mining operations stopped with effect from 16 March 2018 until fresh mining leases (not fresh renewals or other renewals) and fresh environmental clearances are granted in accordance with the provisions of The Mines and Minerals (Development and Regulation) (MMDR) Act.

Significant uncertainty exists over the resumption of mining at Goa under the current leases. The Group had assessed the recoverable value of all its assets and liabilities associated with existing mining leases which led to a non-cash impairment charge in March 2018. The recoverable value of the mining reserve (grouped under 'mining property and leases') was been assessed as Nil, as there is no reasonable certainty towards re-award of these mining leases. Similarly, upon consideration of past precedence, the provision for restoration and rehabilitation with respect to these mines has been assessed as Nil, as the Group believes that the same would be carried out by the future successful bidder at the time of mine closure. The net recoverable value of other assets and liabilities was assessed at US$114 million based on the fair value less cost of sales methodology using a Level 3 valuation technique. The fair value was determined based on the estimated selling price of the individual assets using depreciated replacement cost method.

5. During the year ended 31 March 2018, the Group had recognised a loss of US$39 million relating to certain items of capital work-in-progress at the aluminium operations, which were no longer expected to be used.

6. During the year ended 31 March 2019, the Group has partly reversed the provision for interest of US$9 million for dues towards SSNP pursuant to the Honourable Supreme Court of India order. A charge of US$17 million in this matter was recognised pursuant to an unfavourable arbitration order during the year ended 31 March 2018.

Additionally during the year ended 31 March 2018, the Group had recognised US$91 million loss as financing special items arising on the bond buybacks completed during the year.

7. On 28 December 2017, the Group through its wholly owned subsidiary, acquired 51.6% equity stake in AvanStrate Inc. (ASI) for a cash consideration of JPY 1 million ($ 0.01 million) and acquired debts for JPY 17,058 million (US$151 million) and incurred acquisition expenses of US$7 million. Additionally, a loan of JPY 815 million (US$7 million) was extended to ASI. The transaction was accounted for on a provisional basis in the financial statements for the year ended 31 March 2018 under IFRS 3 and the resultant bargain purchase gain, net of US$7 million of acquisition expenses, was recorded in the consolidated income statement. Provisional fair values that were determined as at 31 March 2018 for consolidation were finalised during the current year and consequentially amounts for the year ended March 31, 2018 have been restated (Refer note 3(b)).

7. INVESTMENT REVENUE

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Fair value gain on financial assets held for trading/ fair value through profit or loss (FVTPL)(1)	265	258
Interest Income:		
Interest income- financial assets held for trading/FVTPL	129	108
Interest income- bank deposits at amortised cost	23	21
Interest income- loans and receivables at amortised cost	31	38
Interest income- others	17	34
Dividend Income:		
Dividend Income- available-for-sale investments/investments held at FVOCI	0	0
Dividend income- financial assets held for trading/ FVTPL	6	4
Foreign exchange gain (net)	27	2
Net loss arising on qualifying hedges and non-qualifying hedges	(18)	-
Total	**480**	**465**

(1) Includes mark to market gain of US$137 mn relating to structured investment. (Refer note 35)

8. FINANCE COSTS

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Interest expense – financial liabilities at amortised cost	1,295	1,204
Other finance costs (including bank charges)	69	68
Total interest cost	**1,364**	**1,272**
Unwinding of discount on provisions (note 26)	13	13
Net interest on defined benefit arrangements	9	8
Special items (note 6)	(9)	108
Capitalisation of finance costs/borrowing costs (note 16)	(119)	(54)
Total	**1,258**	**1,347**

All borrowing costs are capitalised using rates based on specific borrowings and general borrowings with the interest rate of 8.0% per annum for the year ended 31 March 2019.

9. OTHER GAINS AND (LOSSES) (NET)

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Foreign exchange loss (net)	(65)	(11)
Change in fair value of financial liabilities measured at fair value	(1)	(1)
Net (loss)/ gain arising on qualifying hedges and non-qualifying hedges	(9)	(4)
Bargain gain net of acquisition cost (note 6)	-	11
Total	(75)	**(5)**

10(a). PROFIT/ (LOSS) FOR THE YEAR HAS BEEN STATED AFTER CHARGING/ (CREDITING):

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Depreciation & amortisation	1,482	1,271
Costs of inventories recognised as an expense	4,182	5,533
Auditor's remuneration for audit services (note 37)	3	3
Research and development	1	1
Net Loss/ (profit) on disposal of Property, plant and equipment	9	(1)
Provision for receivables*	(0)	76
Impairment of assets	-	693
Impairment reversal/(charge) of oil & gas assets	(38)	(1,448)
Employee costs (note 28)	577	540

* Includes provision of US$66 million relating to iron ore business recognised as special items during the year ended 31 March 2018. (Refer note 6).

10(b). EXCHANGE GAIN/ (LOSS) RECOGNISED IN THE CONSOLIDATED INCOME STATEMENT:

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Cost of sales	(79)	(40)
Investment revenue	9	2
Other gains and losses	(74)	(15)
Total	(144)	**(53)**

11. TAX

(a) Tax charge/ (credit) recognised in Consolidated Income Statement (including on special items)

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Current tax:		
Current tax on profit for the year	554	516
Charge/(credit) in respect of current tax for earlier years	(1)	6
Total current tax (a)	553	522
Deferred tax		
Origination and reversal of temporary differences	103	140
Charge in respect of deferred tax for earlier years	-	13
Charge in respect of Special items (note 6)	16	338
Total deferred tax (b)	119	491
Net tax expense ((a)+(b))	672	1,013
Profit/ (loss) before taxation	1,096	2,488
Effective tax rate (%)	61.3%	40.7%

Tax expense

(US$ million)

Particulars	Year ended 31 March 2019	Year ended 31 March 2018
Tax effect of special items (Note 6)	16	338
Tax expense – others	656	675
Net tax expense	672	1,013

(b) A reconciliation of income tax expense applicable to profit/ (loss) before taxation at the Indian statutory income tax rate to income tax expense/ (credit) at the Group's effective income tax rate for the year ended 31 March 2019 is as follows. Given majority of the Group's operations are located in India, the reconciliation has been carried out from Indian statutory income tax rate.

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Profit before taxation	1,096	2,488
Indian statutory income tax rate	34.944%	34.608%
Tax at statutory income tax rate	383	861
Disallowable expenses	81	21
Non-taxable income	(27)	(37)
Tax holidays and similar exemptions	(116)	(158)
Effect of tax rates differences of subsidiaries operating in other jurisdictions	(22)	73
Dividend distribution tax	158	63
Unrecognised tax assets (net)*	204	165
Changes in deferred tax balances due to change in income tax rate from 34.608% to 34.944%	-	12
Capital Gains subject to lower tax rate	(2)	(12)
Charge/(credit) in respect of previous years	(1)	19
Others	14	6
Total	672	1,013

* Deferred tax charge for the year ended 31 March 2019 includes US$121 million (31 March 2018: US$ Nil million) representing reversal of deferred tax asset created on carry forward losses not expected to be utilised during the statutory permitted period.

Certain businesses of the Group within India are eligible for specified tax incentives which are included in the table above as tax holidays and similar exemptions. Most of such tax exemptions are relevant for the companies operating in India. These are briefly described as under:

The location based exemption
In order to boost industrial and economic development in undeveloped regions, provided certain conditions are met, profits of newly established undertakings located in certain areas in India may benefit from a tax holiday. Such a tax holiday works to exempt 100% of the profits for the first five years from the commencement of the tax holiday, and 30% of profits for the subsequent five years. This deduction is available only for units established up to 31 March 2012. However, such undertaking would continue to be subject to the Minimum Alternative tax ('MAT').

The Group has such types of undertakings at Haridwar and Pantnagar, which are part of Hindustan Zinc Limited (Zinc India). FY2018 was the last year of eligibility for deduction for Haridwar unit. In the current year, Pantnagar is the only unit eligible for deduction at 30% of taxable profit.

The location based exemption: SEZ Operations
In order to boost industrial development and exports, provided certain conditions are met, profits of undertaking located in Special Economic Zone ('SEZ') may benefit from a tax holiday. Such a tax holiday works to exempt 100% of the profits for the first five years from the commencement of the tax holiday, 50% of profits for five years thereafter and 50% of the profits for further five years provided the amount allowable in respect of deduction is credited to Special Economic Zone Re-Investment Reserve account. However, such undertaking would continue to be subject to the Minimum Alternative tax ('MAT').

The Group has setup SEZ Operations in its aluminium division of Vedanta Limited (where no benefit has been drawn).

Sectoral Benefit - Power Plants and Port Operations
To encourage the establishment of infrastructure certain power plants and ports have been offered income tax exemptions of upto 100% of profits and gains for any ten consecutive years within the 15 year period following commencement of operations subject to certain conditions. The Group currently has total operational capacity of 8.4 Giga Watts (GW) of thermal based power generation facilities and wind power capacity of 274 Mega Watts (MW) and port facilities. However, such undertakings would continue to be subject to MAT provisions.

The Group has power plants which benefit from such deductions, at various locations of Hindustan Zinc Limited (where such benefits have been drawn), Talwandi Sabo Power Limited, Vedanta Limited and Bharat Aluminium Company Limited (where no benefit has been drawn).

The Group operates a zinc refinery in Export Processing Zone, Namibia which has been granted tax exempt status by the Namibian government.

In addition, the subsidiaries incorporated in Mauritius are eligible for tax credit to the extent of 80% of the applicable tax rate on foreign source income.

The total effect of such tax holidays and exemptions was US$116 million for the year ended 31 March 2019 (31 March 2018: US$158 million).

(c) Deferred tax assets/liabilities
The Group has accrued significant amounts of deferred tax. The majority of the deferred tax liability represents accelerated tax relief for the depreciation of property, plant and equipment, the depreciation of mining reserves and the fair value uplifts created on acquisitions, net of losses carried forward by Vedanta Limited (post the re-organisation) and unused tax credits in the form of MAT credits carried forward in Vedanta Limited, Cairn Energy Hydrocarbons Limited and Hindustan Zinc Limited. Significant components of Deferred tax (assets) and liabilities recognised in the consolidated balance sheet are as follows:

For the year ended March 31, 2019:

(US$ million)

Significant components of deferred tax liabilities/(assets)	Opening balance as at 01 April 2018	Charged/ (credited) to Income Statement	Charged/ (credited) to other comprehensive income	Deferred tax on acquisition through business combination	Exchange difference transferred to translation of foreign operation	Closing balance as at 31 March 2019
Property, plant and equipment, Exploration and Evaluation and other intangible assets	2,484	113	-	-	(155)	2,442
Unabsorbed depreciation/business loss	(914)	(78)	-	-	113	(879)
Voluntary retirement scheme	(6)	-	-	-	1	(5)
Employee benefits	(27)	-	(4)	-	14	(17)
Fair value of derivative assets/ liabilities	(9)	6	(2)	-	(3)	(8)
Fair valuation of other assets/liabilities	145	(25)	-	-	-	120
MAT credits entitlement	(1,705)	110	-	-	103	(1,492)
Other temporary differences	(136)	(7)	-	-	(20)	(163)
Total	(168)	119	(6)	-	53	(2)

For the year ended March 31, 2018:

(US$ million)

Significant components of deferred tax liabilities/(assets)	Opening balance as at 01 April 2018	Charged/ (credited) to Income Statement	Charged/ (credited) to other comprehensive income	Deferred tax on acquisition through business combination	Exchange difference transferred to translation of foreign operation	Closing balance as at 31 March 2019
Property, plant and equipment, Exploration and Evaluation and other intangible assets	2,179	298	-	(3)	10	2,484
Unabsorbed depreciation/business loss	(989)	73	-	-	2	(914)
Voluntary retirement scheme	(7)	1	-	-	0	(6)
Employee benefits	(28)	2	(1)	-	(0)	(27)
Fair value of derivative assets/ liabilities	(5)	1	(5)	-	0	(9)
Fair valuation of other assets/liabilities	177	(97)	-	61	4	145
MAT credits entitlement	(1,916)	200	-	-	11	(1,705)
Other temporary differences	(151)	13	-	6	(4)	(136)
Total	**(740)**	**491**	**(6)**	**64**	**23**	**(168)**

Deferred tax assets and liabilities have been offset where they arise in the same taxing jurisdiction with a legal right to offset but not otherwise. Accordingly the net deferred tax (assets)/liability has been disclosed in the Balance Sheet as follows :

(US$ million)

	As at 31 March 2019	As at 31 March 2018
Deferred tax assets	**(778)**	(917)
Deferred tax liabilities	**776**	749
Net Deferred tax (assets) / Liabilities	**(2)**	**(168)**

Recognition of deferred tax assets on MAT credits entitlement is based on the respective legal entity's present estimates and business plans as per which the same is expected to be utilised within the stipulated fifteen year period from the date of origination.

Deferred tax assets in the Group have been recognised to the extent there are sufficient taxable temporary differences relating to the same taxation authority and the same taxable entity which are expected to reverse. For certain components of the Group, deferred tax assets on carry forward unused tax losses have been recognised to the extent of deferred tax liabilities on taxable temporary differences available. It is expected that any reversals of the deferred tax liability would be offset against the reversal of the deferred tax asset at respective entities.

Unused tax losses / unused tax credit for which no deferred tax asset has been recognised amount to US$4,129 million and US$3,533 million as at 31 March 2019 and 31 March 2018 respectively.

As at 31 March 2019

(US$ million)

Unutilised tax losses/ Unused tax credit Particulars	**Within one year**	**Greater than one year, less than five years**	**Greater than five years**	**No expiry date**	**Total**
Unutilised business losses	**389**	**812**	**88**	**1,679**	**2,968**
Unabsorbed depreciation	**-**	**-**	**-**	**975**	**975**
Unutilised R&D credit	**-**	**-**	**-**	**1**	**1**
Unabsorbed interest allowance*	**-**	**-**	**-**	**185**	**185**
Total	**389**	**812**	**88**	**2,840**	**4,129**

As at 31 March 2018

(US$ million)

Unutilised tax losses/ Unused tax credit Particulars	Within one year	Greater than one year, less than five years	Greater than five years	No expiry date	Total
Unutilised business losses	615	866	2	1,711	3,194
Unabsorbed depreciation	-	-	-	25	25
Unutilised Capital losses	19	22	-	-	41
Unutilised R&D credit	-	-	-	1	1
Unabsorbed interest allowance*	-	-	-	272	272
Total	**634**	**888**	**2**	**2,009**	**3,533**

* As per UK's corporate interest restriction rules, the disallowed interest expense for any year can be carried forward and claimed in future years for unlimited life subject to specified conditions

No deferred tax assets has been recognised on these unused tax losses/ unused tax credit as there is no evidence that sufficient taxable profit will be available in future against which these can be utilised by the respective entities.

Additionally, the Group has not recognised MAT credit for one of its components, details of which are as under:

(US$ million)

Year of Expiry	As at 31 March 2019	As at 31 March 2018
2022	15	15
2023	2	2
2024	7	8
2025	7	8
2026	15	15
2027	9	10
2028	1	1
2029	1	1
	57	60

The Group has not recognised any deferred tax liabilities for taxes that would be payable on the Group's share in unremitted earnings of certain of its subsidiaries because the Group controls when the liability will be incurred and it is probable that the liability will not be incurred in the foreseeable future. The amount of unremitted earnings are US$4,260 million and US$4,830 million as at 31 March 2019 and 31 March 2018 respectively.

(d) Non-current tax assets

Non-current tax assets of US$504 million (31 March, 2018: US$521 million) mainly represents income tax receivable from Indian tax authorities by Vedanta Limited relating to the refund arising consequent to the Scheme of Amalgamation & Arrangement made effective in August 2013 pursuant to approval by the jurisdiction High Court and receivables relating to matters in tax disputes in Group companies including tax holiday claim.

12. UNDERLYING ATTRIBUTABLE PROFIT/(LOSS) FOR THE YEAR

Underlying earnings is an alternative earnings measure, which the management considers to be a useful additional measure of the Group's performance. The Group's Underlying profit/ loss is the profit/ loss for the year after adding back special items, other losses/(gains) [net] (note 9) and their resultant tax (including taxes classified as special items) and non-controlling interest effects. This is a Non-IFRS measure.

(US$ million)

	Note	Year ended 31 March 2019	Year ended 31 March 2018
(Loss)/ Profit for the year attributable to equity holders of the parent		(237)	239
Special items	6	(47)	(586)
Other gains/(losses) [net]	9	75	16
Tax and non-controlling interest effect of special items (including taxes classified as special items) and other gains/ (losses) [net]		(17)	497
Underlying attributable (loss)/ profit for the year		(226)	166

13. DIVIDENDS

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Amounts recognised as distributions to equity holders:		
Equity dividends on ordinary shares:		
Final dividend for 2017-18: 41.0 US cents per share (2016-17: 35.0 US cents per share)*	114	97
Interim dividend paid during the year: NIL US cents per share (2017-18: 24.0 US cents per share)	-	68
Proposed for approval by shareholders		
Equity dividends on ordinary shares:		
Final dividend for 2018-19: 65.0 US cents per share (2017-18: 41.0 US cents per share)	185	114

* This includes US$1 million (31 March 2018: US$1 million) dividend on equity shares held by a separate investment trust holding treasury shares of the Company.

14. GOODWILL

(US$ million)

	As at 31 March 2019	As at 31 March 2018
At 01 April	12	17
Impairment during the year	-	(5)
At 31 March	12	12

Goodwill is allocated for impairment testing purposes to the following CGU's.

- US$12 million Copper India (As at 31 March 2019 & 31 March 2018)
- US$5 million - Impaired during the year ended 31 March 2018

The Group tests goodwill annually for impairment or more frequently if there are indications that goodwill might be impaired.

The Company has undertaken an impairment review of goodwill of US$12 million as at 31 March 2019. The carrying amount of goodwill allocated to the relevant cash generating unit is considered to be insignificant in comparison with the total carrying value of the cash generating unit. The carrying amount of goodwill was evaluated using the higher of Fair value less cost of disposal ('FVLCD') or value in use based on discounted future cash flows of the cash generating unit to which the goodwill pertains and comparing this to the total carrying value of the relevant cash generating units. It was determined that the carrying amount of goodwill is not impaired and nor was impairment indicated following a reasonably possible change in a key assumption.

15. INTANGIBLE ASSETS

Intangible assets include Port concession rights to operate a general cargo berth for handling coal at the outer harbour of the Visakhapatnam port on the east coast of India, software licences, technological know-how, acquired brand and others.

(US$ million)

	Port concession rights(1)	Software license	Others(2)	Total
Cost				
As at 1 April 2017	93	18	10	121
Addition	0	1	0	1
Disposals/Adjustments	(0)	(1)	-	(1)
Acquisition through business combination (note 3(b))	-	0	32	32
Exchange differences	(1)	0	2	1
As at 1 April 2018	**92**	**18**	**44**	**154**
Addition	0	1	0	1
Disposals/Adjustments	(0)	(0)	-	(0)
Acquisition through business combination (note 3(a))	-	0	-	0
Exchange differences	(5)	(2)	(2)	(9)
As at 31 March 2019	**87**	**17**	**42**	**146**
Accumulated amortisation				
As at 1 April 2017	14	10	1	25
Charge for the year	3	4	0	7
Disposals/Adjustments	-	(1)	-	(1)
Exchange differences	(0)	0	(0)	(0)
As at 1 April 2018	17	13	1	31
Charge for the year	3	3	4	10
Disposals/Adjustments	(0)	0	-	(0)
Exchange differences	(1)	(1)	(1)	(3)
As at 31 March 2019	**19**	**15**	**4**	**38**
Net book value				
As at 1 April 2017	79	8	9	96
As at 1 April 2018	75	5	43	123
As at 31 March 2019	**68**	**2**	**38**	**108**

(1) Vizag General Cargo Berth Private Limited (VGCB), a special purpose vehicle, was incorporated for the coal berth mechanisation and upgrades at Visakhapatnam port. VGCB is wholly owned by Vedanta Limited. The project is to be carried out on a design, build, finance, operate, transfer basis and the concession agreement between Visakhapatnam Port and VGCB was signed in June 2010. In October 2010, VGCB was awarded with the concession after fulfilling conditions stipulated as a precedent to the concession agreement. Visakhapatnam Port has provided, in lieu of license fee an exclusive license to VGCB for designing, engineering, financing, constructing, equipping, operating, maintaining, and replacing the project/project facilities and services. The concession period is 30 years from the date of the award of the concession. The capacity of upgraded berth would be 10.18 mmtpa and the Vishakhapatnam Port would be entitled to receive 38.10% share of the gross revenue as royalty. VGCB is entitled to recover a tariff from the user(s) of the project facilities and services as per its tariff notification. The tariff rates are linked to the Wholesale Price Index (WPI) and would accordingly be adjusted as specified in the concession agreement every year. The ownership of all infrastructure assets, buildings, structures, berths, wharfs, equipment and other immovable and movable assets constructed, installed, located, created or provided by VGCB at the project site and/or in the port's assets pursuant to concession agreement would be with VGCB until expiry of this concession agreement. The cost of any repair, replacement or restoration of the project facilities and services shall be borne by VGCB during the concession period. VGCB has to transfer all its rights, titles and interest in the project facilities and services free of cost to Visakhapatnam Port at the end of the concession period.

(2) Others include technological know-how and acquired brand relating to acquisition of AvanStrate Inc.

16. PROPERTY, PLANT AND EQUIPMENT

(US$ million)

	Mining property and leases	Freehold Land and buildings	Plant and equipment	Assets under construction	Oil & Gas properties[3]	Others	Total Property, plant and equipment	Exploratory and evaluation assets[4]	Grand Total
Cost									
At 1 April 2017	2,863	1,716	13,327	2,445	9,921	114	30,386	9,837	40,223
Additions	252	25	341	475	139	11	1,243	19	1,262
Transfers	11	4	552	(568)	31	1	31	(31)	-
Disposals/Adjustments	-	(1)	(142)	(16)	(2)	(3)	(164)	(10)	(174)
Acquisition through business combination (note 3(b))	-	49	163	27	-	3	242	-	242
Exchange differences	54	13	34	16	-	2	119	-	119
At 1 April 2018	3,180	1,806	14,275	2,379	10,089	128	31,857	9,815	41,672
Additions	164	73	281	602	468	26	1,614	79	1,693
Transfers	321	167	441	(967)	8,468	38	8,468	(8,468)	-
Unsuccessful Exploration cost	-	-	-	-	-	-	-	(7)	(7)
Reclassification	-	-	-	1	-	-	1	-	1
Disposals/Adjustments	(8)	(2)	(169)	(17)	(2)	(7)	(205)	-	(205)
Acquisition through business combination (note 3(a))	-	134	517	66	-	1	718	-	718
Exchange differences	(216)	(122)	(774)	(160)	-	(10)	(1,282)	-	(1,282)
At 31 March 2019	**3,441**	**2,056**	**14,571**	**1,904**	**19,023**	**176**	**41,171**	**1,419**	**42,590**
Accumulated depreciation, amortisation and impairment									-
At 1 April 2017	1,425	357	4,132	78	9,011	31	15,034	8,436	23,470
Charge for the year	183	52	557	-	461	11	1,264	-	1,264
Disposals/Adjustments	-	-	(125)	-	(2)	(1)	(128)	-	(128)
Reclassification	-	-	0	-	-	(0)	-	-	-
Impairment/(impairment reversal) of assets (note 6)	638	13	29	46	(500)	(0)	226	(947)	(721)
Exchange differences	12	9	38	0	-	1	60	-	60
At 1 April 2018	2,258	431	4,631	124	8,970	42	16,456	7,489	23,945
Charge for the year	219	66	568	-	609	15	1,477	-	1,477
Disposals/Adjustments	-	(1)	(96)	-	(2)	(7)	(106)	-	(106)
Transfer from E&E assets	-	-	(3)	-	6,474	3	6,474	(6,474)	-
Reclassification	-	-	1	-	-	-	1	-	1
Impairment/(impairment reversal) of assets (note 6)	-	-	-	-	(38)	-	(38)	-	(38)
Exchange differences	(119)	(34)	(253)	(3)	-	(6)	(415)	-	(415)
At 31 March 2019	**2,358**	**462**	**4,848**	**121**	**16,013**	**47**	**23,849**	**1,015**	**24,864**
Net book value									
At 1 April 2017	1,438	1,359	9,195	2,367	910	83	15,352	1,401	16,753
At 1 April 2018	922	1,375	9,644	2,255	1,119	86	15,401	2,326	17,727
At 31 March 2019	**1,083**	**1,594**	**9,723**	**1,783**	**3,010**	**129**	**17,322**	**404**	**17,726**

(1) During the year ended 31 March 2019, interest and foreign exchange losses capitalised was US$119 million (31 March 2018: US$54 million).

(2) Certain property, plant and equipment are pledged as collateral against borrowings, the details related to which have been given in note 22 on Borrowings.

(3) Oil and Gas Properties includes development assets under construction of carrying value US$1,517 million (31 March 2018: US$339 million).

(4) Oil & Gas properties and exploration and evaluation assets net block includes share of jointly owned assets with the joint venture partners US$3,331 million (31 March, 2018 US$3,292 million). Refer note 2(c)(I)(xii) for reasons for transfer of exploration and evaluation assets to property, plant and equipment.

17. FINANCIAL ASSET INVESTMENTS

Financial asset investments represent investments classified and accounted for as fair value through profit or loss or through other comprehensive income (refer note 25).

Financial Asset Investments

(US$ million)

Year of Expiry	As at 31 March 2019	As at 31 March 2018
At 1 April 2018	25	11
Purchase of structured investment (refer note 35)	541	-
Movements in fair value (including on investments purchased during the year)	143	14
Exchange difference	(2)	(0)
At 31 March 2019	**707**	**25**

Financial asset investment represents quoted investments in equity shares and other investments that present the Group with an opportunity for returns through dividend income and gains in value. These securities are held at fair value. These are classified as non-current as on 31 March 2019 and 31 March 2018.

18. OTHER NON-CURRENT ASSETS AND TRADE AND OTHER RECEIVABLES

(US$ million)

	As at 31 March 2019			As at 31 March 2018		
	Non- Current	Current	Total	Non- Current	Current	Total
Bank Deposits[2]	3	-	3	19	-	19
Site restoration assets	79	-	79	72	-	72
Trade Receivables[1]	533	593	1,126	209	644	853
Others[4]	108	55	163	71	83	154
Trade receivables from related parties	-	5	5	-	4	4
Cash call / receivables from joint operations	-	298	298	-	99	99
Financial (A)	723	951	1,674	371	830	1,201
Balance with Government Authorities	120	208	328	164	233	397
Advance for supplies	-	221	221	-	309	309
Others[3]	167	124	291	124	155	279
Non-financial (B)	287	553	840	288	697	985
Total (A+B)	1,010	1,504	2,514	659	1,527	2,186

The credit period given to customers ranges from zero to 90 days.

(1) In July 2017, the Appellate Tribunal for Electricity dismissed the appeal filed by one of the Group's subsidiaries, Talwandi Sabo Power Limited (TSPL) with respect to the interpretation of how the calorific value of coal and costs associated with it should be determined. However, APTEL had allowed payment of shunting and unloading charges. TSPL filed an appeal before the Honourable Supreme Court, which by an order dated 7 March 2018 has decided the matter in favour of TSPL. PSPCL has not paid the due amount as per the direction of the Supreme court. Therefore, TSPL filed its contempt petition before the Supreme court. The matter is pending for adjudication. The outstanding trade receivables in relation to this dispute as at 31 March 2019 is US$164 million (31 March 2018: US$123 million).

In another matter relating to assessment of whether there has been a change in law following the execution of the Power Purchase Agreement, the Appellate Tribunal for Electricity has dismissed the appeal in July 2017 filed by TSPL. TSPL filed an appeal before the Honourable Supreme Court to seek relief which is yet to be listed. The outstanding trade receivables in relation to this dispute and other matters as at 31 March 2019 is US$154 million (US$127 million as at 31 March 2018). The Group, based on external legal opinion and its own assessment of the merits of the case, remains confident that it is highly probable that the Supreme court will uphold TSPL's appeal and has thus continued to treat these balances as recoverable.

Additionally, as at 31 March 2018 US$112 million was outstanding on account of certain disputes relating to computation of tariffs and differential revenues recognised with respect to tariffs pending finalisation by the Odisha state regulatory commission. During the current year the said disputes were settled. However, the customer has raised certain claims on the company in respect of short supply of power for which a provision of $ 31 million has been made. A Minutes of Meeting (MOM) has been signed with the customer and subsequently Vedanta Limited has received payment of US$8 million in March 2019. Pending ratification of MOM by Odisha Electricity Regulatory Commission (OERC) and adjudication on certain issues related to the claim, the customer has withheld US$181 million, which the company is confident of recovering.

(2) Includes US$ Nil of restricted bank deposits maintained as debt service reserve account (31 March 2018: US$16 million) and US$3 million (31 March 2018: US$3 million) under lien with banks.

(3) Includes claim receivables, advance recoverable (oil and gas business), prepaid expenses, export incentive receivables and others.

(4) Includes claims receivables, advance recoverable (oil and gas business), unbilled revenue (contract assets) and others. It also includes advance profit petroleum US$43 million (refer note 34(iv)). The outstanding balance of contract assets was US$21 million (31 March 2018 : US$64 million).

19. INVENTORIES

(US$ million)

	As at 31 March 2019	As at 31 March 2018
Raw materials and consumables	1,369	1,330
Work-in-progress	454	578
Finished goods	237	130
Total	**2,060**	**2,038**

Inventory held at net realisable value amounted to US$642 million (31 March 2018: US$168 million). The write down of inventories amounts to US$38 million (31 March 2018: US$7 million) and this has been charged to the Consolidated Income Statement.

20. SHORT-TERM INVESTMENTS

(US$ million)

	As at 31 March 2019	As at 31 March 2018
Bank deposits(1)	122	483
Other investments	4,042	4,325
Total	**4,164**	**4,808**

(1) Includes US$28 million(31 March 2018: US$31 million) on lien with banks , US$19 million(31 March 2018: US$6 million) of margin money, US$47 million(31 March 2018: US$9 million) maintained as debt service reserve account and US$9 million(31 March 2018: US$12 million) of restricted funds held as collateral in respect of closure costs.

Bank deposits are made for periods of between three months and one year depending on the cash requirements of the companies within the Group and earn interest at the respective fixed deposit rates.

Other investments include mutual fund investments and investment in bonds which are recorded at fair value with changes in fair value reported through the income statement. These investments do not qualify for recognition as cash and cash equivalents due to their maturity period and risk of change in value of the investments. Refer Note 25 for further details.

21. CASH AND CASH EQUIVALENTS

(US$ million)

	As at 31 March 2019	As at 31 March 2018
Cash and cash equivalents consist of the following		
Cash at bank and in hand	620	604
Short-term deposits	441	158
Restricted cash and cash equivalents(1)	72	36
Total	**1,133**	**798**

(1) Restricted cash and cash equivalents includes US$15 million (31 March 2018: US$36 million) kept in a specified bank account to be utilised solely for the purposes of payment of dividends to non-controlling shareholders, which is being carried as a current liability. Restricted cash and cash equivalents further include US$57 million (31 March 2018 : Nil) kept in short term deposits under lien with banks as margin money.

Short-term deposits are made for periods of between one day and three months, depending on the immediate cash requirements of the Group, and earn interest at the respective short-term deposit rates.

22(a) BORROWINGS

(US$ million)

	As at 31 March 2019	As at 31 March 2018
Current borrowings consist of:		
Banks and financial institutions	4,132	3,607
Current maturities of long term borrowings	1,324	1,853
Current borrowings (A)	5,456	**5,460**
Non-current borrowings consist of:		
Banks and financial institutions	6,585	5,892
Non- convertible bonds	3,142	3,360
Non-convertible debentures	2,034	1,779
Redeemable Preference shares	0	463
Others	87	93
Non-current borrowings	11,848	11,587
Less: Current maturities of long term borrowings	(1,324)	(1,853)
Non-current borrowings, net of current maturities (B)	10,524	9,734
Total (A+B)	15,980	**15,194**

The Group has discounted trade receivables on recourse basis US$196 million (31 March 2018: US$120 million). Accordingly, the monies received on this account are shown as borrowings as the trade receivables do not meet de-recognition criteria. The Group facilities are subject to certain financial and non-financial covenants. The primary covenants which must be complied with include fixed charge cover ratio, net borrowing to EBITDA ratio, total net assets to borrowings ratio and net interest expense to EBITDA ratio. The Group has complied with the covenants as per the terms of the loan agreement.

Details of the Non-convertible bonds and Non-convertible debentures issued by the Group have been provided below (carrying value):

(US$ million)

	As at 31 March 2019	As at 31 March 2018
Non-Convertible Bonds :		
0.230% bonds due October, 2032 (Repayable in 10 instalments)	18	17
6.125% bonds due August 2024	993	992
7.125% bonds due June, 2023	495	494
6.375% bonds due July, 2022	995	993
8.250% bonds due June, 2021	641	640
6.000% bonds due January, 2019	-	224
	3,142	3,360
Non-Convertible Debentures		
8.75% due September-2021	36	38
9.18% due July-2021	145	-
9.27% due July-2021	144	-
8.50% due June-2021	238	-
8.75% due April-2021	36	38
8.50% due April-2021	340	-
8.55% due April-2021	145	-
7.80% due December-2020	72	77
9.00% due November-2020**	29	-
8.25% due september-2020	62	65
7.85% due August-2020	72	77
9.45% due August-2020	289	308
8.00% due June-2020*	29	31
7.90% due July-2020	43	46
8.70% due April-2020	87	92
7.95% due April-2020*	43	46
7.50% due November-2019*	29	31
8.20% due November-2019	43	46
8.25% due October-2019	43	46
7.75% due September-2019	36	38
8.65% due September-2019	22	23
7.60% due May-2019	51	54
9.17% due July-2018	-	185
9.10% due April 2018	-	384
8.91% due April 2018	-	154
	2,034	1,779

* The debenture holders of these NCDs and the company have put and call option at the end of 5 years from the respective date of the allotment of the NCDs

** The debenture holders of these NCDs and the company have put and call option at the end of 1 year from the respective date of the allotment of the NCDs

Security Details

The Group has taken borrowings in various countries towards funding of its acquisitions and working capital requirements. The borrowings comprise of funding arrangements from various banks and financial institutions taken by the parent and subsidiaries. Out of the total borrowings of US$15,980 million (31 March 2018: US$15,194 million) shown above total secured borrowings are US$6,547 million (31 March 2018: US$5,665 million) and unsecured borrowings are US$9,433 million (31 March 2018: US$9,529 million). The details of security provided by the Group in various countries, to various lenders on the assets of Parent and subsidiaries are as follows:

(US$ million)

Facility Category	Security details	**As at 31 March 2019**	As at 31 March 2018
Project buyers credit from banks (grouped under banks and financial institutions)	Secured by exclusive charge on the assets of Vedanta Limited's aluminium division at Jharsuguda imported under facility and first charge on Jharsuguda aluminium's current assets on pari passu basis	**2**	19
	Other secured project buyer's credit	**-**	0
Working Capital Loans (grouped under banks and financial institutions)	Secured by first pari passu charge on current assets, present and future of Vedanta Limited	**16**	47
	Secured by hypothecation of stock of raw materials, work-in-progress, semi-finished, finished products, consumable stores and spares, bills receivables, book debts and all other movables, both present and future in BALCO. The charges rank pari passu among banks under the multiple banking arrangements for fund based facilities	**18**	26
	First pari passu charge on the entire current assets of the Vedanta Limited, both present and future. First pari passu charge on all rights, title, claim and benefit in all the whole of the current assets of the Vedanta Limited, both present and future, including stock and raw material, stock in process, semi finished and finished goods, stores and spares not relating to plant, and machinery (consumable stores and spares)	**80**	98
	First charge on the entire current assets of the Vedanta Limited, present and future, on pari passu basis	**7**	-
	Secured by a first pari passu charge on all present and future inventories, book debts and all other current assets of TSPL.	**40**	91
	First pari passu charge on current assets of Vedanta Limited	**52**	-
	Secured by charge on current assets of AvanStrate	**6**	
	Other secured working capital loans	**-**	26
External commercial borrowings (grouped under banks and financial institutions)	The facility is secured by first pari passu charge on all movable property, plant and equipments related to power plants and aluminium smelters of BALCO located at Korba both present and future along with secured lenders	**45**	45
	The facility is secured by first pari passu charge on all movable project assets related to 1200 MW power project and 3.25 LTPA Smelter project both present and future along with secured lenders at BALCO	**50**	50

(US$ million)

Facility Category	Security details	**As at 31 March 2019**	As at 31 March 2018
Non convertible debentures			
	Secured by way of movable fixed assets of the Lanjigarh Refinery Expansion Project including 210 MW Power Project for the Lanjigarh Refinery Expansion Project with a minimum security cover of 1 time of the outstanding amount of the debenture and specifically exclude the 1MTPA alumina refinery of the company along with 90 MW power plant in Lanjigarh and all its related expansions	**123**	131
	Secured by the whole of the movable fixed assets of the 1.6 MTPA Aluminium Smelter along with 1215 MW captive power plant in Jharsuguda and 1 MTPA alumina refinery alongwith 90 MW co-generation plant in Lanjigarh, including its movable plant and machinery, capital works-in-process, machinery spares, tools and accessories, and other movable fixed assets	**116**	123
	Secured by way of first ranking pari passu charge on movable fixed assets in relation to the Lanjigarh Refinery Expansion Project (having capacity beyond 2 MTPA and upto 6 MTPA) situated at Lanjigarh, Odisha. The Lanjigarh Refinery Expansion Project shall specifically exclude the '1 MTPA alumina refinery of the Company along with 90 MW power plant in Lanjigarh' and all its related capacity expansions	**181**	192
	Secured by way of "movable fixed assets" in relation to the 1.6 MTPA Aluminium Smelter alongwith 1215 MW (135MW * 9) captive power plant located in Jharsuguda and 1 MTPA Alumina Refinery alongwith 90 MW Co-generation power plant located at Lanjigarh in Odisha State and shall include all present movable plant and machinery, machinery spares, tools and accessories, fixtures, mechanical and electrical equipments, machinery and all other movable fixed assets and all estate, right, title, interest, property, claims and demands whatsoever in relation to assets	**289**	308
	Secured by a first pari - passu charge on the whole of the present and future of the movable fixed assets of 2400 MW (600 MW*4) Power Plant of Vedanta Limited at Jharsuguda location	**578**	384
	Secured by first pari passu charge on movable and/or immovable fixed assets of the TSPL with a minimum asset cover of 1 time during the tenure of NCD	**470**	315
	Secured by way of first pari-passu charge on the specific movable and/ or immovable fixed assets of VGCB, as may be identified and notified by the Issuer to the Security Trustee from time to time, with minimum asset coverage of 1 time of the aggregate face value of bonds outstanding at any point of time	**61**	65
	Secured by way of first pari-passu charge on all present and future of the movable fixed assets of 2400 MW (600 MW*4) Power Plant of Vedanta Limited at Jharsuguda location, as may be identified and notified by the Issuer to the Security Trustee from time to time, with minimum asset coverage of 1 time of the aggregate face value of debentures outstanding at any point of time	**145**	-
	First pari passu charge over the immovable property (excluding of leasehold land and coal block assets) of the BALCO. First pari passu charge on the hypothecated assets (excluding current assets) of BALCO	**72**	77
	Other secured non-convertible debentures	**-**	184

(US$ million)

Facility Category	Security details	As at 31 March 2019	As at 31 March 2018
Term loan from banks (grouped under banks and financial institutions)	Secured by first pari passu charge on fixed assets of TSPL both present and future	524	627
	First pari passu charge by way of hypothecation/ equitable mortgage on the movable/ immovable assets of the Aluminium Division of the Vedanta Limited comprising of alumina refinery having output of 1 MTPA along with co-generation captive power plant with an aggregate capacity of 90 MW at Lanjigarh, Odisha; aluminium smelter having output of 1.6 MTPA along with a 1215 (9x135) MW CPP at Jharsuguda , Odisha, both present and future	738	849
	A pari passu charge by way of hypothecation of all the movable fixed assets of the Vedanta Limited pertaining to its Aluminium Division project consisting of (i) alumina refinery having output of 1 MTPA (Refinery) along with co-generation captive power plant with an aggregate capacity of 90 MW at Lanjigarh, Odisha (Power Plant); and (ii) aluminium smelter having output of 1.6 MTPA along with a 1215 (9x135) MW CPP at Jharsuguda, Odisha (Smelter) (the Refinery, Power Plant and Smelter). Also, a first pari passu charge by way of equitable mortgage on the land pertaining to the mentioned project of aluminium division	513	606
	Secured by a pari - passu charge by way of hypothecation on the movable fixed assets of the Lanjigarh Refinery Expansion Project including 210 MW Power Project for the Lanjigarh Refinery Expansion Project. Lanjigarh Refinery Expansion Project shall specifically exclude the 1 MTPA alumina refinery of the Vedanta Limited along with 90 MW power plant in Lanjigarh and all its related expansions	70	-
	A pari-passu charge by way of hypothecation on the movable fixed assets of the Vedanta Limited pertaining to its Aluminium Division comprising of 1 mtpa alumina refinery plant with 90 MW captive power plant at Lanjigarh, Odisha and 1.6 mtpa aluminium smelter plant with 1215 MW captive power plant at Jharsuguda, Odisha	251	-
	First pari passu charge by way of hypothecation/ equitable mortgage on the movable/ immovable assets of the Aluminium Division of the Vedanta Limited comprising of alumina refinery having output of 1 MTPA along with co-generation captive power plant with an aggregate capacity of 90 MW at Lanjigarh, Odisha; aluminium smelter having output of 1.6 MTPA along with a 1215 (9x135) MW CPP at Jharsuguda , Odisha and additional charge on Lanjigarh Expansion project, both present and future	171	190
	A pari-passu charge by way of hypothecation/equitable mortgage of the movable/immovable fixed assets of the Vedanta Limited pertaining to its Aluminium Division comprising of 1 mtpa alumina refinery plant with 90 MW captive power plant at Lanjigarh, Odisha and 1.6 mtpa aluminium smelter plant with 1215 MW captive power plant at Jharsuguda, Odisha	431	-
	Secured by charge on Cairn Energy Hydrocarbons Limited's (CEHL) all banks accounts, cash & investments, all receivables and current assets (but excluding any shares issued to CEHL by its subsidiaries, all of its right, title and interest in and to Production Sharing Contract and all of its fixed assets of any nature)	379	426
	As security for the Parent's (THL Zinc Limited) obligation under the limited guarantee, the Parent pledges all of its shares and other securities held by it in BMM and is a security cession and not an outright cession of all its rights, title and interest in and to all and any claims held by the Parent in and against the BMM	60	-
	The facility is secured by first pari passu charge on all movable property, plant and equipments related to power plants and aluminium smelters of BALCO located at Korba both present and future along with secured lenders	30	30
	Secured by first pari passu charge on movable property, plant and equipment (except for coal block) of the BALCO	214	232
	Secured by first pari passu charge on all present and future movable fixed assets including but not limited to plant & machinery ,spares, tools and accessories of BALCO (excluding coal block assets) by way of a deed of hypothecation	140	152
	Unattested deed of Hypothecation executed in favour of Vistra ITCL (India) Limited, Security Trustee for the lenders of Vedanta Star limited by providing security for the facility, by a charge, by way of hypothecation over the hypothecated properties of ESL	488	-
	Secured against assets of KCM	113	293
Others	Secured by Fixed asset (platinum) of AvanStrate.	75	79
	Total	6,547	5,665

22(b). MOVEMENT IN NET DEBT[1]

(US$ million)

	Cash and cash equivalents	Short term investments	Financial asset investment net of related liabilities and derivatives(1)	Total cash and short-term investments	Debt due within one year	Debt due after one year	Total Net Debt
					Debt carrying value	Debt carrying value	
At 1 April 2017	1,682	8,043	-	9,725	(7,659)	(10,570)	(8,504)
Cash flow	(924)	(3,441)	-	(4,365)	3,859	(694)	(1,200)
Net debt on acquisition through business combination (note 3(b))	24	-	-	24	-	(99)	(75)
Other non-cash changes [2]	-	209	-	209	(1,669)	1628	168
Foreign exchange currency translation differences	16	(3)	-	13	9	1	23
At 1 April 2018	**798**	**4,808**	**-**	**5,606**	**(5,460)**	**(9,734)**	**(9,588)**
Cash flow	341	(639)	254	(44)	1,199	(2,394)	(1,239)
Net cash flow on acquisition through business combination (note 3(a))	36	46	-	82	(1)	-	81
Other non-cash changes[2]	-	187	137	324	(1,449)	1,398	273
Foreign exchange currency translation differences	(42)	(238)	-	(280)	255	206	181
At 31 March 2019	**1,133**	**4,164**	**391**	**5,688**	**(5,456)**	**(10,524)**	**(10,292)**

(1) Net debt is a Non-IFRS measure and represents total debt after fair value adjustments under IAS 32 and IFRS 9 as reduced by cash and cash equivalents, short-term investments and structured investment, net of the deferred consideration payable for such investments (referred above as Financial asset investment net of related liabilities) (refer note 35), if any

(2) Other non-cash changes comprise of amortisation of borrowing costs, foreign exchange difference on net debt and reclassification between debt due within one year and debt due after one year. It also includes US$324 million (31 March 2018: US$209 million) of fair value movement in investments and accrued interest on investments.

23. NON-EQUITY NON-CONTROLLING INTERESTS

As at 31 March 2019, non-equity non-controlling interests amounts to US$12 million (31 March 2018: US$12 million), being deferred shares in KCM held by ZCCM. The deferred shares have no voting rights or rights to KCM's dividends, but are entitled on a winding up to a return of up to US$0.99 per share once all of KCM's ordinary shares have received a distribution equal to their par value and any share premium created on their issue and which remains distributable to them.

The deferred shares are held at historic cost, being the fair value attributed to them at the time of initial acquisition of KCM in the year ended 31 March 2005. They are classified as non-current liabilities as they are repayable only on the winding up of KCM, for an amount different than the pro rata share of net assets upon liquidation. The shares have been valued at US$0.99 per share, which is the maximum amount payable to the deferred shareholders. These deferred shares have not been discounted as the effect would not be material.

24. TRADE AND OTHER PAYABLES

(US$ million)

	As at 31 March 2018			As at 31 March 2018		
	Non- Current	Current	Total	Non- Current	Current	Total
Operational buyers' credit/ suppliers' credit	-	1,173	1,173	-	1,448	1,448
Dividend payable to NCI	-	24	24	-	46	46
Trade payables	-	1,680	1,680	-	1,653	1,653
Liabilities for capital expenditure	7	864	871	19	609	628
Profit petroleum Payable	-	148	148	-	127	127
Other payables (1)	189	1,024	1,213	10	742	752
Security deposits and retentions	2	23	25	2	38	40
Put option liability with non-controlling interests (2)	29	-	29	21	-	21
Financial (A)	227	4,936	5,163	52	4,663	4,715
Statutory liabilities	-	484	484	-	453	453
Advance from customers (3)	17	1,408	1,425	66	886	952
Other payables	-	50	50	-	76	76
Non-financial (B)	17	1,942	1,959	66	1,415	1,481
Total (A+B)	244	6,878	7,122	118	6,078	6,196

Trade payables are majorly non-interest bearing and are normally settled upto 180 days terms.

Operational buyers' credit/ suppliers' credit are interest-bearing liabilities and are normally settled within a period of twelve months. These represent arrangements whereby operational suppliers of raw materials are paid by financial institutions, with the Group recognising the liability for settlement with the institutions at a later date.

The fair value of trade and other payables is not materially different from the carrying value presented.

(1) Includes US$143 million (non-current) and US$156 million (current) of deferred consideration payable as at 31 March 2019 in relation to purchase of structured investment. (Refer note 35)

(2) The non-controlling shareholders of ASI have an option to offload their shareholding to the Group. The option is exercisable at any time within the period of three years following the fifth anniversary of the date of shareholders' agreement (22 December 2017) at a price higher of US$0.757 per share and the fair market value of the share. Therefore, the liability is carried at higher of the two. Subsequent changes to the put option liability are treated as equity transaction and hence accounted for in equity.

(3) Advance from customers are contract liabilities and include amounts received under long term supply agreements. The advance payment plus a fixed rate of return/ discount will be settled by supplying respective commodity over a period up to twenty four months under an agreed delivery schedule as per the terms of the respective agreements. As these are contracts that the Group expects, and has the ability, to fulfil through delivery of a non-financial item, these are recognised as advance from customers and will be released to the income statement as respective commodity is delivered under the agreements. The portion of the advance that is expected to be settled within the next 12 months has been classified as a current liability. The increase in contract liabilities is due to additional amounts received during the year.

25. FINANCIAL INSTRUMENTS

Financial Assets and Liabilities :

The following tables present the carrying value and fair value of each category of financial assets and liabilities as at 31 March 2019 and 31 March 2018:

(US$ million)

As at 31 March 2019	Fair value through profit or loss	Fair value through other comprehensive income	Derivatives designated as hedging instruments	Amortised cost	Total carrying value	Total fair value
Financial Assets						
Financial instruments (derivatives)	5	-	6	-	11	11
Financial asset investments held at fair value*	690	17	-	-	707	707
Short term investments						
- Bank deposits	-	-	-	122	122	122
- Other investments	4,042	-	-		4,042	4,042
Cash and cash equivalents				1,133	1,133	1,133
Other non-current assets and trade and other receivables	35	-	-	1,639	1,674	1,674
Total	4,772	17	6	2,894	7,689	7,689

* Includes structured investment (refer note 35).

(US$ million)

As at 31 March 2019	Fair value through profit or loss	Derivatives designated as hedging instruments	Amortised cost	Others*	Total carrying value	Total fair value
Financial Liabilities						
Financial instruments (derivatives)	79	1	-	-	80	80
Trade and other payables	221	-	4,913	29	5,163	5,163
Borrowings	-	-	15,980	-	15,980	15,873
Total	**300**	**1**	**20,893**	**29**	**21,223**	**21,116**

* Represents put option liability accounted for at fair value - Refer Note 3(b) and 24

(US$ million)

As at 31 March 2018	Held for trading	Loans and receivables	Available for sale	Derivatives	Total carrying value	Total fair value
Financial Assets						
Financial instruments (derivatives)	-	-	-	24	24	24
Financial asset investments held at fair value	-	-	25	-	25	25
Short term investments						
- Bank deposits	-	483	-	-	483	483
- Other investments	4,325	-	-	-	4,325	4,325
Cash and cash equivalents	-	798	-	-	798	798
Other non-current assets and trade and other receivables	-	1,201	-	-	1,201	1,201
Total	**4,325**	**2,482**	**25**	**24**	**6,856**	**6,856**

As at 31 March 2018	Amortised cost	Derivatives	Others*	Total carrying value	Total fair value
Financial Liabilities					
Financial instruments (derivatives)	-	40	-	40	40
Trade and other payables	4,694	-	21	4,715	4,715
Borrowings	15,194	-	-	15,194	15,311
Total	**19,888**	**40**	**21**	**19,949**	**20,066**

* Represents put option liability accounted for at fair value - Refer Note 3(b) and 24

Fair value hierarchy
The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices)
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs)

The below tables summarise the categories of financial assets and liabilities as at 31 March 2019 and 31 March 2018 measured at fair value:

(US$ million)

	As at 31 March 2019		
	Level 1	**Level 2**	**Level 3**
Financial assets			
At fair value through profit or loss			
- Short term investments	939	3,091	12
- Financial asset investments held at fair value*	-	690	-
- Financial instruments (derivatives)	-	5	-
- Other non-current assets and trade and other receivables		35	
At fair value through other comprehensive income			
- Financial asset investments held at fair value	15	-	2
Derivatives designated as hedging instruments			
- Financial instruments (derivatives)	-	6	-
Total	954	3,827	14
Financial liabilities			
At fair value through profit or loss			
- Financial instruments (derivatives)	-	79	-
- Trade and other payables		221	
Derivatives designated as hedging instruments			
- Financial instruments (derivatives)	-	1	-
Trade and other payables- Put option liability with non controlling interest (refer note 3(b))	-	-	29
Total	-	301	29

* Includes structured investment (refer note 35)

(US$ million)

	As at 31 March 2018		
	Level 1	Level 2	Level 3
Financial assets			
At fair value through profit or loss			
- Held for trading	1,163	3,162	-
- Financial instruments (derivatives)	-	24	-
Available-for-sale investments			
- Financial asset investments held at fair value	23	-	2
Total	**1,186**	**3,186**	**2**
Financial liabilities			
At fair value through profit or loss/ designated for hedging			
- Financial instruments (derivatives)	-	40	-
Trade and other payables- Put option liability with non controlling interest (refer note 3(b))	-	-	21
Total	**-**	**40**	**21**

The below table summarises the fair value of borrowings which are carried at amortised cost as at 31 March 2019 and 31 March 2018:

(US$ million)

	As at 31 March 2019		As at 31 March 2018	
	Level 1	**Level 2**	Level 1	Level 2
Borrowings	3,068	12,805	3,444	11,867
Total	3,068	12,805	**3,444**	**11,867**

The fair value of the financial assets and liabilities are at the amount that would be received to sell an asset and paid to transfer a liability in an orderly transaction between market participants at the measurement date. The following methods and assumptions were used to estimate the fair values:

- Investments traded in active markets are determined by reference to quotes from the financial institutions; for example: Net asset value (NAV) for investments in mutual funds declared by mutual fund house. For other listed securities traded in markets which are not active, the quoted price is used wherever the pricing mechanism is same as for other marketable securities traded in active markets. Other current investments and structured investments are valued by referring to market inputs including quotes, trades, poll, primary issuances for securities and /or underlying securities issued by the same or similar issuer for similar maturities and movement in benchmark security, etc.
- Financial assets forming part of Trade and other receivables, cash and cash equivalents (including restricted cash and cash equivalents), bank deposits, financial liabilities forming part of trade and other payables and short-term borrowings: Approximate their carrying amounts largely due to the short-term maturities of these instruments.
- Other non-current financial assets and financial liabilities: Fair value is calculated using a discounted cash flow model with market assumptions, unless the carrying value is considered to approximate to fair value.
- Long term fixed-rate and variable rate borrowings: Listed bonds are fair valued based on the prevailing market price. For all other long term fixed-rate and variable-rate borrowings, either the carrying amount approximates the fair value, or fair value has been estimated by discounting the expected future cash flows using a discount rate equivalent to the risk-free rate of return adjusted for the appropriate credit spread.
- Quoted financial asset investments: Fair value is derived from quoted market prices in active markets.
- Derivative financial assets/liabilities: The Group enters into derivative financial instruments with various counterparties. Interest rate swaps, foreign exchange forward contracts and commodity forward contracts are valued using valuation techniques, which employs the use of market observable inputs. The most frequently applied valuation techniques by the Group include forward pricing and swap models, using present value calculations. The models incorporate various inputs including the foreign exchange spot and forward rates, yield curves of the respective currencies, currency basis spreads between the respective currencies, interest rate curves and forward rate curves of the underlying commodity. Commodity contracts are valued using the forward LME rates of commodities actively traded on the listed metal exchange i.e. London Metal Exchange, United Kingdom (UK).

For all other financial instruments, the carrying amount is either the fair value, or approximates the fair value.

The changes in counterparty credit risk had no material effect on the hedge effectiveness assessment for derivatives designated in hedge relationship and the value of other financial instruments recognised at fair value.

The estimated fair value amounts as at 31 March 2019 have been measured as at that date. As such, the fair values of these financial instruments subsequent to reporting date may be different than the amounts reported at each year-end.

There were no significant transfers between level 1, level 2 and level 3 during the current year.

Risk management framework
The Group's businesses are subject to several risks and uncertainties including financial risks.

The Group's documented risk management polices act as an effective tool in mitigating the various financial risks to which the businesses are exposed to in the course of their daily operations. The risk management policies cover areas such as liquidity risk, commodity price risk, foreign exchange risk, interest rate risk, counterparty credit risk and capital management.

Risks are identified at both the corporate and individual subsidiary level with active involvement of senior management. Each operating subsidiary in the Group has in place risk management processes which are in line with the Group's policy. Each significant risk has a designated 'owner' within the Group at an appropriate senior level. The potential financial impact of the risk and its likelihood of a negative outcome are regularly updated.

The risk management process is coordinated by the Management Assurance function and is regularly reviewed by the Group's Audit Committee. The Audit Committee is aided by the other committees of the Board including the Risk Management Committee, which meets regularly to review risks as well as the progress against the planned actions. Key business decisions are discussed at the periodic meetings of the Executive Committee. The overall internal control environment and risk management programme including financial risk management is reviewed by the Audit Committee on behalf of the Board.

The risk management framework aims to:

- improve financial risk awareness and risk transparency
- identify, control and monitor key risks
- identify risk accumulations
- provide management with reliable information on the Group's risk situation
- improve financial returns

Treasury management
Treasury management focuses on liability management, capital protection, liquidity maintenance and yield maximisation. The treasury policies are approved by the Committee of the Board. Daily treasury operations of the subsidiary companies are managed by their respective finance teams within the framework of the overall Group treasury policies. Long term fund raising including strategic treasury initiatives are managed jointly by the business treasury team and the central team at corporate treasury while short-term funding for routine working capital requirements is delegated to subsidiary companies. A monthly reporting system exists to inform senior management of the Group's investments and debt position, exposure to currency, commodity and interest rate risk and their mitigants including the derivative position. The Group has a strong system of internal control which enables effective monitoring of adherence to Group's policies.

The internal control measures are effectively supplemented by regular internal audits.

The investment portfolio at the Group is independently reviewed by CRISIL Limited and Group portfolio has been rated as Tier I or "Very Good" meaning highest safety. The investments are made keeping in mind safety, liquidity and yield maximisation.

The Group uses derivative instruments to manage the exposure in foreign currency exchange rates, interest rates and commodity prices. The Group does not acquire or issue derivative financial instruments for trading or speculative purposes. The Group does not enter into complex derivative transactions to manage the treasury and commodity risks.

Both treasury and commodities derivative transactions are normally in the form of forward contracts, interest rate and currency swaps and these are in line with the Group's policies.

Equity price risk

As at 31 March 2019, the Group held economic interest in a structured investment for the equity shares of Anglo American Plc (AA Plc), a company listed on the London Stock Exchange, having fair value of US$690 million (31 March 2018: Nil). The instrument is exposed to equity price movements of AA Plc, subject to a put option embedded therein (Refer note 35).

Set out below is the impact of 10% increase/ decrease in equity prices on pre-tax profit/ (loss) for the year and pre-tax equity as a result of changes in value of the investment:

For the year ended 31 March 2019:

(US$ million)

Financial asset investment	Total Exposure (fair value)	Effect on pre-tax profit/ (loss) of a 10% increase in the equity price	Effect on pre-tax equity of a 10% increase in the equity price	Effect on pre-tax profit/ (loss) of a 10% decrease in the equity price	Effect on pre-tax equity of a 10% decrease in the equity price
Structured investment	690	60	-	(28)	-

The above sensitivities are based on change in price of the underlying equity shares of AA plc and provide the estimated impact of the change on profit and equity assuming that all other variables remain constant.

Commodity Price risk

The Group is exposed to the movement of base metal commodity prices on the London Metal Exchange. Any decline in the prices of the base metals that the Group produces and sells will have an immediate and direct impact on the profitability of the businesses. As a general policy, the Group aims to sell the products at prevailing market prices. The commodity price risk in import of input commodities such as Copper Concentrate & Alumina, for our Copper and Aluminium business respectively, is hedged on back-to back basis ensuring no price risk for the business. Hedging is used primarily as a risk management tool and, in some cases, to secure future cash flows in cases of high volatility by entering into forward contracts or similar instruments. The hedging activities are subject to strict limits set out by the Board and to a strictly defined internal control and monitoring mechanism. Decisions relating to hedging of commodities are taken at the Executive Committee level, basis clearly laid down guidelines.

Whilst the Group aims to achieve average LME prices for a month or a year, average realised prices may not necessarily reflect the LME price movements because of a variety of reasons such as uneven sales during the year and timing of shipments.

The Group is also exposed to the movement of international crude oil price and the discount in the price of Rajasthan crude oil to Brent price.

Financial instruments with commodity price risk are entered into in relation to following activities:

- economic hedging of prices realised on commodity contracts
- cash flow hedging of revenues, forecasted highly probable transactions

Aluminium

The requirement of the primary raw material, alumina, is partly met from own sources and the rest is purchased primarily on negotiated price terms. Sales prices are linked to the LME prices. At present the Group on selective basis hedges the aluminium content in outsourced alumina to protect its margins.

The Group also enters into hedging arrangements for its aluminium sales to realise average month of sale LME prices.

Copper

The Group's custom smelting copper operations at Tuticorin is benefitted by a natural hedge except to the extent of a possible mismatch in quotational periods between the purchase of concentrate and the sale of finished copper. The Group's policy on custom smelting is to generate margins from Treatment charges/Refining charges or "Tc/Rc", improving operational efficiencies, minimising conversion cost, generating a premium over LME on sale of finished copper, sale of by-products and from achieving import parity on domestic sales. Hence, mismatches in quotational periods are managed to ensure that the gains or losses are minimised. The Group hedges this variability of LME prices through forward contracts and tries to make the LME price a pass-through cost between purchases of copper concentrate and sales of finished products, both of which are linked to the LME price.

Tc/Rc is a major source of income for the Indian copper smelting operations. Fluctuation in Tc/Rc is influenced by factors including demand and supply conditions prevailing in the market for mine output. The Group's copper business has a strategy of securing a majority of its concentrate feed requirement under long term contracts with mines.

KCM is largely an integrated copper producer and whenever hedging is done, it is with an intention to protect the Group from price fluctuations in copper. KCM also engages in hedging for its custom smelting operations in line with the Group's policy on custom smelting at Tuticorin, as explained above.

Zinc, lead and silver
The sales prices are linked to the LME prices. The Group also enters into hedging arrangements for its Zinc, Lead and Silver sales to realise average month of sale LME prices.

Zinc International
Raw material for zinc and lead is mined in Namibia and South Africa with sales prices linked to the LME prices.

Iron ore
The Group sells its Iron Ore production from Goa on the prevailing market prices and from Karnataka through e-auction route as mandated by State Government of Karnataka in India.

Oil and Gas
The prices of various crude oils are based upon the price of the key physical benchmark crude oil such as Dated Brent, West Texas Intermediate, and Dubai/Oman etc. The crude oil prices move based upon market factors like supply and demand. The regional producers price their crude basis these benchmark crude with a premium or discount over the benchmark based upon quality differential and competitiveness of various grades.

Natural gas markets are evolving differently in important geographical markets. There is no single global market for natural gas. This could be owing to difficulties in large-scale transportation over long distances as compared to crude oil. Globally, there are three main regional hubs for pricing of natural gas, which are USA (Henry Hub Prices), UK (NBP Price) and Japan (imported gas price, mostly linked to crude oil).

Provisionally priced financial instruments
On 31 March 2019, the value of net financial assets linked to commodities (excluding derivatives) accounted for on provisional prices was US$45 million (31 March 2018: liability of US$468 million). These instruments are subject to price movements at the time of final settlement and the final price of these instruments will be determined in the financial year beginning 01 April 2019.

Set out below is the impact of 10% increase in LME prices on pre-tax profit/ (loss) for the year and pre-tax equity as a result of changes in value of the Group's commodity financial instruments:

For the year ended 31 March 2019:

(US$ million except as stated)

Commodity price sensitivity	**Total Exposure**	**Effect on pre-tax profit/(loss) of a 10% increase in the LME**	**Effect on pre-tax equity of a 10% increase in the LME**
Copper	**(21)**	**(2)**	-

For the year ended 31 March 2018:

(US$ million except as stated)

Commodity price sensitivity	Total Exposure	Effect on profit/ (loss) of a 10% increase in the LME	Effect on total equity of a 10% increase in the LME 31 March 2018
Copper	(568)	(57)	-

The above sensitivities are based on volumes, costs, exchange rates and other variables and provide the estimated impact of a change in LME prices on profit and equity assuming that all other variables remain constant. A 10% decrease in LME prices would have an equal and opposite effect on the Group's financial statements.

The impact on pre-tax profit/(loss) mentioned above includes the impact of a 10% increase in closing copper LME for provisionally priced copper concentrate purchased at Vedanta Limited Copper division custom smelting operations of US$11 million (31 March 2018: US$57 million), which is pass through in nature and as such will not have any impact on the profitability.

Financial risk :
The Group's Board approved financial risk policies include monitoring, measuring and mitigating the liquidity, currency, interest rate and counterparty risk. The Group does not engage in speculative treasury activity but seeks to manage risk and optimise interest and commodity pricing through proven financial instruments.

(a) Liquidity risk
The Group requires funds both for short-term operational needs as well as for long term investment programmes mainly in growth projects. The Group generates sufficient cash flows from the current operations which together with the available cash and cash equivalents and short term investments provide liquidity both in the short term as well as in the long term. Anticipated future cash flows, together with undrawn fund based committed facilities of US$991 million, and cash, short term investments and structured investment net of deferred consideration payable for such investments of US$5,688 million as at 31 March 2019, are expected to be sufficient to meet the liquidity requirement of the Group in the near future.

During FY2019, Moodys revised the outlook on ratings for Vedanta Resources Limited to Negative from Stable while affirming the corporate family rating at Ba3 in February 2019. This was on account of expectation of weaker earnings on account of downside risk to commodity prices and increased risk of movement of funds outside Vedanta. S&P affirmed the ratings at B+ while revising the Outlook to Negative in March 2019 on account of weaker operating performance due to commodity slowdown which along with higher debt could keep its metrics weaker than required for current rating levels.

The maturity profile of the Group's financial liabilities based on the remaining period from the balance sheet date to the contractual maturity date is given in the table below. The figures reflect the contractual undiscounted cash obligation of the Group:

At 31 March 2019

(US$ million)

Payment due by period	< 1 year	1-3 years	3-5 years	> 5 years	Total
Trade and other payables(1)	4,748	172	29	-	4,949
Bank and other borrowings(2)	6,481	6,098	3,914	2,900	19,393
Derivative liabilities	66	14	-	-	80
Total	11,295	6,284	3,943	2,900	24,422

At 31 March 2018

(US$ million)

Payment due by period	< 1 year	1-3 years	3-5 years	> 5 years	Total
Trade and other payables(1)	4,468	31	21	-	4,520
Bank and other borrowings(2)	6,427	4,164	4,823	2,956	18,370
Derivative liabilities	22	18	-	-	40
Total	**10,917**	**4,213**	**4,844**	**2,956**	**22,930**

(1) Excludes accrued interest which has been included with borrowings

(2) Includes current and non-current borrowings and committed interest payments.

At 31 March 2019, the Group had access to following funding facilities:

(US$ million)

As at 31 March 2019	Total facility	Drawn	Undrawn
Fund/Non-fund based	13,176	10,952	2,224
Total	13,176	10,952	2,224

(US$ million)

As at 31 March 2018	Total facility	Drawn	Undrawn
Fund/Non-fund based	12,003	10,256	1,747
Total	**12,003**	**10,256**	**1,747**

Collateral

The Group has pledged financial instruments with carrying amount of US$3,197 million and inventories with carrying amount of US$1,564 million as per the requirements specified in various financial facilities in place. The counterparties have an obligation to release the securities to the Group when financial facilities are surrendered.

(b) Foreign currency risk

Fluctuations in foreign currency exchange rates may have an impact on the consolidated income statement, the consolidated statements of change in equity, where any transaction references more than one currency or where assets/liabilities are denominated in a currency other than the functional currency of the respective consolidated entities.

Considering the countries and economic environment in which the Group operates, its operations are subject to risks arising from the fluctuations primarily in the US dollar, Australian dollar, Namibian dollar, AED, ZAR, GBP, INR, JPY and Euro against the functional currencies of its subsidiaries.

Exposures on foreign currency loans are managed through the Group wide hedging policy, which is reviewed periodically to ensure that the results from fluctuating currency exchange rates are appropriately managed. The Group strives to achieve asset liability offset of foreign currency exposures and only the net position is hedged.

The Group's presentation currency is the US dollar. The majority of the assets are located in India and the Indian Rupee is the functional currency for the Indian operating subsidiaries except for Oil and Gas business operations which have a US dollar functional currency. Natural hedges available in the business are identified at each entity level and hedges are placed only for the net exposure. Short-term net exposures are hedged progressively based on their maturity. A more conservative approach has been adopted for project expenditures to avoid budget overruns, where cost of the project is calculated taking into account the hedge cost. The hedge mechanisms are reviewed periodically to ensure that the risk from fluctuating currency exchange rates is appropriately managed.

The following analysis is based on the gross exposure as at the reporting date which could affect the consolidated income statement. The exposure summarised below is mitigated by some of the derivative contracts entered into by the Group as disclosed under the section on "Derivative financial instruments"

The carrying amount of the Group's financial assets and liabilities in different currencies are as follows:

(US$ million)

	As at 31 March 2019		As at 31 March 2018	
	Financial Assets	Financial liabilities	Financial Assets	Financial liabilities
USD	2,108	10,548	1,221	10,164
INR	4,764	10,049	5,490	9,474
Others	817	626	145	311
Total	**7,689**	**21,223**	**6,856**	**19,949**

The Group's exposure to foreign currency arises where a Group company holds monetary assets and liabilities denominated in a currency different to the functional currency of that entity, with USD (US Dollar) being the major non-functional currency of the Group's main operating subsidiaries.

The foreign exchange rate sensitivity calculated by the aggregation of the net foreign exchange rate exposure with a simultaneous parallel foreign exchange rates shift in the currencies by 10 % against the functional currencies of the respective entities.

Set out below is the impact of a 10% strengthening in the functional currencies of the respective entities on pre-tax profit/(loss) and pre-tax equity arising as a result of the revaluation of the Group's foreign currency monetary financial assets/liabilities :

(US$ million)

	For the year ended 31 March 2019		
	Closing exchange rate	Effect on pre-tax profit/(loss) of 10% strengthening in currency	Effect on pre-tax equity of 10% increase in currency
USD	69.1713	149	0

(US$ million)

	For the year ended 31 March 2018		
	Closing exchange rate	Effect on pre-tax profit/(loss) of 10% strengthening in currency	Effect on pre-tax equity of 10% increase in currency
USD	65.0441	234	-

A 10% weakening of the functional currencies of the respective entities would have an equal and opposite effect on the Group's financial statements.

(c) Interest rate risk

At 31 March 2019, the Group's net debt of US$10,292 million (31 March 2018: US$9,588 million net debt) comprises cash, cash equivalents, short term investments and structured investment net of deferred consideration payable for such investments of US$5,688 million (31 March 2018: US$5,606 million) offset by debt of US$15,980 million (31 March 2018: US$15,194 million).

The Group is exposed to interest rate risk on short-term and long term floating rate instruments and on the refinancing of fixed rate debt. The Group's policy is to maintain a balance of fixed and floating interest rate borrowings and the proportion of fixed and floating rate debt is determined by current market interest rates. The borrowings of the Group are principally denominated in Indian Rupees and US dollars with mix of fixed and floating rates of interest. The USD floating rate debt is linked to US dollar LIBOR and INR Floating rate debt to Bank's base rate. The Group has a policy of selectively using interest rate swaps, option contracts and other derivative instruments to manage its exposure to interest rate movements.
These exposures are reviewed by appropriate levels of management on a monthly basis.

The Group invests cash and short term investments in short-term deposits and debt mutual funds, some of which generate a tax-free return, to achieve the Group's goal of maintaining liquidity, carrying manageable risk and achieving satisfactory returns.

Floating rate financial assets are largely mutual fund investments which have debt securities as underlying assets. The returns from these financial assets are linked to market interest rate movements; however the counterparty invests in the agreed securities with known maturity tenure and return and hence has manageable risk.

The exposure of the Group's financial assets to interest rate risk is as follows:

(US$ million)

	As at 31 March 2019			As at 31 March 2018		
	Floating rate financial assets	**Fixed rate financial assets**	**Non-interest bearing financial assets**	Floating rate financial assets	Fixed rate financial assets	Non-interest bearing financial assets
Financial assets	2,120	2,676	2,893	3,021	2,260	1,575
Total financial assets	**2,120**	**2,676**	**2,893**	**3,021**	**2,260**	**1,575**

The exposure of the Group's financial liabilities to interest rate risk is as follows:

(US$ million)

	As at 31 March 2019			As at 31 March 2018		
	Floating rate financial assets	**Fixed rate financial assets**	**Non-interest bearing financial assets**	Floating rate financial assets	Fixed rate financial assets	Non-interest bearing financial assets
Financial liabilities	7,753	9,447	4,023	6,483	10,211	3,255
Total financial liabilities	**7,753**	**9,447**	**4,023**	**6,483**	**10,211**	**3,255**

Considering the net debt position as at 31 March 2019 and the investment in bank deposits, corporate bonds and debt mutual funds, any increase in interest rates would result in a net loss and any decrease in interest rates would result in a net gain. The sensitivity analysis below has been determined based on the exposure to interest rates for financial instruments at the balance sheet date.

The below table illustrates the impact of a 0.5% to 2.0% movement in interest rate of floating rate financial assets/liabilities (net) on profit/(loss) and equity assuming that the changes occur at the reporting date and has been calculated based on risk exposure outstanding as of date. The year end balances are not necessarily representative of the average debt outstanding during the year. This analysis also assumes that all other variables, in particular foreign currency rates, remain constant.

(US$ million)

Increase in interest rates	**Effect on pre-tax profit/(loss) during the year ended 31 March 2019**	Effect on pre-tax profit/(loss) during the year ended 31 March 2018
0.5%	(28)	(17)
1.0%	(56)	(35)
2.0%	(112)	(69)

A reduction in interest rates would have an equal and opposite effect on the Group's financial statements.

(d) Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group has adopted a policy of only dealing with creditworthy counterparties and obtaining sufficient collateral, where appropriate, as a means of mitigating the risk of financial loss from defaults.

The Group is exposed to credit risk from trade receivables, contract assets, cash and cash equivalents, short term investments and other financial instruments.

The Group has clearly defined policies to mitigate counterparty risks. For short-term investments, counterparty limits are in place to limit the amount of credit exposure to any one counterparty. This, therefore, results in diversification of credit risk for our mutual fund and bond investments.

For derivative and financial instruments, the Group attempts to limit the credit risk by only dealing with reputable banks and financial institutions.

Credit risk on receivables is limited as almost all credit sales are against letters of credit and guarantees of banks of national standing. Moreover, given the diverse nature of the Group's businesses trade receivables are spread over a number of customers with no significant concentration of credit risk. During the year ended 31 March 2019 and 31 March 2018, no single customer accounted for 10% or more of the Group's net sales. The history of trade receivables shows a negligible provision for bad and doubtful debts. Therefore, the Group does not expect any material risk on account of non-performance by any of our counterparties.

The Group's maximum gross exposure to credit risk as at 31 March2019 is US$7,689 million (31 March 2018: US$ 6,856 million).

Of the year end trade and other receivable balance the following, though overdue, are expected to be realised in the normal course of business and hence, are not considered impaired as at 31 March :

(US$ million)

	2019	2018
Neither past due nor impaired	972	574
Past due but not impaired		
- Less than 1 month	129	126
- Between 1 - 3 months	49	60
- Between 3 - 12 months	76	112
- Greater than 12 months	366	238
Total	**1,592**	**1,110**

Receivables are deemed to be past due or impaired with reference to the Group's normal terms and conditions of business. These terms and conditions are determined on a case to case basis with reference to the customer's credit quality and prevailing market conditions. Receivables that are classified as 'past due' in the above table are those that have not been settled within the terms and conditions that have been agreed with that customer.

The credit quality of the Group's customers is monitored on an ongoing basis and assessed for impairment where indicators of such impairment exist. The solvency of the debtor and their ability to repay the receivable is considered in assessing receivables for impairment. Where receivables have been impaired, the Group actively seeks to recover the amounts in question and enforce compliance with credit terms.

Movement in allowances for Financial Assets (other non-current assets and trade and other receivables)

Particulars	US$ million
As at 01 April 2017	146
Allowance made during the year	37
Reversals during the year	(33)
Foreign Exchange difference	0
As at 31 March 2018	**150**
Allowance made during the year	7
Reversals during the year	(1)
Foreign Exchange difference	(5)
As at 31 March 2019	**151**

Derivative financial instruments
The Group uses derivative instruments as part of its management of exposure to fluctuations in foreign currency exchange rates, interest rates and commodity prices. The Group does not acquire or issue derivative financial instruments for trading or speculative purposes. The Group does not enter into complex derivative transactions to manage the treasury and commodity risks. Both treasury and commodities derivative transactions are normally in the form of forward contracts and these are subject to the Group guidelines and policies.

The fair value of all derivatives are separately recorded on the balance sheet within other financial assets (derivatives) and other financial liabilities (derivatives), current and non-current. Derivatives that are designated as hedges are classified as current or non-current depending on the maturity of the derivative.

The use of derivatives can give rise to credit and market risk. The Group tries to control credit risk as far as possible by only entering into contracts with reputable banks and financial institutions. The use of derivative instruments is subject to limits, authorities and regular monitoring by appropriate levels of management. The limits, authorities and monitoring systems are periodically reviewed by management and the Board. The market risk on derivatives is mitigated by changes in the valuation of the underlying assets, liabilities or transactions, as derivatives are used only for risk management purposes.

Embedded derivatives
Derivatives embedded in other financial instruments or other contracts are treated as separate derivative contracts, when their risks and characteristics are not closely related to those of their host contracts.

Cash flow hedges
The Group enters into forward exchange and commodity price contracts for hedging highly probable forecast transaction and account for them as cash flow hedges and states them at fair value. Subsequent changes in fair value are recognised in consolidated statement of comprehensive income until the hedged transaction occurs, at which time, the respective gain or losses are reclassified to the consolidated income statement. These hedges have been effective for the year ended 31 March 2019.

The Group uses foreign exchange contracts from time to time to optimise currency risk exposure on its foreign currency transactions. The Group hedged part of its foreign currency exposure on capital commitments during fiscal year 2019. Fair value changes on such forward contracts are recognised in the consolidated statement of comprehensive income.

The majority of cash flow hedges taken out by the Group during the year comprise non-derivative hedging instruments for hedging the foreign exchange rate of highly probable forecast transactions and commodity price contracts for hedging the commodity price risk of highly probable forecast transactions.

The cash flows related to above are expected to occur during the year ending 31 March 2020 and consequently may impact the consolidated income statement for that year depending upon the change in the commodity prices and foreign exchange rates movements. For cash flow hedges regarded as basis adjustments to initial carrying value of the property, plant and equipment, the depreciation on the basis adjustments made is expected to affect the consolidated income statement over the expected useful life of the property, plant and equipment.

Fair value hedges
The fair value hedges relate to forward covers taken to hedge currency exposure and commodity price risks.

The Group's sales are on a quotational period basis, generally one month to three months after the date of delivery at a customer's facility. The Group enters into forward contracts for the respective quotational period to hedge its commodity price risk based on average LME prices. Gains and losses on these hedge transactions are substantially offset by the amount of gains or losses on the underlying sales. Net gains and losses are recognised in the consolidated income statement.

The Group uses foreign exchange contracts from time to time to optimise currency risk exposure on its foreign currency transactions. Fair value changes on such forward contracts are recognised in the consolidated income statement.

Non-qualifying/economic hedge
The Group enters into derivative contracts which are not designated as hedges for accounting purposes, but provide an economic hedge of a particular transaction risk or a risk component of a transaction. Hedging instruments include copper, aluminium and zinc future contracts on the LME and certain other derivative instruments. Fair value changes on such derivative instruments are recognised in the consolidated income statement.

The fair value of the Group's open derivative positions as at 31 March 2019, recorded within financial instruments (derivative) is as follows:

(US$ million)

	As at 31 March 2019		As at 31 March 2018	
	Liability	Asset	Liability	Asset
Current				
Cash flow hedges				
- Commodity contracts	1	0	15	18
- Forward foreign currency contracts	0	5	-	0
Fair value hedges				
- Commodity contracts	-	0	0	1
- Forward foreign currency contracts	-	1	1	2
Non Qualifying hedges				
- Commodity contracts	11	1	2	1
- Forward foreign currency contracts	53	4	4	2
- Other (Foreign currency swap)	1	0	0	0
Total	66	11	22	24
Non-current				
Fair Value Hedges				
- Forward foreign currency contracts	-	-	16	-
Non Qualifying hedges				
- Commodity contracts	-	-	0	-
- Forward foreign currency contracts	14	-	2	-
Total	14	-	18	-
Grand Total	80	11	40	24

26. PROVISIONS

(US $ million)

	As at 31 March 2019			As at 31 March 2018		
	Current	Non- Current	Total	Current	Non- Current	Total
Provision for restoration, rehabilitation and environmental	2	369	371	7	344	351
Provision for employee benefits	29	2	31	8	7	15
Others	7	-	7	7	-	7
Total	38	371	409	22	351	373

	Restoration, rehabilitation and environmental	Other
As at 1 April 2017	317	19
Additions	8	0
Utilised	(1)	-
Unused amounts reversed	(10)	-
Unwinding of discount (note 8)	13	-
Revision in estimates	23	-
Reclassified during the year	(6)	(12)
Exchange differences	3	0
Acquisition through business combination	4	-
As at 1 April 2018	351	7
Additions	3	0
Utilised	(2)	-
Unused amounts reversed	(1)	-
Unwinding of discount (note 8)	13	-
Revision in estimates	23	-
Exchange differences	(16)	(0)
Acquisition through business combination (net of disposal)	0	-
As at 31 March 2019	**371**	**7**

Restoration, rehabilitation and environmental
The provisions for restoration, rehabilitation and environmental liabilities represent the management's best estimate of the costs which will be incurred in the future to meet the Group's obligations under existing Indian, Australian, Zambian, Namibian, South African and Irish law and the terms of the Group's mining and other licences and contractual arrangements.

Within India, the principal restoration and rehabilitation provisions are recorded within Cairn India where a legal obligation exists relating to the oil and gas fields, where costs are expected to be incurred in restoring the site of production facilities at the end of the producing life of an oil field. The Group recognises the full cost of site restoration as a liability when the obligation to rectify environmental damage arises.

These amounts are calculated by considering discount rates within the range of 2% to 14%, and become payable on closure of mines and are expected to be incurred over a period of one to thirty years. The discount rates at major units are in the range of 2% to 10% at Zinc International with lower range at operations in Ireland and higher range at operations in African Countries, 2% to 3% at Oil & Gas division and 14% at KCM.

An obligation to incur restoration, rehabilitation and environmental costs arises when environmental disturbance is caused by the development or ongoing production from a producing field.

Others
Others include provision for disputed cases and claims.

27. RETIREMENT BENEFITS

The Group participates in defined contribution and benefit plans, the assets of which are held (where funded) in separately administered funds.

For defined contribution plans the amount charged to the consolidated income statement is the total amount of contributions payable in the year.

For defined benefit plans, the cost of providing benefits under the plans is determined by actuarial valuation separately each year for each plan using the projected unit credit method by independent qualified actuaries as at the year end. Re-measurement gains and losses arising in the year are recognised in full in Consolidated Statement of Comprehensive Income for the year.

(i) Defined contribution plans

The Group contributed a total of US$17 million and US$16 million for the year ended 31 March 2019 and 2018 respectively, to the following defined contribution plans.

(US $ million)

Particulars	Year ended 31 March 2019	Year ended 31 March 2018
Employer's contribution to Recognised Provident fund and family pension fund	15	14
Employer's contribution to superannuation	2	2
	17	16

Indian pension plans

Central recognised provident fund

In accordance with the 'The Employees Provident and Miscellaneous Provisions Act ,1952', employees are entitled to receive benefits under the Provident Fund. Both the employee and the employer make monthly contributions to the plan at a predetermined rate (12% for the year ended 31 March 2019 and 31 March 2018) of an employee's basic salary. All employees have an option to make additional voluntary contributions. These contributions are made to the fund administered and managed by the Government of India (GOI) or to independently managed and approved funds. The Group has no further obligations under the fund managed by the GOI beyond its monthly contributions which are charged to the consolidated income statement in the period they are incurred.

Family Pension Fund

The Pension Fund was established in 1995 and is managed by the Government of India. The employee makes no contribution to this fund but the employer makes a contribution of 8.33% of salary each month subject to a specified ceiling per employee. This is provided for every permanent employee on the payroll.

At the age of superannuation, contributions ceases and the individual receives a monthly payment based on the level of contributions through the years, and on their salary scale at the time they retire, subject to a maximum ceiling of salary level. The Government funds these payments, thus the Group has no additional liability beyond the contributions that it makes, regardless of whether the central fund is in surplus or deficit.

Superannuation

Superannuation, another pension scheme applicable in India, is applicable only to executives above certain grade. However, in case of oil & gas (applicable from the second year of employment) and Iron Ore Segment, the benefit is applicable to all executives. Vedanta Limited and each relevant Indian subsidiary holds policy with the Life Insurance Corporation of India ("LIC"), to which each of these entities contributes a fixed amount relating to superannuation and the pension annuity is met by the LIC as required, taking into consideration the contributions made. The Group has no further obligations under the scheme beyond its monthly contributions which are charged to the consolidated income statement in the year they are incurred.

Australian pension Scheme

The Group also participates in defined contribution superannuation schemes in Australia. The contribution of a proportion of an employee's salary into a superannuation fund is a compulsory legal requirement in Australia. The employer contributes, into the employee's fund of choice 9.5% of the employee's gross remuneration where the employee is covered by the industrial agreement and 12.50% of the basic remuneration for all other employees. All employees have an option to make additional voluntary contributions. The Group has no further obligations under the scheme beyond its monthly contributions which are charged to the consolidated income statement in the year they are incurred.

Zambian Pension Scheme

The Konkola Copper Mines (KCM) Pension Scheme is applicable to full-time permanent employees of KCM (subject to the fulfilment of certain eligibility criteria). The management of the scheme is vested in the trustees consisting of representatives of the employer and the members. The employer makes a monthly contribution of 5% to the KCM Pension Scheme and the member makes monthly contribution of 5%.

All contributions to the KCM Pension Scheme in respect of a member cease to be payable when the member attains normal retirement age of 55 years, or upon leaving the service of the employer, or when the member is permanently medically incapable of performing duties in the service of the employer. Upon such cessation of contribution on the grounds of normal retirement, or being rendered medically incapable of performing duties, or early voluntary retirement, the member is entitled to receive his accrued pension. The member is allowed to commute his/her accrued pension subject to certain rules and regulations.

The Group has no additional liability beyond the contributions that it makes. Accordingly, this scheme has been accounted for on a defined contribution basis and contributions are charged directly to the income statement.

Skorpion Zinc Provident Fund, Namibia

The Skorpion Zinc Provident Fund is a defined contribution fund and is compulsory to all full time employees under the age of 60. Company contribution to the fund is a fixed percentage of 9% per month of pensionable salary, whilst the employee contributes 7% with the option of making additional contributions, over and above the normal contribution, up to a maximum of 12%.

Normal retirement age is 60 years and benefit payable is the member's fund credit which is equal to all employer and employee contributions plus interest. The same applies when an employee resigns from Skorpion Zinc. The Fund provides disability cover which is equal to the member's fund credit and a death cover of 2 times annual salary in the event of death before retirement.

The Group has no additional liability beyond the contributions that it makes. Accordingly, this scheme has been accounted for on a defined contribution basis and contributions are charged directly to the income statement in the year they are incurred.

Black Mountain (Pty) Limited, South Africa Pension & Provident Funds
Black Mountain Mining (Pty) Ltd has two retirement funds, both administered by Alexander Forbes, a registered financial service provider. The purpose of the funds is to provide retirement and death benefits to all eligible employees. Group contributes at a fixed percentage of 10.5% for up to supervisor grade and 15% for others.

Membership of both funds is compulsory for all permanent employees under the age of 60.

The Group has no additional liability beyond the contributions that it makes. Accordingly, this scheme has been accounted for on a defined contribution basis and contributions are charged directly to the consolidated income statement in the year they are incurred.

(ii) Defined benefit plans
(a) Contribution to provident fund trust (the "trusts") of Iron ore division, Bharat Aluminium Company Limited (BALCO), Hindustan Zinc Limited (HZL), Sesa Resources Limited (SRL) and Sesa Mining Corporation Limited (SMCL)
The provident funds of Iron ore division, BALCO, HZL, SRL and SMCL are exempted under section 17 of The Employees Provident Fund and Miscellaneous Provisions Act, 1952. Conditions for grant of exemption stipulates that the employer shall make good deficiency, if any, between the return guaranteed by the statute and actual earning of the Fund. Based on actuarial valuation in accordance with IAS 19 and Guidance note issued by Institute of Actuaries of India for interest rate guarantee of exempted provident fund liability of employees, there is no interest shortfall that is required to be met by Iron ore division, BALCO, HZL, SRL and SMCL as at March 31,2019 and March 31,2018. Having regard to the assets of the fund and the return on investments, the Group does not expect any deficiency in the foreseeable future. The Group contributed a total of US$10 million & US$10 million for the years ended 31 March 2019 and 2018 respectively in relation to the independently managed and approved funds. The present value of obligation and the fair value of plan assets of the trust are summarised below.

(US$ million)

Particulars	As at 31 March 2019	As at 31 March 2018
Fair value of plan assets of trusts	317	233
Present value of defined benefit obligation	(306)	(226)
Net liability arising from defined benefit obligation	-	-

Percentage allocation of Plan assets of the trust

(US$ million)

Assets by Category	As at 31 March 2019	As at 31 March 2018
Government Securities	53.1%	71.2%
Debentures / Bonds	45.7%	28.0%
Equity	1.2%	0.6%
Fixed Deposits	0.0%	0.2%

(b) Post-Retirement Medical Benefits:
The Group has a scheme of medical benefits for employees at BMM and BALCO subsequent to their retirement on completion of tenure including retirement on medical grounds and voluntary retirement on contributory basis. The scheme includes employee's spouses as well. Based on an actuarial valuation conducted as at year-end, a provision is recognised in full for the benefit obligation. The obligation relating to post-retirement medical benefits as at 31 March 2019 was US$9 million (31 March 2018: US$10 million). The obligation under this plan is unfunded. The Group considers these amounts as not material and accordingly has not provided further disclosures as required by IAS 19 (Revised 2011) 'Employee benefits'. The remeasurement gain and net interest on the obligation of post-retirement medical benefits of US$0 million (31 March 2018: US$0 million) and US$1 million (31 March 2018: US$1 million) for the year ended 31 March 2019 have been recognised in other comprehensive income and finance cost respectively.

(c) Other Post-employment Benefits:
India- Gratuity Plan
In accordance with the Payment of Gratuity Act of 1972, Vedanta Limited and its Indian subsidiaries contributes to a defined benefit plan (the "Gratuity Plan") covering certain categories of employees. The Gratuity Plan provides a lump sum payment to vested employees at retirement, disability or termination of employment being an amount based on the respective employee's last drawn salary and the number of years of employment with the Group.

Based on actuarial valuations conducted as at year end using the projected unit credit method, a provision is recognised in full for the benefit obligation over and above the funds held in the Gratuity Plan. For entities where the plan is unfunded, full provision is recognised in the consolidated statements of financial position.

The iron ore and oil & gas division of Vedanta Limited, SRL, SMCL and HZL have constituted a trust recognised by Indian Income Tax Authorities for gratuity to employees, contributions to the trust are funded with Life Insurance Corporation of India (LIC), ICICI Prudential Life Insurance Company Limited and HDFC Standard life insurance.

Zambia
Specified permanent employees of KCM are entitled to receive medical and retirement severance benefits. This comprises

two months' basic pay for every completed year of service with an earliest service start date of 1 July 2004. Under this scheme, benefits are provided based on final pensionable pay and a full actuarial valuation of the scheme is carried out on an annual basis. The accruals are not contributed to any fund and are in the form of provisions in KCM's accounts.

On the death of an employee during service, a lump sum amount is paid to his or her dependants. This amount is equal to sixty months' basic pay for employees who joined before 1 April 2000 and thirty months' basic pay for employees who joined on or after 1 April 2000. For fixed term contract employees, the benefit payable on death is thirty months' basic pay.

Principal actuarial assumptions.
Principal actuarial assumptions used to determine the present value of Other post-employment benefit plan obligation are as follows:

(US$ million)

Particulars	Year ended 31 March 2019	Year ended 31 March 2018
Discount rate	7.8% to 17.0%	7.7% to 18.5%
Expected rate of increase in compensation level of covered employees	2.0%-15.0%	2.0%-15.0%

In India, the mortality tables used, assume that a person aged 60 at the end of the balance sheet date has a future life expectancy of 19 years.

Assumptions regarding mortality for Indian entities are based on mortality table of 'Indian Assured Lives Mortality (2006-2008) published by the Institute of Actuaries of India.

Assumptions regarding mortality for KCM are based on World Health Organisation Life Tables for 1999 applicable to Zambia which has been taken as a reference point. Based on this a mortality table which is appropriate for the workers of Konkola Copper Mines plc has been derived.

Amount recognised in the Consolidated Statement of Financial Position consists of:

(US$ million)

Particulars	As at 31 March 2019	As at 31 March 2018
Fair value of plan assets	56	52
Present value of defined benefit obligation	(135)	(122)
Net liability arising from defined benefit obligation	(79)	(70)

Amounts recognised in Consolidated income statement in respect of Other post-employment benefit plan are as follows:

(US$ million)

Particulars	Year ended 31 March 2019	Year ended 31 March 2018
Current service cost	9	7
Past service cost	-	13
Net Interest cost	8	7
Components of defined benefit costs recognised in consolidated income statement	17	27

Amounts recognised in the Consolidated Statement of Comprehensive Income in respect of Other post-employment benefit plan are as follows:

(US$ million)

Particulars	Year ended 31 March 2019	Year ended 31 March 2018
Remeasurement of the net defined benefit obligation:		
Actuarial losses arising from changes in demographic assumptions	0	-
Actuarial losses / (gains) arising from changes in financial assumptions	(1)	0
Actuarial losses / (gains) arising from experience adjustments	7	(1)
Actuarial losses/(gains) on plan assets (excluding amounts included in net interest cost)	0	0
Components of defined benefit costs recognised in consolidated statement of comprehensive income- losses/(gains)	6	(1)

The movement of the present value of Other post-employment benefit plan obligation is as follows:

(US$ million)

Particulars	Year ended 31 March 2019	Year ended 31 March 2018
Opening balance	(122)	(116)
Acquired in business combination	(2)	-
Current service cost	(9)	(7)
Past service cost	-	(13)
Benefits paid	16	7
Interest cost	(12)	(11)
Actuarial (losses)/gains arising from changes in assumptions	(6)	1
Foreign currency translation	-	0
Derecognition of death benefit obligation during the year	-	22
Reclassification from provisions	-	(7)
Closing balance	**(135)**	**(122)**

The movement in the fair value of Other post-employment benefit plan assets is as follows:

(US$ million)

Particulars	Year ended 31 March 2019	Year ended 31 March 2018
Opening balance	52	49
Acquired in business combination	2	-
Contributions received	12	5
Benefits paid	(11)	(6)
Remeasurement gain/ (loss) arising from return on plan assets	(0)	(0)
Interest income	4	4
Foreign currency translation	(3)	(0)
Closing balance	**56**	**52**

The above plan assets have been invested in the qualified insurance policies.

The actual return on plan assets was US$4 million and US$4 million for the year ended 31 March 2019 and 31 March 2018 respectively.

The weighted average duration of the defined benefit obligation is 15 years and 15 years as at 31 March 2019 and 31 March 2018 respectively.

The company expects to contribute US$8 million to the funded Gratuity plan during the year ending 31 March 2020.

Sensitivity analysis for Defined Benefit Plan
Below is the sensitivity analysis determined for significant actuarial assumptions for the determination of defined benefit obligations and based on reasonably possible changes of the respective assumptions occurring at the end of reporting year while holding all other assumptions constant.

	Increase/ (Decrease) in defined benefit obligation
Discount rate	
Increase by 0.50 %	(3)
Decrease by 0.50%	4
Salary increase	
Increase by 0.50 %	4
Decrease by 0.50%	(3)

The above sensitivity analysis may not be representative of the actual benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

In presenting the above sensitivity analysis, the present value of defined benefit obligation has been calculated using the projected unit credit method at the end of reporting period, which is the same as that applied in calculating the defined obligation liability recognised in the consolidated statement of financial position.

Risk analysis

Group is exposed to a number of risks in the defined benefit plans. Most significant risks pertaining to defined benefits plans and management estimation of the impact of these risks are as follows:

Investment risk

Most of the Indian defined benefit plans are funded with Life Insurance Corporation of India (LIC), ICICI Prudential Life (ICICI) and HDFC Standard Life. Group does not have any liberty to manage the fund provided to LIC, ICICI prudential and HDFC Standard Life.

The present value of the defined benefit plan obligation is calculated using a discount rate determined by reference to Government of India bonds for Group's Indian operations. If the return on plan asset is below this rate, it will create a plan deficit.

Interest risk

A decrease in the interest rate on plan assets will increase the net plan obligation.

Longevity risk/ Life expectancy

The present value of the defined benefit plan obligation is calculated by reference to the best estimate of the mortality of plan participants both during and at the end of the employment. An increase in the life expectancy of the plan participants will increase the plan obligation.

Salary growth risk

The present value of the defined benefit plan obligation is calculated by reference to the future salaries of plan participants. An increase in the salary of the plan participants will increase the plan obligation.

28. EMPLOYEE NUMBERS AND COSTS

Average number of persons employed by the Group in the year*

(US$ million)

Class of business	Year ended 31 March 2019	Year ended 31 March 2018
Zinc	5,905	6,035
- India	4,325	4,506
- International	1,580	1,529
Iron ore	2,688	2,869
Copper	7,525	7,724
- India/Australia	1,113	1,162
- Zambia	6,412	6,562
Aluminium	6,784	6,296
Power	98	223
Oil & Gas	1,847	1,780
Other	3,080	156
	27,927	25,083

Costs incurred during the year in respect of Employees and Executive Directors recognised in Consolidated Income Statement

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Salaries and wages	604	555
Defined contribution pension scheme costs (note 27)	17	16
Defined benefit pension scheme costs including interest on defined benefit obligation (note 27)	27	24
Share- based payments charge	21	23
Gratuity- Special Items (note 6)	-	13
Less: cost allocated/directly booked in joint ventures	(92)	(91)
	577	540

*Non IFRS measure

29. SHARE-BASED PAYMENTS
Employee share schemes
The Group aims to provide superior rewards for outstanding performance and a high proportion of 'at risk' remuneration for Executive Directors. Three employee share schemes were approved by shareholders on Listing in 2003. In 2014, the Board introduced a Performance Share Plan ('PSP') which is the primary arrangement under which share-based incentives are provided to the Executive Directors and the wider management group. In 2015, the Board also introduced a Deferred Share Bonus Plan (DSBP). In 2016, Vedanta Limited (subsidiary of Vedanta Resources Limited) introduced an Employee Stock Option Scheme 2016 ("ESOS"), which was approved by the Vedanta Limited shareholders.

The Vedanta Resources Long term Incentive Plan (the 'LTIP') and Employee Share Ownership Plan (the 'ESOP') and Performance Share Plan (the 'PSP')
The maximum value of shares that can be conditionally awarded to an Executive Director in a year is 150% of annual salary. The maximum value of shares that can be awarded to members of the wider management group is calculated by reference to the grade average CTC and individual grade of the employee. The performance conditions attaching to outstanding awards are as follows:

Performance Share Plan (the 'PSP')
Dependent on the level of employee, part of these awards will be subject to a continued service condition only with the remainder measured in terms of Total Shareholder Return ('TSR') (being the movement in a company's share price plus reinvested dividends), compared over the performance period with the performance of the companies as defined in the scheme from the grant date. The extent to which an award vests will depend on the Company's TSR rank against a group or groups of peer companies at the end of the performance period and as moderated by the Remuneration Committee. The awards granted under PSP plans are either equity-settled or cash-settled. The equity settled plans have an exercise price of 10 US cents per share and the performance period is three years, with no re-testing being allowed. In the cash-based scheme, business performance set against business plan for the financial year is included as an additional condition.

Employee Share Ownership Plan (the 'ESOP')
The awards under this plan are measured in terms of business performance set against business plan for the financial year comprising operational deliverables, enabler parameters and sustainability performance specific to each company. The vesting schedule is graded over three years and varies from company to company.

The exercise price of the awards is 10 US cents per share and the performance period is one year. The exercise period is six months from the date of vesting.

The Vedanta Resources Long term Incentive Plan (the 'LTIP')
The awards under this plan are measured in terms of Total Shareholder Return ('TSR') (being the movement in a company's share price plus reinvested dividends), compared over the performance period with the performance of the companies as defined in the scheme from the grant date. The extent to which an award vests will depend on the Company's TSR rank against a group of peer companies ("Adapted Comparator Group") at the end of the performance period and as moderated by the Remuneration Committee. The exercise price of the awards is 10 US cents per share and the performance period is three years, with no re-testing being allowed.

The Vedanta Resources Deferred Share Bonus Plan (the DSBP)
Under this plan, a portion of the annual bonus is deferred into shares and the awards granted under this scheme are not subject to any performance conditions, but only to service conditions being met. The vesting schedule is staggered over a period of one to three years. In case of DSBP, the shares are purchased from open market and allotted to employees, officers and directors. As on 31 March 2019, there are no options outstanding under the DSBP scheme.

In general, the awards will be settled in equity. The awards are accounted for in accordance with the requirements applying to equity settled share-based payment transactions. The fair value of each award on the day of grant is equal to the average of the middle market quotations of its share price for 5 dealing days before the grant date.

The details of share options for the year ended 31 March 2019 and 31 March 2018 is presented below:

Year of Grant	Exercise Period	Exercise price US cents per share	Options outstanding 1 April 2018	Options granted during the year	Options lapsed during the year	Options lapsed during the year owing to performance conditions	Options exercised during the year	Options outstanding at 31 March 2019
2014	17 November 2017- 17 May 2018	10	483,340	-	(28,547)	-	(454,793)	-
2015	1 January 2018 – 1 July 2018	10	8,845	-	-	-	(8,845)	-
2015	30 December 2018 – 30 June 2019	10	4,499,326	-	(167,587)	(1,125,804)	(3,205,935)	-
2016	12 May 2019 - 12 November 2019	10	32,000	-	(7,422)	-	(24,578)	-
2016	11 November 2019 - 11 May 2020	10	371,944	-	(132,776)	(155,277)	(83,891)	-
2017	2 March 2020 – 2 September 2020 (cash based plan)	-	627,660	-	(328,097)	(155,351)	(144,212)	-
2017	14 November 2020 – 14 May 2021 (cash based plan)	-	780,180	-	(566,222)	(169,392)	(44,566)	-
2017	14 November 2020 - 14 May 2021	10	300,670	-	(219,942)	(80,728)	-	-
			7,103,965	-	(1,450,093)	(1,686,552)	(3,966,820)	-

Year of Grant	Exercise Period	Exercise price US cents per share	Options outstanding 1 April 2017	Options granted during the year	Options lapsed during the year	Options lapsed during the year owing to performance conditions	Options exercised during the year	Options outstanding at 31 March 2018
2014	17 November 2017- 17 May 2018	10	4,247,283	-	(120,483)	(963,690)	(2,679,770)	483,340
2015	1 January 2018 – 1 July 2018	10	21,500	-	(6,000)	(6,655)	-	8,845
2015	30 December 2018 – 30 June 2019	10	4,930,183	-	(430,857)	-	-	4,499,326
2016	12 May 2019 - 12 November 2019	10	32,000	-	-	-	-	32,000
2016	11 November 2019 - 11 May 2020	10	475,000	-	(103,056)	-	-	371,944
2017	2 March 2020 – 2 September 2020 (cash based plan)	-	678,550	-	(50,890)	-	-	627,660
2017	14 November 2020 – 14 May 2021 (cash based plan)	-	-	805,900	(25,720)	-	-	780,180
2017	14 November 2020 - 14 May 2021	10	-	300,670	-	-	-	300,670
			10,384,516	**1,106,570**	**(737,006)**	**(970,345)**	**(2,679,770)**	**7,103,965**

During the current year, through a cash offer all the outstanding equity settled options were bought back by Vedanta Resources Limited's parent, Volcan Investments Limited. All the TSR based options were vested based on the TSR performance from the date of grant to the date on which buy-back offer on these options went unconditional. For the service condition related options, no. of options were prorated as per remaining period left till the date of actual vesting except for options issued in December 2015 which got vested in full. For options outstanding under DSBP all options were vested in full. On account of delisting of the Company, the cash based options were also early settled. The accelerated charge on account of early settlement of both the equity settled and cash settled options was recognised in the income statement.

Hence, as at 31 March 2019, no options were exercisable at the year end (31 March 2018: 492,185 options were exercisable). The Weighted average share price for the share options exercised during the year ended 31 March 2019 was GBP 9 (Year ended 31 March 2018: GBP 7). The weighted average maturity period for the options outstanding as on 31 March 2019 is Nil (31 March 2018: 18 months).

Most of the share-based awards of the Group are equity-settled as defined by IFRS 2 "Share-based Payment". The fair value of these awards has been determined at the date of grant of the award allowing for the effect of any market-based performance conditions. This fair value, adjusted by the Group's estimate of the number of awards that will eventually vest as a result of non-market conditions, is expensed on a straight-line basis over the vesting period. Where an award is cash-settled the fair value is recalculated at each reporting date until the liability is settled.

The fair values were calculated using the Stochastic valuation model with suitable modifications to allow for the specific performance conditions of the respective schemes. The inputs to the model include the share price at date of grant, exercise price, expected volatility, expected dividends, expected term and the risk-free rate of interest. Expected volatility has been calculated using historical return indices over the period to date of grant that is commensurate with the performance period of the award. The volatilities of the industry peers have been modelled based on historical movements in the return indices over the period to date of grant which is also commensurate with the performance period for the option. The history of return indices is used to determine the volatility and correlation of share prices for the comparator companies and is needed for the Stochastic valuation model to estimate their future TSR performance relative to the Company's TSR performance. All options are assumed to be exercised immediately after vesting.

The assumptions used in the calculations of the charge in respect of the PSP/LTIP awards granted during the year ended 31 March 2018 are set out below:

	Year ended 31 March 2018 PSP/ LTIP	
	November 2017	November 2017
Number of instruments	805,900 (cash settled)	300,670 (equity settled)
Exercise price	-	US$0.10
Share price at the date of grant	GBP 7.8	GBP 7.8
Contractual life	3years	3years
Expected volatility	61.33%	61.33%
Expected option life	3 years	3 years
Expected dividends	5.77%	5.77%
Risk free interest rate	0.51%	0.51%
Expected annual forfeitures	10%p.a.	10%p.a.
Fair value per option granted	GBP 3.1/GBP 6.6	GBP 3.1

The Group recognised total expenses of US$6 million (including expenses on DSBP of US$1 million) and US$12 million (including expenses on DSBP of US$2 million) related to equity settled share-based payment transactions in the year ended 31 March 2019 and 31 March 2018 respectively.

The total expense recognised on account of cash settled share based plan during the year ended 31 March 2019 is US$0 million (31 March 2018 : US$1 million) and the carrying value of cash settled share based compensation liability as at 31 March 2019 is Nil (31 March 2018 is US$1 million).

The Vedanta Limited Plans
Employee Stock Option Scheme (ESOS) 2016
During the year 2016, Vedanta Limited (subsidiary of Vedanta Resources Limited) introduced an Employee Stock Option Scheme 2016 ("ESOS"), which was approved by the Vedanta Limited shareholders. The maximum value of shares that can be conditionally awarded to an Executive Committee in a year is 125% of annual salary. The maximum value of options that can be awarded to members of the wider management group is calculated by reference to the grade average CTC and individual grade of the employee. The performance conditions attached to the award is measured by comparing company's performance in terms of TSR over the performance period with the performance of the companies as defined in the scheme. The extent to which an award vests will depend on the Vedanta Limited's TSR rank against a group or groups of peer companies at the end of the performance period and as moderated by the Remuneration Committee. Dependent on the level of employee, part of these awards will be subject to a continued service condition only with the remainder measured in terms of TSR. The exercise price of the awards is 1 INR per share and the performance period is three years, with no re-testing being allowed. Further in some schemes under the plan, business performance set against business plan for the financial year is included as an additional condition. During the year, cash based options were also issued under this scheme.

The details of share options for the year ended 31 March 2019 and 31 March 2018 is presented below:

Year of Grant	Exercise Period	Options outstanding 01 April 2018	Options granted during the year	Options lapsed during the year	Options lapsed during the year owing to performance conditions	Options exercised during the year	Options outstanding 31 March 2019
2017	15 December 2019-15 June 2020	7,098,602	-	(590,376)	-	-	6,508,226
2018	1 September 2020-1 March 2021	9,617,340	-	(848,381)	(494,566)	-	8,274,393
2018	16 October 2020-16 April 2021	11,570	-	-	(444)	-	11,126
2018	1 November 2020-1 May 2021	28,740	-	-	(1,102)	-	27,638
2019	1 November 2021-1 May 2022	-	13,793,980	(227,780)	-	-	13,566,200
2019	1 November 2021-1 May 2022 (Cash settled)	-	3,889,980	(42,486)	-	-	3,847,494
		16,756,252	17,683,960	(1,709,023)	(496,112)	-	32,235,077

Year of Grant	Exercise Period	Options outstanding 01 April 2017	Options granted during the year	Options lapsed during the year	Options lapsed during the year owing to performance conditions	Options exercised during the year	Options outstanding 31 March 2018
2017	15 December 2019-14 June 2020	7,803,400	-	(704,798)	-	-	7,098,602
2018	1 September 2020-28 February 2021	-	10,048,650	(431,310)	-	-	9,617,340
2018	16 October 2020-15 April 2021	-	11,570	-	-	-	11,570
2018	1 November 2020-30 April 2021	-	28,740	-	-	-	28,740
		7,803,400	10,088,960	(1,136,108)	-	-	16,756,252

The fair value of all awards has been determined at the date of grant of the award allowing for the effect of any market-based performance conditions. This fair value, adjusted by the Group's estimate of the number of awards that will eventually vest as a result of non-market conditions, is expensed on a straight-line basis over the vesting period.

The fair values were calculated using the Stochastic valuation model with suitable modifications to allow for the specific performance conditions of the respective schemes. The inputs to the model include the share price at date of grant, exercise price, expected volatility, expected dividends, expected term and the risk free rate of interest. Expected volatility has been calculated using historical return indices over the period to date of grant that is commensurate with the performance period of the award. The volatilities of the industry peers have been modelled based on historical movements in the return indices over the period to date of grant which is also commensurate with the performance period for the option. The history of return indices is used to determine the volatility and correlation of share prices for the comparator companies and is needed for the Stochastic valuation model to estimate their future TSR performance relative to the Vedanta Limited's TSR performance. All options are assumed to be exercised immediately after vesting.

The assumptions used in the calculations of the charge in respect of the ESOS awards granted during the year ended 31 March 2019 and 31 March 2018 are set out below:

	Year ended March 2019 ESOS November 2018	Year ended March 2018 ESOS September, October & November 2017
Number of instruments	3,889,980 (cash settled)/ 13,793,980 (equity settled)	10,088,960
Exercise price	INR 1	INR 1
Share price at the date of grant	INR 195.0	INR 308.9
Contractual life	3 years	3 years
Expected volatility	44.3%	48%
Expected option life	3 years	3 years
Expected dividends	6.5%	3.7%
Risk free interest rate	7.7%	6.5%
Expected annual forfeitures	10%p.a.	10%p.a.
Fair value per option granted	INR 159.9/INR 96.3	INR 275.3/INR 161.1

The Group recognised total expenses of US$12 million (2018: US$7 million) related to equity settled share-based plans under the above scheme in the year ended 31 March 2019.

The Group has awarded certain other cash settled option plans indexed to shares of its subsidiaries. As the amounts under these plans are not material, accordingly no further disclosures have been provided.

The total expense recognised on account of these cash settled option plans during the year ended 31 March 2019 is US$3 million (2018: US$3 million) and the carrying value of cash settled share based compensation liability as at 31 March 2019 is US$5 million (2018: US$3 million).

30. SHARE CAPITAL

	As at 31 March 2019		As at 31 March 2018	
Shares in issue	**Number**	**Paid up amount (US$ million)**	Number	Paid up amount (US$ million)
Ordinary shares of 10 US cents each	**285,246,698**	**29**	303,987,039	30
Deferred shares of £1 each	**50,000**	**0**	50,000	0
Total	**285,296,698**	**29**	**304,037,039**	**30**

Rights and obligations attaching to shares
The rights and obligations attaching to the ordinary and deferred shares are set out in the Articles.

Each ordinary share carries the right to one vote at general meetings of the Company and is entitled to dividends. During the year ended 31 March 2019, the Company issued 3,762,142 ordinary shares at par value of 10 US cents per share to the employees pursuant to the Vedanta Performance Share Plan (31 March 2018: 2,686,214 shares).This included the shares which were issued on vesting of the Company outstanding share plans on account of the takeover offer by Volcan Investments Limited becoming unconditional. In addition, 22,502,483 Treasury shares, equivalent to US$491 million were cancelled. As a result, the number of Ordinary shares in issue has decreased from that at 31 March 2018 to 285,246,698 shares.

6,904,995 Ordinary shares with no voting rights, which were previously issued on the conversion of certain convertible bonds issued by one of the Group's subsidiaries and held through Global Depositary Receipts, were transferred to Volcan as part of the takeover offer of the Company's shares. Following the takeover, the GDR listing was terminated.

The holders of deferred shares do not have the right to receive notice of any general meeting of the Company nor the right to attend, speak or vote at any such general meeting. The deferred shares have no rights to dividends and, on a winding-up or other return of capital, entitle the holder only to the payment of the amounts paid on such shares after repayment to the holders of Ordinary Shares of the nominal amount paid up on the Ordinary Shares plus the payment of £100,000 per Ordinary Share. Of the 50,000 deferred shares, one deferred share was issued at par and has been fully paid, and 49,999 deferred shares were each paid up as to one-quarter of their nominal value.

31. NON-CONTROLLING INTERESTS ('NCI')

The Group consists of a parent Company, Vedanta Resources Limited, incorporated in UK and a number of subsidiaries held directly and indirectly by the Group which operate and are incorporated around the world. Note 39 to the financial statements lists details of the interests in the subsidiaries.

Non-controlling interests that are material to the Group relate to Hindustan Zinc Limited (HZL), Cairn India Holdings Limited (CIHL) and its subsidiaries and Vedanta Limited.

As at 31 March 2019, NCIs hold an economic interest of 67.33%, 49.67% and 49.67% respectively in HZL, CIHL and its wholly owned subsidiaries, and Vedanta Limited. In ASI (partly owned subsidiary of CIHL), the NCI's economic interest is 74.01%. The respective NCI holdings as at 31 March 2018 were 67.38%, 49.75% and 49.75% in HZL, CIHL and its wholly owned subsidiaries, and Vedanta Limited. In ASI (partly owned subsidiary of CIHL), the NCI's economic interest was 74.06% as at 31 March 2018.

Principal place of business of HZL, CIHL and its subsidiaries and Vedanta Limited is set out under note 39.

The table below shows details of non-wholly owned subsidiaries of the Group that have material non-controlling interests:

The summarised financial information below are on a 100% basis and before inter-company eliminations.

	Year ended 31 March 2019					Year ended 31 March 2018				
Particulars	HZL	CIHL and its subsidiaries	Vedanta Limited	Others*	Total	HZL	CIHL and it's subsidiaries	Vedanta Limited	Others*	Total
Profit/ (loss) Attributable to NCI	748	98	330	(515)	661	968	257	508	(497)	1,236
Equity Attributable to NCI**	3,312	1,096	5,826	(4,053)	6,181	3,772	999	6,258	(4,159)	6,870
Dividends paid / payable to NCI	(512)	-	(496)	-	(1,008)	(221)	-	(607)	-	(828)

* Others consist of investment subsidiaries of Vedanta Limited, other individual non-material subsidiaries and consolidation adjustments.

** US$15 million (31 March 2018 : US$15 million) loss attributable to NCI of CIHL and its subsidiaries transferred to put option liability. Refer note 3(b) and 24.

Summarised financial information in respect of the components of the Group including subsidiaries that have material non-controlling interests is set out below:

	As at 31 March 2019					As at 31 March 2018				
Particulars	HZL	CIHL and its subsidiaries	Vedanta Limited	Others*	Total	HZL	CIHL and it's subsidiaries	Vedanta Limited	Others*	Total
Non-current assets	2,932	3,031	18,635	(3,690)	20,908	2,830	2,413	19,047	(4,249)	20,041
Current assets	3,119	1,117	3,284	1,353	8,873	3,712	1,106	3,574	805	9,197
Current liabilities	1,108	1,061	7,039	3,308	12,516	913	408	7,626	2,707	11,654
Non-current liabilities	24	871	3,150	7,967	12,012	31	1,105	2,415	7,493	11,044
Net assets	4,919	2,216	11,730	(13,612)	5,253	5,598	2,006	12,580	(13,644)	6,540

* Others consist of investment subsidiaries of Vedanta Limited, Vedanta Resources Limited, other individual non-material subsidiaries and consolidation adjustments.

	Year ended 31 March 2019					Year ended 31 March 2018				
Particulars	HZL	CIHL and its subsidiaries	Vedanta Limited	Others*	Total	HZL	CIHL and its subsidiaries	Vedanta Limited	Others*	Total
Revenue	2,981	969	5,442	4,639	14,031	3,379	714	6,985	4,216	15,294
Profit/ (loss) for the year	1,111	217	664	(1,568)	424	1,437	523	1,021	(1,506)	1,475
Other comprehensive income / (loss)**	5	-	(17)	(6)	(18)	(9)	-	14	9	14
Net cash inflow/ (outflow) from operating activities	1,259	148	1,645	(1,166)	1,886	1,560	398	1,235	(1,699)	1,494
Net cash inflow/ (outflow) from investing activities	(173)	114	(540)	(1,077)	(1,676)	294	(803)	1,911	811	2,213
Net cash inflow/ (outflow) from financing activities	(1,368)	(46)	(807)	2,388	167	(2,849)	380	(3,111)	973	(4,607)

* Others consist of Investment subsidiaries of Vedanta Limited, Vedanta Resources Limited, other Individual non-material subsidiaries and consolidation adjustments.

** Excluding exchange differences arising on translation of foreign operations

The effect of changes in ownership interests in subsidiaries that did not result in a loss of control is as follows:

(US$ million)

As at 31 March 2019	HZL	CIHL and its subsidiaries	Vedanta Limited	Others	Total
Other changes in non-controlling interests	-	-	11	21	32

(US$ million)

As at 31 March 2018	HZL	CIHL and its subsidiaries	Vedanta Limited	Others	Total
Other changes in non-controlling interests	-	17	5	(2)	20

32. CAPITAL MANAGEMENT

The Group's objectives when managing capital are to safeguard continuity, maintain a strong credit rating and healthy capital ratios in order to support its business and provide adequate return to shareholders through continuing growth.

The Group sets the amount of capital required on the basis of annual business and long term operating plans which include capital and other strategic investments. The funding requirement is met through a mixture of equity, internal accruals and other borrowings.

The Group monitors capital using a gearing ratio, being the ratio of net debt as a percentage of total capital.

(US$ million)

	As at 31 March 2019	As at 31 March 2018
Total equity	5,253	6,540
Net debt	10,292	9,588
Total capital	15,545	16,128
Gearing	66 %	**59%**

The increase in the gearing ratio compared to 2018 ratio is primarily due to increase in net debt pursuant to special dividend paid by a subsidiary of the Company.

33. COMMITMENTS, GUARANTEES, CONTINGENCIES AND OTHER DISCLOSURES

A. Commitments

The Group has a number of continuing operational and financial commitments in the normal course of business including:

- Exploratory mining commitments;
- Oil and gas commitments;
- Mining commitments arising under production sharing agreements; and
- Completion of the construction of certain assets.

(US$ million)

	As at 31 March 2019	As at 31 March 2018
Capital commitments contracted but not provided	2,003	2,020

Estimated amount of contracts remaining to be executed on capital accounts and not provided for:

(US$ million)

	As at 31 March 2019	As at 31 March 2018
Oil & Gas sector		
Cairn India	797	668
Aluminium sector		
Lanjigarh Refinery (Phase II)	209	205
Jharsuguda 1.25 MTPA smelter	67	75
Zinc sector		
Zinc India (mines expansion and smelter)	284	305
Gamsberg mining & milling project	26	163
Copper sector		
Tuticorin Smelter 400 KTPA*	404	424
Others	216	180
Total	2,003	**2,020**

**currently contracts are under suspension under the force majeure clause as per the contract*

Commitments related to the minimum work programme (Other than capital commitment):

(US$ million)

	As at 31 March 2019	As at 31 March 2018
Oil & Gas sector		
Cairn India (OALP - New Oil and Gas blocks)	551	-

B. Guarantees
The aggregate amount of indemnities and other guarantees on which the Group does not expect any material losses, was US$1,120 million (31 March 2018: US$416 million).

The Group has given guarantees in the normal course of business as stated below:

- Guarantees and bonds advanced to the customs authorities in India of US$98 million relating to the export and payment of import duties on purchases of raw material and capital goods (31 March 2018: US$107 million).
- Guarantees issued for Group's share of minimum work programme commitments of US$342 million (31 March 2018: US$26 million).
- Guarantee issued against liabilities for structured investment worth US$277 million. Liability of US$299 million pertaining to above mentioned structured investment has been shown under Trade and other payables (refer note 24)
- Guarantees of US$78 million issued under bid bond (31 March 2018: US$2 million).
- Bank guarantees of US$17 million (US$18 million as on 31 March 2018) has been provided by the Group on behalf of Volcan Investments Limited to Income tax department, India as a collateral in respect of certain tax disputes
- Other guarantees worth US$308 million (31 March 2018: US$263 million) issued for securing supplies of materials and services, in lieu of advances received from customers, litigation, for provisional valuation of custom duty and also to various agencies, suppliers and government authorities for various purposes. The Group does not anticipate any liability on these guarantees.

Cairn PSC guarantee to Government
The Group has provided Parent Company guarantee for the Cairn India Group's obligation under the Production Sharing Contract ('PSC').

C. Export Obligations
The Indian entities of the Group have export obligations of US$562 million (31 March 2018: US$1,904 million) on account of concessional rates of import duty paid on capital goods under the Export Promotion Capital Goods Scheme and under the Advance Licence Scheme for the import of raw material laid down by the Government of India.

In the event of the Group's inability to meet its obligations, the Group's liability would be US$78 million (31 March 2018: US$169 million) reduced in proportion to actual exports, plus applicable interest.

The Group has given bonds of US$216 million (31 March 2018: US$226 million) to custom authorities against these export obligations.

D. Contingencies
The Group discloses the following legal and tax cases as contingent liabilities.

Hindustan Zinc Limited: Department of Mines and Geology
The Department of Mines and Geology of the State of Rajasthan issued several show cause notices in August, September and October 2006 to HZL, totalling US$48 million as at 31 March 2019 (31 March 2018: US$51 million). These notices alleged unlawful occupation and unauthorised mining of associated minerals other than zinc and lead at HZL's Rampura Agucha, Rajpura Dariba and Zawar mines in Rajasthan during the period from July 1968 to March 2006. HZL believes it is unlikely that the claim will lead to a future obligation and thus no provision has been made in the financial statements. HZL had filed appeals (writ petitions) in the High Court of Rajasthan in Jodhpur. The High Court restrained the Department of Mines and Geology from undertaking any coercive measures to recover the penalty. Central Government has also been made a party to the case and the matter is likely to be listed now for hearing after completion of pleadings by the Central Government.

Richter and Westglobe: Income Tax
The Group, through its subsidiaries Richter Holdings Limited and Westglobe Limited, in 2007 acquired the entire stake in Finsider International Company Limited (FICL) based in the United Kingdom which held 51% shares of Sesa Goa Ltd, an Indian Company. In October 2013, the Indian Tax Authorities (Tax Authorities) had served an order on Richter and Westglobe for alleged failure to deduct withholding tax on capital gains on the indirect acquisition of shares in April 2007.

The Tax Authorities determined the liability for such non-deduction of tax as US$127 million (31 March 2018: US$135 million) in the case of Richter and US$84 million (31 March 2018: US$90 million) in the case of Westglobe, comprising tax and interest as at 31 March 2019. Richter and Westglobe filed appeals before the first appellate authority. Appeals (writ petitions) were filed in the High Court of Karnataka challenging the constitutional validity of retrospective amendments made by the Finance Act 2012 and in particular the imposition of obligations to deduct tax on payments made against an already concluded transaction. The Karnataka High Court passed interim orders and directed that the adjudication of liability (TDS quantum and interest) shall no longer remain in force since the tax department passed the orders on merits travelling beyond the limited issue of jurisdiction. The jurisdiction issue will be heard by the High Court.

In another similar matter, ITAT in the case of Cairn UK Holdings Limited held that being a retrospective transaction, interest would not be levied. As a result of the above order from ITAT, the Group now considers the risk in respect of the interest portion of claim to be remote. Accordingly, the Group has revised the contingent liability to US$74 million in the case of Richter and US$49 million in the case of Westglobe.

Vedanta Limited: Income tax
In March 2014, Vedanta Limited (notice was served on Cairn India Limited which subsequently merged with Vedanta Limited, accordingly now referred to as Vedanta Limited) received a show cause notice from the Indian Tax Authorities ('Tax Authorities') for not deducting withholding tax on the payments made to Cairn UK Holdings Limited (CUHL), for acquiring shares of Cairn India Holdings Limited (CIHL), as part of their internal reorganisation. The Tax Authorities have stated in the notice that a short-term capital gain has accrued to CUHL on transfer of the shares of CIHL to Vedanta Limited, in the financial year 2006–2007, on which tax should have been withheld by Vedanta Limited. Pursuant to this various replies were filed with the Tax Authorities. After several hearings, the Income Tax Authority, in March 2015, issued an order holding Vedanta Limited as 'assessee in default' and raised a demand totalling US$2,963 million (including interest of US$1,481 million). Vedanta Limited had filed an appeal before the First

Appellate Authority, Commissioner of Income Tax (Appeals) which vide order dated 3 July 2017 confirmed the tax demand against Vedanta Limited. Vedanta Limited has challenged the Commissioner of Income Tax's (Appeals) order before the Income Tax Appellate Tribunal (ITAT).

Vedanta Limited also filed a writ petition before the Delhi High Court wherein it has raised several points for assailing the aforementioned Income Tax Authority's order. The matter is pending for adjudication before the Honourable Delhi High Court.

Separately CUHL, on whom the primary liability of tax lies, had received an Order from the ITAT in the financial year 2016-17 holding that the transaction is taxable in view of the clarification made in the Act but also acknowledged that being a retrospective transaction, interest would not be levied. Hence affirming a demand of US$1,481 million excluding the interest portion that had previously been claimed. The tax department has appealed this order before the Delhi High Court. As a result of the above order from ITAT, the Group considers the risk in respect of the interest portion of claim to be remote. Further, as per the recent recovery notice dated 12 October 2018 received from the Tax Recovery Officer (TRO) appointed for CUHL, tax demand of CUHL of approx. US$722 million along with interest is outstanding. Further, in the said notice, tax department had also instructed to remit the preference shares redemption amount including dividend payable thereon to the TRO. Accordingly, amount aggregating to US$88 million has been paid to the TRO on 26 October 2018 thus reducing the liability to US$635 million. Vedanta has also paid interim dividend for FY2019 of US$1 million to the TRO. Accordingly, the Group has revised the contingent liability to US$634 million (31 March 2018: US$1,405 million). In the event, the case is finally decided against the Company, the demand payable along with interest as per the above mentioned order would be US$2,963 million, of which only US$634 million is considered as possible. Separately, but in connection with this litigation, the Company has filed a Notice of Claim against the Government of India ('GOI') under the UK India Bilateral Investment Treaty (the BIT). The International Arbitration Tribunal passed a favourable order on jurisdiction and recently hearing on merits have been completed and order will be passed in due course. The Government of India has challenged the jurisdiction order of Arbitration Tribunal before the High Court of Singapore.

Ravva Joint Operations arbitration proceedings
ONGC Carry
The Ravva Production Sharing Contract (PSC) obliges the contractor parties to pay a proportionate share of ONGC's exploration, development, production and contract costs in consideration for ONGC's payment of costs related to the construction and other activities it conducted in Ravva prior to the effective date of the Ravva PSC (the ONGC Carry). The question as to how the ONGC Carry is to be recovered and calculated, along with other issues, was submitted to an International Arbitration Tribunal in August 2002 which rendered a decision on the ONGC Carry in favour of the contractor parties (including Vedanta Limited (Cairn India Limited which subsequently merged with Vedanta Limited, accordingly now referred to as Vedanta Limited)) whereas four other issues were decided in favour of Government of India (GOI) in October 2004 (Partial Award). The GOI then proceeded to challenge the ONGC Carry decision before the Malaysian courts, as Kuala Lumpur was the seat of the arbitration. The Federal Court of Malaysia upheld the Partial Award. As the Partial Award did not quantify the sums, therefore, contractor parties approached the same Arbitration Tribunal to pass a Final Award in the subject matter since it had retained the jurisdiction to do so. The Arbitral Tribunal was reconstituted and the Final Award was passed in October 2016 in Vedanta Limited's favour. GOI's challenge of the Final Award has been dismissed by the Malaysian High Court and the next appellate court in Malaysia i.e. Malaysian Court of Appeal. GOI then filed an appeal at Federal Court of Malaysia. The matter was heard on 28 February 2019 and the Federal Court dismissed GOI's leave to appeal. Vedanta Limited has also filed for the enforcement of the Partial Award and Final Award with Delhi High Court.

Base Development Cost
Ravva joint operations had received a claim from the Ministry of Petroleum and Natural Gas, Government of India (GOI) for the period from 2000-2005 for US$129 million for an alleged underpayment of profit petroleum (by recovering higher Base Development Costs ("BDC") against the cap imposed in the PSC) to the Government of India (GOI), out of which, Vedanta Limited's (Cairn India Limited which subsequently merged with Vedanta Limited, accordingly now referred to as Vedanta Limited) share will be US$29 million plus interest. Joint venture partners initiated the arbitration proceedings and Arbitration Tribunal published the Award allowing claimants (including Vedanta Limited) to recover the development costs spent to the tune of US$278 million and disallowed over run of US$22 million spent in respect of BDC along with 50% legal costs. The High Court of Kuala Lumpur as well as the Court of Appeal dismissed GOI's application of setting aside the part of the Award. GOI challenge to the same before the Federal Court of Malaysia was also dismissed on 17 May 2016. Vedanta Limited has filed an application for enforcement of award before Delhi High Court.

In connection with the above two matters, Vedanta Limited has received an order dated 22 October 2018 from the GOI directing oil marketing companies (OMCs) who are the offtakers for Ravva to divert the sale proceeds to GOI's account. GOI alleges that the Ravva Joint Operations has short paid profit petroleum of US$314 million (Vedanta Limited's share approximately - US$93 million) on account of the two disputed issues of ONGC Carry and BDC matters. Against an interim application, filed by Vedanta Limited and other joint venture partner, seeking stay of such action from GOI, before the Delhi High Court, where enforcement petitions for both matters are pending, the Court directed the OMCs to deposit above sums to the Court for both BDC and ONGC Carry matters. However, the Company (and other joint venture partner) has been given the liberty to seek withdrawal of the proportionate amounts (fallen due as of the date of Court order) from the Court upon furnishing a bank guarantee of commensurate value. The interim application is pending adjudication.

While the Company does not believe the GOI will be successful in its challenge, if the Arbitral Awards in above matters are reversed and such reversals are binding, Group would be liable for approximately US$93 million plus interest (31 March 2018: US$93 million plus interest).

Proceedings related to the imposition of entry tax
Vedanta Limited and other Group companies i.e. Bharat Aluminium Company Limited (BALCO) and Hindustan Zinc Limited (HZL) challenged the constitutional validity of the local statutes and related notifications in the states of

Chhattisgarh, Odisha and Rajasthan pertaining to the levy of entry tax on the entry of goods brought into the respective states from outside.

Post some contradictory orders of High Courts across India adjudicating on similar challenges, the Supreme Court referred the matters to a nine judge bench. Post a detailed hearing, although the bench rejected the compensatory nature of tax as a ground of challenge, it maintained status quo with respect to all other issues which have been left open for adjudication by regular benches hearing the matters.

Following the order of the nine judge bench, the regular bench of the Supreme Court proceeded with hearing the matters. The regular bench remanded the entry tax matters relating to the issue of discrimination against domestic goods bought from other States to the respective High Courts for final determination but retained the issue of jurisdiction for levy on imported goods, for determination by the regular bench of the Supreme Court. Following the order of the Supreme Court, the Group filed writ petitions in respective High Courts.

On 9 October 2017, the Supreme Court has held that states have the jurisdiction to levy entry tax on imported goods. With this Supreme Court judgment, imported goods will rank pari passu with domestic goods for the purpose of levy of Entry tax. Vedanta Limited and its subsidiaries have amended their appeals (writ petitions) in Odisha and Chhattisgarh to include imported goods as well. With respect to Rajasthan, the State Government has filed a counter petition in the Rajasthan High Court, whereby it has admitted that it does not intend to levy the entry tax on imported goods.

The issue pertaining to the levy of entry tax on the movement of goods into a Special Economic Zone (SEZ) remains pending before the Odisha High Court. The Group has challenged the levy of entry tax on any movement of goods into SEZ based on the definition of 'local area' under the Odisha Entry Tax Act which is very clear and does not include a SEZ. In addition, the Government of Odisha further through its SEZ Policy 2015 and the operational guidelines for administration of this policy dated 22 August 2016, exempted the entry tax levy on SEZ operations.

The total claims against Vedanta Limited and its subsidiaries are US$190 million (31 March 2018: US$203 million) net of provisions made.

BALCO: Challenge against imposition of Energy Development Cess

BALCO challenged the imposition of Energy Development Cess levied on generators and distributors of electrical energy @ 10 paise per unit on the electrical energy sold or supplied before the High Court on the grounds that the Cess is effectively on production and not on consumption or sale since the figures of consumption are not taken into account and the Cess is discriminatory since captive power plants are required to pay @ 10 paise while the State Electricity Board is required to pay @ 5 paise. The High Court of Chhattisgarh by order dated 15 December 2006 declared the provisions imposing ED Cess on CPPs as discriminatory and therefore ultra vires the Constitution. BALCO has sought refund of ED Cess paid till March 2006 amounting to US$5 million.

The State of Chhattisgarh moved an SLP in the Supreme Court and whilst issuing notice has stayed the refund of the Cess already deposited and the Supreme Court has also directed the State of Chhattisgarh to raise the bills but no coercive action be taken for recovery for the same. Final argument in this matter started before the Supreme Court. In case the Supreme Court overturns the decision of the High Court, BALCO would be liable to pay an additional amount of US$108 million (31 March 2018: US$101 million) and the company may have to bear a charge of US$113 million (31 March 2018: US$106 million).

South Africa Carry Cost

As part of the farm-in agreement for Block 1, the Group was required to carry its joint venture partner, Petro SA, up to a gross expenditure of US$100 million for a work programme including 3D and 2D seismic studies and at least one exploration well. The Group has spent US$38 million towards exploration expenditure and a minimum carry of US$62 million (including drilling one well) was outstanding at the end of the initial exploration period. The Group had sought an extension for execution of deed for entry into the second renewal phase of the exploration period with a request to maintain status quo of the prior approvals due to uncertainty in the proposed changes in fiscal terms impacting the Group financial interest in the block. The same was granted by the South African authority subject to risk of exploration right getting expired on account of recent High Court judgments. The Group had provided for the requisite damages as applicable under the South African Regulations.

During financial year 2018-19, Group has received letter from PASA (Petroleum Agency SA) that exploration right has lapsed through effluxion of time, in line with past judicial precedents and asked to submit a closure application. The Group along with Petro SA has filed the closure application on 19 September 2018. Pending disposal of Group's application the obligation for the aforesaid carry cost of US$62 million (31 March 2018: US$62 million) has been assessed as possible and disclosed as a contingency.

Class actions against KCM on behalf of Zambian nationals

Vedanta and KCM had challenged the jurisdiction of the English courts to hear and adjudicate the claims by Zambian residents in relation to KCM's operations in Zambia. The allegations relate to claims of personal injury, significant pollution, environmental damage and claims for aggravated and exemplary damages and for injunctive relief. These allegations are currently defended by KCM. On 27 May 2016, the English High Court of Justice, Queen's Bench Division, Technology and Construction Court ruled that the English courts have jurisdiction to hear and adjudicate the claims. Vedanta and KCM appealed this ruling.

The English Court of Appeal released a judgement on 13 October 2017, dismissing this appeal and ruling that the English courts have jurisdiction to hear and adjudicate the claims. This judgement was solely related to the jurisdiction of the English courts to hear these claims.

Vedanta and KCM had sought permission from the Supreme Court of London to appeal the Court's decision, which was granted by the Supreme Court on 23 March 2018.

The UK Supreme Court hearing on jurisdiction of the UK courts to adjudicate the substantive claims took place on 15 and 16 January, 2019. Both parties presented their arguments and submissions on the days. On 10 Apr 2019, the UK Supreme Court delivered its decision on jurisdiction matter and held that the English Court has jurisdiction to try such claims.

The Supreme Court, however, agreed with arguments put forward by Vedanta and KCM that England is not the proper place for the trial of these claims and consequently overturned the lower courts on this point. The Court further added that the High Court was entitled to conclude on the evidence before it that there is a real risk that "substantial justice" will not be obtainable in Zambia and because of this, the claims may nonetheless be heard in the English Court.

There has been no hearing or proceeding in any court on the merits of any of these claims to date, none has been scheduled, and the amount of the claims has not been specified. Given the stage of proceedings the amount is presently not quantifiable.

Miscellaneous disputes- Income tax
The Group is involved in various tax disputes amounting to US$1,070 million (31 March 2018: US$1,075 million) relating to income tax for the periods for which initial assessments have been completed. These mainly relate to the disallowance of tax holiday for 100% Export Oriented Undertaking under section 10B of the Income Tax Act, 1961, disallowance of tax holiday benefit on production of gas under section 80IB of the Income Tax Act, 1961, tax holiday for undertakings located in certain notified areas under section 80IC of the Income Tax Act, 1961, disallowance of tax holiday benefit for power plants under section 80IA of the Income Tax Act, 1961, on account of depreciation disallowances of the Income Tax Act and interest thereon which are pending at various appellate levels. There are similar matters pending initial assessment by the tax authorities for subsequent years and additional demands, if any, can be determined only once such assessments are completed.

The Group believes that these disallowances are not tenable and accordingly no provision is considered necessary.

Miscellaneous disputes- Others
The Group is subject to various claims and exposures which arise in the ordinary course of conducting and financing its business from the excise, indirect tax authorities and others. These claims and exposures mostly relate to the assessable values of sales and purchases or to incomplete documentation supporting the companies' returns or other claims.

The approximate value of claims (excluding the items as set out separately above) against the Group companies total US$581 million (31 March 2018: US$543 million).

The Group considers that it can take steps such that the risks can be mitigated and that there are no significant unprovided liabilities arising.

Except as described above, there are no pending litigations which the Group believes could reasonably be expected to have a material adverse effect on the results of operations, cash flows or the financial position of the Group.

E. Operating Lease commitments: As lessee
(i) Operating leases are in relation to the office premises, office equipment and other assets, some of which are cancellable and some are non-cancellable. There is an escalation clause in the lease agreements during the primary lease period. There are no restrictions imposed by lease arrangements and there are no sub-leases. There are no contingent rents. The total of the future minimum lease payments under non-cancellable leases are as under:

(US$ million)

Particulars	As at 31 March 2019	As at 31 March 2018
Within one year of the balance sheet date	2	1
Within two to five years from the balance sheet date	3	1
After five years from the balance sheet date	0	0
Total	**5**	**2**

Lease payments recognised as expenses during the year ended 31 March 2019, on non-cancellable leases, is US$2 million (31 March 2018: US$1 million).

(ii) TSPL has ascertained that the Power Purchase Agreement (PPA) entered with Punjab State Power Corporation Limited (PSPCL) qualifies to be an operating lease under IAS 17 'Leases'. Based on the assessment that the lease payments by PSPCL are subject to variations on account of various factors like availability of coal, water, etc., the management has determined the entire consideration receivable under the PPA relating to recovery of capacity charges towards capital cost to be contingent rent under IAS 17. The contingent rent recognised as revenue in the consolidated income statement during the year ended 31 March 2019 and 31 March 2018 is US$242 million and US$239 million respectively.

34. OTHERS MATTERS
i) Share transactions Call options
a. HZL
Pursuant to the Government of India's policy of divestment, the Group in April 2002 acquired 26% equity interest in HZL from the Government of India. Under the terms of the Shareholder's Agreement ('SHA'), the Group had two call options to purchase all of the Government of India's shares in HZL at fair market value. The Group exercised the first call option on 29 August 2003 and acquired an additional 18.9% of HZL's issued share capital. The Group also acquired an additional 20% of the equity capital in HZL through an open offer, increasing its shareholding to 64.9%. The second call option provides the Group the right to acquire the Government of India's remaining 29.5% share in HZL. This call option is subject to the right of the Government of India to sell 3.5% of HZL shares to HZL employees. The Group exercised the second call option on 21 July 2009. The Government of India disputed the validity of the call option and has refused to act upon the second call option. Consequently the Group invoked arbitration which is in the early stages. The next date of hearing is to be notified. The Government of India without prejudice to the position on the Put / Call option issue has received approval from the Cabinet for divestment and the Government is looking to divest through the auction route. Meanwhile, the Supreme Court has, in January 2016, directed status quo pertaining to disinvestment of Government of India's residual shareholding in a public interest petition filed which is currently pending and sub-judice.

b. BALCO
Pursuant to the Government of India's policy of divestment, the Group in March 2001 acquired 51% equity interest in BALCO from the Government of India. Under the terms of the SHA, the Group has a call option to purchase the Government of India's remaining ownership interest in BALCO at any point from 2 March 2004. The Group exercised this option on 19 March 2004. However, the Government of India has contested the valuation and validity of the option and contended that the clauses of the SHA violate the (Indian) Companies Act, 1956 by restricting the rights of the Government of India to transfer its shares and that as a result such provisions of the SHA were null and void. In the arbitration filed by the Group, the arbitral tribunal by a majority award rejected the claims of the Group on the grounds that the clauses relating to the call option, the right of first refusal, the "tag-along" rights and the restriction on the transfer of shares violate the (Indian) Companies Act, 1956 and are not enforceable. The Group has challenged the validity of the majority award in the High Court of Delhi and sought for setting aside the arbitration award to the extent that it holds these clauses ineffective and inoperative. The Government of India also filed an application before the High Court of Delhi to partially set aside the arbitral award in respect of certain matters involving valuation. The matter is currently scheduled for hearing by the Delhi High Court on 02 August 2019. Meanwhile, the Government of India without prejudice to its position on the Put / Call option issue has received approval from the Cabinet for divestment and the Government is looking to divest through the auction route.

In view of the lack of resolution on the options, the non-response to the exercise and valuation request from the Government of India, the resultant uncertainty surrounding the potential transaction and the valuation of the consideration payable, the Group considers the strike price of the options to be at fair value, and hence the call options have not been recognised in the financial statements.

ii) Konkola Copper Mines: Value Added Tax
As at 31 March 2019, backlog Value Added Tax (falling under older VAT rule 18 regime) on inputs amounting to US$45 million (31 March 2018 : US$72 million) for eight month's period between January 2013 to December 2014 was pending for refund from the Government of republic of Zambia (GRZ). VAT receivable under new VAT rule 18 is US$119 million (31 March 2018 : US$116 million). Based on various VAT audits to the satisfaction of Zambia Revenue Authority (ZRA), KCM was granted total refunds for US$115 million (including US$12 million of back log VAT) in FY2019.

During FY2018, Government of republic of Zambia have initiated an industry-wide audit of governance and documentations surrounding VAT rules through independent professional audit firms in order to have a more comprehensive review of compliance and governance in VAT regime between 01 January 2013 to 31 December 2015.

The company believes the new comprehensive review would only reaffirm the position of its compliance, given positive outcomes in earlier audits as conducted by ZRA. Accordingly, the company does not recognise any provision against the carrying amount of this receivable. The firm appointed by ZRA has conducted the long pending forensic audit with regards to backlog VAT during FY2019 and the final report has not yet been issued. However, due to delays in closure of the comprehensive assessment, the backlog VAT receivables of US$45 million has been continued to be classified under "Other non-current assets" in Statement of Financial position as at 31 March 2019.

iii) Electrosteel Steels Limited had filed application for renewal of Consent to Operate ('CTO') on 24 August 2017 for the period of five years which was denied by Jharkhand State Pollution Control Board ('JSPCB') on 23 August 2018. Hon'ble High Court of Jharkhand has extended a stay on the order of denial of CTO by JSPCB and continued their interim order to allow the operations till next hearing. Hon'ble High Court has also extended stay against order of Ministry of Environment, Forests and Climate Change (MOEF) dated 20 September 2018 in respect of environment clearance. Presently the stay has been extended till 25 July 2019.

iv) Pursuant to Management Committee recommendation and minutes of Empowered Committee of Secretaries (ECS) filed by GoI, Vedanta Limited had considered cost recovery of US$251 million in FY2018, being the cost incurred over the initially approved FDP of Pipeline Project. Vedanta Limited's claim for the resultant profit petroleum of US$43 million (refer note 18), which had been previously paid, has been disputed by the GoI. The Group believes that it has a good case on merits to recover the amount and has therefore treated it as a non-current recoverable amount.

35. RELATED PARTY TRANSACTIONS
The information below sets out transactions and balances between the Group and various related parties in the normal course of business for the year ended 31 March 2019.

Sterlite Technologies Limited ('STL')

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Sales	0	11
Purchases	-	0
Other expenses	0	-
Dividend Income	0	0
Management fees expense	2	-
Management fees income	0	0
Net amounts receivable at year end	0	1
Net amounts payable at year end	2	-
Investment in Equity Share	15	23

Sterlite Technologies Limited is related by virtue of having the same controlling party as the Group, namely Volcan. Pursuant to the terms of the Shared Services Agreement dated 5 December 2003 entered into by the Company and STL, the Company provides various commercial services in relation to STL's businesses on an arm's length basis and at normal commercial terms. For the year ended 31 March 2019, the commercial services provided to STL were performed by certain senior employees of the Group on terms set out in the Shared Services Agreement.

Sterlite Power Transmission limited ('SPTL')

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Sales	131	175
Purchases	0	2
Other income	-	0
Reimbursement	0	-
Net Interest Received	1	0
Net amounts receivable at year end	1	1
Net amounts payable at year end	1	1
Investment in Equity Share	2	2

Sterlite Power Transmission limited ('SPTL') is related by virtue of having the same controlling party as the Group, namely Volcan.

Vedanta Foundation

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Donation	1	0
Net advance given at year end	0	1

Vedanta Foundation is a registered not-for-profit entity with a broad focus mainly on education, nutrition and livelihood. The Vedanta Foundation is a related party as it is controlled by members of the Agarwal family who control Volcan. Volcan is also the majority shareholder of Vedanta Resources Limited.

Sesa Goa Community Foundation Limited

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Donation	1	1

Following the acquisition of erstwhile Sesa Goa Limited, the Sesa Goa Community Foundation Limited, a charitable institution, became a related party of the Group on the basis that key management personnel of the Group have significant influence on the Sesa Goa Community Foundation Limited.

Sterlite Power Grid Ventures Limited

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Reimbursement	0	0
Net amounts receivable at year end	0	0

Pursuant to scheme of demerger, SPGVL becomes the subsidiary of Sterlite Power Transmission Limited effective 23 May 2016 which is a subsidiary of Twinstar Overseas Limited.

Sterlite Iron and Steel Company Limited

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Loan given/(repaid)	0	0
Net Interest Income	0	0
Advances given/(received) during the year	0	-
Loan balance receivable at year end	0	1
Net amount receivable at year end (including interest and advance given)	2	2

Sterlite Iron and Steel Limited is a related party by virtue of having the same controlling party as the Group, namely Volcan.

Vedanta Medical Research Foundation

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Donation	14	13
Guarantees given during the year (net of relinquishment)	2	5
Guarantees given balance at year end	7	5

Vedanta Medical Research Foundation is a related party of the Group on the basis that key management personnel of the Group exercise significant influence.

Volcan Investments Limited

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Recovery of expenses	0	0
Dividend paid	73	111
Interest paid on bonds held by Volcan	1	5
Bonds redeemed during the period**	8	82
Value of bonds held by Volcan	13	21
Purchase of structured investment*	541	-
Deferred consideration payable*	299	-
Fair Value of structured investment at year end*	690	-
Net amount receivable at the year end	0	1

** Includes premium on redemption of bonds of US$ Nil and US$6 million for the year ended 31 March 2019 and 31 March 2018 respectively.

Volcan Investments Limited is a related party of the Group by virtue of being an ultimate controlling party of the Group.

Bank guarantee has been provided by the Group on behalf of Volcan in favour of Income tax department, India as collateral in respect of certain tax disputes of Volcan. The guarantee amount is US$17 million (31 March 2018 : US$18 million).

Pursuant to a buy back offer by Volcan, the Group has rendered 1.7 million shares held by its separate investment trust to Volcan and received US$19 million as consideration towards the same.

*In December 2018, as part of its cash management activities, Cairn India Holdings Limited (CIHL), a step-down subsidiary of the Company, entered into a tripartite agreement with Volcan and one of its subsidiaries. Under the agreement, CIHL purchased an economic interest in a structured investment for the equity shares of Anglo American Plc (AA Plc), a company listed on the London Stock Exchange, from Volcan for a total consideration of US$541 million (GBP 428 million) (of which US$254 million (GBP 200 million) has been paid up to March 31 2019), determined based on an independent third-party valuation. The ownership of the underlying shares, and the associated voting interests, remained with Volcan and the investment would mature in two tranches in April 2020 and October 2020. As part of the agreement, CIHL also received a put option (embedded derivative) from the aforementioned subsidiary, the value of which was not material at initial recognition. In February 2019, certain terms of the aforesaid agreement were modified, and it was converted into a biparty agreement between CIHL and Volcan. The revision in the terms did not have any material effect on the fair value of the instrument on that date.

As per the revised agreement, if the share price of AA Plc remain above the Put exercise price, CIHL would be entitled to an amount determined based on the share price of AA Plc multiplied by 15 million and 11 million shares respectively on the aforementioned two maturity dates. Alternatively, CIHL also has an option to realise the instrument for US$358 million (GBP 274 million) and US$247 million (GBP 189 million) on the respective maturity dates.

Cairn Foundation

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Donation	3	3
Net amount payable at the year end	1	2

Cairn Foundation though not a related party as per the definition under IAS 24, related party disclosure has been included by way of a voluntary disclosure, following the best corporate governance practices.

India Grid Trust

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Dividend Income	2	1
Investment redeemed during the year	-	0
Investment in Equity Share at year end	15	19

India Grid Trust is a related party of the Group on the basis that the ultimate controlling party of the Group, Volcan Investments Limited, exercises significant influence.

Runaya Refinery LLP

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Purchases	0	-
Amount payable at year end	0	-

Runaya Refinery LLP is a related party of the Group by virtue of being controlled by relative of Group's KMP.

Associates

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Investment made during the year	-	0
Loans given/(repaid) during the year	(0)	-
Investment redeemed during the year	-	0
Loan balance receivable at year end	1	1

Associates include RoshSkor Township (Pty) Ltd., Gaurav Overseas Private Limited and Madanpur SouthCoal Company Limited.

Post Retirement employees benefit trust
Details of transactions during the year with post-retirement employee benefit trusts. The below mentioned trusts are related parties because these are employee trusts.

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
BALCO Employees Provident Fund Trust	2	2
Hindustan Zinc Ltd. Employee Contributory provident fund trust	5	5
Sesa Group Employees Provident Fund Trust	1	1
Sesa Resources Limited Employees Provident Fund Trust	0	0
Sesa Mining Corporate Limited Employees Provident Fund	0	0
HZL Employee group Gratuity Trust	9	3
Sesa Group Employees Gratuity Fund and Sesa Group Executives Gratuity Fund	0	0
Sesa Resources Limited Employees Gratuity Fund	0	0
Sesa Mining Corporation Limited Employees Gratuity Fund	0	0
HZL Superannuation fund Trust	0	0
Sesa Group Executives Superannuation Scheme	0	0
Sesa Resources Limited and Sesa Mining Corporation Limited Employees Superannuation Fund	0	0

Details of balance payable at the end of the year to post retirement employee benefit trusts.

(US$ million)

	As at 31 March 2019	As at 31 March 2018
BALCO Employees Provident Fund Trust	1	1
Hindustan Zinc Ltd. Employee Contributory provident fund trust	2	1
Sesa Group Employees Provident Fund	0	0
Sesa Resources Limited Employees Provident Fund	0	0
Sesa Mining Corporate Limited Employees Provident Fund	0	0
HZL Employee group Gratuity Trust	8	10
Sesa Group Employees Gratuity Fund and Sesa Group Executives Gratuity Fund	1	1
Sesa Resources Limited Employees Gratuity Fund	0	0
Sesa Mining Corporation Limited Employees Gratuity Fund	0	0
HZL Superannuation fund	0	0
Sesa Group Executives Superannuation Scheme	0	0
Sesa Resources Limited and Sesa Mining Corporation Limited Employees Superannuation Fund	0	0

Remuneration of Key Management Personnel

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Short-term employee benefits	24	20
Post-employment benefits	1	1
Share-based payments	4	5
	29	26
Compensation for Non-Executive Directors	1	1
Commission/Sitting Fees to KMP	0	0

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Group, directly or indirectly, including any director (whether executive or otherwise).

Other related party#

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Remuneration to relatives	2	1
Commission/ sitting fees to relatives of KMP	0	0

 # Close relative of the executive chairman.

36. SUBSEQUENT EVENTS

Subsequent to the Balance sheet date, the Company through it's wholly owned subsidiary, Vedanta Resources Finance II Plc issued US$1,000 million bonds in two tranches consisting of :

(i) US$400 million of 8% Bonds due April 2023 and

(ii) US$600 million of 9.25% Bonds due April 2026.

These bonds are guaranteed by the Company.

37. AUDITOR'S REMUNERATION

The table below shows the fees payable globally to the Company's auditor, Ernst & Young LLP and their associate firms, for statutory external audit and audit related services, as well as fees paid to other accountancy firms for statutory external audit and audit related services in each of the two years ended 31 March:

(US$ million)

	Year ended 31 March 2019	Year ended 31 March 2018
Fees payable to the Company's auditor for the audit of Vedanta Resources Limited (formerly Vedanta Resources Plc) annual accounts	1	1
The audit of the Company's subsidiaries pursuant to legislation	2	2
Total audit fees	**3**	**3**
Fees payable to the Company's auditor and their associates for other services to the Group		
Other services pursuant to legislation(1)	2	2
Tax services(2)	0	0
Corporate finance services(3)	1	1
Other services(4)	0	0
Total non-audit fees	**3**	**3**
Total fees paid to the Company's auditor	**6**	**6**
Audit fees payable to other auditors of the Group's subsidiaries	0	0
Non-audit fees payable to other auditors of the Group's subsidiaries	-	-
Total fees paid to other auditors	**0**	**0**

(1) Other services pursuant to legislation principally comprise assurance services, being quarterly reviews of the Group's subsidiaries results and the half year review of the Group's results.

(2) Tax services principally comprise certification and assurance services as required by Indian and overseas tax regulations.

(3) Corporate finance services principally comprise services in connection with debt raising transactions, group simplification and other acquisition related certifications. These assurance-related services are ordinarily provided by the auditor.

(4) Includes certification related services.

38. JOINT ARRANGEMENTS

Joint Operations

The Group's principal licence interests in oil and gas business are joint operations. The principal licence interests for the year ended 31 March 2019 and 31 March 2018 are as follows:

Oil & Gas blocks/fields	Area	Participating Interest
Operating blocks		
Ravva block-Exploration, Development and Production	Krishna Godavari	22.50%
CB-OS/2 – Exploration	Cambay Offshore	60.00%
CB-OS/2 - Development & production	Cambay Offshore	40.00%
RJ-ON-90/1 – Exploration	Rajasthan Onshore	100.00%
RJ-ON-90/1 – Development & production	Rajasthan Onshore	70.00%
South Africa Block 1- Exploration(1)	Orange Basin South Africa Offshore	60.00%
Non-operating blocks		
KG-ONN-2003/1(2)	Krishna Godavari Onshore	49.00%

(1) Application for closure has been filed with relevant authorities in September 2018

(2) Operatorship has been transferred to Oil and Natural Gas Corporation (ONGC) w.e.f. 07 July 2014

(3) PR-OSN-2004/1 block was relinquished on 30 June 2017

39. LIST OF SUBSIDIARIES

The Group owns directly or indirectly through subsidiaries, more than half of the voting power of all of its subsidiaries as mentioned in the list below, and has power over the subsidiaries, is exposed or has rights, to variable returns from its involvement with the subsidiaries and has the ability to affect those returns through its power over the subsidiaries.

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2019	31 March 2018		31-Mar-2019	31-Mar-2018
Direct Subsidiaries of the Parent Company								
Vedanta Resources Holding Limited ('VRHL')	Holding company	5th Floor, 6 St Andrew Street, London EC4A 3AE	United Kingdom	**100.00%**	100.00%	VRL	**100.00%**	100.00%
Vedanta Resources Jersey Limited('VRJL")	Investment company	47 Esplanade, St Helier JE1 0BD	Jersey(CI)	**100.00%**	100.00%	VRL	**100.00%**	100.00%
Vedanta Resources Jersey II Limited('VRJL-II')	Investment company	47 Esplanade, St Helier JE1 0BD	Jersey(CI)	**100.00%**	100.00%	VRL	**100.00%**	100.00%
Vedanta Finance (Jersey) Limited ('VFJL')	Investment company	47 Esplanade, St Helier JE1 0BD	Jersey(CI)	**100.00%**	100.00%	VRL	**100.00%**	100.00%
Vedanta Jersey Investments Limited('VJIL")	Investment company	13 Castle Street, St. Helier, Jersey JE4 5UT, Channel Islands	Jersey(CI)	**100.00%**	100.00%	VRL	**100.00%**	100.00%
Indirect Subsidiaries of the Parent Company								
Cairn Energy India Pty Limited	Oil and gas exploration, development and production	Level 12, 680 George Street, Sydney NSW 2000, Australia	Australia	**50.33%**	50.25%	CIHL	**100.00%**	100.00%
Copper Mines of Tasmania Pty Limited ('CMT')	Copper mining	c/o MCullough Robertson lawyers 44 martin place, Sydney NSW 2000	Australia	**50.33%**	50.25%	MCBV	**100.00%**	100.00%
Thalanga Copper Mines Pty Limited ('TCM')	Copper mining	C/O MCullough Robertson lawyers 44 martin place, Sydney NSW 2000	Australia	**50.33%**	50.25%	MCBV	**100.00%**	100.00%
Monte Cello Corporation NV (MCNV')	Investment company	Kaya Flamboyan 6, Curacao	Curacao	**100.00%**	100.00%	Twin Star	**100.00%**	100.00%
Richter Holding Limited('Richter')	Investment company	66, Ippocratous Street, 1015 Nicosia, Cyprus	Cyprus	**100.00%**	100.00%	VRCL	**100.00%**	100.00%
Vedanta Resources Cyprus Limited ('VRCL')	Investment company	66, Ippocratous Street, 1015 Nicosia, Cyprus	Cyprus	**100.00%**	100.00%	VRFL	**100.00%**	100.00%
Welter Trading Limited ('Welter')	Investment company	28th Oktovriou Street, 205 Louloupis Court, 1st Floor P.C. 3035, Limassol, Cyprus	Cyprus	**100.00%**	100.00%	VRCL	**100.00%**	100.00%
Vedanta Limited	Copper smelting, Iron ore mining, Aluminium mining, refining and smelting, Power generation, Oil and Gas exploration, and production	Vedanta Limited 1st Floor, 'C' wing, Unit 103, Corporate Avenue, Atul Projects, Chakala, Andheri (East), Mumbai–400093, Maharashtra, India	India	**50.33%**	50.25%	Twin Star	**37.26%**	37.20%

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2019	31 March 2018		31-Mar-2019	31-Mar-2018
Bharat Aluminium Company Limited ('BALCO')	Aluminium mining and smelting	Aluminium Sadan, 2nd Floor, Core-6-Scope Complex, 7 Lodhi Road, New Delhi-110 003	India	**25.67%**	25.63%	Vedanta Limited	**51.00%**	51.00%
Electrosteel Steels Limited[(3)]	Manufacturing of Steel (Products : TMT, Wire Rod & DI Pipe)	801, Uma Shanti Apartments, Kanke Road, Ranchi – 834 008, Jharkhand	India	**45.30%**	-	Vedanta Star Limited	**90.00%**	-
Goa Sea Ports Private Limited	Infrastructure	SIPCOT Industrial Complex, Madurai Bypass Road, T. V. Puram P.O., Tuticorin, Thoothukudi TN 628002 IN	India	**50.33%**	50.25%	SPL	**100.00%**	100.00%
Hindustan Zinc Limited ('HZL')	Zinc mining and smelting	Yashad Bhawan, Udaipur (Rajasthan) – 313004	India	**32.67%**	32.62%	Vedanta Limited	**64.92%**	64.92%
MALCO Energy Limited ('MEL')	Power generation	SIPCOT Industrial Complex, Madurai Bypass Road,T.V PuramP.O., Tuticorin (Tamil Nadu) - 628 002	India	**50.33%**	50.25%	Vedanta Limited	**100.00%**	100.00%
Maritime Ventures Private Limited	Infrastructure	SIPCOT Industrial Complex, Madurai Bypass Road, T. V. Puram P.O., Tuticorin, Thoothukudi TN 628002 IN	India	**50.33%**	50.25%	SPL	**100.00%**	100.00%
Paradip Multi Cargo Berth Private Limited	Infrastructure	SIPCOT Industrial Complex, Madurai Bypass Road, T. V. Puram P.O., Tuticorin, Thoothukudi TN 628002 IN	India	**50.33%**	50.25%	Vedanta Limited	**100.00%**	100.00%
Sesa Mining Corporation Limited	Iron Ore	Sesa Ghor, 20 EDC Complex, Patto, Panaji (Goa)- 403001	India	**50.33%**	50.25%	SRL	**100.00%**	100.00%
Sesa Resources Limited ('SRL')	Iron Ore	Sesa Ghor, 20 EDC Complex, Patto, Panaji (Goa)- 403001	India	**50.33%**	50.25%	Vedanta Limited	**100.00%**	100.00%
Sterlite Ports Limited ('SPL')	Infrastructure	MALCO Power company limited, SIPCOT Industrial Complex, Madurai Bypass Road, T. V. Puram P.O., Tuticorin, Thoothukudi TN 628002 IN	India	**50.33%**	50.25%	Vedanta Limited	**100.00%**	100.00%
Talwandi Sabo Power Limited	Power generation	Vill. Banawala, Mansa - Talwandi Sabo Road, Mansa, Punjab – 151302	India	**50.33%**	50.25%	Vedanta Limited	**100.00%**	100.00%

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2019	31 March 2018		31-Mar-2019	31-Mar-2018
Vedanta Star Limited***	Holding Company	M 11, First Floor, VIP Road, Harmu Housing Colony, P.S. Argoda, Ranchi 834 002	India	**50.33%**	-	Vedanta Limited	**100.00%**	-
Vizag General Cargo Berth Private Limited	Infrastructure	SIPCOT Industrial Complex, Madurai Bypass Road, T. V. Puram P.O., Tuticorin, Thoothukudi TN 628002 IN	India	**50.33%**	50.25%	Vedanta Limited	**100.00%**	100.00%
Killoran Lisheen Finance Limited	Investment company	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperay	Ireland	**50.33%**	50.25%	VLHL	**100.00%**	100.00%
Killoran Lisheen Mining Limited	Mining	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperay	Ireland	**50.33%**	50.25%	VLHL	**100.00%**	100.00%
Lisheen Milling Limited	Manufacturing	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperay	Ireland	**50.33%**	50.25%	VLHL	**100.00%**	100.00%
Lisheen Mine Partnership	Mining Partnership Firm	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperay	Ireland	**50.33%**	50.25%	VLML,KLML	**100.00%**	100.00%
Vedanta Exploration Ireland Limited	Exploration Company	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperay	Ireland	**50.33%**	50.25%	VLHL	**100.00%**	100.00%
Vedanta Lisheen Holdings Limited('VLHL')	Investment company	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperay	Ireland	**50.33%**	50.25%	THL Zinc Holding BV	**100.00%**	100.00%
Vedanta Lisheen Mining Limited ('VLML')	Mining	Deloitte & Touche House, Charlotte's Quay, Limerick, IrelandKilloran, Moyne, Thurles, Co. Tipperay	Ireland	**50.33%**	50.25%	VLHL	**100.00%**	100.00%
Avanstrate Inc. ('ASI')[(1)]	Holding company	No.1-11-1 Nishi-Gotanda-1, Shinagawa-ku, Tokyo, Japan	Japan	**25.99%**	25.63%	Cairn India Holdings Limited	**51.63%**	51.63%
Valliant (Jersey) Limited	Investment Company	47 Esplanade, St Helier JE1 0BD	Jersey(CI)	**100.00%**	100.00%	VRJL-II	**100.00%**	100.00%

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2019	31 March 2018		31-Mar-2019	31-Mar-2018
Cairn India Holdings Limited	Investment company	4th Floor, 22-24 New Street, St. Paul's Gate, St. Helier, Jersey, JE1 4TR	Jersey	**50.33%**	50.25%	Vedanta Limited	**100.00%**	100.00%
Western Cluster Limited	Mining Company	Amir Building, 18th Street, Sinkor, Tubman Boulevard, Sinkor, Monrovia, Liberia, West Africa	Liberia	**50.33%**	50.25%	BFL	**100.00%**	100.00%
CIG Mauritius Holdings Private Limited	Investment company	Ocorian Corporate Services (Mauritius) Limited, 6th Floor, Tower A, 1 CyberCity, Ebene, Mauritius	Mauritius	**50.33%**	50.25%	Cairn Energy Hydrocarbons Limited	**100.00%**	100.00%
CIG Mauritius Private Limited	Investment company	Ocorian Corporate Services (Mauritius) Limited, 6th Floor, Tower A, 1 CyberCity, Ebene, Mauritius	Mauritius	**50.33%**	50.25%	CIG Mauritius Holding Private Limited	**100.00%**	100.00%
Bloom Fountain Limited ('BFL')	Operating (Iron ore) and Investment Company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	**50.33%**	50.25%	Vedanta Limited	**100.00%**	100.00%
Sesa Sterlite Mauritius Holdings Limited*	Investment company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	**50.33%**	50.25%	BFL	**100.00%**	100.00%
THL Zinc Limited	Investment company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	**50.33%**	50.25%	THL Zinc Ventures Limited	**100.00%**	100.00%
THL Zinc Ventures Limited	Investment company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	**50.33%**	50.25%	Vedanta Limited	**100.00%**	100.00%
Twin Star Energy Holdings Limited ('TEHL')*	Holding company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	**50.33%**	50.25%	BFL	**100.00%**	100.00%
Twin Star Holdings Limited ('Twin Star')	Holding company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	**100.00%**	100.00%	VRHL	**100.00%**	100.00%
Twin Star Mauritius Holdings Limited ('TMHL')*	Holding company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	**50.33%**	50.25%	TEHL	**100.00%**	100.00%
Westglobe Limited	Investment company	IQ EQ Corporate Services (Mauritius) Ltd 33, Edith Cavell Street Port Louis, 11324 Mauritius	Mauritius	**100.00%**	100.00%	Richter	**100.00%**	100.00%

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2019	31 March 2018		31-Mar-2019	31-Mar-2018
Amica Guesthouse (Proprietary) Limited	Accomodation and catering services	4 mokke street, Windhoek, Namibia	Namibia	**50.33%**	50.25%	SZPL	**100.00%**	100.00%
Namzinc (Proprietary) Limited ('SZ')	Mining	24 Orban Street, Klein Windhoek, Windhoek	Namibia	**50.33%**	50.25%	SZPL	**100.00%**	100.00%
Rosh Pinah Healthcare (Proprietary) Limited	Leasing out of medical equipment and building and conducting services related thereto	24 Ondye Drive, Rosh Pinah7 Von Lindeque Street, Mariental, Namibia	Namibia	**34.72%**	34.67%	SZPL	**69.00%**	69.00%
Skorpion Mining Company (Proprietarty) Limited ('NZ')	Mining	24 Orban Street, Klein Windhoek, Windhoek	Namibia	**50.33%**	50.25%	SZPL	**100.00%**	100.00%
Skorpion Zinc (Proprietary) Limited ('SZPL')	Acquisition of immovable and movable properties	24 Orban Street, Klein Windhoek, Windhoek	Namibia	**50.33%**	50.25%	VNHL	**100.00%**	100.00%
THL Zinc Namibia Holdings (Proprietary) Limited ('VNHL)	Mining and Exploration	24 Orban Street, Klein Windhoek, Windhoek	Namibia	**50.33%**	50.25%	THL Zinc Limited	**100.00%**	100.00%
Lakomasko B.V.	Investment company	Atrium Building, 8th Floor, Strawinskylaan, 3127, Amsterdam, Netherlands	Netherlands	**50.33%**	50.25%	THL Zinc Holding B.V.	**100.00%**	100.00%
Monte Cello BV ('MCBV')	Holding company	Atrium Building, 8th Floor, Strawinskylaan, 3127, Amsterdam, Netherlands	Netherlands	**50.33%**	50.25%	Vedanta Limited	**100.00%**	100.00%
THL Zinc Holding BV	Investment company	Atrium Building, 8th Floor, Strawinskylaan, 3127, Amsterdam, Netherlands	Netherlands	**50.33%**	50.25%	Vedanta Limited	**100.00%**	100.00%
Cairn Energy Discovery Limited	Oil and gas exploration, development and production	Summit House, 4-5 Mitchell Street, Edinburgh, EH6 7BD, Scotland	Scotland	**50.33%**	50.25%	Cairn India Holdings Limited	**100.00%**	100.00%
Cairn Energy Gujarat Block 1 Limited	Oil and gas exploration, development and production	Summit House, 4-5 Mitchell Street, Edinburgh, EH6 7BD, Scotland	Scotland	**50.33%**	50.25%	Cairn India Holdings Limited	**100.00%**	100.00%
Cairn Energy Hydrocarbons Limited	Oil and gas exploration, development and production	Summit House, 4-5 Mitchell Street, Edinburgh, EH6 7BD, Scotland	Scotland	**50.33%**	50.25%	Cairn India Holdings Limited	**100.00%**	100.00%
Cairn Exploration (No. 2) Limited	Oil and gas exploration, development and production	Summit House, 4-5 Mitchell Street, Edinburgh, EH6 7BD, Scotland	Scotland	**50.33%**	50.25%	Cairn India Holdings Limited	**100.00%**	100.00%
Black Mountain Mining (Proprietary) Limited	Mining	Penge Road, Aggeneys	South Africa	**37.24%**	37.19%	THL Zinc Limited	**74.00%**	74.00%
Cairn South Africa Proprietary Limited	Oil and gas exploration, development and production	22 Bree Street, Cape Town, 8001, South Africa	South Africa	**50.33%**	50.25%	Cairn Energy Hydrocarbons Limited	**100.00%**	100.00%

Subsidiaries	Principal activities	Registered Address	Country of incorporation	The Company's economic percentage holding		Immediate holding company	The Company's immediate percentage holding	
				31 March 2019	31 March 2018		31-Mar-2019	31-Mar-2018
Avanstrate Korea Inc(1)	LCD glass substrate manufacturing	84 ,Hyeongoksandan-ro, Cheongbuk -myeon,Pyeongtaek-city , Gyeonggi, South Korea	South Korea	**25.99%**	25.63%	Avanstrate (Japan) Inc.	**100.00%**	100.00%
Cairn Lanka Private Limited	Oil and gas exploration, development and production	Lanka Shipping Tower, No.99, St. Michael's Road, Colombo 03	Sri Lanka	**50.33%**	50.25%	CIG Mauritius Private Limited	**100.00%**	100.00%
Avanstrate Taiwan Inc(1)	LCD glass substrate manufacturing	No 8 , Industry III road Annan ,Tainan	Taiwan	**25.99%**	25.63%	Avanstrate (Japan) Inc.	**100.00%**	100.00%
Fujairah Gold FZC	Gold & Silver processing	P.O. Box 3992, Fujairah, United Arab Emirates	UAE	**50.33%**	50.25%	MEL	**100.00%**	100.00%
Finsider International Company Limited	Investment company	5th Floor, 6 St Andrew Street, London, EC4A 3AE	United Kingdom	**100.00%**	100.00%	Richter, Westglobe	**100.00%**	100.00%
Vedanta Finance UK Limited	Investment company	5th Floor, 6 St Andrew Street, London, EC4A 3AE	United Kingdom	**100.00%**	100.00%	Welter	**100.00%**	100.00%
Vedanta Resources Finance II Plc***	Investment company	5th Floor, 6 St Andrew Street, London, EC4A 3AE	United Kingdom	**100.00%**	-	VRHL	**100.00%**	-
Vedanta Resources Finance Limited ('VRFL')	Investment company	5th Floor, 6 St Andrew Street, London, EC4A 3AE	United Kingdom	**100.00%**	100.00%	VRHL	**100.00%**	100.00%
Sterlite (USA) Inc.	Investment company	Corporation Service Company, 2711 Centerville Road, Suite 400, City of Wilmington, Country of New Castle, Delaware, 19808	USA	**50.33%**	50.25%	Vedanta Limited	**100.00%**	100.00%
KCM SmelterCo Limited	Sale of copper and slimes	Private Bag KCM (C) 2000, Stand M 1408, Fern Avenue, Chingola, Zambia	Zambia	**79.42%**	79.42%	KCM	**100.00%**	100.00%
Konkola Copper Mines PLC ('KCM')	Mining, production and marketing of Copper and Cobalt Alloys	Private Bag KCM (C) 2000, Stand M 1408, Fern Avenue, Chingola, Zambia	Zambia	**79.42%**	79.42%	VRHL	**79.42%**	79.42%

** Under liquidation*

**** Incorporated during the year*

(1) On 28 December 2017, the Group through its wholly owned subsidiary, acquired 51.6% equity stake in AvanStrate Inc. (ASI) (Refer note 3(b))

(2) The Group also has interest in certain trusts which are neither significant nor material to the Group.

(3) On 04 June 2018, the Group through its wholly owned subsidiary, acquired 90.0% equity stake in Electrosteel Steels Limited (ESL) (Refer note 3(a))

40. ULTIMATE CONTROLLING PARTY

At 31 March 2019, all of the issued shares of the Company were held by Volcan Investments Limited and its wholly owned subsidiary, Volcan Investments Cyprus Limited. Accordingly, the ultimate controlling party of the Group was Volcan, which is controlled by persons related to the Executive Chairman, Mr Anil Agarwal. Volcan Investments Limited is incorporated in the Bahamas and Volcan Investments Cyprus Limited is incorporated in Cyprus. Neither Volcan Investments Limited nor Volcan Investments Cyprus Limited produce Group accounts.

ANNEX A — LIFE OF MINES

Company Particulars		Reserves (Proved and Probable) Mt	Reserves and Resources Mt[1]	Fiscal Year 2020 Production Mt	Mine Life — Reserves — Years as of 1 April 2020	Mine Life — Reserves and Resources — Years as of 1 April 2020
HZL	Rampura Agucha	39.1	84.9	3.9	9.9	21.5
HZL	Rajpura Dariba	20.4	58.8	1.0	19.7	56.8
HZL	Zawar Group	14.2	96.5	3.3	4.3	29.5
HZL	Kayad	3.6	5.5	1.1	3.2	4.8
HZL	Sindesar Khurd	37.3	116.4	5.1	7.4	22.9
HZL	Bamnia Kalan	–	40.8	–	–	–
CMT	Mt. Lyell	–	59.6	–	–	–
KCM	Konkola[3]	12.0	256.6	1	11.6	247.3
KCM	Nchanga (Underground)[3]	–	39.1	1.7	0	23.3
KCM	Nchanga (Open Pit)[3]	4.5	4.5	0.3	15	0
KCM	Other Pits & other underground	24.3[3]	108.3[3]	0.9	27	120.4
Skorpion	Skorpion	1.3	4.1	1.0	1.3	3.9
Black Mountain Mining	Deeps	3.9	11.1	1.1	3.6	10.4
Black Mountain Mining	Swartberg	25.4	108.2	0.4	60.5	257.6
Black Mountain Mining	Gamsberg	109.8	218.2	3.4	31.9	63.5
Black Mountain Mining	Big Syncline Project	–	167.8	–	–	–
Black Mountain Mining	Gergarub Project	–	15.6	–	–	–
Vedanta Limited	Iron Ore Karnataka	73.1	87.8	4.4	16.6	20.0
BALCO	Mainpat	4.6	12.1	0.1	82.6	231.6
BALCO	Bodai-Daldali	1.9	4.4	0.5	4.0	9.4
BALCO	Chotia	10.4	15.9	1.0	10.4	15.9

(1) See Annex B — "*Mineral Resources (exclusive reporting basis)*". The reporting methodology for Mineral Resources differs from that of Ore Reserves under international reporting codes as certain factors (termed "Modifying Factors", such as mining losses and dilution) are included in the reporting of Ore Reserves, whereas Mineral Resources are reported on an in-situ basis. Accordingly, the two numbers are not added together under international reporting codes such as JORC (2012). Consequently, considerable caution should be exercised when considering life of mine estimates based on Mineral Resource plus Ore Reserves. Life of mine estimates which include Mineral Resources have been undertaken by the Company and have not been subject to review by the Independent Consultants named in this Offering Circular. See the sections entitled "*Presentation of Information — Basis of Presentation of Reserves and Resources — Cautionary Note to United States Investors Concerning Estimates of Measured, Indicated and Inferred Resources for Mining Operations*" and "*Risk Factors — Risks Relating to Business — There are uncertainties inherent in estimating Vedanta's Ore Reserves and Mineral Resources and oil, condensate and sales-gas reserves, and if the actual amounts of such reserves and resources are less than estimated, its results of operations and financial condition may be materially and adversely affected.*" for more information. The life of mine estimates presented in this table take into account the Fiscal Year 2020 production for all mines. Furthermore, it should be noted that the Ore Reserves are derived from Life-of-mine plans which in certain instances assume expanded production which is significantly increased when compared to historical production capacity. Accordingly, the mine lives for such instances will be significantly shorter than the theoretical values reported above. Furthermore, there are scenarios where the contribution of Inferred Mineral Resources is significant and as these are not separately identified this may constitute non-material disclosure.

(2) Excluded from the above Table are the Ore Reserves at KCM of 99.5 Mt of refractory ore comprising tailings dam and stockpile material and 1.2 Mt of additional refractore ore all of which is classified as Inferred Mineral Resources.

(3) KCM numbers are as per report of 31 March 2019. The Mineral Resources and Ore Reserves as reported for KCM's Konkola, Nchanga and Nampundwe mines were prepared as of 31 March 2019 are not current and are reported solely as a statement of historical fact. Accordingly, these estimates may be significantly different to that reported herein if these were assessed as at 31 March 2020.

ANNEX B — MINERAL RESOURCES (EXCLUSIVE REPORTING BASIS)

Zinc-Lead Mines	Measured Quantity Mt.	Measured Grade Zinc %	Measured Grade Lead %	Indicated Quantity Mt.	Indicated Grade Zinc %	Indicated Grade Lead %	Inferred Quantity Mt.	Inferred Grade Zinc %	Inferred Grade Lead %
Rampura Agucha	9.9	14.5	2.1	0.4	17.6	3.2	35.5	9.6	2.6
Rajpura Dariba	7.9	7.5	2.1	8.3	6.9	1.9	22.2	6.2	2.1
Zawar Group	16.3	4.7	1.9	13.4	4.1	1.9	52.5	4.6	2.2
Kayad	0.7	12.3	2.1	0.1	10.9	1.4	1.1	8.2	1.4
Sindesar Khurd	25.1	4.3	2.2	26.8	3.9	2.2	27.1	3.6	2.2
Bamnia Kalan	–	–	–	20.7	3.3	1.1	20.1	3.5	1.4
Skorpion	–	–	–	1.4	14.1	0.0	1.4	11.4	–
BMM									
– Deeps	3.3	3.2	3.6	3.9	3.2	2.7	–	–	–
– Swartberg	–	–	–	63.7	0.9	2.6	19.1	1.1	2.8
– Gamsberg	3.5	6.0	0.4	38.5	5.9	0.5	66.4	7.8	0.5
– Gergarub Project	–	–	–	10.2	9.6	2.6	5.4	8.7	2.4
– Big Syncline Project . .	–	–	–	6.1	3.0	1.1	161.8	2.5	1.0

BALCO Mines	Measured Tonnage (Mt)	Measured Grade (%Al_2O_3, GCV)	Indicated Tonnage (Mt)	Indicated Grade (%Al_2O_3, GCV)	Inferred Tonnage (Mt)	Inferred Grade (%Al_2O_3, GCV)
Mainpat	–	–	6.2	40.4	1.3	42.1
Bodai Daldali	–	–	2.0	43.2	0.5	44.4
Chotia	–	–	–	–	5.5	5,142

Copper Mines	Measured Tonnage (Mt)	Measured Grade (% TCu)	Indicated Tonnage (Mt)	Indicated Grade (% TCu)	Inferred Tonnage (Mt)	Inferred Grade (% TCu)
Mt. Lyell	3.5	1.22	26.1	1.07	30.0	1.06
Konkola	2.9	3.83	28.8	3.85	212.9	3.66
Nchanga (Underground)[1]	–	–	13.8	2.45	25.3	2.06
Nchanga (Open-Pit)	–	–	–	–	–	–
Other Open Pits.	–	–	–	–	0.7	1.30
Other Underground	–	–	57.7	2.11	25.6	2.32
Refractory Ore	–	–	–	–	1.2	0.76

Iron Ore	Measured Quantity Mt.	Measured Grade Fe %	Indicated Quantity Mt.	Indicated Grade Fe %	Inferred Quantity Mt.	Inferred Grade Fe %
Iron ore Karnataka*[2]	8.09	43.3	4.30	44.2	2.34	50.5

(1) The Mineral Resources and Ore Reserves as reported for KCM's Konkola, Nchanga and Nampundwe mines were prepared as of 31 March 2019 are not current and are reported solely as a statement of historical fact. Accordingly, these estimates may be significantly different to that reported herein if these were assessed as at 31 March 2020.

(2) During Fiscal Year 2018, The Supreme Court of India issued a judgment directing that all mining operations in the state of Goa were to cease with effect from 16 March 2018. Pursuant to this order, mining activities were halted. Therefore, the Company has not shown any Reserves and Resources related to Iron Ore Goa.

See the sections entitled "*Presentation of Information — Basis of Presentation of Reserves and Resources — Cautionary Note to United States Investors Concerning Estimates of Measured, Indicated and Inferred Resources for Mining Operations*" and "*Risk Factors — Risks Relating to Business — There are uncertainties inherent in estimating Vedanta's Ore Reserves and Mineral Resources and oil, condensate and sales-gas reserves, and if the actual amounts of such reserves and resources are less than estimated, its results of operations and financial condition may be materially and adversely affected.*" for more information.

ANNEX C — MINERAL RESOURCE AND ORE RESERVE REPORTING

The JORC Code (2012) require that for Reporting of Mineral Resources and Ore Reserves, the publication of additional supplemental information, specifically in respect of assumed modifying factors and economic assumptions as well as a detailed narrative in respect of certain elements as noted under the JORC Codes (2012) Table 1 declarations. Certain sections of this Offering Circular present historical production sections as well as technical descriptions of the Company's Mineral Assets and as such includes some of the supporting information incorporated into such declarations.

The detailed split for Proved and Probable Ore Reserves are included under the relevant business description sections for each of the Mineral Assets.

The Competent Persons' responsible for confirming that the Mineral Resources and Ore Reserves are reported in accordance with the terms and definitions of the reporting codes are:

For HZL, KCM, Black Mountain, Skorpion, where Mineral Resources and Ore Reserves are reported in accordance with the terms and definitions of the JORC Code (2012):

The Mineral Resources and Ore Reserves as reported for KCM's Konkola, Nchanga and Nampundwe mines were prepared as of 31 March 2019 are not current and are reported solely as a statement of historical fact. Accordingly, these estimates may be significantly different to that reported herein if these were assessed as at 31 March 2020.

The Competent Person who has reviewed the Mineral Resources as reported by the company in 31 March 2020 Statements (or the 31 March 2019 Statements in the case of KCM) is Mr. Mark Campodonic, FGS, AusIMM (CP) and MSc, who is an employee of SRK. He is Fellow of the geological Society and a Chartered Professional Member of the Australian Institute of Mining and Metallurgy ("AusIMM"). Mr Mark Campodonic is a resource geologist with over 20 years of experience in the mining industry. Mr Mark Campodonic is a mining geologist with over 20 years' experience in the mining industry which is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code (2012).

The Competent Person who has reviewed the Ore Reserves as reported by the company in the 31 March 2019 Statements is Mr John Miles, C. Eng (UK) and MSc, who is an associate of SRK. He is a Member of the Institute of Materials, Minerals and Mining ("IMMM"). Mr John Miles is a mining engineer with 35 years' experience in the mining industry which is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code (2012).

For CMT where Mineral Resources are reported in accordance with the terms and definitions of the JORC Code (2012):

The Competent Person who is responsible for the Mineral Resources of CMT is John Hooper BSc (Hons). He is a Member of the Australian Institutes of Mining and Metallurgy. Mr John Hooper has sufficient experience relevant to the style and type of mineral deposit under consideration and to the activity which is being undertaken to qualify as a Competent Person as defined in the JORC Code (2012).

For BALCO where Mineral Resources and Ore Reserves are reported in accordance with the terms and definitions of the JORC Code (2012):

The Competent Person who is responsible for the Mineral Resources and Ore Reserves of BALCO is Mr Mark Campodonic, FGS, AusIMM (CP) and MSc, who is an employee of SRK. He is a Member of the Geological Society and a Chartered Professional Member of the Australian Institute of Mining and Metallurgy ("AusIMM"). Mr Mark Campodonic is a resource geologist with over 20 years of experience in the mining industry which is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code (2012).

ANNEX D — PRODUCTION RELEASE OF THE COMPANY FOR THE THREE MONTHS ENDED 30 JUNE 2020

Zinc India

Particulars (In '000 tonnes, or as stated)	Q1 FY21	Q1 FY20	Q1 % Change	Q4 FY20	Q4 % Change	12 months FY20	12 months FY19	12 months % Change
Mined metal content	202	213	(5)%	249	(19)%	917	936	(2)%
Integrated metal	202	219	(8)%	221	(9)%	870	894	(3)%
Refined Zinc — Integrated	157	172	(8)%	172	(9)%	688	696	(1)%
Refined Lead — Integrated[1]	44	48	(7)%	49	(10)%	181	198	(8)%
Silver — Integrated (in mn ounces)[2]	3.8	5.1	(26)%	5.4	(30)%	19.6	21.8	(10)%

Particulars	Q1 FY21	Q1 FY20	Q1 % Change	Q4 FY20	Q4 % Change	12 months FY20	12 months FY19	12 months % Change
HZL — Net Sales Realisation (NSR)								
Zinc ($/MT)	2,071	2,987	(31)%	2,333	(11)%	2,612	2,961	(12)%
Lead ($/MT)	1,788	2,028	(12)%	1,983	(10)%	2,085	2,245	(7)%
Silver ($/Kg)	597	534	12%	590	1%	592	544	9%
HZL WPP (Rs./unit)	4.18	4.15	1%	4.07	3%	4.05	4.15	(3)%

1. Excluding captive consumption of 1,202 tonnes in Q1FY2021 vs. 1,822 tonnes in Q1FY2020. and 1,755 tonnes in Q4FY2020. It was 7,088 tonnes in FY2020 vs. 6,534 tonnes in FY2019.

2. Excluding captive consumption of 200,000 ounces in Q1FY2021 vs. 303,000 ounces in Q1FY2020 and 288,000 ounces in Q4FY2020. It was 1,180,000 ounces in FY2020 vs. 1,099,000 ounces in FY2019.

Q1 Fiscal year 2021 vs. Previous Quarters

Mined metal production for Q1FY21 was 202,000 tonnes, down 5% as compared to Q1FY20 and 19% as compared Q4FY20 due to fewer days of production in April and lower workforce availability on account of restrictions related to COVID-19. Ore grades were flat from a year ago and were lower sequentially as per mine plan and mix shift.

Integrated metal production was 202,000 tonnes for Q1FY21, down 8% as compared to Q1FY20 and 9% as compared to Q4FY20 due to lower production in April,2020. Integrated zinc production was 157,000 tonnes, down 8% as compared to Q1FY20 and 9% as compared to Q4FY20 while integrated lead production was 44,000 tonnes for Q1FY21, down 7% as compared to Q1FY20 and 10% as compared to Q4FY20. Integrated saleable silver production was 3.8 moz, down 26% as compared to Q1FY20 and 30% as compared to Q4FY20 due to delayed stabilization of DSC lead smelter and increase in WIP, partly offset by higher silver grades.

Projects Update

- Rampura Agucha Shaft project has been completed.

- First dry tailing plant was commissioned in Zawar.

- Sindesar Khurd production shaft was ramped up post its commissioning towards the end of FY2019.

- Smelter debottlenecking to expand capacity to 1.13 mtpa was completed during the quarter.

- Fumer project at Chanderiya and two pastefill/hydrofill plants in Zawar are ready for commissioning.

Fiscal year 2020 vs. Fiscal year 2019

For the full-year, ore production was up 5% as compared to FY19 to a record 14.5 million MT on account of strong production growth at Rampura Agucha and Zawar mines. This was inspite of disruptions related to COVID-19 towards the end of the year.

Mined metal production for FY2020 was 917,000 tonnes as compared to 936,000 tonnes a year ago. The FY2020 production was lower by 2% y-o-y due to lower ore grades and shutdown in March due to COVID-19.

Integrated metal production was 870,000 tonnes, 3% lower from previous year's production of 894,000 tonnes. Integrated Zinc production was 688,000 tonnes, marginally down as compared to FY2019. Integrated lead and silver production were at 181,000 tonnes and 19.6 mn ounces, lower 8% and 10%, due to temporary operational issues at Dariba Lead smelter and lower silver grades.

Zinc — International

	Q1			Q4		12 months		
Particulars (In '000 tonnes, or as stated)	**FY21**	**FY20**	**% Change**	**FY20**	**% Change**	**FY20**	**FY19**	**% Change**
ZINC INTERNATIONAL	38	60	(36)%	57	(34)%	240	148	63%
Zinc-refined — Skorpion	1	18	(96)%	15	(96)%	67	66	2%
Mined metal content — BMM	12	19	(36)%	12	(2)%	66	65	1%
Mined metal content — Gamsberg[3]	25	23	11%	30	(15)%	108	17	–

3. Trial run production of 10,000 tonnes in FY2019

Variance above 100% are not disclosed

	Q1			Q4		12 months		
Particulars	**FY21**	**FY20**	**% Change**	**FY20**	**% Change**	**FY20**	**FY19**	**% Change**
ZI — Net Sales Realisation (NSR)								
Skorpion ($/MT)	1,764	2,488	(29)%	1,945	(9)%	2,260	2,741	(18)%
BMM ($/MT)	1,490	1,814	(18)%	1,564	(5)%	1,753	1,979	(11)%
Gamsberg ($/MT)	1,490	1,780	(16)%	1,440	3%	1,592	1,914	(17)%

Q1 Fiscal year 2021 vs. Previous Quarters

Total production for Q1FY21 was 38,000 tonnes, lower by 36% as compared to Q1FY20 and 34% as compared to Q4FY20 mainly due to Skorpion undergoing maintenance from April 2020 because of multiple slope failures in FY20 and also COVID-19 impact which resulted in production resuming from 17th April 2020 at BMM and Gamsberg mines.

Skorpion produced 700 tonnes in Q1FY21 as compared to 18,000 tonnes in Q1FY20 and 15,000 tonnes in Q4FY20. In May 2019, Skorpion experienced a major open pit failure which resulted in an ore gap of four months — which thus required the stoppage of the Refinery from November 2019 to January 2020. The failure was safely and successfully mined out. However, further (smaller) failures have since occurred with the latest one in January 2020 sterilizing a significant portion of the open pit. This has resulted in an ore gap in excess of 10 months. Further technical studies have indicated the likely existence of similar such failure structures at depth.

All mining operations at Skorpion have been decided to be ceased, while studies continue to look at feasible ways to make the pit safe for mining options which would allow for the extraction of the remainder of the accessible ore.

BMM produced 12,000 tonnes in Q1FY21 as compared to 19,000 tonnes in Q1FY20. Tons processed were 276,000 in Q1FY21 as compared to 399,000 in Q1FY20 with substantially lower lead grades.

BMM production was flat sequentially. Production was mainly impacted by COVID-19 related lockdown which resulted in the mine only starting on 17th April at 50% capacity in line with government regulations. Production in Q4FY20 was impacted by suspension of mining operations for 16 days on account of a fatality.

Gamsberg's production was 25,000 tonnes in Q1FY21, 11% higher as compared to Q1FY20 due to higher throughput and zinc grades and was lower 15% as compared to Q4FY20, mainly due to impact of COVID-19 related lockdown and lower throughput and recoveries.

Fiscal year 2020 vs. Fiscal year 2019

During FY20, total production was 240,000 tonnes, higher 63% as compared to FY19 on account of commencement of production from Gamsberg. While Skorpion and BMM production was in line with previous year, Gamsberg produced 108,000 tonnes vs 17,000 tonnes. Gamsberg Mining has fully ramped up to 4 Mtpa capacity and ~1.8 Mt of healthy ore stockpile has been built ahead of plant as on March 2020. Recovery continues to be a focus area as the plant ramps up and is stable.

Oil & Gas

	Q1			Q4		12 months		
Particulars (In '000 tonnes, or as stated)	**FY21**	**FY20**	**% Change**	**FY20**	**% Change**	**FY20**	**FY19**	**% Change**
Average Daily Gross Operated Production (boepd)	158,779	180,059	(12)%	160,838	(1)%	172,971	188,784	(8)%
Rajasthan	127,937	149,153	(14)%	132,315	(3)%	144,260	155,903	(7)%
Ravva	22,037	13,491	63%	17,562	25%	14,232	14,890	(4)%
Cambay	8,805	17,415	(49)%	10,961	(20)%	14,479	17,991	(20)%

Particulars (In '000 tonnes, or as stated)	Q1 FY21	Q1 FY20	Q1 % Change	Q4 FY20	Q4 % Change	12 months FY20	12 months FY19	12 months % Change
Average Daily Working Interest Production (boepd)	98,528	114,570	(14)%	101,565	(3)%	110,459	119,798	(8)%
Rajasthan	89,556	104,407	(14)%	92,621	(3)%	100,982	109,132	(7)%
Ravva	4,958	3,036	63%	3,951	25%	3,202	3,350	(4)%
Cambay	3,522	6,966	(49)%	4,384	(20)%	5,792	7,196	(20)%
KG-ONN	492	162	–	608	(19)%	483	119	–
Total Oil and Gas (million boe)								
Oil & Gas — Gross	14.4	16.4	(12)%	14.6	(1)%	63.3	68.9	(8)%
Oil & Gas — Working Interest	9.0	10.4	(14)%	9.2	(3)%	40.4	43.7	(8)%

Particulars	Q1 FY21	Q1 FY20	Q1 % Change	Q4 FY20	Q4 % Change	12 months FY20	12 months FY19	12 months % Change
Oil & Gas — Net Sales Realisation (NSR)								
Average Realisation ($/boe)	28.4	64.8	(56)%	46.9	(39)%	56.6	65.3	(13)%
Oil ($/bbl)	29.6	66.7	(56)%	48.8	(39)%	58.8	66.0	(11)%
Gas ($/mscf)	2.7	6.7	(60)%	5.6	(52)%	6.1	8.5	(28)%

Variance above 100% are not disclosed

Q1 Fiscal year 2021 vs. Previous Quarters

Average gross operated production during Q1FY21 across our assets was 158,779 barrels of oil equivalent per day (boepd), down by 12% as compared to Q1FY20 and 1% as compared to Q4FY20. This was mainly due to delay in execution of growth projects due to implementation of nationwide lockdown imposed by the Government to curb the spread of COVID-19 and natural reservoir decline at the MBA fields.

Gross production from the Rajasthan block averaged 127,937 boepd for the quarter, 14% lower as compared to Q1FY20 and 3% lower as compared to Q4FY20. The decrease in volume was primarily due to the natural decline from the fields and delay in activities due to COVID-19 lockdown restrictions. As part of the growth projects, 232 wells have been drilled and 82 wells have been hooked up till Q1FY21. Gross production from Development Area-1 (DA-1), Development Area-2 (DA-2) and Development Area-3 (DA-3) averaged 115,151 boepd, 12,479 boepd and 307 boepd respectively.

Gas production from Raageshwari Deep Gas (RDG) averaged 90.3 million standard cubic feet per day (mmscfd) (equiv. 15.0 kboepd) in Q1FY21, with gas sales post captive consumption at 64.6 mmscfd (equiv. 10.8 kboepd). Early production facility has been commissioned and ramped up to its designed capacity of 90 mmscfd. There was a fall in gas demand during April 2020 due to nationwide lockdown imposed by the Government to curb the spread of COVID-19. The demand got restored in May 2020.

The Ravva block produced at an average rate of 22,037 boepd for Q1FY21, up 63% as compared to Q1FY20 and 25% as compared to Q4FY20 supported by production from new wells drilled through Ravva drilling campaign commenced as a part of growth project during FY20.

The Cambay block produced at an average rate of 8,805 boepd for the Q1FY21, lower 49% as compared to Q1FY20 and 20% as compared to Q4FY20. This was primarily due to natural field decline and gas sales restriction on account of reduced demand from buyers due to COVID-19 lockdown during April 2020.

Key upcoming project milestones

- **MBA Infill, EOR Polymer and ASP Project:** 148 wells have been drilled till date. Of these 66 wells are hooked up. The surface facilities for EOR polymer project shall get completed by Q3FY21.

- **Tight Gas (RDG):** Early production facility commissioned and ramped up to its designed capacity of 90 mmscfd. Further construction of gas terminal through integrated contract is expected to deliver additional ~90 mmscfd of gas production. This new gas terminal is expected to get commissioned in Q3FY21. In order to realize the full potential of the gas reservoir, contract for drilling of 42 wells has been awarded and 26 wells have been drilled till date.

- **Tight Oil (ABH):** All 39 wells have been drilled, of which 16 wells have been hooked up. These are being progressively hooked up to ramp up volumes. Surface facility is under construction and shall be commissioned in Q3FY21.

- **Liquid handling up-gradation project:** Facility upgradation project to handle incremental volume is progressing as per plan to increase capacity by ~ 30%. Intra-field pipeline augmentation project has been completed, the MPT surface facility augmentation project is expected to be commissioned in Q3FY21.

- **Ravva Development:** An integrated development campaign has been commenced. 6 wells have been drilled till date, of these 4 wells are hooked up.

Exploration

- **RJ Exploration:** We intend to drill low-risk high reward exploration wells NM and AFH East during the current financial year.

- **Tight Oil (Appraisal fields):** Integrated drilling to appraise 4 tight oil discoveries (Vijaya and Vandana, Mangala Barmer Hill, DP and Shakti) has commenced; 7 wells drilled till Q1FY21.

- **OALP:** Seismic acquisition for Offshore GK-OSHP-2017/1 and GS-OSHP-2017/2 blocks completed leading to acquisition of 2D acquisition data of 100 LKM and 3D acquisition data for 1655 SQKM. Seismic acquisition also commenced in Rajasthan blocks. We are looking at early drilling opportunities in Assam and Rajasthan blocks.

Fiscal year 2020 vs. Fiscal year 2019

Average gross operated production across our assets was at 172,971 boepd in FY2020, 8% down as compared to FY2019. Production from Rajasthan block was at 144,260 boepd, 7% lower as compared to FY19. The decrease was primarily due to natural reservoir decline and maintenance shutdown of Mangala Processing Terminal (MPT) carried out in February 2020. The decline was partly offset by gains accruing from ramp up of early gas production facilities and new wells brought online. Production from the offshore assets, was at a combined 28,711 boepd, lower 13% as compared to FY2019, owing to natural field decline.

IRON ORE

	Q1			Q4		12 months		
Particulars (In ’dmt, or as stated)	**FY21**	**FY20**	**% Change**	**FY20**	**% Change**	**FY20**	**FY19**	**% Change**
IRON ORE								
Sales	1.02	1.22	(17)%	2.27	(55)%	6.63	3.84	73%
Goa	0.6	0.0	–	0.6	(7)%	0.9	1.3	(33)%
Karnataka	0.4	1.2	(64)%	1.6	(74)%	5.8	2.6	–
Production of Saleable Ore	0.95	1.09	(13)%	0.77	23%	4.36	4.36	0%
Goa	–	–	–	–	–	–	0.2	–
Karnataka	0.9	1.1	(13)%	0.8	23%	4.4	4.1	6%
Production (’000 tonnes)								
Pig Iron	109	178	(39)%	148	(26)%	681	686	(1)%

	Q1			Q4		12 months		
Particulars	**FY21**	**FY20**	**% Change**	**FY20**	**% Change**	**FY20**	**FY19**	**% Change**
Iron Ore — Net Sales Realisation (NSR)								
Average Realisation ($/MT)	39	28	39%	30	27%	28	23	20%
IOG ($/MT)	52	58	(10)%	44	19%	45	16	–
IOK ($/MT)	20	27	(28)%	25	(21)%	26	27	(5)%
Pig Iron ($/MT)	328	407	(19)%	378	(13)%	375	416	(10)%

Variance above 100% are not disclosed

Q1 Fiscal year 2021 vs. Previous Quarters

There was no production at Goa due to suspension of mining pursuant to the Hon’ble Supreme Court judgement dated 7th February 2018 directing mining operations of all companies in Goa to stop with effect from 16th March 2018. We continue to engage with the Government for resumption of mining operations.

At Karnataka, production volume in Q1FY21 was 0.9 million tonnes, lower by 13% as compared to Q1FY20 majorly due to the impact of COVID 19 during the initial days of April FY2021. It was higher by 23% as compared to Q4FY20.

Pig iron production was at 109,000 tonnes in Q1FY2021, lower by 39% as compared to Q1FY20 and 26% as compared to Q4FY20 majorly due to COVID 19 impact during initial days of April.

Fiscal year 2020 vs. Fiscal year 2019

At Goa, there were no production due to mine closure pursuant to the Supreme court judgement dated 7th February 2018 directing mining operations of all companies in Goa to cease with effect from 16th March 2018. We continue to engage with the Government for resumption of mining operations.

At Karnataka, production was 4.4 million tonnes, increased by 6% as compared to FY2019. Pig iron production was at 681 thousand tonnes, lower by 1% as compared to FY2019.

Steel

	Q1			Q4		12 months		
Particulars (In '000 tonnes, or as stated)	**FY21**	**FY20**	**% Change**	**FY20**	**% Change**	**FY20**	**FY19**	**% Change**
Steel								
Finished Production	267	323	(17)%	320	(16)%	1,231	1,199	3%
Pig Iron	36	28	30%	46	(21)%	167	142	18%
Billet[4]	129	14	–	(3)	–	27	39	(30)%
TMT Bar	30	128	(77)%	129	(77)%	468	441	6%
Wire Rod	59	109	(46)%	113	(48)%	413	427	(3)%
Ductile Iron Pipes	13	44	(70)%	35	(62)%	155	150	3%

4. Opening stock of Billets is used for further rolling of TMT Bars & Wire rods.

	Q1			Q4		12 months		
Particulars	**FY21**	**FY20**	**% Change**	**FY20**	**% Change**	**FY20**	**FY19**	**% Change**
Steel — Net Sales Realisation (NSR)								
Average NSR	394	565	(30)%	484	(19)%	495	572	(13)%
Pig Iron ($/MT)	302	398	(24)%	375	(20)%	354	404	(13)%
Billet[4] ($/MT)	327	432	(24)%	375	(13)%	418	486	(14)%
TMT Bar ($/MT)	480	551	(13)%	492	(2)%	494	564	(12)%
Wire Rod ($/MT)	463	604	(23)%	484	(4)%	519	638	(19)%
Ductile Iron Pipes ($/MT)	563	619	(9)%	582	(3)%	602	593	2%

Variance above 100% are not disclosed

Q1 Fiscal year 2021 vs. Previous Quarters

Total saleable production for Q1FY21 was 2,67,000 tonnes, lower by 17% as compared to Q1FY20, due to lower furnace availability in Q1FY21 for ~60 days owing to supply crunch amidst nationwide lockdown due to COVID-19 resulting in ~ 60,000 tonnes of hot metal volume loss. Sequentially, total saleable production was lower by 16%.

Fiscal year 2021 vs. Fiscal year 2020

Total saleable production for FY2021 was 1,231,000 tonnes, 3% higher y-o-y owing to better furnace availability and plant operations.

Copper — India

Particulars (In '000 tonnes, or as stated)	Q1			Q4		12 months		
	FY21	FY20	% Change	FY20	% Change	FY20	FY19	% Change
Copper — Cathodes	17	16	4%	26	(35)%	77	90	(13)%

Smelting operations at Tuticorin have been halted since April 2018. The Tamil Nadu Pollution Control Board (TNPCB) through an order dated 9th April 2018 rejected the Consent to Operate (CTO) of the Tuticorin Plant and issued a direction for closure and disconnection of power supply at the plant. In May 2018, The Government of Tamil Nadu has issued orders with a direction to permanently seal the existing copper smelter plant at Tuticorin. In response to Vedanta Limited's appeal to the National Green Tribunal (NGT) against the aforementioned orders, in December 2018, NGT set aside Tamil Nadu Government's order and directed TNPCB to renew the CTO subject to complying of certain directions as specified in the order.

However, in February 2019, The Hon'ble Supreme Court set aside NGT's order on the grounds of maintainability and has given liberty to approach Madras High Court for filing a writ petition before the Madras High Court challenging the impugned orders and seek interim relief considering that Vedanta Limited's plant has been shut since end March 2018. The Company has filed a writ petition before Madras High Court challenging the various orders passed against the company in 2018 and 2013 and the matter is pending adjudication. The hearing was concluded on January 8, 2020. The final judgement of the Madras High Court is awaited.

Our Silvassa refinery and wire rod plant continue to operate. This enables us to cater to the domestic market. Production from the Silvassa refinery was 4% higher in Q1FY21 as compared to Q1FY20 due to partially improved availability of customised anode & secondary material. However the production was lower by 35% compared with Q4FY20 largely due to prolonged lockdown across the country consequent to pandemic COVID-19.

Aluminium

Particulars (In '000 tonnes, or as stated)	Q1			Q4		12 months		
	FY21	FY20	% Change	FY20	% Change	FY20	FY19	% Change
Alumina-Lanjigarh	476	446	7%	479	(1)%	1,811	1,501	21%
Total Aluminium Production	469	471	(0)%	474	(1)%	1,904	1,959	(3)%
Jharsuguda-I	132	134	(1)%	133	(1)%	543	545	0%
Jharsuguda-II	199	199	(0)%	196	2%	800	843	(5)%
BALCO-I	65	63	3%	66	(2)%	256	260	(1)%
BALCO-II	72	74	(3)%	79	(8)%	305	311	(2)%

Particulars	Q1 FY21	Q1 FY20	Q1 % Change	Q4 FY20	Q4 % Change	12 months FY20	12 months FY19	12 months % Change
Aluminium — Net Sales Realisation (NSR)								
JSG ($/MT)	1,593	1,955	(19)%	1,811	(12)%	1,883	2,165	(13)%
BALCO ($/MT)	1,619	1,977	(18)%	1,853	(13)%	1,914	2,217	(14)%

Variance above 100% are not disclosed

Q1 Fiscal year 2021 vs. Previous Quarters

The Lanjigarh refinery produced 476,000 tonnes of alumina in Q1FY21, 7% higher as compared to Q1FY20 and flat as compared to Q4FY20 due to plant debottlenecking. Improved captive alumina production and higher mix of locally sourced bauxite are key to driving our aluminium costs lower. The Lanjigarh refinery continues to operate at over 1.8 mtpa production run rate. The Odisha Mining Corporation production operates its bauxite mine with production run rate of 3.0 Mtpa, with bauxite supplies to Lanjigarh refinery as per state policy.

Aluminium production in Q1FY21 was at 469,00 tonnes. The Line 4 of Jharsuguda Smelter II continues to be under evaluation.

All our refinery, smelter & power plant operations for Aluminium have adapted to newer external conditions due to COVID-19 impact, across our in-plant operations and supply chain. We continue to dynamically alter our product mix to meet our customer requirements. Coal continues to be a key focus area for management. We have signed the Coal Mines Development and Production Agreement with Government of India for the Jamkhani coal block. This will improve our coal security and availability, and therefore help to drive our costs down.

Fiscal year 2020 vs. Fiscal year 2019

At our Lanjigarh refinery, production was 1,811,000 tonnes, 21% higher as compared to FY2019, primarily through continued plant debottlenecking. We ended the year with Metal production of 1,904,000 tonnes (including trial run), largely flat year-on-year. Both smelters at BALCO and Jharsuguda continued to show consistent performance. During the Fiscal Year 2020, we won the Jamkhani coal block, taking our coal security to 72% of our requirements.

Power

Particulars (In MU, or as stated)	Q1 FY21	Q1 FY20	Q1 % Change	Q4 FY20	Q4 % Change	12 months FY20	12 months FY19	12 months % Change
Total Power Sale	1,843	3,523	(48)%	2,107	(13)%	11,162	13,514	(17)%
Jharsuguda 600 MW	685	267	–	482	42%	776	1,039	(25)%
TSPL	643	2,697	(76)%	1,094	(41)%	8,223	9,858	(17)%
BALCO 300 MW*	403	425	(5)%	460	(12)%	1,726	2,168	(20)%
HZL Wind Power	112	134	(16)%	71	58%	437	449	(3)%
TSPL — Availability	97%	95%	–	85%	–	91%	88%	–

Particulars	Q1 FY21	Q1 FY20	Q1 % Change	Q4 FY20	Q4 % Change	12 months FY20	12 months FY19	12 months % Change
Power Realization								
Jharsuguda 600 MW(Rs/unit)	2.6	2.3	13%	2.9	(13)%	2.7	2.4	10%
TSPL (Rs/Unit)	2.0	4.5	(55)%	2.7	(25)%	3.7	4.1	(10)%
BALCO 300 MW (Rs/Unit)	3.8	3.7	3%	3.9	(1)%	3.9	3.7	6%

Variance above 100% are not disclosed

Q1 Fiscal year 2021 vs. Previous Quarters

During Q1FY21, power sales were 1,843 million units lower 48% as compared to Q1FY20 and 13% as compared to Q4FY20. Power sales at TSPL were 643 million units with 97% availability in Q1FY2021. At TSPL, the Power Purchase Agreement with the Punjab State Electricity Board compensates us based on the availability of the plant.

The 600 MW Jharsuguda power plant operated at plant load factor (PLF) of 56% in Q1FY2021 (PLF of 6% in Q1FY2020 and 39% in Q4FY2020).

The 300 MW BALCO IPP operated at a PLF of 67% in Q1FY2021 (PLF of 70% in Q1FY2020 and 76% in Q4FY2020).

Fiscal year 2020 vs. Fiscal year 2019

During FY20, power sales were 11,162 million units, 17% lower as compared to FY19. Power sales at TSPL were 8,223 million units with 91% availability in FY2020. At TSPL, the Power Purchase Agreement with the Punjab State Electricity Board compensates us based on the availability of the plant.

The 600 MW Jharsuguda power plant operated at a lower plant load factor (PLF) of 11% in FY2020.

The 300 MW BALCO IPP operated at a PLF of 71% in FY2020. We have received an order dated 01 Jan 2019 from CSERC for the conversion of 300 MW capacity from an Independent power plant (IPP) to a Captive power plant (CPP).

Production Summary (Unaudited)

(In ’000 tonnes, except as stated)

Particulars	Q1 FY2021	Q1 FY2020	Q1 % change	Q4 FY2020	Q4 % change	12 months FY2020	12 months FY2019	12 months % change
ZINC INDIA								
Mined metal content	202	213	(5)%	249	(19)%	917	936	(2)%
Integrated Metal	202	219	(8)%	221	(9)%	870	894	(3)%
Refined Zinc — Integrated	157	172	(8)%	172	(9)%	688	696	(1)%
Refined Lead — Integrated[1]	44	48	(7)%	49	(10)%	181	198	(8)%
Silver — Integrated (in mn ounces)[2]	3.8	5.1	(26)%	5.4	(30)%	19.6	21.8	(10)%

(In ’000 tonnes, except as stated)

Particulars	Q1 FY2021	Q1 FY2020	Q1 % change	Q4 FY2020	Q4 % change	12 months FY2020	12 months FY2019	12 months % change
ZINC INTERNATIONAL	38	60	(36)%	57	(34)%	240	148	63%
Zinc-Refined — Skorpion	1	18	(96)%	15	(96)%	67	66	2%
Mined metal content — BMM	12	19	(36)%	12	(2)%	66	65	1%
Mined metal content — Gamsberg[3]	25	23	11%	30	(15)%	108	17	–
OIL AND GAS								
Average Daily Gross Operated Production (boepd)	158,779	180,059	(12)%	160,838	(1)%	172,971	188,784	(8)%
Rajasthan	127,937	149,153	(14)%	132,315	(3)%	144,260	155,903	(7)%
Ravva	22,037	13,491	63%	17,562	25%	14,232	14,890	(4)%
Cambay	8,805	17,415	(49)%	10,961	(20)%	14,479	17,991	(20)%
Average Daily Working Interest Production (boepd)	98,528	114,570	(14)%	101,565	(3)%	110,459	119,798	(8)%
Rajasthan	89,556	104,407	(14)%	92,621	(3)%	100,982	109,132	(7)%
Ravva	4,958	3,036	63%	3,951	25%	3,202	3,350	(4)%
Cambay	3,522	6,966	(49)%	4,384	(20)%	5,792	7,196	(20)%
KG-ONN	492	162	–	608	(19)%	483	119	–
Total Oil and Gas (million boe)								
Oil & Gas — Gross	14.4	16.4	(12)%	14.6	(1)%	63.3	68.9	(8)%
Oil & Gas — Working Interest	9.0	10.4	(14)%	9.2	(3)%	40.4	43.7	(8)%
IRON ORE (in million dry metric tonnes, or as stated)								
Sales	1.02	1.22	(17)%	2.27	(55)%	6.63	3.84	73%
Goa	0.6	0.0	–	0.6	(7)%	0.9	1.3	(33)%
Karnataka	0.4	1.2	(64)%	1.6	(74)%	5.8	2.6	–
Production of Saleable Ore	0.95	1.09	(13)%	0.77	23%	4.36	4.36	0%
Goa	–	–	–	–	–	–	0.2	–
Karnataka	0.9	1.1	(13)%	0.8	23%	4.4	4.1	6%
Pig Iron (’000 tonnes)	109	178	(39)%	148	(26)%	681	686	(1)%

(In ’000 tonnes, except as stated)

Particulars (In ’000 tonnes, or as stated)	Q1 FY21	Q1 FY20	Q1 % Change	Q4 FY20	Q4 % Change	12 months FY20	12 months FY19	12 months % Change
Steel								
Finished Production	267	323	(17)%	320	(16)%	1,230	1,199	3%
Pig Iron	36	28	30%	46	(21)%	167	142	18%
Billet[4]	129	14	–	(3)	–	27	39	(30)%
TMT Bar	30	128	(77)%	129	(77)%	468	441	6%
Wire Rod	59	109	(46)%	113	(48)%	413	427	(3)%
Ductile Iron Pipes	13	44	(70)%	35	(62)%	155	150	3%
COPPER — INDIA								
Copper — Cathodes	17	16	4%	26	(35)%	77	90	(13)%

(In ’000 tonnes, except as stated)

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TSPL — Availability	97%	95%	–	85%	–	91%	88%	–

1. Excluding captive consumption of 1,202 tonnes in Q1FY2021 vs. 1,822 tonnes in Q1FY2020. and 1,755 tonnes in Q4FY2020. It was 7,088 tonnes in FY2020 vs. 6,534 tonnes in FY2019.

2. Excluding captive consumption of 200,000 ounces in Q1FY2021 vs. 303,000 ounces in Q1FY2020 and 288,000 ounces in Q4FY2020. It was 1,180,000 ounces in FY2020 vs. 1,099,000 ounces in FY2019.

3. Trial run production of 10,000 tonnes in FY2019.

4. Opening stock of Billets is used for further rolling of TMT Bars & Wire rods.

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