

IMPORTANT NOTICE

You must read the following disclaimer before continuing. The following disclaimer applies to the attached Offering Memorandum (the “Offering Memorandum”). You are therefore advised to read this disclaimer carefully before reading, accessing or making any other use of the attached. In accessing the attached, you agree to be bound by the following terms and conditions, including any modifications to them from time to time, each time you receive any information from us as a result of such access.

THE SECURITIES HAVE NOT BEEN, AND WILL NOT BE, REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), OR THE SECURITIES LAWS OF ANY OTHER JURISDICTION AND MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OR BENEFIT OF U.S. PERSONS (AS DEFINED UNDER REGULATION S UNDER THE SECURITIES ACT), 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.

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You are reminded that you have accessed the attached Offering Memorandum on the basis that you are a person into whose possession the Offering Memorandum may be lawfully delivered in accordance with the laws of the jurisdiction in which you are located and you may not nor are you authorized to deliver or forward this document, electronically or otherwise, to any other person. If you have gained access to this transmission contrary to the foregoing restrictions, you will be unable to purchase any of the securities described therein.

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The attached document has been made available to you in electronic form. You are reminded that documents transmitted via this medium may be altered or changed during the process of transmission and consequently neither the issuer of the securities and the Dealers nor any of their employees, representatives or affiliates accepts any liability or responsibility whatsoever in respect of any discrepancies between the document distributed to you in electronic format and the hard copy version. We will provide a hard copy version to you upon request.

Confirmation of Your Representation: You have accessed the attached document on the basis that you have confirmed your representation that (1) you and any customers you represent are (i) qualified institutional buyers (as defined under Rule 144A under the Securities Act), or (ii) neither resident in the United States nor a U.S. person (as defined under Regulation S under the Securities Act) and that the electronic mail address that you gave us and to which this e-mail has been delivered is not located in the United States, (2) you consent to delivery of the attached Offering Memorandum and any amendments or supplements thereto by electronic transmission and (3) you agree to the foregoing terms and conditions.

OFFERING MEMORANDUM



PT PERTAMINA (PERSERO)

(a state-owned company established in the Republic of Indonesia with limited liability)

US\$20,000,000,000

Global Medium Term Note Program

Under this US\$20,000,000,000 Global Medium Term Note Program (the “Program”), PT Pertamina (Persero) (the “Issuer”), a state-owned company established with limited liability under the laws of the Republic of Indonesia, subject to compliance with all relevant laws, regulations and directives, may, from time to time, issue notes in bearer or registered form (the “Notes”).

The maximum aggregate principal amount of all Notes from time to time outstanding under the Program will not exceed US\$20,000,000,000 (or its equivalent in other currencies determined at the time of agreement to issue), subject to any duly authorized increase. The Notes may be denominated in U.S. dollars, Euros and such other currencies as may be agreed between the Issuer and the Relevant Dealers (as defined below), subject to all legal and regulatory requirements applicable to issuances of Notes denominated in particular currencies. The Notes may bear interest on a fixed or floating rate basis, be issued on a fully discounted basis and not bear interest, or be indexed.

The Notes may be issued on a continuing basis to the Dealers and any additional Dealer(s) appointed under the Program from time to time pursuant to the terms of an amended and restated program agreement dated October 19, 2018, as amended by an amendment agreement dated July 23, 2019 and a second amendment agreement dated the date hereof (as the same may be further amended, supplemented or restated from time to time, the “Program Agreement”), which appointment may be for a specific issue or on an ongoing basis (each, a “Dealer” and, together, the “Dealers”). References in this Offering Memorandum to the “Relevant Dealer,” in the case of an issue of Notes being (or intended to be) subscribed by more than one Dealer, shall be to all Dealers agreeing to subscribe for such Notes.

Notes will be issued in Series (each, a “Series”), with all Notes in a Series having the same maturity date and terms otherwise identical (except in relation to issue dates, interest commencement dates, issue prices and related matters). Notes of each Series may be issued in one or more tranches (each, a “Tranche”) on different issue dates. Details applicable to each particular Series or Tranche will be supplied in a pricing supplement to this Offering Memorandum (each, a “Pricing Supplement”), which will contain the aggregate principal amount of the Notes, interest (if any) payable in respect of Notes, the issue price of Notes and any other terms and conditions not contained herein which are applicable to each Tranche. This Offering Memorandum may not be used to consummate sales of Notes, unless accompanied by a Pricing Supplement.

The price and amount of Notes to be issued under the Program will be determined by the Issuer and the Relevant Dealer at the time of issue in accordance with prevailing market conditions.

Application has been made to the Singapore Exchange Securities Trading Limited (the “SGX-ST”) for permission to deal in and for the listing and quotation of any Notes that may be issued pursuant to the Program and which are agreed at or prior to the time of issue thereof to be so listed on the SGX-ST. The SGX-ST assumes no responsibility for the correctness of any of the statements made or opinions expressed or reports contained herein. Admission of any Notes to the Official List of the SGX-ST is not to be taken as an indication of the merits of the Issuer and its respective subsidiaries and associated companies, the Program or the Notes. Unlisted Notes may be issued under the Program. The relevant Pricing Supplement in respect of any Series will specify whether or not such Notes will be listed and, if so, on which exchange(s) the Notes are to be listed. There is no assurance that an application to the SGX-ST for the listing of the Notes of any Series will be approved.

Notes of each Series to be issued in bearer form (“Bearer Notes”) will initially be represented by interests in a temporary global Note or by a permanent global Note, in either case in bearer form (each a “Temporary Global Note” and a “Permanent Global Note,” respectively), without interest coupons, which may be deposited on the relevant date of issue (the “Issue Date”) with a common depositary on behalf of Clearstream Banking S.A. (“Clearstream”) and Euroclear Bank SA/NV (“Euroclear”) (the “Common Depositary”) or any other agreed clearance system compatible with Euroclear and Clearstream and will be sold in an “offshore transaction” within the meaning of Regulation S (“Regulation S”) under the United States Securities Act of 1933, as amended (the “Securities Act”). The provisions governing the exchange of interests in Temporary Global Notes and Permanent Global Notes (each, a “Bearer Global Note”) for other Bearer Global Notes and individual definitive Bearer Notes (“Definitive Bearer Notes”) are described in “Forms of the Notes.” Definitive Bearer Notes will only be available in the limited circumstances as described herein.

Notes of each Series to be issued in registered form (“Registered Notes”) sold in an offshore transaction will initially be represented by interests in a global unrestricted Note, without interest coupons (each an “Unrestricted Global Security”), which may be deposited on the issue date with the Common Depositary unless otherwise specified in the applicable Pricing Supplement. Beneficial interests in an Unrestricted Global Security will be shown on, and transfers thereof will be effected only through, records maintained by, Euroclear or Clearstream unless otherwise specified in the applicable Pricing Supplement. Notes of each Series sold to a qualified institutional buyer (“QIB”) within the meaning of Rule 144A under the Securities Act (“Rule 144A”), as referred to in, and subject to the transfer restrictions described in, “Plan of Distribution” and “Transfer Restrictions” will initially be represented by interests in a global restricted Note, without interest coupons (each a “Restricted Global Security” and together with any Unrestricted Global Security, the “Registered Global Securities”), which will be deposited on the relevant issue date with a custodian for, and registered in the name of a nominee of, The Depository Trust Company (“DTC”). Beneficial interests in a Restricted Global Security will be shown on, and transfers thereof will be effected only through, records maintained by DTC and its participants. See “Global Clearance and Settlement Systems.”

Notes in definitive registered form will be represented by registered certificates (each, a “Certificated Security”), one Certificated Security being issued in respect of each Noteholder’s entire holding of Notes of one Series and will only be available in the limited circumstances as described herein.

Notes of any Series issued under the Program may be rated or unrated. When an issue of Notes is rated, its rating will not necessarily be the same as the rating applicable to the Program. A security rating is not a recommendation to buy, sell or hold securities and may be subject to suspension, reduction or withdrawal at any time by the assigning rating agency.

Investing in the Notes involves risk. See “Risk Factors” beginning on page 21 for a discussion of risks relevant to an investment in the Notes.

The Notes have not been and will not be registered under the Securities Act, or any state securities laws in the United States or any other jurisdiction, and the Notes may include Bearer Notes that are subject to U.S. tax law requirements. The Notes may be offered and sold (i) in the United States only to QIBs or to “accredited investors” (as defined in Rule 501(a)(1), (2), (3) or (7) under the Securities Act) (“Institutional Accredited Investors”), in each case in transactions exempt from registration under the Securities Act and/or (ii) outside the United States to non-U.S. persons in offshore transactions in reliance on Regulation S. In addition, subject to certain exceptions, Bearer Notes may not be offered, sold or delivered within the United States or to, or for the account or benefit of, United States persons (as defined in the U.S. Internal Revenue Code of 1986, as amended (the “Internal Revenue Code”). See “Transfer Restrictions.” The Notes may not be offered or sold in Indonesia or to Indonesian citizens, wherever they are domiciled, or to Indonesian residents.

Arrangers & Dealers

BNP PARIBAS

MUFG

Citigroup

SMBC Nikko

Crédit Agricole CIB

**Société Générale
Corporate & Investment Banking**

Mandiri Securities

The date of this Offering Memorandum is February 3, 2021

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NOTICE TO INVESTORS

This Offering Memorandum is to be read in conjunction with all documents which are deemed to be incorporated herein by reference (see “Documents Incorporated by Reference” below).

No action has been or will be taken to permit a public offering of any Notes in any jurisdiction where action would be required for that purpose. No Notes may be offered or sold, directly or indirectly, and this Offering Memorandum may not be distributed in any jurisdiction, except in accordance with the legal requirements applicable in such jurisdiction.

If a jurisdiction requires that the offering be made by a licensed broker or dealer and the Dealers or any affiliate of the Dealers is a licensed broker or dealer in that jurisdiction, the offering shall be deemed to be made by that Dealer or its affiliate on behalf of the Issuer in such jurisdiction.

Neither this Offering Memorandum nor any other information supplied in connection with the Program or the Notes constitutes an offer of, or an invitation by or on behalf of our Company, BNP Paribas, Citigroup Global Markets Inc., Crédit Agricole Corporate and Investment Bank, Mandiri Securities Pte. Ltd., MUFG Securities Asia Limited, SMBC Nikko Capital Markets Limited and Société Générale, as the arrangers of this Program (the “Arrangers”), any of the Dealers, or The Bank of New York Mellon, as trustee (the “Trustee”) to subscribe for or purchase, any Notes. Subject as provided in the applicable Pricing Supplement, the only persons authorized to use this Offering Memorandum in connection with an offer of Notes are the persons named in the applicable Pricing Supplement as the Relevant Dealer or any other persons named in the section “Non-exempt Offer” of the Pricing Supplement (if any), as the case may be.

No person has been authorized to give any information or to make any representation other than those contained in this Offering Memorandum, and any information or representation not contained in this Offering Memorandum must not be relied upon as having been authorized by us, the Arrangers, any of the Dealers, the Trustee, the Paying Agent or the Registrar (each as defined herein) or any other person. Neither the delivery of this Offering Memorandum nor any sale of any Notes in connection therewith shall, under any circumstances, constitute a representation or create any implication that the information contained herein is correct as of any time subsequent to the date hereof or that there has been no change in the affairs of any party mentioned herein since that date.

No representation, warranty or undertaking, express or implied, is made by any of the Arrangers, any of the Dealers, or the Trustee, and no responsibility or liability is accepted by any thereof to the accuracy, adequacy, reasonableness or completeness of the information contained in this Offering Memorandum or any other information provided by us in connection with the Notes, their distribution or their future performance. To the fullest extent permitted by law, none of the Dealers or the Arrangers accept any responsibility for the contents of this Offering Memorandum or for any other statement, made or purported to be made by the Arrangers or a Dealer or on any of their behalf in connection with the Issuer or the issue and offering of the Notes. Each Arranger and each Dealer accordingly disclaims all and any liability whether arising in tort or contract or otherwise (save as referred to above) which it might otherwise have in respect of this Offering Memorandum or any such statement.

Neither this Offering Memorandum nor any other information supplied in connection with the Program or the Notes should be considered as a recommendation by us, the Arrangers, any of the Dealers or the Trustee that any recipient of this Offering Memorandum should purchase any of the Notes. Each investor contemplating purchasing any Notes should make its own independent investigation of our business, financial condition and affairs, and its own appraisal of our creditworthiness.

The Notes 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 U.S. regulatory authority, nor have any of the foregoing authorities passed upon or endorsed the merits of the offering of the Notes or the accuracy or adequacy of this Offering Memorandum. Any representation to the contrary is a criminal offense in the United States.

In connection with the issue of Notes in any Series or Tranche under the Program, the Relevant Dealer or Relevant Dealers (if any) names as the stabilizing manager(s) (the “Stabilizing Manager(s)”) in the applicable Pricing Supplement, or any person acting for the Stabilizing Manager(s), may purchase and sell such Notes in the open market. These transactions may, to the extent permitted by applicable laws and regulations, include short sales, stabilizing transactions and purchases to cover positions created by short sales. These activities may stabilize, maintain or otherwise affect the market price of such Notes. As a result, the price of such Notes may be higher than the price that otherwise might exist in the open market. If these activities are commenced, they may be discontinued at any time and must in any event be brought to an end after a limited time. There is no obligation on the Stabilizing Manager(s) or any of the Relevant Dealers to carry out such activities. These activities will be undertaken solely for the account of Stabilizing Manager(s) and/or the Relevant Dealers and not for or on our behalf.

DOCUMENTS INCORPORATED BY REFERENCE

This Offering Memorandum should be read and construed in conjunction with each relevant Pricing Supplement and all other documents which are deemed to be incorporated by reference in the relevant Offering Memorandum and in the relevant Pricing Supplement. The relevant Offering Memorandum and the relevant Pricing Supplement shall, save as specified herein and therein, be read and construed on the basis that such documents are so incorporated by reference and form part of the relevant Offering Memorandum and the relevant Pricing Supplement.

Following the date of this Offering Memorandum, this Offering Memorandum should also be read and construed in conjunction with the most recently published audited consolidated financial statements, and any interim consolidated financial statements (whether audited or unaudited) published subsequently to such consolidated financial statements, of our Company from time to time, which are published on the website of the SGX-ST (www.sgx.com) and/or published on our Company’s website (www.pertamina.com), which shall be deemed to be incorporated in, and to form part of, this Offering Memorandum and which shall be deemed to modify or supersede the contents of this Offering Memorandum to the extent that a statement contained in any such document is inconsistent with such contents.

Copies of documents deemed to be incorporated by reference in this Offering Memorandum may be obtained without charge from the registered office of our Company.

SUPPLEMENTAL OFFERING MEMORANDUM

If at any time we shall be required to prepare a supplemental Offering Memorandum, we will prepare and make available an appropriate amendment or supplement to this Offering Memorandum or a further Offering Memorandum.

NOTICE TO PROSPECTIVE INVESTORS IN THE UNITED KINGDOM

The Notes may not be offered or sold to any person in the United Kingdom, other than to persons whose ordinary activities involve them acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses or otherwise in circumstances which have not resulted and will not result in an offer to the public in the United Kingdom.

NOTICE TO PROSPECTIVE INVESTORS IN CANADA

The Notes may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the Notes must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws. Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor. Pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

MIFID II PRODUCT GOVERNANCE/TARGET MARKET

The Pricing Supplement may include a legend entitled “MiFID II Product Governance” which will outline the target market assessment in respect of the Notes and which channels for distribution of the Notes are appropriate. Any person subsequently offering, selling or recommending the Notes (a “distributor”) should take into consideration the target market assessment; however, a distributor subject to Directive 2014/65/EU (as amended, “MiFID II”) is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the target market assessment) and determining appropriate distribution channels.

A determination will be made in relation to each issue about whether, for the purpose of the MiFID Product Governance rules under EU Delegated Directive 2017/593 (the “MiFID Product Governance Rules”), any Dealer subscribing for any Notes is a manufacturer in respect of such Notes, but otherwise, unless so determined, neither the Arrangers nor the Dealers nor any of their respective affiliates will be a manufacturer for the purpose of the MiFID Product Governance Rules.

UK MIFIR PRODUCT GOVERNANCE/TARGET MARKET

The Pricing Supplement in respect of any Notes may include a legend entitled “UK MiFIR Product Governance” which will outline the target market assessment in respect of the Notes and which

channels for distribution of the Notes are appropriate. Any person subsequently offering, selling or recommending the Notes (a “distributor”) should take into consideration the target market assessment; however, a distributor subject to the FCA Handbook Product Intervention and Product Governance Sourcebook (the “UK MiFIR Product Governance Rules”) is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the target market assessment) and determining appropriate distribution channels.

A determination will be made in relation to each issue about whether, for the purpose of the UK MiFIR Product Governance Rules, any Dealer subscribing for any Notes is a manufacturer in respect of such Notes, but otherwise neither the Arrangers nor the Dealers nor any of their respective affiliates will be a manufacturer for the purpose of the UK MIFIR Product Governance Rules.

PROHIBITION OF SALES TO EEA RETAIL INVESTORS

If the Pricing Supplement in respect of any Notes includes a legend entitled “Prohibition of Sales to EEA Retail Investors,” the Notes 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”). For these purposes, a retail investor in the EEA 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; (ii) a customer within the meaning of Directive (EU) 2016/97 (as amended, the “Insurance Distribution Directive”), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; and (iii) not a qualified investor as defined in Regulation (EU) 2017/1129 (as amended, the “Prospectus Regulation”). Consequently, no key information document required by Regulation (EU) No 1286/2014 (as amended, the “PRIIPs Regulation”) for offering or selling the Notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

PROHIBITION OF SALES TO UK RETAIL INVESTORS

If the Pricing Supplement in respect of any Notes includes a legend entitled “Prohibition of Sales to UK Retail Investors”, the Notes 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 United Kingdom (“UK”). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 (“EUWA”); or (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act 2000 (“FSMA”) and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA; or (iii) not a qualified investor as defined in Article 2 of Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the EUWA. Consequently no key information document required by Regulation (EU) No 1286/2014 as it forms part of domestic law by virtue of the EUWA (the “UK PRIIPs Regulation”) for offering or selling the Notes or otherwise making them available to retail investors in the UK has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.

NOTIFICATION UNDER SECTION 309B(1)(C) OF THE SECURITIES AND FUTURES ACT (CHAPTER 289) OF SINGAPORE

Unless otherwise stated in the Pricing Supplement in respect of any Notes, all Notes issued or to be issued under the Program shall be prescribed capital market products (as defined in the Securities and Futures (Capital Markets Products) 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).

NOTICE TO PROSPECTIVE INDONESIAN INVESTORS

The Notes have not been offered or sold and will not be offered or sold in the Republic of Indonesia or to any Indonesian nationals, corporations or residents, including by way of invitation, offering or advertisement, and this Offering Memorandum and any other offering material relating to the Notes has not been distributed, and will not be distributed, in the Republic of Indonesia or to any Indonesian nationals, corporations or residents. The offering of the Notes does not constitute a public offering or private placement in Indonesia under the Law No. 8 of 1995 on Capital Markets and OJK Rule No. 30 of 2019 on the Issuance of Debt-Linked Securities and/or Sukuk issued by way of Private Placement. The Indonesian Financial Service Authority (*Otoritas Jasa Keuangan* or the “OJK”) has not reviewed or declared its approval or disapproval of the issue of the Notes, nor has it made any determination as to the accuracy or adequacy of this Offering Memorandum. Any statement to the contrary is a violation of Indonesian law.

ENFORCEABILITY OF FOREIGN JUDGMENTS IN INDONESIA

The Issuer is a state-owned limited liability company established and existing in Indonesia. All of our commissioners, directors and executive officers reside in Indonesia. Substantially all of the assets of the Issuer and these other persons are located outside the United States. As a result, it may be difficult for investors to effect service of process upon such persons within the United States, or to enforce against us in court, judgments obtained in U.S. courts, including judgments predicated upon the civil liability provisions of the federal securities laws of the United States.

We have been advised by our Indonesian legal advisor, Ali Budiardjo, Nugroho, Reksodiputro, that judgments of courts outside Indonesia are not enforceable in Indonesian courts. A foreign court judgment could be offered and accepted into evidence in a proceeding on the underlying claim in an Indonesian court and may be given such evidentiary weight as the Indonesian court may deem appropriate in its sole discretion. A claimant may be required to pursue claims in Indonesian courts on the basis of Indonesian law. A purchaser of the Notes may not be able to enforce judgments against us obtained in the United States based upon certain of the civil liability provisions of the securities laws of the United States or any states thereof in Indonesian courts, and Indonesian courts may not enter judgments in original actions brought in Indonesian courts based solely upon the civil liability provision of the securities laws of the United States or any state thereof. Re-examination of the underlying claim would be required before the Indonesian court. There can be no assurance that the claims or remedies available under Indonesian law will be the same, or as extensive as those available in other jurisdictions. For more details, see “Risk Factors — Risks Relating to Indonesia — It may not be possible for investors to effect service of process or to enforce certain judgments on the Issuer or its management” and “Risk Factors — Risks Relating to Indonesia — Holders of the Notes will be exposed to a legal system subject to considerable discretion and uncertainty and may have difficulty pursuing claims under the Notes.”

INDONESIAN REGULATION OF OFFSHORE BORROWINGS

Pursuant to Presidential Decree No. 59 of 1972, dated October 12, 1972, as partly revoked by the Presidential Decree No. 15 of 1991 on Receipt of Offshore Loans and Issuance of Bank Guarantees for the Acceptance of Offshores Loans by State-Owned Banks and Regional Development Banks Stipulated as Foreign Exchange Banks (“PD 59/1972”), we are required to obtain approval from the Minister of Finance of Indonesia and report the particulars of our offshore commercial borrowings to the Minister of Finance of Indonesia and Bank Indonesia, on the acceptance, implementation, and repayment of principal and interest. Minister of Finance Decree No. KEP-261/MK/IV/5/1973 dated May 3, 1973, as amended by the Minister of Finance Decree No. 417/KMK.013/1989 dated May 1, 1989 and partly revoked by the Minister of Finance Decree No. 279/KMK.01/1991 dated March 18, 1991, as the implementing regulation of this PD 59/1972, further sets forth the requirement to submit periodic reports to the Minister of Finance of Indonesia and Bank Indonesia on the effective date of the contract and each subsequent three-month period.

See “Indonesian Regulatory Framework — Indonesian Regulation of Offshore Borrowings” for information on certain regulations in Indonesia which apply to our offshore borrowings.

LANGUAGE OF TRANSACTION DOCUMENTS

Pursuant to Law No. 24 of 2009, regarding Flag, Language, Coat of Arms and National Anthem enacted on July 9, 2009 (“Law No. 24”) and Presidential Regulation No. 63 of 2019 on Use of Bahasa Indonesia (“PR No. 63” and, together with Law No. 24, the “Indonesian Language Regulations”), agreements to which Indonesian entities are a party are required to be executed in Bahasa Indonesia, although, when a foreign entity is a party, execution of such agreements in English or the language of the relevant foreign entity is permitted (in addition to the Bahasa Indonesia version). PR No. 63, however, provides that the Bahasa Indonesia version of the agreement should be the original or master version, while the English version or the national language version of the foreign party is treated as an equivalent of, or a translation of, the Bahasa Indonesia version of the agreement. Under PR No. 63, in the event of a discrepancy or inconsistency, the prevailing language must be the language as agreed between the parties in the agreement.

We will execute both English and Bahasa Indonesia versions of all transaction agreements to which the Issuer is a party. All of these documents will provide that in the event of a discrepancy or inconsistency, the parties agree that the English version would prevail and the Bahasa Indonesia version will be read as amended to conform with the provisions of the English version. Furthermore, some concepts in English may not have corresponding terms in Bahasa Indonesia and thus the exact meaning of the English version may not be fully captured by the Bahasa Indonesia version. If this occurs, we cannot assure you that the terms of the Notes, the Indenture and the Program Agreement, will be as described in this Offering Memorandum or will be interpreted and enforced by the Indonesian courts as intended. See “Risk Factors — Risks Relating to the Notes — Indonesian law requiring agreements involving Indonesian parties, which includes the Indenture and certain other documents entered into in connection with the Program or any issue of Notes thereunder, to be written in the Indonesian language may raise issues as to the enforceability of such agreements.”

CERTAIN DEFINED TERMS AND CONVENTIONS

As used in this Offering Memorandum, unless the context otherwise requires, the terms “we,” “us,” “our,” “our Company”, the “Group” and “Pertamina” refer to PT Pertamina (Persero) and its consolidated subsidiaries and the term the “Issuer” refers to PT Pertamina (Persero) on a standalone basis.

In this Offering Memorandum, references to “US\$,” “\$” and “U.S. dollars” are to United States dollars, the legal currency of the United States, references to “Rupiah” and “Rp.” are to the legal currency of Indonesia, references to “€” and “Euro” are to the legal currency of certain member states of the European Union and references to “¥” and “Japanese Yen” are to the legal currency of Japan. Unless otherwise specified or the context otherwise requires, all references to “Indonesia” are references to the Republic of Indonesia. All references to the “Government” and “government” (as the context requires) herein are references to the Government of the Republic of Indonesia. All references to “United States” or “U.S.” herein are references to the United States of America. Certain terms used herein are defined in the “Glossary” contained elsewhere in this Offering Memorandum.

Unless otherwise expressly stated, all operational data of our Company contained in this Offering Memorandum is provided as of September 30, 2020.

All references herein to the “Oil and Gas Law of 2001” are references to the oil and gas law enacted on November 23, 2001 as partially annulled by the Constitutional Court of the Republic of Indonesia on December 15, 2004 and November 13, 2012, and amended by the Job Creation Law. References to “SKK MIGAS” are references to the Special Working Unit for the Implementation of Upstream Natural Oil and Gas Business Activity (Satuan Kerja Khusus Pelaksana Kegiatan Usaha Hulu Minyak dan Gas Bumi) and references to “BPMIGAS” are references to the predecessor to SKK MIGAS, the Executive Agency for Upstream Oil and Gas Activities (Badan Pelaksana Kegiatan Usaha Hulu Minyak dan Gas Bumi), a non-profit Government-owned legal entity which was dissolved pursuant to the decision of the Constitutional Court of the Republic of Indonesia Decision No. 36/PUU-X/2012 dated November 13, 2012. References to “BPH MIGAS” are references to the Oil and Gas Downstream Regulatory Body (Badan Pengatur Hilir Minyak dan Gas Bumi), an independent governmental agency. For more information see “Indonesian Regulatory Framework.”

All references herein to the “Job Creation Law” are references to Law No. 11 of 2020 concerning Job Creation enacted by the Government of Indonesia on November 2, 2020. The Job Creation Law amended regulatory frameworks within various Indonesian sectors. For more information, see “Indonesian Regulatory Framework.”

See “Business — Pertamina Upstream Business — Reserves” for definitions of net reserves, proved reserves, proved plus probable reserves, proved developed reserves and proved undeveloped reserves.

See “Business — Pertamina Upstream Business — Production” for a definition of production and net production in respect of our upstream business. See “Indonesian Regulatory Framework” for a description of the production sharing arrangements between us and the Government.

Our working interest is given after taking into account any dilution due to ownership through subsidiaries which are less than wholly owned, directly or indirectly, by us.

In respect of our downstream businesses, unless otherwise specified, all references herein to “production capacity” of a facility means the maximum amount that can, or is expected to be able to, be produced by such facility. No representation is made that the amount of production (if any) from such facility is or will or is expected to be equal to the production capacity of a facility and production capacity should not be treated as indicative of future levels of production.

Unless otherwise indicated or in the case of oil prices, references to “crude oil” or “oil” include condensate. Natural gas equivalents and crude oil equivalents are determined using the ratio of 1 mmcf of natural gas to 0.1726 mboe of oil equivalent, except in “Industry Overview,” where natural gas equivalents and crude oil equivalents are determined using the ratio of 1 mmcf of natural gas to 0.176 mboe of oil equivalent.

INDUSTRY AND MARKET DATA

This Offering Memorandum includes certain industry and market data (including forecasts and other forward-looking information) obtained from, among others, the Central Bureau of Statistics (Badan Pusat Statistik, formerly known as Biro Pusat Statistik), the World Bank and reports of other governmental agencies, industry publications and surveys, and internal company surveys. Such industry publications and surveys and forecasts generally state that the data contained therein has been obtained from sources believed to be reliable, but we cannot assure you that such data is complete or accurate, nor has such data been independently verified, and neither we, nor the Arrangers or any Dealer make any representation as to the accuracy or completeness of such data or any assumptions relied upon therein.

This Offering Memorandum, including the section titled “Industry Overview,” also contains certain industry and market data derived from a report commissioned by us and prepared by our energy industry consultant Wood Mackenzie Asia Pacific Pte Ltd (“Wood Mackenzie”) titled “*Indonesia Oil and Gas Industry Report*” (the “Wood Mackenzie Report”). The information contained in the Wood Mackenzie Report is as of January, 2021 unless otherwise stated therein. The information for the year 2020 contained in the Wood Mackenzie Report is based on Wood Mackenzie’s estimates and forecasts for that year, in which the energy industry was substantially affected by the COVID-19 pandemic, rather than historical information. Other than information about Pertamina that was provided by us to Wood MacKenzie, the industry and market data in the Wood Mackenzie Report has not been independently verified by us, the Arrangers or the Dealers, and neither we, except with respect to information which we have provided, nor the Arrangers or any Dealer make any representation as to the accuracy or completeness of such data or any assumptions relied upon therein.

The Wood Mackenzie Report contains certain data produced by Wood Mackenzie about Indonesia’s and our oil and gas reserves. Wood MacKenzie’s categorization of oil and gas reserves as “commercial assets” and “sub-commercial assets” is not part of a system of oil and gas reporting definitions that is recognized by a professional standards-setting body or a securities regulator. Pertamina reports its oil and gas reserves under its oil and gas resource management system, which is consistent with the Petroleum Resource Management System (“PRMS”) approved by the Society of Petroleum Engineers, the World Petroleum Council, the American Association of Petroleum Geologists and the Society of Petroleum Evaluation Engineers. See also “Presentation of Financial and Other Data — Oil and Gas Reserves” and “Business — Pertamina Upstream Business — Oil and Gas Reserves.” Investors should carefully consider the differences between the categories Wood MacKenzie employs and the industry-standard categories that Pertamina uses to calculate its oil and gas reserves and resources. Investors should not assume that quantities of oil and gas that Wood Mackenzie describes as reserves or resources would be categorized as reserves or resources under the PRMS.

Financial data with respect to Indonesia provided in this Offering Memorandum may be subsequently revised in accordance with Indonesia’s ongoing maintenance of its economic data, and such revised data will not be distributed by us to any holder of the Notes.

PRESENTATION OF FINANCIAL AND OTHER DATA

Financial Information

Our consolidated financial statements and, unless otherwise indicated, financial information in this Offering Memorandum has been prepared in accordance with Indonesian Financial Accounting Standards (“IFAS”), which differ in certain respects from generally accepted accounting principles in

the United States (“U.S. GAAP”). For a summary of certain differences between IFAS and U.S. GAAP, see “Summary of Certain Significant Differences Between IFAS and U.S. GAAP.” Except as otherwise indicated or the context otherwise requires, financial information in this Offering Memorandum is presented on a consolidated basis.

Our consolidated financial statements as of December 31, 2019, 2018 and 2017 and for the years then ended included in this Offering Memorandum have been audited by KAP Purwanto, Sungkoro & Surja (the Indonesian member firm of Ernst & Young Global Limited), independent public accountants, in accordance with Standards on Auditing established by the Indonesian Institute of Certified Public Accountants (the “IICPA”), as stated in their audit report appearing elsewhere in this Offering Memorandum.

Our unaudited interim consolidated financial statements as of September 30, 2020 and for the nine-month periods ended September 30, 2020 and 2019 have been reviewed by KAP Purwanto, Sungkoro & Surja (the Indonesian member firm of Ernst & Young Global Limited), independent public accountants, in accordance with SRE 2410, established by the IICPA, as stated in their review report appearing elsewhere in this Offering Memorandum (presented combined with the audit report mentioned above). A review conducted in accordance with SRE 2410 established by the IICPA is substantially less in scope than an audit conducted in accordance with Standards on Auditing established by the IICPA, and as stated in their review report appearing in this Offering Memorandum (presented combined with the audit report mentioned above), KAP Purwanto, Sungkoro & Surja (the Indonesian member firm of Ernst & Young Global Limited), independent public accountant, did not audit and do not express any opinion on such unaudited interim consolidated financial statements included elsewhere in this Offering Memorandum.

Restatement in connection with BUMN Hospital Holding Acquisition

In December 2016, the Minister of SOE issued a letter (No. S-736/MBU/12/2016 dated December 21, 2016) providing for our then wholly-owned subsidiary, Pertamina PT Pertamina Bina Medika, to acquire eight companies indirectly owned by the Government that operate hospitals in Indonesia. Pursuant to that letter, on March 31, 2020, we acquired 51% of PT RS Peln, and on August 7, 2020, we acquired 67% of each of PT Pelindo Husada Citra, PT Hospital Port, PT Nusantara Medika Utama, PT Nusantara Sebelas Medika, PT Rolas Nusantara Medika and PT Rumah Sakit Bakti Timah and a 67.8% of PT Krakatau Medika (together, the “Acquisitions”). The total consideration for the Acquisitions amounted to Rp.2.28 trillion (equivalent to US\$157.9 million), which included a share swap amounting to Rp.0.91 trillion (equivalent to US\$62 million). As a result of the share swap, our interest in Pertamina PT Pertamina Bina Medika was reduced from 100.00% to 81.12%.

The Acquisitions are considered a common control business combination under SFAS 38 (Revised 2012) “Business Combination between Entities Under Common Control” (“SFAS 38”), as they entailed the transfer or reorganization of businesses under the same business group without a change of ownership in economic substance. As a consequence of the retrospective application of SFAS 38 in connection with the Acquisitions, our consolidated statement of financial position as of December 31, 2017, 2018 and 2019 and September 30, 2019 and our consolidated statements of comprehensive profit or loss and other comprehensive income for the years ended December 31, 2017, 2018 and 2019 and the nine-month period ended September 30, 2019 were restated in our unaudited interim consolidated financial statements as of September 30, 2020 and for the nine month period then ended to present the Acquisitions in such a manner as if they had occurred prior to January 1, 2017.

Please refer to Notes 2e, 4m and 5 to our unaudited interim consolidated financial statements included elsewhere in this Offering Memorandum for more information.

PGN

Certain operational data of PT Perusahaan Gas Negara Tbk (“PGN”) and its subsidiaries has been included in this Offering Memorandum. Unless otherwise stated, the operational data of Pertamina in this Offering Memorandum (including relating to our natural gas transmission and distribution, LNG production, upstream and downstream oil and gas businesses and strategies, proved plus probable oil and gas reserves, exploratory and development wells, oil and gas fields/blocks and upstream oil and gas production and distribution) excludes the operational data of PGN and its subsidiaries.

In this Offering Memorandum, references to our “net income” are to our “profit for the period/year after the effect of merging entity’s income adjustment attributable to owners of the parent entity.”

For more information, see our consolidated financial statements and the accompanying notes thereto included elsewhere in this Offering Memorandum.

Rounding

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

Non-GAAP Financial Measures

This Offering Memorandum includes certain non-GAAP financial measures, including Adjusted EBITDA and dividend payout ratio. Adjusted EBITDA and the related ratios presented in this Offering Memorandum and dividend payout ratio are supplemental measures of our performance and liquidity that are not required by, or presented in accordance with, IFAS or U.S. GAAP. Adjusted EBITDA is not a measurement of financial performance or liquidity under IFAS or U.S. GAAP and should not be considered as an alternative to profit for the period/year after the effect of merging entity’s income adjustment attributable to owners of the parent entity (which is our net income), operating income or any other performance measures derived in accordance with IFAS or U.S. GAAP or as an alternative to cash flow from operating activities or as a measure of liquidity. In addition, Adjusted EBITDA is not a standardized term, hence a direct comparison between companies using such a term may not be possible.

We calculate Adjusted EBITDA in accordance with *Kementerian Badan Usaha Milik Negara* (Indonesia’s Ministry of State Owned Enterprises), or Decree of the Minister of State-Owned Enterprises Number: Kep-100/MBU/2002 concerning Assessment of the Health Level of State-Owned Enterprises (*Keputusan Menteri Badan Usaha Milik Negara Nomor: Kep-100/MBU/2002 Tentang Penilaian Tingkat Kesehatan Badan Usaha Milik Negara*) (“BUMN Regulation KEPMEN 100”), which requires adjustment for all finance costs and does not take into account the effects of merging entity’s income adjustment, which arise in connection with acquisitions during the year or period. In comparison, our calculations of EBITDA in the past adjusted for interest expense and not accretion expenses related to decommissioning and site restoration or other finance costs and took into account the effects of merging entity’s income adjustment. Adjusted EBITDA and the related ratios presented in this Offering Memorandum are therefore not comparable to our previously disclosed EBITDA and related ratios.

See “Summary Consolidated Financial and Other Data” and “Selected Consolidated Financial and Other Data” for more information, including details of our calculation of Adjusted EBITDA and a reconciliation of our net income under IFAS to our definition of Adjusted EBITDA.

Oil and Gas Reserves

Except where attributed to Wood Mackenzie, the information on our historical oil and gas reserves in this Offering Memorandum is based on our estimated “net reserves” and, as such, represents our aggregate share of the estimated crude oil and/or natural gas reserves in all blocks or fields or specified areas, attributable to our working interest in such areas, before deducting the share payable to the Government as owner of the reserves pursuant to the terms of the relevant production sharing arrangement, the cost recovery portion and any applicable taxes.

These estimates have been prepared based on our oil and gas and geothermal resource management system, which contains procedures for classifying and estimating reserves. Until December 31, 2018, the procedures for our oil and gas resource management system and the classifications of our reserves were consistent with PRMS approved in March 2007 (“PRMS 2007”) by the Society of Petroleum Engineers, the World Petroleum Council, the American Association of Petroleum Geologists, and the Society of Petroleum Evaluation Engineers. PRMS 2007 was generally considered the oil and gas industry standard for reserve reporting until it was superseded by a new PRMS released in June 2018 (“PRMS 2018”). Accordingly, in this Offering Memorandum, except where attributed to Wood Mackenzie, estimates of our oil and gas reserves as of December 31, 2018 and 2017 have been prepared in a manner consistent with PRMS 2007.

Beginning in 2019, we began classifying and estimating our reserves in a manner consistent with PRMS 2018. Accordingly, in this Offering Memorandum, estimates of our oil and gas reserves as of September 30, 2020 and December 31, 2019 have been prepared in a manner consistent with PRMS 2018. Investors should note that different reserves reporting systems employ different assumptions, and that our methodologies for classifying reserves and our reserves classifications vary in certain respects from the methodologies and classifications used by oil and gas companies subject to the reporting obligations of the SEC. As a result, because of the impact of such assumptions or differences in the methodologies of resource management systems, identical raw data can produce varying estimates of reserves.

Estimates of reserves are largely dependent on the interpretation of data obtained from drilling, testing and production and may prove to be incorrect over time. Estimates of proved reserves that may be developed and produced in the future are frequently based upon volumetric calculations and by analogy to similar types of reservoirs, rather than upon actual production history. Subsequent evaluation of the same reservoirs based upon production history may result in revisions to the estimated proved or proved plus probable reserves. An estimate of reserves is based in part on a field’s long-term development plan, and reserves are classified or adjusted and re-classified as contingent where a long-term development plan has not been finalized or is not up-to-date. The estimation of reserves involves a significant degree of judgment by our management, engineers and technical personnel. Reserves estimates are subject to various uncertainties, including those relating to the physical characteristics of oil and gas fields, as well as changes in oil prices. These uncertainties are difficult to estimate and, as a result, actual production may be materially different from current estimates of reserves. No assurance can be given that the reserves presented in this Offering Memorandum will be recovered at the levels presented. See “Risk Factors — Risks Relating to Our Upstream Operations — Our crude oil, natural gas and geothermal reserve estimates are uncertain and may prove to be incorrect over time or may not accurately reflect actual reserve levels, or even if accurate, technical limitations may prevent us from retrieving these resources.”

See “Business — Pertamina Upstream Business — Reserves” for definitions relating to our reserves and details of our reserve estimation methodology and techniques.

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

There are principal differences between the reporting regimes under the PRMS 2007, PRMS 2018 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 Programs and Subpart 1200 of Regulation S-K (together “Industry Guide 4”).

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

AVAILABLE INFORMATION

In the event that Notes are offered and sold in reliance on Rule 144A, we shall, for so long as any of the Notes are “restricted securities” within the meaning of Rule 144(a)(3) under the Securities Act, during any period in which we are not subject to Section 13 or 15(d) of the U.S. Securities Exchange Act of 1934, as amended (the “Exchange Act”), or exempt from reporting pursuant to Rule 12g3-2(b) under the Exchange Act, make available to any qualified institutional buyer (as defined in Rule 144A) who is a holder of such restricted securities and any prospective purchaser of such restricted securities who is a qualified institutional buyer (as so defined) designated by such holder, upon the request of such holder or prospective purchasers, the information concerning us required to be provided to such holder or prospective purchaser by Rule 144A(d)(4) under the Securities Act.

FORWARD-LOOKING STATEMENTS

This Offering Memorandum includes, and any amendment or supplement, may include forward-looking statements. All statements other than statements of historical facts included in this Offering Memorandum and any amendment or supplement regarding, among other things, our future financial position and results of operations, business, strategy, plans, developments and prospects, the condition and prospects of the oil, gas and geothermal industries, and Indonesia’s economy, fiscal condition, debt or prospects may constitute forward-looking statements. Forward-looking statements can generally be identified by the use of forward-looking terminology such as “may,” “will,” “expect,” “intend,” “estimate,” “anticipate,” “believe,” “continue” or similar terminology. Specifically, statements under the captions “Summary,” “Industry Overview,” “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” “Business,” “Indonesian Regulatory Framework” and “Relationship with the Government” relating to the following matters may include forward-looking statements relating to:

- the expected results of our exploration, development, production, refining and distribution activities and related capital expenditures and investments;
- our oil, gas and geothermal reserve estimates, the classification of our oil, gas and geothermal reserves and our ability to extract oil, gas and geothermal energy;
- our strategic, business and financial plans and objectives, including budgeted and future capital expenditures, acquisitions and investments, (i) in respect of future oil, gas and

geothermal exploration, development and production; (ii) in respect of the future construction, expansion, production capacity and utilization of our refining and other facilities; and (iii) in respect of the future construction, expansion, acquisition or operation of our distribution, trading and transportation networks;

- the anticipated demand and selling prices for crude oil, natural gas, geothermal energy, refined petroleum and petrochemical products, drilling activities and power;
- sales to existing and potential customers, whether under sales contract or not, and generation of future receivables;
- our ability to be and remain competitive in each of our main business segments;
- our financial position, business strategy and budget, including projected financial and operating data;
- existing and future regulatory requirements applicable to us and our businesses; and
- existing and future obligations in respect of environmental compliance and remediation.

These forward-looking statements involve a number of risks and uncertainties that could cause actual results to differ materially from those suggested by the forward-looking statements. Forward-looking statements should therefore be considered in light of various important factors, including those set out in this Offering Memorandum. Factors that could cause actual results to differ include, but are not limited to, the following:

- economic, social and political conditions in Indonesia and other countries in which we operate, including economic, financial and other effects of the COVID-19 pandemic;
- changes and volatility in market prices of or demand for key commodities produced or consumed by us, including crude oil and natural gas, as a result of competitive actions, economic factors such as inflation or exchange rate fluctuations, or otherwise;
- changes in our relationship with the Government, SKK MIGAS, BPH MIGAS and other government authorities in Indonesia and other countries in which we operate, our joint venture partners, our shareholder, our co-investors and other counterparties, in Indonesia and other countries in which we operate;
- whether we have or are able to obtain sufficient working capital to meet our cash and operational requirements, including through external financing;
- operational risks and hazards, such as accidents, natural disasters and other catastrophes;
- increases or other changes in regulatory burdens and obligations in Indonesia and other countries, including our public service obligation (“PSO”), dividend obligations, and environmental regulations and compliance costs;
- our ability to implement our growth strategy and development plans, including our ability to consummate future acquisitions, joint ventures or investments;

- changes in terms and conditions of the agreements under which we operate our businesses and the ability of third parties to perform in accordance with contractual terms and specifications;
- changes in import or export controls, duties, levies or taxes, either in international markets or in Indonesia;
- changes in laws and regulations and their interpretation, applicable taxes and tax rates, accounting standards or practices, and reserve reporting guidelines; and
- our ability to manage the risks described above and in the section captioned “Risk Factors.”

Although we believe that the expectations of our management as reflected by such forward-looking statements are reasonable based on information currently available to us, no assurances can be given that such expectations will prove to be correct.

In addition, our management’s expectations with respect to our exploration, production, development, refining and distribution activities are subject to risks arising from the inherent difficulty of predicting the presence, yield or quality of oil, gas and geothermal reserves, as well as unknown or unforeseen difficulties in extracting, transporting, refining or processing any oil, gas or geothermal energy found, or doing so on a commercial basis.

Our ability to maintain and grow our revenues, net income and cash flows depends upon continued capital expenditure. In addition, our capital expenditure and investment plans are subject to a number of risks, contingencies and other factors, such as oil and gas prices, market demand, geological factors, acquisition opportunities and the success of our exploration program, some of which are beyond our control. Our ability to obtain adequate financing to satisfy our capital expenditure and investment budget and debt service requirements may be limited by our financial condition, results of operations, legal and regulatory issues and the liquidity of international and domestic financial markets. We may make additional capital expenditures and investments as opportunities or needs arise, and may increase, reduce or suspend our planned capital expenditures or investments or change the timing and use of its capital expenditures from what is currently planned in response to market conditions, drilling results, production trends or for other reasons.

Should one or more of these uncertainties or risks, among others, materialize, our actual results may vary materially from those estimated, anticipated or projected. Specifically, but without limitation, capital costs could increase, projects could be delayed, and anticipated improvements in production, capacity or performance might not be fully realized or realized at all.

Accordingly, prospective purchasers are cautioned not to place undue reliance on forward-looking statements. In any event, these statements speak only as of their dates, and we undertake no obligation to update or revise any of them, whether as a result of new information, future events or otherwise.

SUMMARY

This summary highlights information contained elsewhere in this Offering Memorandum. This summary is qualified by, and must be read in conjunction with, the more detailed information and the consolidated financial statements appearing elsewhere in this Offering Memorandum. We urge you to read this entire Offering Memorandum carefully, including our consolidated financial statements and related notes and “Risk Factors.”

Overview

We are a fully integrated national oil, gas and geothermal company, wholly owned by the Government and headquartered in Jakarta, Indonesia. We have an operating history of more than 60 years. We were established on December 10, 1957 and became an Indonesian limited liability company in 2003.

We are engaged in a broad spectrum of upstream and downstream oil, gas, geothermal, petrochemical and other energy operations. Our lines of business are organized into upstream and downstream sectors in accordance with Indonesian oil, gas and geothermal regulations. In the upstream sector, we engage in the exploration (the search for oil, gas and geothermal energy), development (the drilling and bringing into production of wells in addition to the discovery wells in a field) and production and supply of crude oil, natural gas and geothermal energy in Indonesia and internationally. In the downstream sector, we carry out refining, marketing, distribution and trading of crude oil, natural gas, refined fuel products and petrochemical and other non-fuel products such as green coke, including products for retail, industrial and aviation uses. We are also mandated by the Government to distribute subsidized fuel, LPG and CNG in Indonesia and to assist in its efforts to encourage the use of LPG as a substitute for kerosene in Indonesian households under the kerosene conversion program and to encourage the use of CNG as an alternative fuel.

As of September 30, 2020, our total net proved oil and gas reserves were an estimated 2,025.3 mmboe and our total net proved plus probable oil and gas reserves were an estimated 2,676.0 mmboe. We have the largest base of oil and gas “commercial reserves” in Indonesia as of September 30, 2020, based on Wood Mackenzie’s procedures for reserves categorization. We are also the largest exploration and production player in Indonesia, hold more total blocks and active blocks than any other entity in Indonesia, and have the largest net acreage of all oil and gas companies in Indonesia, according to Wood Mackenzie.

We are the largest oil and gas producer in Indonesia in terms of net working interest production, according to Wood Mackenzie, with 608 kboe/d in 2020. Our total average daily oil and gas production was 921.4 mboe/d in 2018 and 868.0 mboe/d in the nine months ended September 30, 2020. We also have significant geothermal resources and an extensive distribution network of gas pipelines. Our geothermal installed capacity was 1,383 MW as of September 30, 2020. We have a portfolio of six refineries with total refining capacity of 1,031.0 mbbls/d and significant downstream assets and infrastructure, including fuel stations, fuel terminals, LPG filling plants, aviation fuel depots, lube oil blending plants, tankers and CNG refueling stations.

For the years ended December 31, 2017, 2018 and 2019 and the nine months ended September 30, 2020, we had total sales and other operating revenue of US\$46,175.7 million, US\$58,111.2 million, US\$54,792.5 million, and US\$30,250.6 million, respectively. For the years ended December 31, 2017, 2018 and 2019 and the nine months ended September 30, 2020, we had profit/(loss) after the effect of merging entity’s income adjustment of US\$2,710.2 million, US\$2,725.7 million, and

US\$2,618.0 million, and a loss of US\$(698.0) million, respectively. For a detailed discussion of our results of operations for these periods, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Results of Operations.”

Business Strengths

The Only Fully Integrated Indonesian Oil and Gas Company

We are the only fully integrated Indonesian oil and gas company, and we have a leading market position in both the Indonesian upstream and downstream markets, providing for full integration across the oil and gas value chain.

Leading upstream oil and gas player in Indonesia. We have the largest base of oil and gas “commercial reserves” in Indonesia, based on Wood Mackenzie’s procedures for reserves categorization. As of September 30, 2020, our total net proved oil and gas reserves were an estimated 2,025.3 mmboe and our total net proved plus probable oil and gas reserves were an estimated 2,676.0 mmboe. We are the largest oil and gas producer in Indonesia in terms of net working interest production, according to Wood Mackenzie, with 608 kboe/d in 2019. Our total average daily oil and gas production was 900.8 mboe/d in 2019 and 868.0 mboe/d in the nine months ended September 30, 2020. We are also the largest exploration and production player in Indonesia, hold most blocks than any other entity in Indonesia, and have the largest net acreage of all oil and gas companies in Indonesia, according to Wood Mackenzie.

Dominant oil refining, marketing and trading company in Indonesia. Our comprehensive downstream portfolio significantly complements our upstream strengths. We are the dominant refining company in Indonesia, wholly owning and operating six of the nine active oil refineries in Indonesia. Our total production capacity of 1,035.0 kb/d in 2019 based on Wood Mackenzie data. We have extensive downstream infrastructure and an extensive distribution network in Indonesia, which are comprised of pipelines, fuel stations and depots, and shipping vessels. We have a close to a 100% market share for the retail sector. We also have 7,146 branded stations at the end of 2019, according to Wood Mackenzie. We also have a strong presence in the transportation, marketing and distribution markets in Indonesia.

Strategically Positioned in a Fast Growing Domestic Energy Market

Energy demand in Indonesia is projected to increase from 237 million mtoe in 2019 to 284 million mtoe by 2025, representing a CAGR of 3.1%, largely driven by the robust growth of the power sector, according to Wood Mackenzie. Indonesia is currently a net importer of crude oil and refined products, and to meet the escalating demand, based on current domestic output capacity, oil imports are expected to grow significantly. At the same time, the Government has stated its intention to decrease oil imports. We see this as a significant opportunity for growth, which we intend to meet by increasing our oil and gas production capabilities through upstream expansions and acquisitions as well as expanding our refining capacity through upgrades to existing refineries and constructing new refineries.

In particular, gas demand in Indonesia is expected to increase by 0.7 billion cubic feet per day (“bcfd”) from 3.4 bcfd in 2019 to 4.1 bcfd in 2025. However, gas demand is expected to contract by 3% in 2020 compared to 2019 due to the COVID-19 pandemic but is expected to recover in 2021, with around 30% of Indonesia’s gas demand being met by LNG by 2025, according to Wood Mackenzie. Gas production is forecast to decline from 1.1 Mboe/d in 2019 to 1.0 Mboe/d in 2025, according to Wood Mackenzie. West Java and North Sumatra are expected to continue to face supply constraints

due to a decline in the existing piped gas supply into the markets, according to Wood Mackenzie. Several gas-fired power plant projects are also expected to be commissioned within the next five years, which we believe will provide strong growth on the demand side. This shortfall can be remedied by pipeline gas and LNG from Sumatra and Kalimantan, areas where we own large acreage and reserves, and where our sizable gas fields in South Sumatra (Pagar Dewa), West Java (Cirebon) and East Java (Cepu) are located. Several refinery projects, such as the RU IV Cilacap in end 2022 and RU V Balikpapan in end 2023, are also expected to be commissioned within the next five years which we believe will provide strong growth on the demand side that can be supplied by our LNG portfolio.

Indonesia's GDP (at 2010 constant prices) grew at a CAGR of 5.0% between 2012 to 2019 to reach US\$1.1 trillion in 2019, according to the World Bank. Indonesia is poised for robust long-term growth with its expanding working age population and relatively competitive cost environment for businesses, according to Wood Mackenzie. Wood Mackenzie expects Indonesia's GDP to grow from US\$1,205 billion (in 2010 dollars) in 2019 to US\$1,547 billion by 2025, a compounded annual growth rate ("CAGR") of 4.2%., supported by an increase of 13 million in population size from a population of 270 million in 2019. Currently, a large proportion of Indonesians reside in rural areas and remain unconnected to the power grid, according to Wood Mackenzie. Wood Mackenzie expects that as urbanization continues and power grid connectivity improves, demand for other solid fuels will decrease from 25% in 2019 to 21% by 2025, while Indonesian coal will grow from 29% of total energy demand in 2019 to 34% in 2025 driven by increasing supply and cost competitiveness.

Based on our presence across Indonesia and our reserves base, we are strategically positioned to meet expected growth in demand.

Sustained Growth from Significant Reserves, Extensive Downstream Infrastructure Network and Proven Operating Track Record

We have the largest base of oil and gas "commercial reserves" in Indonesia, based on Wood Mackenzie's procedures for reserves categorization. We had estimated total net proved oil and gas reserves of 2,025.3 mmboe and estimated total net proved plus probable oil and gas reserves of 2,799.8 mmboe, as of September 30, 2020. We make new reserve discoveries on an ongoing basis which we believe provides strong reserve replacement and that our portfolio not only provides for production longevity but also serves as a solid foundation for production growth. We expect that our production growth potential in Indonesia will be primarily driven by oil development projects in Cepu, Mahakam and Rokan, gas development projects in Mahakam, Sumatra and Java, strategic domestic acquisitions and enhanced oil recovery projects at existing mature oil fields. Internationally, we successfully completed the acquisition of 72.7% of the share capital of and at least 71.4% of the voting rights in Etablissements Maurel et Prom in February 2017 and through our majority shareholding, and we expect to leverage our international operations in 11 countries towards our aim of securing national energy. In addition, we have an estimated 1300 MW of proved plus probable geothermal reserves as of September 30, 2020, which we believe can drive significant increases in our geothermal production.

We have maintained our leading position in the oil refining, marketing and trading sectors in Indonesia, notwithstanding recent Government initiatives to liberalize the downstream sector, due to our extensive distribution network and supporting infrastructure. We believe that this gives us a substantial advantage over both our domestic and international competitors. For example, we are currently the largest refiner in Southeast Asia by refining capacity and we are the dominant refining company in Indonesia, wholly owning and operating six of the nine active oil refineries in Indonesia, according to Wood Mackenzie. We intend to expand our refining design capacity to 2,000 mbbls/d by the end of 2030, a growth of approximately 94.0% from 2018, and to increase the number of fuel stations owned and operated by us.

We have over 60 years of operational history, and our management team and staff have a proven track record and extensive expertise in operational, engineering, technological, commercial, and financial matters. Our long operating history in the region has given us a level of institutional knowledge of and experience in the Indonesian market that is difficult for our competitors, international or domestic, to match. Our management has also gained significant expertise and knowledge through our 50-year history of strategic alliances and partnerships with major international oil and gas companies such as ExxonMobil, Shell and BP.

Robust Financial Profile

We have robust cash generating abilities, which have supported our operating margins and allowed us to achieve strong financial ratios. We have generated Adjusted EBITDA levels of over US\$5.0 billion (with Adjusted EBITDA of US\$7.9 billion in 2019) in each of the last three years, and our Adjusted EBITDA levels have generally been healthy despite recent volatility in oil and gas prices. Our stable and strong cash flows are based on long-term contracts for the sale of oil, gas and refined products as well as steam and electricity to a diverse group of domestic and multinational customers, including Mitsui Oil and Mitsubishi. For future offtake contracts, we expect to benefit from a strong and growing customer base for production from our substantial Java and Sumatra assets.

Strong Government Support

As a company wholly owned by the Government, we enjoy strong support from the Government, given the importance of our contribution to domestic revenues and our strategic position in the Indonesian oil and gas sector. We are designated as the Government's oil and gas holding company and the Government's 56.96% interest in PGN was transferred to us, making PGN our subsidiary in April 2018. The Government's policy of providing us with a right to request to take over any oil and gas block in Indonesia for which the cooperation contract has expired also allows us to significantly expand our portfolio of domestic upstream assets and to take on attractive new opportunities. We are also entitled to a transition period from oil and gas contractors whose cooperation contracts are scheduled to expire. For example, we were selected as the administrator of the Mahakam Block beginning early 2018 after the existing administrator's contract expired in December 2017. We have also been selected to manage eight oil and gas working areas where the cooperation contracts expired in 2018. We believe that our oil and gas PSCs with the Government in general have more favorable terms than PSCs signed by foreign or private domestic oil and gas companies. Under PEP's PSCs, our share of profits before tax is 67.2%, compared to 12% to 33% for oil and 28% to 37% for gas under a typical PSC. In addition, PHE and local-government enterprises may be nominated by the Government to receive a 10% working interest in PSCs after the first plan of development is approved by the Ministry of Energy and Mineral Resources as PHE is the subsidiary of a state-owned enterprise.

Business Strategy

Our goal is to become one of Asia's leading integrated energy companies that is globally competitive with major international energy companies and international and national oil companies. To achieve these goals, our development strategy is based on four parameters.

Safeguard Indonesia's Energy Future — We intend to meet Indonesia's increasing energy needs by becoming one of Asia's leading integrated energy companies

We aim to secure energy resources for Indonesia, to maintain a leading position in our existing core businesses, and to become a leading national oil company in Asia with a dominant position in

Indonesia and a growing international footprint. To achieve this goal, we plan to cultivate a diverse portfolio of energy resources that can meet Indonesia's future energy needs.

In our upstream oil and gas business, we plan to pursue strategic acquisitions, joint ventures, major block development projects and other investments, including with respect to assets that are in production or advanced stages of development, which will expand our oil, gas and geothermal business, in Indonesia and internationally and develop our gas infrastructure in Sumatra and Java. See "Business — Pertamina Upstream Business — Upstream Strategy" and "Business — Pertamina Gas Business." We also aim to maintain our existing leadership in our downstream businesses by diversifying and optimizing our refining capabilities, expanding our retail fuel station network and solidifying our market leadership in fuel, gas and petrochemical products distribution in Indonesia. See "Business — Pertamina Downstream Business — Downstream Strategy."

In the long term, we aim to supplement our existing core businesses and become one of Asia's leading integrated energy companies by expanding our new and renewable energy business into biofuels, biorefineries, photovoltaic power plants, coal conversion and geothermal power strengthening our supply and distribution infrastructure and integrating technology into our business, such as cashless payment systems and digitalized predictive refinery maintenance.

Efficiency — We aim to increase our efficiency and optimize our business operations and technological capabilities

We aim for operational excellence in all of our business activities and intend to consistently achieve above-average efficiency metrics across our operational platform. To achieve this objective, we are focusing on our core businesses and restructuring non-core businesses, streamlining our business processes relating to sales of natural gas and LNG to ensure we obtain optimal pricing, optimizing our upstream assets portfolio and oil recovery activities. We launched the Breakthrough Project ("BTP 2017") in 2017 with initiatives focused on improving efficiencies across all our business lines and improving the efficiency of our refineries. We are focused on employing enhanced oil recovery activities to increase efficiency and production from existing fields and reactivating idle fields. We aim to optimize our current producing assets and improve profitability. For more information, see "— Pertamina Upstream Business — Upstream Strategy" and "— Pertamina Downstream Business — Downstream Strategy." We also have a Research and Technology Centre ("RTC") to serve as an integrated research and development center and to enhance our technological capabilities across our business lines (see "— Research and Development").

Corporate Governance and Culture — We place a high priority on having a strong corporate governance system and a results-driven culture

We place a high priority on corporate governance, professionalism, and transparency, and have developed codes of conduct and corporate policies and procedures that are in line with those of our international and public counterparts. For example, in 2017, Kementerian Badan Usaha Milik Negara (Indonesia's Ministry of State Owned Enterprises) recognized us as the best state-owned enterprise for corporate governance, our President Director Massa Manik was recognized as best chief operating officer in the visionary category and our various subsidiaries won awards in the categories of human resources, transformation, strategy development, financial performance. We were also named by BrandFinance in 2018 as one of the most valuable brands in Indonesia. In 2020, we dominated the PROPER (Company Performance Rating Assessment Program in Environmental Management) award issued by the Ministry of Environment and Forestry of Indonesia, with 16 Gold PROPER and 64 Green PROPER awards. We have established a whistleblowing system and implemented ISO 37001

anti-bribery management system. We have won the Best State-owned Enterprise for Corporate Governance issued by Indonesia's Ministry of State Owned Enterprises in 2017, and are recognized as one of the most valuable brands in Indonesia by BrandFinance in 2018. In addition, our GCG Score Achievement (independently audited) increased steadily from 92% to 92.6% from 2017 to 2019, and we have won the Platinum Awards in Public Relations Indonesian Award for Corporate Communication in 2020. We aim to develop a strong, results-driven corporate culture that demands the highest performance by our management and employees alike. One of our key strategies for achieving this end is through our wide range of training and education programs for our employees. To further our efforts, we are also recruiting and developing high quality managerial and technical teams, with an emphasis on the development of leadership skills.

Positioning — We intend to become a model and a benchmark for other regional companies

We aim to become the preferred company of our customers, partners and potential employees. We also aim to remain one of the most highly regarded companies in Indonesia, setting a solid benchmark for Indonesian companies and other energy companies and oil and gas companies in Asia. By implementing international best practices, we believe that we can serve as a standard in terms of capabilities, technology, managerial processes, health, safety and environmental standards and good corporate governance.

General Information

Our full legal name is PT Pertamina (Persero). We are a state-owned limited liability company established in Indonesia under Deed of Establishment No. 20 dated September 17, 2003 drawn up before Lenny Janis Ishak, SH, Notary in Jakarta, as approved by the Minister for Justice & Human Rights under its Decision No. C-24025 HT.01.01.TH.2003 on October 9, 2003, which has been registered in the Company Registration Office of Central Jakarta and published in the State Gazette of the Republic of Indonesia No. 93 dated November 21, 2003, Supplemental State Gazette No. 11620. Our principal executive offices are located at Jl. Medan Merdeka Timur 1A, Jakarta 10110, Indonesia. Our telephone number is (+62) 1-500-000.

Overview of the Program

The following overview does not purport to be complete and is taken from and is qualified in its entirety by, the remainder of this Offering Memorandum and, in relation to the terms and conditions of any particular Tranche of Notes, the applicable Pricing Supplement. Words and expressions defined in “Forms of the Notes” and “Description of the Notes” shall have the same meanings in this summary.

Under the Program, the Company may, from time to time, issue Notes denominated in U.S. dollars, Euros or in any other currency, subject to the terms more fully set forth herein. A summary of the terms and conditions of the Program and the Notes appears below. The applicable terms of any Notes will be agreed upon by and between the Company and the relevant Dealer(s) prior to the issue of the Notes and will be set forth in the Description of the Notes endorsed on, or incorporated by reference into, the Notes, as modified and supplemented by the applicable Pricing Supplement attached to, or endorsed on, such Notes, as more fully described under “Forms of Notes” below.

Summary of the Program and Description of the Notes

Company: PT Pertamina (Persero)

Arrangers: BNP Paribas, Citigroup Global Markets Inc., Crédit Agricole Corporate and Investment Bank, Mandiri Securities Pte. Ltd., MUFG Securities Asia Limited, SMBC Nikko Capital Markets Limited and Société Générale.

Dealers: BNP Paribas, Citigroup Global Markets Inc., Crédit Agricole Corporate and Investment Bank, Mandiri Securities Pte. Ltd., MUFG Securities Asia Limited, SMBC Nikko Capital Markets Limited and Société Générale.

The Company may issue Notes to persons other than Dealers and may terminate the appointment of any Dealer or appoint new dealers for a particular Series of Notes or for the Program.

Trustee: The Bank of New York Mellon

Paying Agent(s): The Bank of New York Mellon, The Bank of New York Mellon, London Branch

Registrar: The Bank of New York Mellon

Euro Registrar: The Bank of New York Mellon SA/NV, Luxembourg Branch

Transfer Agent: The Bank of New York Mellon

Description: Global Medium Term Note Program

Program Size: Up to US\$20,000,000,000 (or its equivalent in any other currency (the “Program Limit”) in aggregate nominal amount of Notes outstanding

at any one time). The Company may increase the amount of the Program Limit in accordance with the terms of the Program Agreement.

Method of Issue: The Notes will be issued on a syndicated or non-syndicated basis. The Notes will be issued in series (each, a “Series”) having one or more issue dates and on terms otherwise identical (or identical other than in respect of the first payment of interest and their Issue Price), the Notes of each Series being intended to be fungible with all other Notes of that Series. Each Series may be issued in tranches (each, a “Tranche”) on the same or different issue dates. The specific terms of each Tranche (which will be completed, where necessary, with the relevant terms and conditions and, save in respect of the issue date, issue price, first payment of interest and nominal amount of the Tranche, will be identical to the terms of other Tranches of the same Series) will be specified in the pricing supplement (the “Pricing Supplement”).

Issue Price: Notes may be issued at their nominal amount or at a discount or premium to their nominal amount. Partly Paid Notes may be issued, the issue price of which will be payable in two or more installments.

Form of Notes: The Notes may be issued in bearer or registered form, as specified in the applicable Pricing Supplement. Certificates representing the Notes that are registered in the name of a nominee for one or more clearing systems are referred to as “Global Securities.”

Each Series of Bearer Notes will initially be represented by a Temporary Global Note or a Permanent Global Note which, in each case, will be deposited on the Issue Date with a common depositary for Euroclear, Clearstream or any other agreed clearance system compatible with Euroclear and Clearstream. Interests in a Temporary Global Note will be exchangeable, from the 40th day following the issue date, for either interests in a Permanent Global Note or Definitive Bearer Notes (as indicated in the applicable Pricing Supplement) and in the case of Notes to which the D Rules (as defined below) apply, upon certification of non-U.S. beneficial ownership as required by United States Treasury regulations (“U.S. Treasury Regulations”). Interests in a Permanent Global Note will be exchangeable, unless otherwise specified in the applicable Pricing Supplement, only in the limited circumstances described therein, in whole but not in part for Definitive Bearer Notes, upon written notice to the Trustee. Any interest in a Temporary Global Note or a Permanent Global Note will be transferable only in accordance with the rules and procedures for the time being of Euroclear, Clearstream and/or any other agreed clearance system, as appropriate.

Each Series of Registered Notes, which are sold outside the United States in reliance on Regulation S, will, unless otherwise specified in the applicable Pricing Supplement, be represented by an Unrestricted Global Security, which will be deposited on or about its Issue Date with a common depositary for, and registered in the name of a

nominee of the common depositary for Euroclear and Clearstream. Unrestricted Global Securities will be exchangeable for Certificated Securities only in the limited circumstances more fully described herein.

Any Series of Registered Notes sold in private transactions to QIBs and subject to the transfer restrictions described in “Transfer Restrictions” will, unless otherwise specified in the applicable Pricing Supplement, be represented by a Restricted Global Security, which will be deposited on or about its Issue Date with a custodian for, and registered in the name of a nominee of, DTC. Persons holding beneficial interests in Registered Global Securities will be entitled or required, as the case may be, under the circumstances described in the Indenture, to receive physical delivery of Certificated Securities. Registered Notes initially offered and sold in the United States to Institutional Accredited Investors pursuant to Section 4(a)(2) of the Securities Act or in a transaction otherwise exempt from registration under the Securities Act and subject to the transfer restrictions described in “Transfer Restrictions” will be issued only in definitive registered form and will not be represented by a Global Security. Bearer Notes will not be exchangeable for Registered Notes, and Registered Notes will not be exchangeable for Bearer Notes.

Clearing Systems: DTC, Clearstream, Euroclear and, in relation to any Tranche, such other clearing system as may be agreed between the Company, the Trustee and the relevant Dealer. See “Global Clearance and Settlement Systems.”

Currencies: Subject to compliance with all relevant laws, regulations and directives, Notes may be issued in any currency agreed between the Company and the relevant Dealer(s).

Maturities: Subject to compliance with all relevant laws, regulations and directives, any maturity.

Specified Denomination: Notes will be in such denominations as may be specified in the relevant Pricing Supplement save that (i) in the case of any Notes which are to be admitted to trading within the UK or on a regulated market within the European Economic Area or offered to the public in the UK or an EEA State in circumstances which require the publication of a prospectus under the Prospectus Regulation or the UK Prospectus Regulation, the minimum specified denomination shall be US\$200,000 (or its equivalent in any other currency as of the date of issue of the Notes); and (ii) unless otherwise permitted by then current laws and regulations, Notes (including Notes denominated in sterling) which have a maturity of less than one year will have a minimum denomination of £100,000 (or its equivalent in other currencies).

Fixed Rate Notes: Fixed interest will be payable in arrears on the date or dates in each year specified in the relevant Pricing Supplement.

Floating Rate Notes:	Floating Rate Notes will bear interest determined separately for each Series as set out in the Description of the Notes and the relevant Pricing Supplement.
Zero Coupon Notes:	Zero Coupon Notes may be issued at their nominal amount or at a discount to it and will not bear interest.
Dual Currency Notes:	Payments in respect of Dual Currency Notes will be made in such currencies, and based on such rates of exchange as may be specified in the relevant Pricing Supplement.
Index-Linked Notes:	Payments of principal in respect of Index-Linked Redemption Notes or of interest in respect of Index-Linked Interest Notes will be calculated by reference to such index and/or formula as may be specified in the relevant Pricing Supplement.
Interest Periods and Interest Rates:	The length of the interest periods for the Notes and the applicable interest rate or its method of calculation may differ from time to time or be constant for any Series. Notes may have a maximum interest rate, a minimum interest rate, or both. All such information will be set out in the relevant Pricing Supplement.
Redemption:	The relevant Pricing Supplement will specify the basis for calculating the redemption amounts payable. Unless permitted by then current laws and regulations, Notes (including Notes denominated in sterling) which have a maturity of less than one year must have a minimum redemption amount of £100,000 (or its equivalent in other currencies).
Redemption by Installments:	The Pricing Supplement issued in respect of each issue of Notes that are redeemable in two or more installments will set out the dates on which, and the amounts in which, such Notes may be redeemed.
Optional Redemption:	The Pricing Supplement issued in respect of each issue of Notes will state whether such Notes may be redeemed prior to their stated maturity at the option of the Company (either in whole or in part) and/or the Holders, and if so the terms applicable to such redemption.
Redemption upon a Change of Control Triggering Event:	Unless otherwise stated in the relevant Pricing Supplement and unless the Notes are previously redeemed, repurchased and cancelled, the Company will, no later than 30 days following a Change of Control Triggering Event (as defined in the indenture governing the Notes), make an Offer to Purchase (as defined in the Notes of the relevant Series) all outstanding Notes of any Series at a purchase price of 101% of their principal amount, together with accrued and unpaid interest, if any.
Status of Notes:	The Notes will constitute direct, unsubordinated and unsecured obligations of the Company.

Certain Covenants:	Unless otherwise stated in the relevant Pricing Supplement, the Company will agree in the terms and conditions of the Notes of any Series to observe certain covenants, including, among other things, the incurrence of liens, mergers, acquisitions and disposals and certain other covenants. See “Description of the Notes.”
Events of Default:	Certain events will permit acceleration of the principal of the Notes (together with all interest and additional amounts accrued and unpaid thereon). These events include default with respect to the payment of principal of, premium, if any, or interest on, the Notes.
Ratings:	Tranches of Notes will be rated or unrated. Where a Tranche of Notes is to be rated, such rating will be specified in the relevant Pricing Supplement. A rating is not a recommendation to buy, sell or hold securities and may be subject to suspension, reduction or withdrawal at any time by the assigning rating agency.
Withholding Tax:	All payments of principal and interest in respect of the Notes will be made free and clear of withholding taxes unless such withholding is required by law. Indonesia currently applies a withholding tax of 20% to payments of interest on the Notes. In respect of any such withholding required by law, the Company will pay additional amounts that will result in receipt by the holders of the Notes of such amounts as would have been received by them had no such withholding been required, subject to customary exceptions, all as described in “Description of the Notes — Taxation.”
Selling Restrictions:	There are restrictions on the offer, sale and transfer of the Notes in the United States, Hong Kong, Singapore, Japan, Indonesia, Italy, the European Economic Area and Switzerland (including the public offer selling restriction under the Prospectus Regulation) and the United Kingdom. See “Plan of Distribution.”
	Bearer Notes will be issued in compliance with rules in substantially the same form as U.S. Treasury Regulations Section 1.163-5(c)(2)(i)(D) for purposes of Section 4701 of the Internal Revenue Code (the “D Rules”) unless (i) the relevant Pricing Supplement states that Bearer Notes are issued in compliance with rules in substantially the same form as U.S. Treasury Regulations Section 1.163-5(c)(2)(i)(C) for purposes of Section 4701 of the Internal Revenue Code (the “C Rules”) or (ii) Bearer Notes are issued other than in compliance with the D Rules or the C Rules but in circumstances in which the Notes will not constitute “registration required obligations” for U.S. federal income tax purposes, which circumstances will be referred to in the relevant Pricing Supplement as a transaction to which the Tax Equity and Fiscal Responsibility Act of 1982 (“TEFRA”) is not applicable.
Use of Proceeds:	We intend to use net proceeds from the issue of each Tranche of Notes to finance capital expenditures and for general corporate purposes or as set forth in the Pricing Supplement applicable to such Notes.

Listing: Application has been made to the SGX-ST for permission to deal in and for the listing of and quotation of any Notes that may be issued pursuant to the Program and which are agreed at or prior to the time of issue thereof to be so listed on the SGX-ST. There is no assurance that an application to the SGX-ST for the listing of the Notes of any Series will be approved. For so long as any Notes are listed on the SGX-ST and the rules of the SGX-ST so require, such Notes will be traded on the SGX-ST in a minimum board lot size of S\$200,000 (or its equivalent in any other currency). The Notes may also be listed on such other or further stock exchange(s) as may be agreed between the Company and the relevant Dealer in relation to each Series. Unlisted Notes may also be issued under the Program. The relevant Pricing Supplement will state whether or not the Notes of a Series will be listed on any exchange(s) and, if so, on which exchange(s) the Notes are to be listed.

Governing Law: The Notes will be governed by, and construed in accordance with, the laws of the State of New York.

Summary Consolidated Financial and Other Data

The summary audited consolidated financial information as of and for the years ended December 31, 2019, 2018 and 2017 have been derived from our audited consolidated financial statements which are included elsewhere in this Offering Memorandum. The summary unaudited interim consolidated financial information as of and for the nine-month periods ended September 30, 2020 and 2019 have been derived from our unaudited interim consolidated financial statements included elsewhere in this Offering Memorandum. These financial statements have been prepared on the same basis as our audited consolidated financial statements. Our results for any interim period may not be indicative of our results for the full year or for any other period.

You should read the following summary consolidated financial information in conjunction with our consolidated financial statements and related notes “Presentation of Financial and Other Data,” “Selected Consolidated Financial and Other Data” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included elsewhere in this Offering Memorandum. Our consolidated financial statements have been prepared and presented in accordance with IFAS, which differs in certain respects from U.S. GAAP. See “Summary of Certain Significant Differences Between IFAS and U.S. GAAP.”

Consolidated Statement of Profit or Loss and Other Comprehensive Income Data

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
		(Restated)		(Unaudited) (Restated)	
	(US\$ in millions)				
Sales and other operating revenues					
Domestic sales of crude oil, natural gas, geothermal energy and oil products	39,788.8	44,742.5	43,783.5	32,429.5	24,501.8
Subsidy reimbursements from the government	3,572.1	5,632.5	4,875.1	3,654.6	2,493.5
Export of crude oil, natural gas and oil products	1,874.3	3,637.0	3,628.9	2,484.0	2,620.5
Marketing fees	25.5	15.4	—	9.4	—
Revenues from other operating activities	915.1	4,083.8	2,505.0	750.1	634.9
Total sales and other operating revenues	46,175.7	58,111.2	54,792.5	39,327.5	30,250.6
Costs of sales and other direct costs					
Cost of goods sold	(33,175.7)	(42,787.9)	(39,559.7)	(29,113.0)	(20,602.2)
Upstream production and lifting costs	(3,421.2)	(4,386.5)	(4,999.7)	(3,573.5)	(3,546.2)
Exploration costs	(165.4)	(267.7)	(206.9)	(120.1)	(111.6)
Expenses from other operating activities	(1,016.4)	(1,357.5)	(1,868.2)	(1,330.5)	(1,720.8)
Total cost of sales and other direct costs	(37,778.7)	(48,799.6)	(46,634.5)	(34,137.1)	(25,980.9)
Gross profit	8,397.1	9,311.5	8,158.0	5,190.4	4,269.7
Selling and marketing expenses	(1,590.2)	(1,642.8)	(1,624.9)	(1,082.2)	(813.9)
General and administrative expenses	(1,606.7)	(1,412.2)	(1,635.2)	(1,196.0)	(1,026.9)
Gain (loss) on foreign exchange — net	58.1	19.6	289.4	140.5	(640.2)
Finance income	233.8	257.1	1,221.7	400.7	326.4
Finance costs	(818.0)	(836.7)	(968.3)	(722.9)	(761.7)
Share in net profit of associates and joint venture	37.9	122.7	80.3	59.7	(17.2)
Other expenses — net	(831.4)	(77.3)	(638.9)	(333.9)	(987.9)
	(4,516.5)	(3,569.6)	(3,275.9)	(2,734.0)	(3,921.4)

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
	(Restated)			(Unaudited) (Restated)	
	(US\$ in millions)				
Profit before income tax	3,880.6	5,741.9	4,882.1	2,456.4	348.4
Income tax expense — net	(1,170.4)	(3,016.2)	(2,264.1)	(1,675.8)	(1,046.4)
Profit for the period/year after the effect of merging entity’s income adjustment	2,710.2	2,725.7	2,618.0	780.5	(698.0)
Other Comprehensive (Loss) Income					
Items not to be reclassified to profit or loss in subsequent periods (net of tax)					
Remeasurement of net defined benefit liability	(125.7)	228.5	(93.3)	(37.7)	(6.3)
Foreign exchange difference from translation of financial statements in foreign currency	8.8	(79.6)	48.2	(63.3)	0.2
Share of other comprehensive income of associates	(26.3)	(127.1)	(144.7)	93.5	(409.6)
Other comprehensive income (loss), net of tax . . .	(143.2)	21.8	(189.9)	(7.5)	(415.6)
Total comprehensive income for the period/ year after the effect of merging entity’s income adjustment	2,567.0	2,747.6	2,428.2	773.0	(1,113.7)
Adjustment of merging entity’s income:					
Owners of the parent entity	(86.5)	(50.5)	0.3	(3.0)	(0.8)
Non-controlling interests	(71.1)	(39.2)	0.1	(2.9)	(0.7)
	(157.6)	(89.7)	0.3	(5.9)	(1.5)
Profit for the period/year before the effect of merging entity’s income adjustment attributable to:					
Owners of the parent entity	2,540.2	2,526.8	2,529.3	730.4	(530.5)
Non-controlling interests	12.4	109.3	89.0	44.2	(169.0)
	2,552.6	2,636.0	2,618.4	774.7	(699.5)
Adjustment of merging entity’s comprehensive income:					
Owners of the parent entity	(87.8)	(49.3)	(0.4)	(2.9)	(0.8)
Non-controlling interests	(72.1)	(39.0)	(1.7)	(2.9)	(0.7)
	(160.0)	(88.3)	(2.1)	(5.8)	(1.5)
Total comprehensive income for the period/ year before effect of merging entity’s comprehensive income (loss) adjustment attributable to:					
Owners of the parent entity	2,363.3	2,536.6	1,989.5	363.0	(801.8)
Non-controlling interests	43.7	122.8	427.2	404.2	(313.4)
	2,407.0	2,659.3	2,416.6	767.2	(1,115.2)

Consolidated Statement of Financial Position Data

	As of December 31,			As of September 30,
	2017	2018	2019	2020
	(Restated) (US\$ in millions)			(Unaudited)
Assets				
Current assets				
Cash and cash equivalents	6,429.2	9,123.5	6,770.2	10,206.4
Restricted cash	119.7	108.9	182.1	180.8
Short-term investments	249.3	225.2	392.6	291.0
Trade receivables				
Related parties	1,095.0	1,297.7	1,554.1	1,776.7
Third parties	1,620.4	1,982.9	1,957.7	1,629.2
Due from the Government — current portion	1,492.6	1,834.3	3,375.8	1,632.7
Other receivables				
Related parties	255.1	149.2	182.5	184.3
Third parties	622.2	735.8	958.1	882.4
Inventories	6,040.2	6,327.4	5,897.1	5,062.1
Prepaid taxes — current portion	794.6	822.1	1,364.2	788.9
Prepayments and advances	477.3	536.5	449.7	579.8
Other investments	27.3	80.2	85.8	16.3
Total current assets	19,222.7	23,223.5	23,169.8	23,230.5
Non-current assets				
Due from the Government — net of current portion	663.1	2,924.1	3,313.8	2,571.0
Deferred tax assets	1,374.8	1,445.3	1,511.2	1,168.9
Long-term investments	2,969.7	2,822.3	2,987.0	2,585.2
Fixed assets	12,510.4	12,934.9	13,454.2	13,752.5
Right of Use Asset	—	—	—	1,963.5
Oil & gas and geothermal properties	18,031.4	18,614.3	19,756.8	19,398.0
Prepaid taxes — net of current portion	829.3	820.3	875.9	1,087.7
Other non-current assets	1,981.7	2,088.2	2,229.9	2,018.4
Total non-current assets	38,360.3	41,649.4	44,128.8	44,545.1
Total assets	57,583.1	64,872.9	67,298.7	67,775.6
Liabilities and equity				
Short-term liabilities				
Short-term loans	452.9	4,353.4	1,285.4	1,410.6
Trade payables				
Related parties	49.3	78.8	73.3	74.0
Third parties	3,914.9	3,609.8	4,591.8	2,769.8
Due to the Government — current portion	1,050.6	1,207.7	940.4	984.3
Taxes payable				
Income taxes	309.7	468.5	200.3	334.0
Other taxes	251.8	259.8	304.2	366.2
Accrued expenses	2,029.6	2,149.0	2,815.7	2,763.2
Long-term liabilities — current portion	322.0	362.9	536.7	151.4
Lease liabilities — current portion	50.4	58.7	44.5	730.3
Bonds payable — current portion	—	—	—	391.4
Other payables				
Related parties	56.6	52.5	72.7	44.3
Third parties	1,132.3	1,212.8	1,122.5	1,053.2
Deferred revenue — current portion	260.8	202.0	257.0	228.8
Total short-term liabilities	9,880.9	14,015.9	12,244.5	11,301.5

	As of December 31,			As of September 30,
	2017	2018	2019	2020
	(Restated) (US\$ in millions)			(Unaudited)
Long-term liabilities				
Due to the Government — net of current portion	780.6	795.1	796.0	774.5
Deferred tax liabilities	2,848.4	3,307.6	3,731.6	3,424.6
Long-term liabilities — net of current portion	1,963.7	1,718.5	1,434.1	1,419.7
Lease liabilities — net of current portion	158.9	103.3	135.0	1,215.0
Bonds payables	10,385.9	11,094.1	12,614.5	14,610.2
Employee benefit liabilities	2,225.8	1,866.7	2,014.9	2,026.6
Provision for decommissioning and site restoration	2,129.3	2,029.7	2,458.9	2,600.7
Deferred revenue — net of current portion	42.7	74.6	53.8	111.7
Other non-current payables	84.7	178.9	508.1	717.0
Total long-term liabilities	20,620.1	21,168.6	23,747.0	26,900.1
Total liabilities	30,501.0	35,184.5	35,991.5	38,201.6
Equity				
Equity attributable to owners of the parent entity				
Share capital				
Authorized — 600,000,000 (2019 and 2018) and 200,000,000 (2017 and 2016) ordinary shares at par value of Rp. 1,000,000 (full amount) per share,				
Issued and paid up — 171,227,044 shares (2019 and 2018) and 133,090,697 shares (2017 and 2016)	13,417.0	16,191.2	16,191.2	16,191.2
Additional paid-in capital	2.7	(924.3)	(924.3)	(857.8)
Merging entity's equity	1,804.1	40.1	44.3	—
Government contributed assets pending final clarification of status	1.4	401.1	146.6	1.4
Other equity components	487.7	617.1	77.2	(64.3)
Retained earnings				
Appropriated	6,871.1	8,796.4	10,770.5	12,681.8
Unappropriated	2,540.2	2,526.8	2,529.3	(530.5)
Total Equity Attributable to Owners of the Parent Entity	25,160.2	27,648.3	28,834.8	27,421.8
Non-controlling interest	1,921.8	2,040.0	2,472.4	2,152.2
Total equity	27,082.1	29,688.3	31,307.2	29,574.0
Total liabilities and equity	57,583.1	64,872.9	67,298.7	67,775.6

Consolidated Statement of Cash Flows Data

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
		(Restated)		(Unaudited) (Restated)	
	(US\$ in millions)				
Cash flows from operating activities:					
Cash receipts from customers	40,387.2	49,045.2	52,051.3	38,161.9	31,652.7
Cash receipts from the Government	3,787.9	7,805.6	7,195.1	4,728.6	5,909.9
Cash receipts from tax restitution	616.8	185.0	83.0	39.0	77.6
Payments to suppliers	(29,366.8)	(38,333.6)	(40,803.2)	(28,944.0)	(25,816.5)
Payments to the Government	(7,524.6)	(11,279.6)	(9,587.7)	(7,161.0)	(4,323.4)
Payments of corporate income taxes	(2,104.8)	(2,692.8)	(2,456.3)	(2,033.1)	(1,116.4)
Cash paid to employees and management	(1,589.0)	(1,693.7)	(1,989.5)	(1,534.1)	(1,328.5)
Receipts from (placement of) restricted cash	(156.0)	73.2	(47.0)	(11.5)	(46.8)
Receipts of interest	35.9	62.0	45.7	18.7	136.1
Net cash generated from operating activities	4,086.5	3,171.3	4,491.4	3,264.5	5,144.5
Cash flows from investing activities:					
Proceeds from disposal of short-term investment	99.9	198.4	162.8	98.0	269.8
Proceeds from disposal of long-term investments	15.8	—	—	—	70.1
Interest received from investments	18.2	14.3	6.2	9.7	4.2
Cash receipts from other investing activities	28.7	262.2	99.0	0.4	1.9
Proceeds from sale of fixed assets	0.1	0.2	1.3	1.1	13.4
Dividends received from associates	81.6	214.1	99.8	14.8	31.2
Purchases of fixed assets	(1,002.3)	(1,301.5)	(1,295.2)	(985.6)	(1,007.5)
Purchases of oil and gas and geothermal properties	(892.0)	(1,482.5)	(2,360.8)	(1,372.5)	(1,705.0)
Placements in long-term investments	(660.0)	(1,062.2)	(290.3)	(90.7)	(143.1)
Placements in short-term investments	(226.3)	(237.6)	(340.8)	(123.3)	(92.1)
Payments for exploration and evaluation assets	(37.2)	(99.5)	(7.0)	(30.5)	(48.6)
Placement of restricted cash	(29.4)	(26.2)	2.2	(0.7)	44.9
Addition of participating interest	—	—	—	—	—
Acquisition of subsidiary net of cash acquired	—	—	8.5	17.0	—
Cash obtained due to change of control	203.2	—	—	—	—
Net cash used in investing activities	(2,399.7)	(3,520.4)	(3,914.3)	(2,462.2)	(2,560.8)
Cash flows from financing activities:					
Proceeds from short-term loans	4,048.8	9,500.1	7,176.3	5,733.3	5,274.3
Proceeds from bond issuance	625.0	734.4	1,498.9	1,498.9	2,969.1
Proceeds from long-term loans	663.4	263.1	418.0	415.2	547.4
Repayments of short-term loans	(3,786.7)	(5,591.4)	(10,285.2)	(8,375.6)	(5,130.1)
Repayments of long-term loans	(2,103.7)	(467.0)	(526.5)	(491.1)	(916.4)
Dividend payments	(868.5)	(587.1)	(563.1)	(318.0)	(574.3)
Payments of finance costs	(523.4)	(538.9)	(622.8)	(337.5)	(486.2)
Repayments of bonds payables	—	(37.6)	—	—	(608.6)
Receipts from (placement of) restricted cash	(13.2)	(0.3)	(139.0)	(1.0)	(0.4)
Net cash generated from (used in) financing activities	(1,958.4)	3,275.2	(3,043.6)	(1,875.9)	(1,074.4)
Net increase (decrease) in cash and cash equivalents	(271.6)	2,926.2	(2,466.4)	(1,073.6)	3,658.1
Effect of exchange rate changes on cash and cash equivalents	(37.4)	(231.8)	113.1	59.5	(221.9)
Cash and cash equivalents at beginning of the period/period	6,738.1	6,429.2	9,123.5	9,123.5	6,770.2
Cash and cash equivalents at end of the period/ year	6,429.2	9,123.5	6,770.2	8,109.4	10,206.4

Segment Results

The following table presents segment revenues and results for our upstream and downstream segments for the periods indicated. This table should be read together with our consolidated financial statements, including the notes thereto, appearing elsewhere in this Offering Memorandum. Our segment results are derived from our total segment revenues, after deducting total costs of sales and other direct costs, selling and marketing expenses and general and administrative expenses relating to such segments. For more information, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Overview of Segment Results.”

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
				(Unaudited)	
	(US\$ in millions)				
Total upstream segment revenues	7,966.3	12,552.6	12,123.6	8,890.5	6,121.8
Upstream segment results	3,327.9	5,960.6	5,112.7	3,835.7	1,635.3
Total downstream segment revenues	37,372.7	46,091.3	44,417.3	31,861.4	24,490.8
Downstream segment results	1,282.2	(286.8)	(784.2)	(1,336.2)	346.9

Non-GAAP and Other Financial Data

	As of or for the Years Ended December 31,			As of or for the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
	(Unaudited)				
	(US\$ in millions, except ratios and percentages)				
Capital expenditure ⁽¹⁾	5,535.8	4,553.3	5,166.0	2,626.7	5,172.5
Interest expense ⁽²⁾	564.1	582.4	816.0	608.9	603.5
Adjusted EBITDA ⁽³⁾	7,119.1	9,215.6	7,922.0	5,162.7	3,884.8
Total debt ⁽⁴⁾	13,841.3	18,267.4	16,611.9	17,159.0	18,709.1
Total debt/Adjusted EBITDA (times)	1.9	2.0	2.1	3.3 ⁽⁶⁾	4.8 ⁽⁶⁾
Adjusted EBITDA/Total sales and other operating revenues (%)	15.4	15.9	14.5	13.1	12.8
Total debt to Total equity (%)	51.1	61.5	53.1	57.3	63.3
Adjusted EBITDA/Interest expense (times)	12.6	15.8	9.7	8.5	6.4
Dividend payout ratio (%) ⁽⁵⁾	27.6	23.1	22.3	—	—

Notes:

- (1) Capital expenditure is comprised of additions to fixed assets, oil and gas and geothermal properties and long term investments — investments in oil and gas blocks-net. For details of our capital expenditure, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Indebtedness.” The following table reconciles our net income under IFAS to our definition of capital expenditure for the periods indicated:

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
	(Unaudited)				
	(US\$ in millions)				
Additions of fixed assets	1,700.2	1,513.0	1,842.3	818.5	3,261.3
Additions of oil and gas, and geothermal properties	3,835.6	3,040.3	3,294.3	1,808.2	1,897.0
Additions of long term investments — investments in oil and gas blocks-net	—	—	29.4	—	14.2
Capital expenditure	<u>5,535.8</u>	<u>4,553.3</u>	<u>5,166.0</u>	<u>2,626.7</u>	<u>5,172.5</u>

- (2) Interest expense is comprised of finance costs for short-term loans, long-term loans and bonds. For details of our loans and bonds, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Indebtedness.” The following table reconciles our net income under IFAS to our definition of interest expense for the periods indicated:

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
				(Unaudited)	
	(US\$ in millions)				
Finance Costs:					
Short-term loans	8.5	56.5	99.6	81.7	26.1
Long-term loans	203.0	174.0	144.4	112.3	74.6
Bonds	352.6	351.9	572.0	414.9	502.8
Interest expense	564.1	582.4	816.0	608.9	603.5

- (3) We calculate Adjusted EBITDA by adding depreciation, depletion and amortization, finance costs and income tax expense — net to profit for the period/year before the effect of merging entity’s income adjustment and subtracting finance income, in accordance with BUMN Regulation KEPMEN 100. BUMN Regulation KEPMEN 100 requires adjustment for all finance costs and does not take into account the effects of merging entity’s income adjustment, which arise in connection with acquisitions during the year or period. In comparison, our calculations of EBITDA in the past adjusted for interest expense and not accretion expenses related to decommissioning and site restoration or other finance costs and took into account the effects of merging entity’s income adjustment. Adjusted EBITDA and the related ratios presented in this Offering Memorandum are therefore not comparable to our previously disclosed EBITDA and related ratios.

Adjusted EBITDA is a supplemental measure of our performance and liquidity that is not required by or presented in accordance with IFAS or U.S. GAAP. Adjusted EBITDA is not a measurement of financial performance or liquidity under IFAS or U.S. GAAP and should not be considered as an alternative to net income, operating income or any other performance measures derived in accordance with IFAS or U.S. GAAP or an alternative to cash flows from operating activities as a measure of liquidity. In addition, Adjusted EBITDA is not a standardized term, hence a direct comparison between companies using such term may not be possible. We have included Adjusted EBITDA because we believe it is an indicative measure of our operating performance and is used by investors and analysts to evaluate companies in our industry. The following table reconciles our net income under IFAS to our definition of Adjusted EBITDA for the periods indicated:

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
	(Unaudited)				
	(US\$ in millions)				
Profit for the period/year before the effect of merging entity's income adjustment	2,552.6	2,636.0	2,618.4	774.7	(699.5)
Adjustments:					
Finance income	(233.8)	(257.1)	(1,221.7)	(400.7)	(326.4)
Finance costs	818.0	836.7	968.3	722.9	761.7
Income tax expense — net	1,170.4	3,016.2	2,264.1	1,675.8	1,046.4
Depreciation, depletion and amortization expense . . .	2,811.9	2,983.8	3,292.9	2,390.0	3,102.6
Adjusted EBITDA	7,119.1	9,215.6	7,922.0	5,162.7	3,884.8

- (4) Total debt is comprised of short-term loans, long-term liabilities — bank loans — net (including current portion), due to the Government — two-step loans and bonds payables. “Two-step loans” is comprised of: (i) the Ulubelu and Lahendong geothermal project loan, (ii) the Lumut Balai geothermal project loan, (iii) the Ngurah Rai Airport refueling facility construction project loan, (iv) the South Sumatera West Java gas transmission pipeline development project loan, (v) the Domestic Gas market development project loan and (vi) gas transmission and distribution project Phase II project loan. For details, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Indebtedness.”

- (5) Dividend payout ratios are calculated as dividends paid during the year equivalents in U.S. dollars divided by the previous year's profit for the year before the effect of merging entity's income adjustment. Dividend payout ratio is a supplemental measure of our performance and liquidity that is not required by or presented in accordance with IFAS or U.S. GAAP. Dividend payout ratio is not a measurement of financial performance or liquidity under IFAS or U.S. GAAP and should not be considered as an alternative to net income, operating income, or any other performance measure derived in accordance with IFAS or U.S. GAAP or an alternative to cash flow from operating activities as a measure of liquidity. In addition, dividend payout ratio is not a standardized term, hence a direct comparisons between companies using such a term may not be possible. For details of our dividend payout ratios, see "Risk Factors — Risk relating to our Company — We are subject to the control of the Government and there is no guarantee that they will always act in our best interests. We also derive certain benefits from being a state-owned entity, and we cannot guarantee that any or all of these benefits will continue." The following table reconciles our net income under IFAS to our definition of dividend payout ratios for the periods indicated:

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
	(Unaudited)				
	(US\$ in millions except percentages)				
Dividend paid during the year equivalents in U.S. dollars	868.5	587.1	563.1	—	—
Prior year profit for the period before merging entity's income adjustment attributable to owners of the parent entity	3,147.0	2,540.2	2,526.8	—	—
Dividend payout ratio (%)	<u>27.6</u>	<u>23.1</u>	<u>22.3</u>	<u>—</u>	<u>—</u>

- (6) Total debt/Adjusted EBITDA ratios for the nine-month periods ended September 30, 2019 and 2020 are calculated based on total debt as of such dates and Adjusted EBITDA for the three-month periods then ended. Therefore, they are not comparable to, and are higher than, our total debt/Adjusted EBITDA ratios for the years ended December 31, 2017, 2018 and 2019, which are calculated using Adjusted EBITDA for the twelve-month periods then ended.

RISK FACTORS

An investment in the Notes involves certain risks. You should carefully consider all of the following factors, in addition to all of the information contained in this Offering Memorandum including the consolidated financial statements included herein and the related notes thereto, prior to investing in the Notes. The factors described below are not the only ones facing our company. Additional factors not presently known to us or that we currently deem immaterial may also impair our business operations. Our business, financial condition, results of operations and prospects could be materially and adversely affected by any of these risks. The trading prices of the Notes could decline due to any of these risks and you may lose all or part of your investment. This Offering Memorandum also contains forward looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks faced by us described below and elsewhere in this Offering Memorandum.

Risks Relating to Our Company

The volatility in the prices of crude oil, natural gas and our refined products and the uncertainty of the market dynamics for oil and gas could adversely affect our business, financial condition, results of operations and prospects.

Our profitability is significantly affected by the prices of, and demand for, crude oil, natural gas and refined products and the difference between the prices received for the crude oil, natural gas and refined products we produce and the costs of exploring for, developing, producing, transporting and selling these products. The international market for crude oil, natural gas and refined products is volatile and therefore subjects us to various risks and uncertainties. In the past, this market has been characterized by significant price fluctuations, including in 2020 due to the impact of the COVID-19 pandemic on global markets and energy demand. The volatility of the market prices of crude oil, natural gas and refined products is subject to a variety of factors beyond our control. These factors, among others, include:

- demand for crude oil, gas and related products, including fluctuations due to the COVID-19 pandemic;
- international events and circumstances, as well as political developments and instability in petroleum producing regions, such as the Middle East (particularly the Persian Gulf, Iran and Iraq), Latin America (particularly Venezuela), Northern and Western Africa (particularly Libya) and North America (particularly the U.S.);
- the ability of the Organization of Petroleum Exporting Countries and other petroleum-producing nations to set and change production levels and therefore to influence market prices;
- global and regional supply levels and costs of substitute energy sources, such as natural gas, coal, hydroelectric, tidal, wind or solar power;
- domestic and foreign government regulations with respect to oil and energy industries in general and crude oil, natural gas and refined product pricing policies in Indonesia;
- the level and scope of activity of global oil and natural gas exploration and production, global oil and natural gas inventories, oil speculators and other commodity market participants;

- changes to crude oil, natural gas and refined products' pricing policies by competitors and the Government;
- global conflicts or acts of terrorism and/or conflicts or acts of terrorism in petroleum producing regions;
- inflation and the global inflation outlook;
- actions of commodity market participants;
- fluctuations in exchange rates between the U.S. dollar and the Rupiah;
- weather conditions and seasonality; and
- overall global, domestic and regional economic conditions.

The price of energy, and in particular in the price of crude oil, has fluctuated in the recent past, and there can be no assurance that the prices that our assumptions are based on will not change. Prolonged periods of low oil and gas prices could result in our upstream projects being delayed, deferred or cancelled, which in turn may, among other things, harm the viability of such projects and result in the impairment of related assets.

Our sale of refined products and our downstream operations in general may also be affected by volatility in prices and the factors described above. In addition, there can be no assurance that we will be able to sell our refined products at a price that cover our costs of production (including the costs at which we purchase crude oil from our upstream operations or third parties). For example, during periods of peaking oil prices where our costs of production increase, we may not be able to sell our refined products at prices that result in the same profit margins or any profit on such sales, whether due to downstream market factors, various regulatory restrictions on our sales volumes or prices, or otherwise.

For these reasons, volatility and any significant decreases in the price of crude oil and natural gas, or any market or operational developments that increase our costs of lifting crude oil and natural gas from our existing or future operations may have a material adverse effect on our business, financial condition, results of operations and prospects. For example, in the nine months ended September 30, 2020, our total sales and other operating revenues decreased by US\$9,076.9 million, or 23.1%, to US\$30,250.6 million from US\$39,327.5 million in the nine months ended September 30, 2019. This decrease was primarily due to a decrease in subsidy reimbursements from the Government and a decrease in domestic sales of crude oil, natural gas, geothermal energy and oil products because of the lower selling prices of certain types of our products as well as a decrease in revenues from other operating activities, all of which are partly attributable to the COVID-19 pandemic. For further details regarding the effect of crude oil and natural gas prices on our financial results, see "Management's Discussion and Analysis of Financial Condition and Results of Operations — Factors Affecting Our Business and Results of Operation — Price of Crude Oil, Natural Gas and Refined Products."

The ongoing global COVID-19 pandemic and the disruption caused by various measures to reduce its spread has had and may continue to have adverse consequences on the global economy, our industry and our business, results of operations and financial condition.

The World Health Organization declared COVID-19 a pandemic in March 2020. The outbreak of the COVID-19 pandemic has delivered economic shocks globally, leading to adverse repercussions

across local, regional and global economies, financial markets, industries and businesses which necessarily adversely affects Indonesia and in turn, our business. The governments of many countries, including Indonesia, have reacted by instituting lockdowns, business shutdowns, quarantines and restrictions on travel. Such actions have not only disrupted businesses but have had a material and adverse effect on industries and local, regional and global economies, including the economies of Indonesia. The Indonesian Government revised its forecast of Indonesia's gross domestic product in 2020 from an expansion of 5.3% to a range of an expansion of 0.2% to a contraction of 1.1% due to the fallout of the COVID-19 pandemic, which caused a negative impact on domestic demand for oil and gas. The economic impact of COVID-19 on Indonesia has been substantial and may increase. Unemployment has increased and may further increase, valuations and trading prices of financial and other assets have declined and the Rupiah has depreciated significantly against the U.S. dollar. If the pandemic continues to spread and more restrictive measures are implemented by the relevant government authorities, our business, financial condition, results of operations and prospects may be materially and adversely impacted.

We have been impacted by the COVID-19 pandemic in terms of the impact that reduced global economic activity has had on international trade and energy demand. During the first three quarters of 2020, we faced weakening of Indonesian crude prices, a decrease in downstream sales, and fluctuations in the U.S. dollar-Rupiah exchange rate. During the first three quarters of 2020, as a result of lockdowns and other measures implemented by governments in response to COVID-19, there was a significant decline in energy demand in Indonesia as well as in export markets, and a decrease in oil prices. There was also reduced demand in our gas businesses, driven by lower demand for LNG and petrochemicals.

The COVID-19 pandemic has also directly impacted our business operations, requiring us to adopt precautionary measures such as telecommuting, rotation of office hours among employees, limiting face-to-face meetings and restricting domestic and overseas business travel. The current COVID-19 pandemic has affected, and we expect it to continue to affect, our ability to continue doing business with our customers, suppliers, third-party services providers and other parties that we conduct business with or that operate within our supply chains for our various businesses, whether due to restrictions placed on business activities and movements in Indonesia, in the countries where they are located, or other regions operating within our supply chains, or other reasons stemming from COVID-19. We have also experienced general delays in our operations due to safety measures implemented by us or our customers in response to COVID-19.

Our logistics services have also been affected by heightened restrictions at the ports we operate, which have resulted in delayed port clearance and extended crew change processes. We have also faced delays in the extension of certain permits we require for our operations such as, in particular, in relation to our river and sea transportation services, due to social distancing measures implemented at Government offices resulting in prolonged processing periods. Further, although the current COVID-19 pandemic has not lead to any major disruptions to operations at our concessions or facilities, we may be required to suspend or shut down operations at some or all of our concessions or facilities as a result of the pandemic. While we have established temperature screening checkpoints and temporary medical facilities and isolation areas at all our work sites as well as established COVID-19 testing facilities for our employees and their families, we cannot assure you that such measures or any other actions we have taken to mitigate the effects of the pandemic on our business operations will be adequate.

The COVID-19 pandemic may in the future continue to affect our industry and business in a number of ways, including:

- limiting our ability to generate cash flow, and as a result, affecting our financial condition;

- causing us to delay, postpone or cancel certain of our operating and development plans, and the associated capital expenditures;
- the economic slowdown may adversely impact our customers' abilities to raise capital, which may result in our customers being unable to meet their payment obligations under our coal agreements or planned capital expenditure, and a decrease in demand for our products;
- adversely impacting our ability to enter into new strategic transactions or to finalize strategic transactions on previously agreed terms and timetables;
- limiting our ability to ship our products to overseas customers due to the imposition of import restrictions and various governments prioritizing domestic coal in light of the overall economic downturn; and
- requiring us to make operational changes and implement measures to ensure the health and safety of our employees and counterparties, which may involve increased costs or operational inefficiencies.

The duration and full extent of the impact of the pandemic on our business remains uncertain and will depend on a range of factors which we are not able to accurately predict, including the duration, severity, potential recurrence and scope of the pandemic and the nature and severity of measures adopted by governments. It is possible that the COVID-19 pandemic will cause a prolonged global economic crisis or recession. To the extent the COVID-19 pandemic adversely affects our business and financial results, it may also have the effect of heightening many of the other risks described in this “*Risk Factors*” section.

We are subject to the control of the Government and there is no guarantee that they will always act in our best interests. We also derive certain benefits from being a state-owned entity, and we cannot guarantee that any or all of these benefits will continue.

The Government is our sole shareholder and, through its agencies, it is likely to continue to retain control over us. The Government has historically influenced, and is likely to continue to influence, our strategy, operations and management policies. The Government also has the ability to influence and control other Government-related entities we conduct business with. The Government is likely to retain control of us as our sole shareholder, which gives the Government powers with respect to approving matters such as the election and removal of members of our Board of Commissioners and Board of Directors, amendments to our Articles of Association, changes in our capital structure and mergers and acquisitions, consolidation or liquidation. For further details, see “Relationship with the Government.”

The Government also has the power to control the amount and timing of dividends payable by us to them as our sole shareholder. We have historically been required to pay dividends to the Government as an estimated amount based on a specified percentage of our distributable profit as shown in our unaudited financial statements in advance of our audited financial statements becoming available. In 2017, 2018 and 2019, we paid aggregate dividends of Rp. 12.1 trillion (US\$907.3 million), Rp. 8.5 trillion (US\$614.9 million), and Rp. 7.9 trillion (US\$552.6 million) respectively, to the Government. For 2017, 2018 and 2019, this represented aggregate dividend payout ratios (calculated as dividends paid during the year equivalents in U.S. dollars divided by the previous year's profit for the year before the effect of merging entity's income adjustment attributable to owners of the parent entity) of 27.6%, 23.1%, and 22%, respectively. For 2020, the Government is targeting for us to pay approximately 24% or less of our projected profits to the Government as dividends. There can be

no assurance that if the amount of the dividends payable exceeds the estimate that the Government will return the excess amount paid by us to the Government or that the Government, as our sole shareholder, would not cause us to pay a larger percentage than the estimate. There can also be no assurance that the Government will not require abnormally large dividends in any given year if it is facing a significant deficit, for other reasons or for no reason whatsoever.

We are currently mandated by the Government under the PSO mandate to distribute fuel domestically. Historically, the Government's regulated prices of subsidized fuel products have not been sufficient to meet our costs of producing or importing and distributing for certain fuel products, and we rely on subsidy reimbursements from the Government to address the shortfall between the regulated retail prices and our costs of producing or importing and distributing such fuel. The subsidy reimbursement formula for the distribution of certain of our fuel products have a fixed margin. Even when the cost of crude oil substantially exceeds the price ceiling assumed by the Government, the subsidiary reimbursement formula and the margin may not be revised, and as the regulated retail price of fuel subject to the PSO mandate is fixed by the Government, we are not able to increase the sale price of the products which we distribute under the PSO mandate. In addition, in determining the subsidy reimbursements payable to us in any given month for the distribution of certain subsidized fuel products, the Government's policy is to use Mean of Platts Singapore ("MOPS") from the month immediately prior to the month to which the subsidiary reimbursement claim relates. This lag in the value of MOPS used in the subsidy reimbursement formula may result in the subsidy reimbursements we receive under our PSO mandate being insufficient to cover our costs of distribution and of our raw materials, in months where there is a significant increase in crude oil prices from the previous month. As a result, we may not recover the increased costs of distributing subsidized fuel under our PSO mandate.

We also derive certain benefits from being a state-owned entity, and we cannot guarantee that any or all of these benefits will continue. For example, in 2018 and 2019, the Government took additional action to compensate us for shortfalls between the retail price of certain subsidized fuel products and our subsidy reimbursements for those products, on one hand, and our costs of distributing subsidized fuel under our PSO mandate, on the other hand. As of the date of this Offering Memorandum, the Government had not made a decision on whether to similarly compensate us for such shortfalls in 2020. For more information, see "Management's Discussion and Analysis of Financial Condition and Results of Operations — Overview of Certain Key Line Items — Sales and Other Operating Revenues — Revenues from other operating activities." In addition, we currently anticipate that our planned developments of new refineries in Bontang and Tuban will be eligible for favorable corporate income tax treatment under Regulation of the Minister of Finance Number 150/PMK.010/2018 on Provision of Corporate Income Tax Holiday Facility for investments in pioneer industries.

If crude oil prices exceed the ceiling price assumed by the Government or our transportation, distribution or other costs increase, we may not be able to recover the full costs of distributing subsidized fuel and LPG under the compensation formula and may incur losses as a result. Because the subsidy reimbursement formulas that affect our results of operations in respect of the PSO mandate is fixed by the Government and beyond our control, we cannot assure you that such losses will not occur in 2021 or for any other future period. This may have a material adverse effect on our financial condition, results of operations or cash flows. See "— We may not be able to pass on increases in costs of our raw materials for products distributed under our PSO or other mandates from the Government or where the prices of such products are fixed on account of requests by the Government," "Management's Discussion and Analysis of Financial Condition and Results of Operations — Factors Affecting Our Business and Results of Operations — PSO Mandate" and "Indonesian Regulatory Framework."

The Government could further affect us through other actions, such as the renegotiation or nullification of existing concessions and contracts, the imposition of taxes and foreign exchange restrictions, the fixing of a ceiling price for certain of the non-PSO fuels we distribute, requiring that

we supply fuel to other Government-owned entities at a discounted rate or through regulatory changes that have an adverse impact on us. We also derive certain benefits from being a Government-owned entity, including a favorable allocation of net crude entitlement under a PSC for our current and future operational blocks, a favorable share of profits before tax under PEP's PSCs, access to two-step loans under which the Government is a co-obligor with us and a right to request to enter into any cooperation contracts which have already expired for any oil and gas blocks in Indonesia. There can be no assurance that the Government will exercise its control and influence to our benefit or continue to allow us to enjoy such benefits.

If we are required to act in the Government's interests and those interests differ from our interests, or if the Government favors the interests of others, or if the Government decides to remove or reduce any of the benefits we currently enjoy from them, such action could have a material adverse effect on our business, financial condition, results of operations and prospects.

In addition, a significant portion of our sales are to related parties that are also owned and controlled by the Government. The Government has the power to control our sales decisions and could require us to continue to sell to third parties that may be less creditworthy or less likely to promptly meet their payment obligations to us. See "— We are exposed to credit risk on our trade receivables."

The amount of working capital we require for our operations is significant and fluctuates. Our operations may be adversely affected if we do not have sufficient working capital to meet our cash and operational requirements, which may occur as a result of delays in the payment of subsidies which we are owed or for any other reasons.

We expend a significant amount of cash in our operations, principally on the import of crude oil and refined products. In particular, one of our principal operating costs is the acquisition of crude oil feedstock for our refineries. Volatility in market prices for crude oil, natural gas and refined products and fluctuations in exchange rates causes our working capital and costs for our operations to be uncertain.

We fund our operations principally through cash flow from operations, short-term working capital facilities (including bank overdrafts, letters of credit and revolving credit facilities) and long-term bank loans. See "Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources." A significant portion of our cash flow from operations is comprised of subsidy payments under our PSO mandate. To receive subsidy payments, we submit a subsidy claim at the beginning of the month for the subsidized fuel distributed during the preceding month. Although we typically receive 95% of the subsidy claim within a month of its submission, there is no mandatory fixed timeframe in which the Government is required to make such subsidy payments to us. There can be no assurance that we will not experience delays in the payment of such subsidies. For more details, see "Business — Pertamina Downstream Business — PSO." If our revenues are insufficient to cover our working capital needs as a result of low crude oil, natural gas or refined products prices, delays in subsidy payments, operating difficulties, declines in reserves or for any other reason, we may be unable to obtain the working capital necessary to sustain our operations and we may have to seek alternative sources of funding for our operations. We can provide no assurance that we will not experience negative cash flows in the future. If we fail to generate sufficient revenue from our operations, or if we fail to obtain or maintain sufficient cash and banking facilities, we may not have sufficient cash flow to fund our operations and we may not be able to procure alternative sources of funding on satisfactory terms or at all to meet our liquidity requirements.

We may seek to incur additional indebtedness in the future, which could adversely affect our business or financial condition.

We may in the future incur additional indebtedness. As of December 31, 2019 and September 30, 2020, our total debt (comprising short-term loans, long-term liabilities — bank loans — net (including

current portion), due to the Government — two-step loans, and bonds payables) was US\$16,611.9 million and US\$18,709.1 million. We will require a stable cash flow to meet our obligations under our current and anticipated indebtedness, our capital expenditures, and our working capital requirements. If our cash flow from operations were to be significantly reduced for any reason, consequences may include:

- limitations on our ability to satisfy our obligations under the Notes and other debt;
- an increase in our vulnerability to adverse general economic and industry conditions;
- requirements for us to dedicate a substantial portion of our cash flow from operations to servicing and repaying our indebtedness, thereby reducing the availability of our cash flow to fund working capital, capital expenditures and other general corporate purposes;
- limitations on our flexibility in planning for or reacting to changes in our businesses and the industry in which we operate;
- a competitive disadvantage as compared to our competitors that have less debt;
- limitations on, along with the financial and other restrictive covenants of our existing or future indebtedness, among other things, on our ability to borrow additional funds; and
- an increase in the cost of additional financing.

Our ability to generate sufficient cash to satisfy our outstanding and future debt obligations will depend upon our future operating performance, which will be affected by prevailing economic conditions and financial, business and other factors, many of which are beyond our control. We anticipate that our operating cash flow will be sufficient to meet our anticipated present requirements for operating expenses and to service our debt obligations as they become due. However, if we are unable to service our indebtedness, we would be forced to adopt an alternative strategy that may include reducing or delaying capital expenditures, selling assets, and restructuring or refinancing our indebtedness. These strategies may not be instituted on satisfactory terms, if at all, and may negatively affect our ability to react to changes in market conditions, take advantage of business opportunities we believe to be desirable, obtain future financing, fund needed expenditures, or withstand any continuing or future downturn in our business. Any of these factors could materially and adversely affect our business, financial condition, results of operations, prospects and our ability to satisfy our obligations under the Notes and other debt.

Our operations are subject to significant operating risks and hazards, for which we may not be fully insured.

We are subject to operational risks and hazards that are common among companies in the oil, gas and geothermal industry, including, but not limited to, the following:

- *Exploration and production risks:* risks related to fluctuations in oil, gas and steam production that may be affected by reserve levels, accidents (including losses of life), mechanical difficulties, work stoppages, adverse natural conditions, such as bad weather or natural disasters, as well as the inability to manage unforeseen production costs, pressure or irregularities in geological formations, unexpected drilling conditions and surface cratering;

- *Equipment risks:* risks related to the adequacy and condition of our oil, gas and steam production facilities, our refineries and our equipment, including situations where equipment becomes obsolete, where our equipment fails, or where availability of necessary equipment is poor;
- *Transportation risks:* risks related to the condition of oil and gas pipelines and vulnerability and costs of other modes of transportation, such as oil tankers; and
- *Storage risks:* risks related to the condition of oil and gas storage tanks and other storage facilities and compliance with safety and environmental standards.

Our business is subject to significant risk of fires, explosions, oil spills, well blowouts, leakage, release of toxic fumes, lightning strikes, other natural or geological disasters, deliberate attacks, sabotage, terrorism risks and other unexpected or dangerous conditions that may cause personal injuries or death, property damage, environmental damage and interruption of operations. Such incidents may have an adverse effect on our business, financial condition, results of operations and prospects. For example, in March 2018, an incident involving one of our undersea pipelines from our Lawe-Lawe Terminal in North Penajam Paser to our refinery facility in Balikpapan resulted in a large oil spill in Balikpapan Bay in East Kalimantan, in response to which we undertook various environmental mitigation and recovery efforts and compensated the affected community. In August 2018, we also experienced an oil spill at our fuel terminal in Wayame. These two incidents required us to expend resources, including financial resources and management time, on investigation, compensation, economic and social recovery and environmental and infrastructure repair. In response to the incident at Balikpapan, although responsibility has been placed on a third party, we have conducted pipeline and port assessment studies for asset integrity and are implementing additional monitoring systems. In response to the incident at Wayame, we have conducted re-training programs and additional protocols to mitigate risks of future occurrences. In July 2019, we experienced a “well kick” in the Java Sea near Karawang (West Java) at an offshore platform operated by PHE ONWJ (as defined herein) where a reactivated well is being developed. Residents of nearby Banten Bay and Thousand Island have filed a class action lawsuit against us and PHE ONWJ in the Central Jakarta District Court for the impact of such oil spill. In August 2018, the court ruled against us and PHE ONWJ. We and PHE ONWJ have appealed the decision and the appeal is pending. An investigation by the Directorate of Special Crime and the West Java Regional Police is also pending. As of the date of this Offering Memorandum, we have implemented responsive environmental mitigation measures and undertaking recovery efforts in coordination with the government and other key stakeholders. PHE ONWJ have committed to implement an environmental recovery plan in accordance with Ministry of Environment and Forestry (MoEF). Additionally, certain of our operations and facilities are located offshore and subject to additional dangers inherent in marine operations. These dangers include capsizing, sinking, grounding and damage from severe weather conditions, which could also result in injury and loss of life, severe damage to and destruction of property and equipment, pollution and other environmental damage and suspension of our operations.

While we are prepared and our personnel are trained to deal with such hazards, if we are unable to quickly fix any resulting damage, our drilling and production schedules and refining operations could be materially delayed and our financial condition and results of operation would be materially and adversely impacted. In addition, drilling hazards or environmental damage could increase the cost of operations, and various field operating conditions may adversely affect our production levels from successful wells. These conditions include delays in obtaining Government approvals or consents, shut-in of connected wells resulting from extreme weather conditions, insufficient storage or transportation capacity or other geological and mechanical conditions. Production delays and declines from normal field operating conditions cannot be eliminated and can be expected to materially and adversely affect revenue and cash flow to varying degrees.

We may be required to implement temporary, unscheduled shutdowns, for example due to equipment breakdowns or human errors. Such unscheduled shutdowns could materially and adversely affect us. For example, unscheduled upstream shutdowns may require us to source additional feedstock from third parties at higher prices and unscheduled downstream shutdowns may lead to a decrease in inventories available for sale.

We are not fully insured against these operating risks and other types of losses, such as those due to acts of war, either because such insurance is not available at commercially acceptable premiums or at all. We are also not insured for the full value of all of our operational assets as our policy is to obtain insurance in an amount to cover the value of certain high-value assets within each operational asset. We may also lose the capital invested in and the anticipated revenue from the affected property. We also do not have a policy of obtaining business interruption insurance as we take the view that our diversified business assets mitigate the impact of any occurrence of a business interruption. The occurrence of a significant event that we are not fully insured against, or the insolvency of the insurer of such event, could have a material adverse effect on us.

We do not carry coverage for product liability insurance for the majority of our refined fuel and non-fuel products. We and our operating partners will be required to bear any costs associated with any incidents to the extent that such costs are uninsured or exceed the amount of such insurance. For a description of the insurance we maintain to protect against operating risks and hazards, see “Business — Insurance.”

Our activities in or in connection with certain countries could lead to U.S. Sanctions.

Certain trade and economic sanctions laws and regulations, including, without limitation, those administered and enforced by the U.S. Department of the Treasury’s Office of Foreign Assets Control’s (“OFAC”) and the U.S. Department of State (collectively, “U.S. Sanctions”), may, in certain circumstances, impact our ability to, directly or indirectly, conduct activities or dealings in or with certain countries that are the subject of comprehensive embargoes (collectively, “Sanctioned Countries”), as well as with individuals or entities (collectively, “persons”) that are the target of U.S. Sanctions-related prohibitions and restrictions (collectively, “Sanctioned Parties”). Although we are not currently directly subject to U.S. Sanctions because we are not incorporated in the United States, do not operate in the United States, and do not employ U.S. persons, our international activities may nonetheless expose us to certain penalties (resulting from secondary sanctions, which can apply to non-U.S. persons in certain circumstances) or other risks (such as reputational risks) in the event that we were to engage in significant transactions with Sanctioned Countries or Sanctioned Parties. Accordingly, in conducting our business we are cognizant of U.S. Sanctions’ potential impact. The U.S. may also choose to impose broader sanctions than currently in place, in particular with respect to Iran or Russia. There can be no assurance that the countries in which we currently operate or the persons with whom we conduct business will not at some point become the target of new or expanded U.S. Sanctions, which could therefore expose us to reputational or other risks as the result of potential dealings therewith.

Although we do not currently operate in or expect to receive any revenue from Sanctioned Countries, we are engaged in certain dealings with a Russian counterparty, described below. Russia is not currently the target of comprehensive U.S. Sanctions, but the U.S. government maintains sectoral sanctions that restrict U.S. persons from engaging in certain types of transactions with OFAC-designated persons as well as certain activities in Russia. As noted above, we are not a U.S. person and do not employ U.S. persons; accordingly, we are not directly subject to these sectoral sanctions. However, we could, in certain circumstances, be exposed to secondary sanctions. For example, the Countering America’s Adversaries Through Sanctions Act authorizes the President of the United States to impose secondary sanctions on non-U.S. persons that knowingly make certain investments that directly or indirectly contribute to Russia’s ability to construct energy export pipelines, or provide to

Russia goods, services, technology, information, or support that could directly and significantly facilitate the maintenance or expansion of the construction, modernization, or repair of energy pipelines.

In November 2017, we established PT Pertamina Rosneft Pengolahan dan Petrokimia, a joint venture with Rosneft, which is the subject of U.S. Sanctions restrictions, in which we hold a 55% interest. The purpose of the joint venture is to construct a grass root refinery and petrochemical complex in the East Java Province of Indonesia. The project is currently in the engineering phase (BED & FEED phase) and it will be targeted to be onstream by 2026 or later. Neither this arrangement or project is subject to primary U.S. Sanctions, nor do we believe that it exposes us to secondary sanctions risks under U.S. law, but it is possible that such liability may arise in the future to the extent that the United States or other governments with applicable jurisdiction expand their trade and economic sanctions regimes over this counterparty, activities, or in any other impactful way.

We import LPG through Petredec, a trading company incorporated in Bermuda. In years prior to 2019, a small percentage of the LPG supplied to us by Petredec was sourced by Petredec from suppliers in Iran. At the time, we had requested to Petredec that no Iran-sourced LPG be supplied to us, however, the terms of our contract with Petredec limits our ability to control Petredec's sourcing activities. To our knowledge, the amount of Iran-sourced LPG provided by Petredec to us was insignificant (i.e., less than 10% of our imports from Petredec and less than 1% of our total LPG imports). Accordingly, we do not believe that such sourcing activities triggered or trigger exposure under U.S. Sanctions. As previously noted, we are not a U.S. person and none of our activities or dealings with Petredec involved or involves U.S. persons. Further, we do not believe that any of our past fuel import activities with Petredec would be subject to the discretionary sanctions of the Iran Sanctions Act of 1996, as amended. Finally, none of the proceeds of the offering of Notes issued or to be issued under the Program have been or will be used to benefit any parties in Iran. In addition, to our knowledge, since July 2019, none of the LPG provided to us by Petredec has been sourced by Petredec from Iran.

We are subject to audit by SKK MIGAS and/or the Government which may result in claims by them against us.

Under the terms of our cooperation contracts, our subsidiaries who are parties to such contracts are subject to audit by SKK MIGAS (the successor to BPMIGAS) and the Government which may result in claims against us. Claims arising from such audits are discussed between us and SKK MIGAS or the Government if our management does not agree with them. For a discussion relating to the legal validity and enforceability of our cooperation contracts, see “— All of our current production sharing arrangements and cooperation contracts were entered into with BPMIGAS, the predecessor to SKK MIGAS. Although SKK MIGAS has assumed the functions and responsibilities of BPMIGAS and the Indonesian Constitutional Court's decision has provided that all agreements entered into by BPMIGAS should remain valid until their respective expiry dates, our production sharing arrangements and contracts were not formally assigned or novated by legal instrument to SKK MIGAS from BPMIGAS, leading to potential uncertainty as to their legal validity and enforceability.”

In addition, the Supreme Audit Agency of Indonesia (“BPK”) audits the accounting records and bookkeeping of our subsidiaries that are party to cooperation contracts on behalf of the Government. If BPK makes any claims relating to cost recovery under any cooperation contracts or PSCs and we are required to make settlement of such claims, our liquidity and financial condition could be adversely affected.

We may be unable to accomplish our development plans for our projects on schedule or within our budgeted costs and we are unable to give any assurance that these plans, if completed, will achieve our development aims.

We have in the past pursued and plan to continue to pursue strategic acquisitions, partnerships and investments, in particular with respect to new and renewable assets that are in production or advanced stages of development, that will expand our oil, gas, energy (including geothermal) business, in Indonesia and internationally and develop our oil, gas and infrastructure in Sumatra and Java. We also aim to maintain our existing leadership in our downstream businesses by growing and optimizing our refining capabilities, expanding our retail fuel station network and solidifying our market leadership in fuel, gas and petrochemical products distribution in Indonesia. See “Business — Business Strategy” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Capital Expenditures.” Our development plans may relate to areas in which we have limited or no prior investment or operational experience, and there can be no assurance that we will be successful in our efforts operating in such areas or that we will be able to achieve our aims in the manner anticipated or at all. In such a case, our business, financial condition, results of operations and prospects could be adversely affected.

As part of our ongoing business, we actively seek to collaborate with various international companies and participate in development projects. Such business partnerships and development projects involve many risks, including:

- economic or political risks, including threats specific to a certain country or region, such as terrorism, social unrest or other conflicts;
- the inability to negotiate successfully with partners, governments, local communities, supplies, customers and other third parties;
- differences between estimated and actual subsurface resources and reserves;
- decreases in commodity prices or production caps;
- the breakdown or failure of plant equipment or processes;
- the inability to obtain required governmental permits and approvals in time;
- work stoppages and other industrial actions by employees or contractors;
- opposition from local communities and special-interest groups;
- engineering and environmental problems;
- construction delays;
- inability to obtain working capital or control capital and operating costs;
- disputes or delays on the part of our partnerships, vendors or counterparties; and
- unanticipated cost overruns.

There can be no assurance that we will be able to derive income and cash flows from the projects and investments in a timely manner, in the amounts expected or at all, including due to the factors described above.

The budgeted costs for our development plans are estimates only and will not be known until the contracts for such plans are finalized. There can be no assurance that factors outside of our control will not result in cost overruns that will increase the costs of the projects and require us to seek additional financing. Such factors include fluctuations in raw material costs, technical difficulties, unexpected development expenses, delays in the delivery of equipment or materials, adverse weather conditions, labor disputes, shortages or increased competition or market prices for materials, equipment, skilled personnel and labor, natural disasters, accidents, changes in government priorities and policies, changes in market conditions, delays in obtaining the requisite licenses, permits and approvals from the relevant authorities, and other unforeseeable problems and circumstances. If we need to seek additional financing, there can be no assurance that such financing will be offered at all or on terms acceptable to us. Any of these factors could also give rise to delays in development and completion of our projects beyond schedule, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

We are dependent on our joint venture partners and third-party independent contractors in connection with our exploration and production operations and to implement our development programs.

Many of our major projects and operations are conducted through joint ventures. In certain cases, we may have limited influence over and control of the behavior, performance and cost of operations in which we hold an equity interest or contractual interest and hence are dependent on our joint venture partners to implement our development plans and our ability to identify and manage risks may be reduced. Our joint venture partners' business interests or goals may be inconsistent with ours. Additionally, our partners or members of a joint venture or associated companies (including local partners in our international operations) may not be able to meet their financial or other obligations to the projects, threatening the viability of a given project. For example, we own 45% of our Cepu oil and gas block through our subsidiary, PT Pertamina EP Cepu ("PEPC"). Our joint venture partners in the project, two subsidiaries of ExxonMobil, are responsible for operation of the block. As a party to the PSC in respect of the Cepu block, we share in the block's operational risks even though we are not in control of the operation of the Cepu block.

Although we are the operator under substantially all of our production sharing arrangements, we are dependent on independent third-party contractors to undertake specialized tasks such as rig drilling and production optimization in connection with our exploration and production operations.

There is a risk that such counterparties will fail to meet their obligations as specified or underperform on contractual obligations, whether as a result of financial or operational difficulties or otherwise. Our exploration and production operations or development plans at sites affected by such failure may be disrupted for a substantial period of time to allow the terminated contractor to be replaced or for issues faced by or between the joint venture partners to be resolved. Further, should any agreements with such joint venture partners or contractors be terminated, we cannot assure you that a suitable replacement can be found within a reasonable time or at all. Any material failure by our partners or third-party contractors to adequately perform under their contractual obligations may materially and adversely affect our business, financial condition, results of operations and prospects.

We may not be able to consummate future acquisitions, joint ventures or investments. In addition, any acquisitions, joint ventures or investments which we do consummate could adversely affect us.

We have in the past, and expect in the future, to continue to pursue strategic acquisitions, partnerships and investments that will expand our oil, gas, new and renewable energy (including

geothermal) business and our activity in that industry generally. In our upstream business, our strategy is to continue to pursue such strategic acquisitions, partnerships and investments domestically as well as internationally. We may not be able to identify or complete additional acquisitions, partnership or investments on commercially attractive terms or at all. All our acquisitions, partnerships and investments also require approvals from the Government in its capacity as our shareholder, and there is no assurance that approvals will be given to the acquisitions, partnership or investments that we propose. In the past, the inability to secure the approval of the Government has contributed to our inability to consummate proposed acquisitions, and we may encounter similar challenges in the future.

The oil and gas industry is highly competitive and we face intense competition from other oil and gas companies and energy companies who may bid for the same international oil and gas assets that we seek to acquire or invest in, or compete for participation in the same partnership that we seek. Such competitors may have access to greater financial or other resources than we do, or possess more relevant expertise, which may result in our bids for our proposed acquisitions, partnerships and investments not being successful.

In addition, we may pursue additional acquisitions, partnerships and investments in areas of the oil, gas, new and renewable energy (including geothermal) business sector outside of our core businesses, and in new or unfamiliar geographic regions where our knowledge, expertise and experience may be limited. We may not be able to obtain financing to support any such acquisitions, partnership and investments on attractive terms or at all. We may also be subject to foreign or domestic regulatory restrictions, which may limit our ability to consummate future acquisitions, partnerships or investments.

Even if our proposed acquisitions, partnerships or investments are consummated, we may not realize any anticipated benefits from them. The process of integrating acquired operations, partnership operations and investments into our existing operations may result in unforeseen difficulties and may require significant financial resources that would otherwise be available for the ongoing development or expansion of our existing operations. There can be no assurance that our acquisition, partnerships or investments will yield its anticipated benefits in the near term or at all. Disputes or disagreements with our partnerships and other strategic partners may also arise, which could adversely affect the relevant partnerships or strategic arrangement.

Future acquisitions, partnerships and investments could result in the incurrence of additional debt, contingent liabilities and amortization expenses related to goodwill and other intangible assets and increased capital expenditures, interest and other costs, any of which could have a material adverse effect on our financial condition and operating results by reducing our net profit or increasing our total liabilities, or both. Any of these factors could adversely affect our business, financial condition, results of operations or prospects.

We do not have free and clear title to a significant portion of our land assets.

In connection with our conversion into a limited liability company in 2003, among other non-operating assets, land assets (including non-productive assets such as idle land and buildings) were transferred to us and reflected in our opening balance sheet as of September 17, 2003. We do not have free and/or clear title to approximately one quarter of these land assets by area, as the legal documentation for such land is not in our possession, has expired or is otherwise not in order, or we are not in occupation of the land in question. We are taking steps to obtain the necessary documentation for the land prior to addressing issues relating to the occupation of the land. There can be no assurance that we will be able to obtain the necessary documentation for all or any of the land over which we do not currently hold free and clear title. Under Indonesian land regulations, not being in possession of the necessary documentation for land assets could result in a loss of entitlement to such land. Under

Government Regulation No. 40 of 1996 on *Hak Guna Usaha* (Right to Manage for Agricultural Activities), *Hak Guna Bangunan* (Right to Build on Land) and *Hak Pakai* (Right to Use and/or Collect the Products of Land), if our title over such land was abolished, we would have to clear any fixtures from the land and return it to the state or deemed owner of the land within one year from the date of abolishment of our title. There can also be no assurance that we will be able to regain possession of land which is currently occupied by third parties.

We are exposed to credit risk on our trade receivables.

As of December 31, 2019, we had trade receivables of US\$3,511.8 million, 44.3% of which was owed to us by our related parties. Out of this amount, as of December 31, 2019, US\$420.5 million was owed to us by PT Perusahaan Listrik Negara (Persero) (“PLN”) and its subsidiaries, our related party and a Government-owned electricity company, and US\$432.8 million was owed to us by the Indonesian Armed Forces and the Ministry of Defense. As of September 30, 2020, we had trade receivables of US\$3,405.9 million, 52.2 % of which was owed to us by related parties. Out of this amount, US\$558.6 million was owed to us by the Indonesian Armed Forces and Ministry of Defense, US\$555.0 million was owed to us by PT Garuda Indonesia (Persero) Tbk (“Garuda”), and US\$350.5 million was owed to us by PLN and its subsidiaries, our related party and a Government-owned electricity company. Garuda is an Indonesian air carrier that has been significantly and adversely affected by the on-going COVID-19 pandemic. In December 2020, we reached an agreement with Garuda to restructure their amounts payable to us, pursuant to which US\$5.0 million is payable upfront, 5% is payable within approximately one year, 10% is payable within approximately two years, and the remainder is payable within approximately three years, in each case from the date of the agreement. While we have not recorded any related write-off of the receivables payable to us from Garuda, the future outlook of the COVID-19 pandemic and pace of recovery remains uncertain and the global economy and financial markets remain unpredictable and volatile. As a result, there remains a risk that we will need to enter into similar alternative repayment arrangements in the future with Garuda or other customers, as well as a risk of write-offs and losses if we are ultimately unable to collect amounts due to us.

Our outstanding trade receivables are not covered by credit insurance and we do not require collateral cover for trade receivables from the Government or Government-related entities (although a portion of our trade receivables from unrelated parties are covered by collateral). As of December 31, 2019 and September 30, 2020, we have made a provision for impairment of US\$69.1 million and US\$186.2 million against trade receivables owed to us by our related parties, respectively, and US\$44.4 million and US\$34.3 million of our trade receivables owed to us by our related parties, respectively, have been outstanding for over two years. Although we have procedures to monitor and limit exposure to credit risk on our outstanding accounts receivables for unrelated third party entities, there can be no assurance such procedures will effectively limit our credit risk and avoid losses, which could materially adversely affect our financial condition and results of operations.

Furthermore, because the Government is our sole shareholder and the shareholder of our counterparties, we may have limited courses of action against such counterparties. See “— We are subject to the control of the Government and there is no guarantee that they will always act in our best interests. We also derive certain benefits from being a state-owned entity, and we cannot guarantee that any or all of these benefits will continue.”

Our business is capital intensive, and if we are unable to obtain financing on reasonable terms to fund future capital expenditures, we may not be able to implement our development plans.

We require, and will continue to require, substantial capital expenditures for the acquisition, exploration, development and production of oil, gas and geothermal reserves as well for our downstream business. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Factors Affecting Our Business and Results of Operations — Growth Strategy.” Our actual capital expenditures (including PGN’s) in 2017, 2018, 2019 and in the nine-month period ended

September 30, 2020 were US\$5,535.8 million, US\$4,533.3 million, US\$5,166.0 million, and US\$5,172.5 million, respectively. Our budgeted capital expenditures (including PGN's), which includes amounts budgeted for potential acquisitions and other uncommitted capital expenditures, for 2021 is approximately US\$10,689 million.

Our ability to obtain required capital on commercially acceptable terms or at all is subject to a variety of uncertainties, including limitations on our ability to incur additional debt, including prospective lenders' evaluations of our creditworthiness, restrictions on incurrence of debt in our existing and anticipated credit facilities, prevailing conditions in the capital markets in which we may seek to raise funds, and our future results of operations, financial condition and cash flows. If we do not complete our projects to upgrade our existing oil and gas facilities and infrastructure or our other major development projects that we undertake from time to time as scheduled in our project timelines, or if, following completion of these projects, we do not realize a project's anticipated benefits or experience financial losses, we may be constrained in our ability to secure the capital necessary to undertake or to complete future major development projects, including drilling programs and facility and infrastructure upgrades. There can be no assurance that such financing will be available or sufficient to meet our requirements on commercially acceptable terms, or at all. An inability to access sufficient capital for our operations and capital expenditure requirements could adversely affect our business, financial condition, results of operations or prospects.

We are dependent on key personnel as well as the availability of qualified technical personnel.

We are dependent on certain key senior management employees and, in particular, our employees with specialized technical qualifications or expertise. If we lose the services of any of our key executive officers or employees, it could be very difficult to find, relocate and integrate adequate replacement personnel into our operations in a timely manner, which could seriously harm our operations and the growth of our business. In addition, a significant number of our mid-level and senior-level managers are close to retirement age. There can be no assurance that we will be able to hire a sufficient number of replacement employees or that we will be able to successfully and efficiently train such hires to fill the roles of their predecessors. We are also dependent on attracting qualified technical employees to provide services in relation to certain of our oil, gas and geothermal operations. The media has reported that there are only few people in Indonesia who have sufficient education and training to perform jobs in oil, gas, geothermal fields, refineries and renewable energy in Indonesia. Even if we are able to attract, integrate and retain new qualified technical personnel, it may be on unfavorable terms. If we are unable to retain our current workforce or hire qualified technical personnel in the future, our operations could be adversely affected.

Rising climate change concerns have led and could lead to additional legal and/or regulatory measures which could result in project delays or cancellations, a decrease in demand for fossil fuels, potential litigation and additional compliance obligations.

In December 2015, 195 nations adopted the Paris Agreement, and in October 2016, Indonesia ratified the Paris Agreement through Law No. 16 of 2016 on Ratification of the Paris Agreement to the United Nations Framework Convention on Climate Change. The Paris Agreement aims to limit increases in global temperatures to well below two degrees Celsius. As a result, we expect continued and increased attention to climate change and climate-related issues from all parts of society. This attention has led, and we expect it to continue to lead, to additional regulations designed to reduce greenhouse gas emissions. If our greenhouse gas emissions become subject to such regulation that results in increased compliance costs and operational restrictions, our regulatory burden will increase accordingly. Such regulation could also result in lower revenue and, in the long term, potential impairment of certain assets.

The World Bank has also announced plans to stop financing upstream oil and gas projects beginning in 2019. Similarly, according to press reports, other financial institutions also appear to be

considering limiting their exposure to certain fossil fuel projects. Accordingly, our ability to use financing for future projects may be adversely impacted. This could also adversely impact our potential partners' ability to finance their portion of costs, either through equity or debt.

Further, in some countries around the world, governments and regulators have filed lawsuits seeking to hold fossil fuel companies liable for costs associated with climate change. If we were to lose or settle such a lawsuit, this could have a material adverse effect on our business, financial condition, results of operations or prospects.

Increased regulation of greenhouse gas emissions for new and existing projects or for the products we sell could result in additional costs or financial penalties, delayed or cancelled projects, and/or reduced production and reduced demand for hydrocarbons, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

A substantial portion of our workforce is unionized, and we may face labor disruptions that would interfere with our operations.

A substantial number of our employees are unionized. 19 of our labor unions form a federation (*Federasi Serikat Pekerja Pertamina Bersatu*). The rights and responsibilities under our relationship with the unions are formulated in a collective labor agreement (*Perjanjian Kerja Bersama*) entered into between the unions and our Company. Our latest collective agreement with the unions signed in April 2019 and is valid for two years. We have decided to extend the existing collective labor agreement for one year from its current expiry date. While we believe our Company treats our workforce fairly, there can be no assurance that we will remain on good terms with the unions and we may be affected by strikes, lockouts or other significant work stoppages in the future, any of which could adversely affect our business, results of operations and financial condition.

From time to time, we may be involved in legal, regulatory and other proceedings arising out of our operations, and may incur substantial costs arising therefrom.

From time to time we may be involved in legal disputes in connection with our business operations.

For example, in November 2020, the Supreme Court of Indonesia ruled against PGN and in favor of the Indonesian Directorate General of Tax ("DGT") in respect of 18 of 24 total cases linked to disputed VAT amounts accrued in 2012 (in respect of natural gas sold by PGN) and 2013 (in respect of Rupiah-denominated components of PGN's gas transmission revenue). The Supreme Court decision overturned decisions in PGN's favour from the Tax Court. Of the total amounts of US\$218.5 million and US\$59.8 million in dispute for 2012 and 2013, respectively, the Supreme Court concluded that PGN is liable for unpaid VAT of US\$160.9 million and US\$44.7 million, respectively. The remaining amounts of US\$57.6 million and US\$15.1 million for 2012 and 2013, respectively, remain pending. As of 30 September 2020, management of PGN had recorded a provision for these tax disputes of US\$278.3 million as an adjusting subsequent event. For more information, see "Business — Legal Proceedings". These disputes may cause us to incur substantial costs, delays in our development schedule, and the diversion of resources and management's attention, regardless of the outcome. In July 2019, we experienced a "well kick" in the Java Sea near Karawang (West Java) at an offshore platform operated by PHE ONWJ (as defined herein) where a reactivated well is being developed. Residents of nearby Banten Bay and Thousand Island have filed a class action lawsuit against us and PHE ONWJ in the Central Jakarta District Court for the impact of such oil spill. In August 2018, the court ruled against us and PHE ONWJ. We and PHE ONWJ have appealed the decision and the appeal is pending. An investigation by the Directorate of Special Crime and the West Java Regional Police is also pending. Please see note 50h to our financial statements included elsewhere in this Offering Memorandum for details of additional notable legal cases involving our company.

If we were to fail to win these disputes, we could incur substantial losses and face significant liabilities. Further, even if we were to win these disputes, we may incur substantial costs in mounting our defense. We may also be subject to regulatory action in the course of our operations, which may subject us to administrative proceedings and unfavorable decisions that could result in penalties and/or impact our ability to implement our business and growth plans. As a result of the foregoing, our business, financial condition, results of operations, and prospects could be materially and adversely affected.

Our independent auditors have identified certain aspects of our internal controls and operations relevant to financial reporting for remediation or improvement. If we fail to establish or maintain an effective system of internal controls, we may be unable to accurately report our financial results or prevent fraud.

In connection with the annual audits of our consolidated financial statements as of and for the years ended December 31, 2019, 2018 and 2017, we requested that KAP Purwantono, Sungkoro & Surja (the Indonesian member firm of Ernst & Young Global Limited) provide us, from their assessment of our internal controls to determine the nature, extent and timing of audit procedures for the purpose of expressing an opinion on the consolidated financial statements, with management letters identifying, among other matters, aspects of our internal controls relevant to financial reporting that require remediation or improvement, their implications to our consolidated financial statements, and recommendations for remediation or improvement. As of the date of this Offering Memorandum, we expect a similar letter to be issued in connection with the annual audit of our consolidated financial statements as of and for the year ended December 31, 2020.

The letters issued by KAP Purwantono, Sungkoro & Surja (the Indonesian member firm of Ernst & Young Global Limited) in connection with the annual audits of our consolidated financial statements as of and for the years ended December 31, 2019, 2018 and 2017 (collectively, the “Management Letters”) identified a number of aspects of our internal controls and operations relevant to financial reporting which the independent auditors observed and for which the independent auditors recommended remediation or improvement. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Internal Controls Over Financial Reporting.”

Although the Management Letters did not constitute comprehensive assessments of our internal controls, the observations they contained imply that in certain respects, our internal controls and recordkeeping procedures could be improved, and it is possible that, had we performed a formal assessment of our internal controls over financial reporting or had our independent auditors performed an audit of the effectiveness of our internal controls relevant to financial reporting, additional weaknesses and deficiencies may have been identified.

Among others, the Management Letters identified issues relating to:

- certain aspects of our income tax and value-added tax reconciliation and calculation procedures;
- various accounting policy gaps and inconsistencies, including inaccuracies in the recording of trade transactions, employees loan balance, fixed assets, asset capitalization and obsolete and slow moving inventory;
- our deferred revenue recognition of land and buildings not being in accordance with our accounting guidelines;
- inaccuracies in our estimation, provision, valuation, assessment and reclassification methods;

- lack of regularity in the updates of our customers' and suppliers data in the system;
- inconsistencies between minutes of intercompany reconciliation and matrix;
- various factors contributing to imprecise oil measurement at certain refineries; unreliability of certain oil tank measuring devices and inventory monitoring systems; inadequacies in IT protocols, configurations, controls and usage;
- inaccuracies in recording of deferred revenue and eliminations on consolidation; and
- filing and recordkeeping gaps relating to supporting documents for ownership and control of land assets and material spare parts.

We also requested and received from our independent auditors similar management letters identifying, among other matters, aspects of our internal controls relevant to financial reporting that require remediation or improvement, their implications to our consolidated financial statements, and recommendations for remediation or improvement in connection with the annual audits.

KAP Purwantono, Sungkoro & Surja (the Indonesian member firm of Ernst & Young Global Limited) did not perform an audit or other types of assurance engagements on the effectiveness of internal controls over our financial reporting under auditing standards generally accepted in the United States ("U.S. GAAS") or auditing standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"). They have not assessed the control deficiencies under U.S. GAAS or the auditing standards of the PCAOB and therefore have not evaluated such deficiencies as either significant deficiencies or material weaknesses as defined under U.S. GAAS or the auditing standards of the PCAOB. Certain issues they reported in their management letters are issues related to our internal controls relevant to financial reporting that they identified from their assessment of internal controls to determine the nature, extent and timing of the audit procedures for the purpose of expressing an opinion on the financial statements. The audit procedures were not specifically designed to, and were not required or requested to be specifically able to, detect any ineffectiveness in internal controls relevant to our financial reporting.

Following the identification of the issues raised in the Management Letters, we have taken measures and plan to continue to take measures to remedy these deficiencies. For details of our proposed remedies, see "Management's Discussion and Analysis of Financial Condition and Results of Operations — Internal Controls Over Financial Reporting."

However, the implementation of these measures may not fully address these deficiencies in our internal controls, and we cannot conclude that they have been fully remedied. Our failure to correct these issues or our failure to discover and address any other such issues could result in material misstatements and other inaccuracies in our consolidated financial statements. Any material misstatements may require a restatement of our consolidated financial statements, thereby adversely affecting investors' perception of our financial reporting. As a result, our business, financial condition, results of operations and prospects may be materially and adversely affected. Moreover, ineffective internal controls over financial reporting could significantly hinder our ability to prevent fraud.

Ethical misconduct or breaches of applicable laws by our employees could expose us to criminal and civil penalties and be damaging to our reputation.

Our Code of Conduct applies to all of our management and employees and defines our commitment to business integrity and compliance with applicable legal requirements and high ethical standards. Ethical misconduct or non-compliance with applicable laws and regulations, including

corruption, fraud and competition laws by us or any third party acting on our behalf could expose us and/or our employees to criminal and civil penalties and could be directly or indirectly damaging to our reputation.

We could also be subject to administrative, judicial or arbitration proceedings that could have a material adverse impact on our financial condition and reputation, if we or any third party acting on our behalf violates any other applicable laws or regulations regulating the ethical conduct of businesses, including anti-corruption and anti-bribery legislation.

Disruption to or breaches of our critical information technology (“IT”) services or information security systems could adversely affect our operations.

Our activities depend on the reliability and security of our IT systems. Integrity of our IT systems could be compromised due to, for example, technical failure, cyber-attacks such as viruses or other forms of computer intrusion, power or network outages or natural disasters. Cyber threats are constantly evolving. Attacks are becoming more sophisticated with regularly renewed techniques as the digital transformation amplifies exposure to these cyber threats. The adoption of new technologies, such as the Internet of Things or the migration to the cloud, as well as the evolution of architectures for increasingly interconnected systems, are all areas where cyber security is a very important issue.

As a result, our activities and assets could sustain serious damage, services to clients could be interrupted, material intellectual property could be divulged and, in some cases, personal injury, property damage, environmental harm and regulatory violations could occur, potentially having a material adverse effect on our business, financial condition, results of operations and prospects.

Our future performance depends on the successful adoption and deployment of new technologies and new products.

Technology and innovation are important to our efforts to meet energy demands in a competitive way.

There can be no assurance that we will adopt the right technology in our oil and gas operations or continue to develop marketable products, including crude oil product quality levels that comply with EURO V specifications. We operate in environments where advanced technologies can be utilized, and there is always the possibility of unknown or unforeseeable technological failures or environmental and health effects that could harm our reputation, operations or expose us to litigation or sanctions. A number of our production assets have seen normal depreciation with the passage of time and the emergence of new technology. The associated costs of new technology are sometimes underestimated and technological failures may give rise to delays or disruptions to operations. If we are unable to adopt the right technologies and develop the right products, or if we adopt technologies or introduce products that adversely impact the environment or the health of individuals, there could be a material adverse effect on our earnings, cash flows and financial condition.

In addition, we might face delays or incur additional costs in the adoption and deployment of new technologies and products due to, among other things, our inability to obtain approval from our Company’s stakeholders, including the Government, in a timely manner or at all or due to changes in the organizational or managerial structure of the Government or our other stakeholders.

Changes to IFAS standards for lease accounting may adversely affect our financial results and position.

The Group effectively implemented SFAS 73 for the financial year beginning January 1, 2020, but did not restate comparative figures for the previous reporting period as permitted under the special transitional provisions in the standard.

As of the issuance of the 2020 financial statements, the Group has conducted quantitative impact assessments of most shipping contracts, leasing of transportation services, buildings and some related equipment in production facilities (upstream facilities). Useful assets are measured at the same amount as the lease liability, adjusted for the amount of prepayments or lease payments accrued in respect of the lease recognized in the financial statements as of December 31, 2019. By applying this standard to these contracts, on January 1, 2020, the Group's property, plant, & equipment and oil & gas properties increased by US\$2,167.3 million consisting of the recognition of leases previously recognized as operating leases amounting to US\$2,156.6 million and reclassification of US\$10.7 million prepaid expenses of building leases. In addition, the Group's lease obligations increased by US\$2,156.6 million as of January 1, 2020.

Risks Relating to Our Upstream Operations

Our crude oil, natural gas and geothermal reserve estimates involve a degree of uncertainty and may prove to be incorrect over time or may not accurately reflect actual reserve levels, or even if accurate, technical limitations may prevent us from retrieving these reserves.

Our crude oil, natural gas and geothermal reserves are estimated by us. Estimates of economically recoverable crude oil, natural gas and geothermal reserves are based upon a number of factors and assumptions, such as geological and engineering estimates and judgments (which have inherent uncertainties), the assumed effects of governmental regulation and estimates of future commodity prices and operating costs, all of which may vary considerably from actual results. All such estimates are therefore, to some degree, speculative and classifications of reserves are always subject to a degree of uncertainty. Many of our reserves estimates have not been certified by third parties, and any certifications that have been obtained may not have been updated recently or at all.

The uncertainties inherent in estimating quantities of proved and probable reserves are numerous and many are beyond our control. One of these uncertainties relates to the physical characteristics of crude oil and natural gas fields. These physical characteristics, including the proportion of discovered resources that can ultimately be produced, the rate of production and the costs of developing the fields, are difficult to estimate and, as a result, actual production may be materially different from current estimates of discovered resources. Other factors affecting our discovered resource estimates include new production or drilling activities, field reviews, the addition of new discovered resources from discoveries or extensions of existing fields, the application of improved recovery techniques and changed economic conditions. Failure to replace or maintain discovered resources levels could result in lower future production, cash flows and income. For these reasons, estimates of the economically recoverable crude oil, natural gas and geothermal reserves attributable to any particular group of properties and the classification of such reserves based on risk of recovery, prepared by different engineers or by the same engineers at different times, may vary substantially.

The reserves data in this Offering Memorandum represents estimates we have prepared based on our oil and gas and geothermal resource management system, which contains procedures for classifying and estimating reserves. In this Offering Memorandum, estimates of our oil and gas reserves as of December 31, 2018 and 2017 have been prepared in a manner consistent with PRMS 2007. Beginning in 2019, we began classifying and estimating our reserves in a manner consistent with PRMS 2018. Accordingly, in this Offering Memorandum, estimates of our oil and gas reserves as of December 31, 2019 and September 30, 2020 have been prepared in a manner consistent with PRMS 2018. Investors should note that different reserves reporting systems employ different assumptions, and that our methodologies for classifying reserves and our reserves classifications vary in certain respects from the methodologies and classifications used by oil and gas companies subject to the reporting obligations of the SEC. As a result, because of the impact of such assumptions or differences in the methodologies of resource management systems, identical raw data can produce varying estimates of reserves. For more information, see "Presentation of Financial and Other Information — Oil and Gas Reserves."

Estimates of reserves are largely dependent on the quantity and quality of technical and economic data and, in particular, on the interpretation of data obtained from drilling, testing and production and may prove to be incorrect over time. An estimate of reserves is based in part on a field's long-term development plan, and reserves are classified or adjusted and re-classified as contingent where a long-term development plan is not available or up-to-date.

A variety of factors that are beyond our control could require estimates of our reserves to be adjusted downward in the future, or cause our actual production to be lower than its currently reported proved reserves indicate. Such factors include:

- a prolonged period of low prices of oil or gas, making reserves no longer economically viable to exploit and therefore not classifiable as proved;
- an increase in the price of oil or gas, which may reduce the reserves to which we may be entitled under our contractual terms and arrangements with third parties;
- changes in tax rules and other regulations that make reserves no longer economically viable to exploit; and
- the actual production performance of our oil and gas reserves.

Any downward adjustment to our reserves estimates could indicate lower future production amounts, which could adversely affect our financial condition, including our operating income and cash flow.

Estimates of proved and probable reserves that may be developed and produced in the future are frequently based upon volumetric calculations and by analogy to similar types of reservoirs, rather than upon actual production history. Subsequent evaluation of the same reservoirs based upon production history may result in revisions to the estimated proved and probable reserves. No assurance can be given that the reserve estimates presented in this Offering Memorandum will be recovered at the levels presented.

The quantities of crude oil, natural gas and geothermal energy that are ultimately recovered could be materially different from our reserve estimates, and downward revisions or reclassifications of our estimates could affect our results of operations and business plan. Published reserves estimates may also be subject to correction due to changes in published rules and guidance. We can give no assurance that the reserves estimates upon which we have made investment decisions accurately reflect actual reserve levels, or even if accurate, that technical limitations will not prevent us from retrieving these reserves.

For a discussion of how we estimate our reserves, including how we define “proved reserves” and “probable reserves” and some differences between our reporting system and the SEC regulations, see “Business — Pertamina Upstream Business — Reserves.”

We are dependent on our ability to develop existing reserves, replace existing reserves and develop additional reserves.

We must continually find, acquire, explore for and develop new reserves to replace those produced and sold. We face challenges in sustaining production due to the maturation and depletion of oil and gas properties. Therefore, our future success is dependent upon our ability to develop our reserves and

explore, develop and produce additional reserves from existing blocks, to explore and develop alternative sources of fuel such as shale gas and coal bed methane, and to enhance our oil reserves through oil recovery activities or new acquisitions in order to maintain or increase our current levels of production. See “Business — Pertamina Upstream Business — Exploration and Development” for further information on our exploration and development plans and oil recovery activities.

Drilling activities are subject to numerous risks, including the risk that no commercially viable oil or natural gas accumulations will be discovered. The decision to explore or develop a property will depend in part on geophysical and geological analyses and engineering studies, the results of which may be inconclusive or subject to varying interpretations. The cost of drilling, well completion (which includes post-drilling activities such as installing production equipment) and operating wells is often uncertain. Drilling may be curtailed, delayed or cancelled as a result of many factors, including weather conditions, Government requirements and contractual conditions, shortages of or delays in obtaining equipment, reductions in product prices or limitations in the market for products. Wells may be shut in for, among other things, lack of a market or due to inadequacy or unavailability of pipeline or storage capacity. Geological uncertainties and unusual or unexpected formations and pressures may result in dry holes and wells that are productive but do not produce sufficient revenues to return a profit after drilling, operating and other costs. Completion of a well does not assure a profit on the investment or the recovery of drilling, completion or operating costs.

We plan to increase our activity in exploring and developing our geothermal reserves. The development of such projects is also subject to various uncertainties, such as potential dry holes, flow-constrained wells, and uncontrolled releases of pressure and temperature decline. In addition, the high temperature and high pressure in geothermal energy resources requires special resource management and monitoring. The viability of geothermal projects depends on different factors directly related to the geothermal resource, such as the heat content (reflected by its temperature and pressure) of the geothermal resource, the lifetime of the projects and operational factors relating to the extraction of geothermal fluids. There is inherent uncertainty and unpredictability, and associated risks, in these types of projects. Adverse developments could delay project timelines and adversely affect us.

In addition, we face substantial competition in the search for and acquisition of reserves and such searches and acquisitions require substantial investment. The possibility of finding or being able to acquire such additional reserves is uncertain. If we are unable to find or acquire and develop additional reserves, we will not be able to sustain our production and grow our business, which would have a material adverse effect on our financial condition and results of operation.

Our upstream operations and development plans may be adversely affected by competition.

As is the case with all international oil, gas and geothermal companies, we face intense competition in our business activities, both domestically and internationally. As a result of the Government’s policy to increase competition in the Indonesian oil and gas sector and in connection with our plans to continue to expand internationally, we expect to face increasing competition with much larger, well-established companies with substantially greater financial, human, technical and other resources. These competitors have strong market power through a combination of different factors, such as diversification and reduction of risk, well-established infrastructure, financial strength, exploitation of benefits of integration and economic scale, strengthening of their positions in the global market and their relations with the governments of oil and gas producing countries.

In addition, other competitive sources may come into operation in the future, and the development of unconventional resources and alternative energy sources may create competition for the conventional Indonesian oil and gas industry. In particular, the growth of the electric vehicle industry may adversely affect demand for our products in the long term.

Many of our competitors have greater financial capacity to fund bids for or acquisitions of oil and gas properties and conduct oil and gas exploration, development and production than us, and may be able to identify, bid for and purchase a greater number of properties and prospects, including operatorships and licenses, than our financial or human resources permit. Accordingly, we expect competition in the oil and gas sector to increase, which could have a material adverse effect on our business, financial condition, results of operations and prospects. See “Business — Competition.”

Our exploration and production activities in foreign countries subject us to unforeseen risks.

To increase our oil and gas reserves and diversify our exploration and production operations, we have expanded our investment base to focus on oil and gas exploration and production activities in a number of foreign countries in Southeast Asia, the Middle East and Africa. In addition, we expect to continue to expand our international operations in the future. These international operations are subject to special risks that can materially affect our results of operations. These risks include:

- unsettled political conditions, war, civil unrest, and hostilities in some gas or petroleum producing and consuming countries and regions where we operate or seek to operate, such as in the Middle East and Africa;
- piracy in international waters;
- undeveloped or unexpected developments in legal and regulatory systems;
- exposure to economic instability in foreign markets;
- imposition or increase of withholding and other taxes on remittances by foreign subsidiaries;
- imposition or increase of investment and other restrictions by foreign governments;
- fluctuations and changes in currency exchange rates;
- governmental action such as expropriation of assets, general legislative and regulatory environment, and exchange controls;
- the effects of the COVID-19 pandemic; and
- changes in global trade policies such as trade restrictions and embargoes imposed by the United States and other countries.

Furthermore, investing in or transactions otherwise relating to certain countries (including Sudan and Iran) could also result in adverse consequences to us under existing or future trade or investment sanctions. The effect of any such sanctions would depend on their nature, but if sanctions were imposed on us, or one of our subsidiaries or associated companies, it could affect the market for the securities of that company or impair our ability to access the U.S. capital markets. See “— Risks Relating to Our Company — Our activities in or in connection with certain countries could lead to U.S. Sanctions.”

In addition, antitrust, anti-bribery, anti-corruption, data protection and other laws apply to us and our joint ventures and associates in the vast majority of countries in which we operate. Failure to comply with these laws could expose us to regulatory investigations which may result in fines and penalties. Violation of these laws is also a criminal offense in certain countries, and individuals may either be imprisoned or fined. Furthermore, any violation by us of applicable and relevant international sanctions, anti-bribery and anti-corruption legislation could have a material adverse effect on our reputation, business, financial condition, results of operation or prospects.

We cannot predict the effect that the current conditions affecting various foreign economies or future changes in economic or political conditions abroad could have on the economics of conducting exploration and production activities in these markets. Any of the foregoing factors may have a material adverse effect on our international operations and, therefore, could adversely affect our business, financial condition, results of operations or prospects.

All of our current production sharing arrangements and cooperation contracts were entered into with BPMIGAS, the predecessor to SKK MIGAS. Although SKK MIGAS has assumed the functions and responsibilities of BPMIGAS and the Indonesian Constitutional Court has provided that all agreements entered into by BPMIGAS should remain valid until their respective expiry dates, our production sharing arrangements and contracts were not formally assigned or novated by legal instrument to SKK MIGAS from BPMIGAS, leading to potential uncertainty as to their legal validity and enforceability.

SKK MIGAS is an interim body established by the President of Indonesia to replace its predecessor, BPMIGAS, following the dissolution of BPMIGAS by a decision of the Indonesian Constitutional Court on November 13, 2012 and pending the issuance of a new oil and gas law. See “Indonesian Regulatory Framework — Oil and Gas Regulation — Upstream” for more information relating to the dissolution of BPMIGAS. All of our current production sharing arrangements and cooperation contracts were entered into with BPMIGAS prior to its dissolution by the Indonesian Constitutional Court. Although SKK MIGAS has assumed the functions and responsibilities of BPMIGAS and the Indonesian Constitutional Court has provided that all agreements entered into by BPMIGAS should remain valid until their respective expiry dates, our production sharing arrangements and contracts have not been formally assigned or novated by legal instrument to SKK MIGAS from BPMIGAS, leading to potential uncertainty as to their legal validity and enforceability. While the assumption by SKK MIGAS of BPMIGAS’s obligations under our production sharing arrangements and cooperation contracts is not, as far as we are aware, subject to any challenge before the Indonesian Constitutional Court or any other Indonesian court, there can be no assurance that we will continue to be able to assert our rights under our production sharing arrangements (including gross split schemes) and cooperation contracts.

Failure or delay by SKK MIGAS, our counterparties or by us to comply with the terms of or renew our production sharing arrangements and cooperation contracts, and the failure to receive SKK MIGAS and other government approvals on a timely basis, could adversely affect us.

SKK MIGAS regulates Indonesia’s petroleum resources on behalf of the Government. SKK MIGAS enters (and prior to it, BPMIGAS had entered) into production sharing arrangements and other forms of cooperation contracts with energy companies (including us and other domestic and foreign private companies) on behalf of the Government, whereby such companies explore, develop and market oil and gas in specified areas in exchange for a percentage interest in the production from the blocks in the applicable contract area. All our reserves in Indonesia are attributable to production sharing arrangements (including gross split schemes) or cooperation contracts.

Our production sharing arrangements (including gross split schemes) and cooperation contracts contain requirements regarding quality of service, capital expenditures, legal status of the contractors

and assets, restrictions on the transfer and encumbrance of assets and other restrictions. Any failure to comply with the terms of these production sharing arrangements or cooperation contracts, by us or any private counterparty, could result, under certain circumstances, in the termination of the relevant production sharing arrangement or cooperation contract, which could adversely affect our business, financial condition, results of operations and prospects.

In addition, SKK MIGAS approval is required for substantially all material activities undertaken under these agreements, including exploration, development, production, drilling and other operations, sale of oil or natural gas and the hiring or termination of personnel. The failure to obtain such approvals, or delays in obtaining such approvals, or conditions imposed in connection with the grant of such approvals, could adversely affect us.

Production sharing arrangements (including gross split schemes) and cooperation contracts are valid for a specified period and will need to be renewed following the expiry of such period. We negotiate with SKK MIGAS to renew or extend such arrangements. However, there can be no assurance that we will be able to negotiate new production sharing arrangements or cooperation contracts with SKK MIGAS, or concession or other arrangements with other authorities, when our existing arrangements expire, or that any new arrangements will be on satisfactory terms.

Our business and results of operations are substantially dependent on our relationship with SKK MIGAS and our counterparties, and any adverse change to these relationships could adversely affect our business, financial condition, results of operations or prospects.

We rely on infrastructure and equipment provided by third parties.

As an oil, gas and geothermal exploration and production company, some of the infrastructure that we use to transport oil, gas and geothermal energy to our customers is not owned by us. Such infrastructure, which includes tankers, pipelines and storage tanks, is leased from third-party providers, and we have limited or no control over the quality and availability of this infrastructure. As part of our business, we also have to assume some of the risk of damage or loss of the construction services and equipment provided to us by third-party contractors (such as drilling rigs, seismic acquisition vessels, service boats, tankers and floating storage and offloading vessels). Our development projects have in the past also required us to commit to long-term leases and other financial arrangements.

Limited oil and gas infrastructure in certain parts of Indonesia has to some extent restricted our oil and gas businesses, including our marketing and trading segments. There can be no assurance as to when or if infrastructure capacity will be expanded in areas where it is currently lacking. Construction and upgrading of infrastructure depends on many factors, many of which are beyond our control, such as government funding, costs of land acquisition, national and local government approvals and timely completion of construction.

In addition, we compete with other oil, gas and geothermal companies for equipment and other resources such as oil and gas drilling rigs, distribution vessels, helicopters and aircraft, which are a limited resource given the competitive market in the Indonesian oil and gas sector. The increased demand for such equipment has resulted in increases in the prices that we have had to pay in order to secure access to such equipment and other resources. If we are unable to obtain the equipment that we need to carry out our development plans with respect to our production assets, we may have to delay or restructure our development plans, which may have an adverse effect on our ability to commercialize our oil, gas and geothermal reserves on a timely basis. Further, depending on the complexity of our development projects, the competitive dynamics of the market, movements in prices of raw materials such as steel, and the availability and prices of contractors and equipment, we may have to pay significantly more than we currently anticipate in order to implement our development plans for our blocks.

From time to time, our production and delivery infrastructure may be interrupted due to logistical complications outside our control, which would adversely affect our ability to sell our products until the problem is corrected or until alternative means can be found. For example, in August 2009, a portion of our Tempino-Plaju pipeline caught fire and, in March 2018, an incident involving one of our undersea pipelines from our Lawe-Lawe Terminal in North Penajam Paser to our refinery facility in Balikpapan resulted in a large oil spill in Balikpapan Bay in East Kalimantan, in response to which we undertook various environmental mitigation and recovery efforts and compensated the affected community. The use of alternative means of crude oil or gas transportation and distribution, if available, would likely result in increased costs, and could adversely affect our business, financial condition, results of operations or prospects.

Risks Relating to Our Midstream Operations

We may not be able to secure additional supplies of natural gas to meet expected demand.

Our natural gas distribution business, which we primarily operate through PGN, is dependent on our ability to obtain natural gas supplies. PGN sources natural gas from PEP and has also entered into long-term natural gas sale and purchase agreements with third parties. The demand and supply imbalance can vary depending on regional markets within Indonesia. We have experienced natural gas undersupply issues in the past, particularly in West Java where a majority of our industrial and commercial customers are located. There can be no assurance that we will be able to put in place the necessary infrastructure and supply contracts to source sufficient supplies of natural gas to service our existing distribution customers, ensure continuity of supply to such customers or expand our natural gas distribution business. If we are unable to source natural gas in volumes sufficient to cover our customers' demand, our business, financial condition and results of operations could be materially and adversely affected.

Further, we seek to expand our transmission and distribution networks as well as new LNG receiving and regasification terminal to increase access to new natural gas fields and new market areas. Nonetheless, there can be no assurance that we will be able to put in place the necessary infrastructure and supply contracts to source sufficient supplies of natural gas to service our existing distribution customers, ensure continuity of supply to such customers or implement our growth strategy. If we are unable to source natural gas in volumes sufficient to cover our customers' demand, our business, financial condition and results of operations could be materially and adversely affected.

Our transmission business is dependent on a limited number of significant customers.

We transmit natural gas to a limited number of shippers and off-takers primarily through one of PGN's subsidiaries, PT Transgasindo Indonesia. We enter into gas transportation agreements with a limited number of major customers, and the volume of natural gas we transport is significantly impacted by the off-take volume demand from their respective downstream customers or offtakers. The loss, delay or cancellation of our gas transportation agreements, or renegotiation of terms thereof, as a result of commercial or management decisions or disputes between their respective customers or offtakers and our main customers or offtakers or us, could have a material adverse effect on our business. In addition, if any of our main customers defaults, refuses or is unable to perform its obligations under one of the relevant gas transportation agreements, as a result of financial difficulties or bankruptcy, for instance, our business, financial condition and results of operations could be materially adversely affected.

There is no assurance that we will be able to extend or replace our key natural gas transportation and sale agreements when they expire or that the terms of any renegotiated contracts will be as favorable as the existing contracts. Our ability to extend and replace such agreements could be

adversely affected by factors that we cannot control, such as applicable gas transmission and distribution regulations in Indonesia, international and domestic oil and gas prices, timing, volume and location of new market demand, competition from new entrants and/or new energy sources, supply of natural gas in Indonesia, and demand for natural gas in the markets that we serve. If we are unable to renew, extend or replace these agreements or if we renew them on less favorable terms, our cash flows, financial condition and results of operations may be negatively affected.

Risks Relating to Our Downstream Operations

We compete with other oil and gas companies in connection with our downstream operations and for the PSO mandate.

The refining and marketing industry is highly competitive with respect to both feedstock supply and refined product markets. We do not produce all of our crude oil feedstocks and compete with many companies for available supplies of crude oil and other feedstocks. Competitors that have a higher percentage of feedstock from their own production, more complex refineries or more diverse operations may be better able than us to withstand volatile industry conditions, including shortages of crude oil or refined petroleum products, volatility in prices for crude oil or refined petroleum products or intense price competition at the wholesale level. As a result of the Government's policy to increase competition in the Indonesian oil and gas sector, we also expect to come into increasing competition with respect to the distribution of our refined products, including potentially with much larger, well-established companies with substantially greater financial, human, technical and other resources. For example, the Government announced in March 2019 that it has granted a temporary permit to a private company to set up operations to sell aviation fuel, a product that we have previously been the sole provider of in Indonesia. Competition could cause price reductions, reduce our margins or result in loss of market share for our products and services. This may adversely affect our results of operations. See "Business — Competition."

We participate in an annual tender process for the PSO mandate and have been granted a PSO mandate in each of the last three years. In 2018 and 2019 and in the nine months ended September, 2020, we generated 9.7%, 8.9% and 8.3% of our revenue, respectively, from the distribution of subsidized fuel and LPG. The decrease in 2019 was due to an upward adjustment to the subsidy reimbursement formula for LPG. If the Government reduces our quota of subsidized fuel under the PSO mandate or withdraws the PSO mandate entirely, we may lose market share in the downstream sector, which could lead to a decrease in the revenue which we generate from the distribution of subsidized fuel and LPG, which may materially and adversely affect our business, financial condition, results of operations and prospects. See "Business — Pertamina Downstream Business — PSO" for more information on our PSO mandate.

We may not be able to pass on increases in costs of our raw materials for products distributed under our PSO or other mandates from the Government or where the prices of such products are fixed at the request of the Government.

We consume large amounts of crude oil and other raw materials to manufacture our refined products and petrochemical products.

We are currently mandated by the Government under the PSO mandate to distribute fuel domestically, and we receive subsidy reimbursements from the Government on the basis of compensation formulae for the distribution of certain of our fuel products. The subsidy reimbursement amount for automotive diesel oil is subject to a fixed amount set by the Government. The subsidy reimbursement formulas and the margins may not be revised and as the regulated retail prices of subsidized fuel are fixed by the Government, we are not able to increase the sale prices of the subsidized fuel which we distribute.

In addition, in determining the subsidy reimbursements payable to us in any given month for the distribution of subsidized fuel, the Government's policy is to use MOPS for certain products from the month immediately prior to the month to which the subsidy reimbursement claim relates. This lag in the value of MOPS used in the compensation formula may result in the subsidy reimbursements we receive under our PSO mandate being insufficient to cover our costs of distribution, including our costs of our raw materials, in months where there is a significant increase in crude oil prices from the previous month. As a result, we may not recover the increased costs of distributing subsidized fuel under our PSO mandate.

While we try to match the sales prices of our non-subsidized fuel and petrochemical products with corresponding raw material price increases, our ability to pass on cost increases to our customers is dependent on market conditions, commercial considerations and Government regulations. Such commercial considerations include requests from the Government to contract for the sale and purchase of LPG in 12kg cylinders and compressed natural gas ("CNG"), which deprives us of the ability to pass on cost increases which spot prices offer. There may be periods during which increases in costs of raw materials, and hence our costs of distribution, are not fully recovered by us due to an inability to increase the sale prices of our products, which may result in negative margins on distribution and may have a material adverse effect on our financial condition, results of operations or cash flows.

Because the regulated price and subsidy reimbursement formulas that affect our results of operations in respect of the PSO mandate is fixed by the Government and beyond our control, we cannot assure you that losses will not occur in the current year or for any other future period. This may have a material adverse effect on our financial condition, results of operations or cash flows. In 2019 and the nine-month period ended September, 2020, we incurred losses on distribution of automotive diesel oil (gas oil 0,25% sulfur) fuel, kerosene and motor gasoline (RON 88: (i) \$1,299.0 million in 2017, (ii) \$363.2 million in 2019, and (iii) \$649.3 million in September 2020. These losses were primarily due to higher costs from rising crude prices. The higher costs could not be passed on to consumers due to the retail price ceilings on subsidized fuel products, nor could they be fully covered by subsidy reimbursements that were set based on lower MOPS from preceding months. See also "Management's Discussion and Analysis of Financial Condition and Results of Operations — Factors Affecting Our Business and Results of Operations — PSO Mandate" and "Indonesian Regulatory Framework."

The Government also fixes the prices at which we can purchase and sell CNG. As the price set by the Government for CNG sold to us is denominated in U.S. dollars while the price set by the Government for CNG sold by us is denominated in Rupiah, fluctuations in the exchange rate between the U.S. dollar and the Rupiah affect our profit margin from our CNG sales. An adverse change in the value of the Rupiah against the U.S. dollar would decrease our profit margin from our CNG sales, or even result in us making a loss from our CNG sales. The Government may also revise the fixed purchase and sale prices for CNG from time to time and there can be no assurance that we will not incur a loss in our distribution of CNG as a result of any such revisions. To the extent and as long as we are mandated to distribute CNG, we may not be able to cease this activity even if we incur losses in doing so.

If the growth in our production of crude oil lags behind the growth in demand for our refined products and we will be required to source an increasing amount of crude oil and refined products from outside providers.

Our refineries consume very large amounts of crude oil. In 2018, 2019 and 2020, approximately 38%, 38% and 43% respectively, of the crude oil used in our refinery business was sourced from outside suppliers, respectively, while the balance was provided from our own production of crude oil and the Government's share of crude oil produced. This increase of crude buying primarily comprised domestic crude purchases and is primarily due to the implementation of Minister of Energy and

Mineral Resources Regulation Number 42/2018 in September 2018, which requires us to prioritize the purchase of our crude oil supply from domestic sources. We also import refined products to supplement the refined products which we produce and to meet domestic demand for such products. To the extent that the growth in our production of crude oil lags behind the growth in demand for our refined products, we will be increasingly dependent on third parties for continued access to crude oil and refined products at appropriate prices. If we are unable to obtain adequate crude oil or refined product volumes or are only able to obtain such volumes at unfavorable prices, our margins and other results of operations could be materially adversely affected.

A substantial part of our revenues is derived from the provision of subsidized fuel products.

We are engaged in the provision of fuel products to the public in Indonesia under our PSO mandate, including certain grades of motor gasoline, automotive diesel oil, kerosene and LPG in 3kg cylinders. We receive subsidy reimbursements under our PSO mandate for automotive diesel oil, kerosene and LPG in 3kg cylinders that we sell at regulated retail prices. The Government has historically subsidized the cost of these products and in 2018 and 2019 and in the nine months ended September 30, 2020, 9.7%, 8.9%, and 8.2% of our total sales and other operating revenues, respectively, came from such subsidy reimbursements. The decrease in 2019 was due to an upward adjustment to the subsidy reimbursement formula for LPG.

As the regulated retail price for subsidized fuel has historically been lower than our costs to distribute such fuel, we have relied on Government subsidies to partially cover the gap between our costs and revenues. In the past, the manner of calculating and disbursing the PSO subsidy has been amended from time to time. The subsidy payment may be further amended in a manner that is not favorable to us, in addition, future subsidy payments may not be disbursed in a timely manner or at all. The subsidy level itself is subject to adjustments periodically and may be re-evaluated by the Government by considering the realization of numerous factors that may affect the supply and distribution of fuel. Each of these outcomes could have a material and adverse effect on our business, financial condition, results of operations, and prospects.

Efforts by the Government to reduce such subsidies, and the related expenditures has historically been a politically sensitive issue. See “— Risks Relating to Indonesia — Political and social instability in Indonesia may materially and adversely affect us” for a description of instances of public unrest arising from increases in fuel prices and reductions in fuel subsidies. There can be no assurance that Government’s current policies relating to fuel subsidies will not be subject to significant changes or influence from public opposition to decreased subsidies or relaxed price controls. Any change in the Government’s economic and development policies in these or other respects could have a material and adverse effect on our business, financial condition, results of operations, and prospects.

Due to the limited natural gas transmission and distribution infrastructure, failure by us to develop markets for the sale of our natural gas would have an adverse effect on our results of operations.

The limited natural gas transmission and distribution infrastructure within Indonesia and between Indonesia and other countries has restricted consumption of Indonesian natural gas. There can be no assurance as to when or if a significant natural gas transmission and distribution system will be constructed. Construction of transmission and distribution pipelines and other infrastructure depends on many factors, many of which are beyond our control, such as government funding, costs of land acquisition, national and local government approvals and timely completion of construction.

Our ability to sustain the planned expansion of our natural gas exploration and production business by continuously finding, developing and maintaining markets for the sale of our natural gas will be

subject to many factors, including the ability to obtain funding, regulatory approvals, competition from other regional and international gas producers, downstream market reforms such as reductions of fuel subsidies that could trigger public opposition, environmental regulations, and other operating or commercial risks, some of which are beyond our control. Failure by us to find, develop and maintain markets for the sale of our natural gas would have a material adverse effect on our natural gas business and our business, financial condition, results of operations, and prospects.

Repairs, maintenance and turnarounds at our refineries could affect our results of operations. In addition, due to volatility in the cost of raw materials and finished products in our refining businesses, our regular repair and maintenance operations could occur at an inopportune time when we will be unable to capitalize on high refining margins. The implementation of our plan to comprehensively upgrade our refineries may also limit our existing production during the period in which such upgrading works are being carried out.

We need to carry out regular maintenance at our refineries. Our refineries are typically shut down every three to four years to make necessary repairs, perform preventative and predictive maintenance and implement capital improvements. Such events where entire process units are taken offstream for revamp or renewal (“turnarounds”) vary in duration depending on the complexity of the refinery and the work to be performed, but typically last between approximately three to eight weeks. Portions of our refineries may be shut down for shorter periods to perform more limited maintenance and capital improvements. Although we attempt to schedule routine maintenance or overhauls during periods in which our refining margins are low, it is possible that our refineries may be shut down during periods of high margins as a result of, for example, the volatility and unpredictability of refining margins, unscheduled breakdowns, or scheduled turnarounds taking longer to complete than expected.

As our refineries have been in operation for more than 25 years and deploy aging technology, we have adopted a comprehensive plan to upgrade our refineries with the aim to significantly increase their production capacity and complexity. The upgrading of our refineries may require us to shut down critical aspects of our refinery operations for extended periods of time, which may reduce our existing production capacity during the period in which such upgrading works are being carried out. Our upgrading works may also result in unexpected complications to our existing refinery operations, take longer to complete than we expect or not produce the desired increase in the production capacity and complexity of our refineries, all of which would negatively affect our results of operation.

We are dependent on certain key customers which are Government-owned entities and the loss of, or a significant reduction in, purchases by such customers could adversely affect our business. While we aim to diversify our sales to such customers beyond oil products and to increase our sales to non-Government-owned customers, there can be no assurance that we will be successful.

We are dependent on certain key Government-related entities, for a significant portion of our revenues and profits. In 2017, 2018 and 2019 and in the nine months ended September 30, 2020, sales to Government related entities accounted for 8.9%, 13.9%, 12.4% and 16.4%, respectively, of our total revenue for the year/period. The loss of, or the reduction, delay or cancellation of supply contracts from these customers as a result of their commercial or management decisions or disputes between us and such customers could have a material adverse effect on our business. For instance, PLN has in recent years gradually reduced and is expected to continue to reduce its purchases of fuel from us in favor of coal and gas as sources of energy. If any of our Government related entities becomes bankrupt or insolvent, we may also lose some or all of our business from that entity and some of our receivables may be written off, adversely impacting our income and financial condition. Our business is also dependent on the decisions and actions of the Government acting as a shareholder of a Government related entities. The occurrence of any of these events or factors might result in the delay or termination of a project or the loss of a key customer. Because of our current customer portfolio, which

includes large Government related entities and government institutions, in the event of major negative externalities, we may have difficulty securing comparable levels of business from non-Government related entities to offset any loss of revenue and profits.

We aim to diversify our sales to our key Government-owned customers beyond oil products to include natural gas and geothermal energy as well and also to increase our sales to non-Government-owned customers to diversify our key customer base, however, there can be no assurance that we will be successful in doing so.

We depend on chartered vessels to distribute our cargo, which subjects us to risks such as potential disruption and/or delay of our sales.

We rely on large tankers and small craft for island-to-island delivery of crude oil and refined products within Indonesia. For a description of our shipping operations, see “Business — Shipping.” As of September 30, 2020, approximately 75.3% of deliveries were made by chartered vessels while approximately 24.7% of deliveries were made by our own vessels. As a result, our costs of distribution depend on the market price for chartering vessels. We generally enter into long-term charter arrangements for vessels. However, we may also rely on the spot charter market, in certain circumstances, to charter vessels to carry specified cargos for single trips. There can be no assurance that such we will be able to successfully implement our plans to increase our fleet of owned vessels and reduce our dependence on chartered vessels, and, accordingly, our reliance on chartered vessels may continue in the future. Volatility and any significant increases in charter rates may have a material adverse effect on our distribution costs and results of operations.

Risks Relating to the Oil, Gas and Geothermal Industry

We are subject to similar industry risks as other oil, gas and geothermal companies operating in Indonesia. Our ability to maintain and develop our business and revenues will be affected by, among other things, the prevailing world prices for oil and Indonesian domestic energy prices for gas as well as other factors, including those discussed below.

The interpretation and application of the Oil and Gas Law of 2001 and the anticipated enactment of a new oil and gas law is uncertain and may adversely affect our business, financial condition, results of operations and prospects.

Indonesia’s Oil and Gas Law of 2001 went into effect on November 23, 2001. See “Indonesian Regulatory Framework.” This law sets forth general principles to be further implemented through a series of Government regulations, presidential decrees and ministerial decrees, some of which have not yet been promulgated. In general, the provisions of the law are broad, and few sources of interpretive guidance are available. A number of implementing regulations to the Oil and Gas Law of 2001 have been enacted, among others, relating to the formation of SKK MIGAS and its predecessor BPMIGAS (the upstream executive body), and BPH MIGAS (the downstream regulatory body), our conversion into a limited liability state-owned company, and the upstream and downstream industries (including matters with respect to business licensing). SKK MIGAS and BPH MIGAS have enacted some regulations and guidelines that specifically regulate business activities in these sectors. Implementing regulations have also been issued in respect of, among others, domestic market obligations, field development and reserve production, guidance, procedures, contract terms, designation and tender of working areas, contract amendment and renewal, contractual structures for selling the Government’s share of oil and gas and relinquishment of working areas. These regulations are new and subject to interpretation by the regulatory authorities. Pending clear instances of the application of such regulations, it is uncertain how such regulations will affect us.

The uncertainty surrounding the Oil and Gas Law of 2001 has increased the risks, and may result in further increases of the costs, of conducting oil and gas business in Indonesia. For example, the Government enacted Government Regulation No. 55 of 2009 as the second amendment to Government Regulation No. 35 of 2004 on Upstream Oil and Gas Business Activities, which requires contractors to fulfill domestic gas and oil demand by delivering 25% of their share of oil and gas production to the local market, which is known as the domestic market obligations (“DMO”). A gas field discovery must be notified to the Ministry of Energy and Mineral Resources. If the discovery will be produced commercially, the Ministry of Energy and Mineral Resources will allow domestic gas consumers to deliver their gas demands to them in writing within one year from the date the gas field is discovered. Within three months of the expiry of the one year period, the Ministry of Energy and Mineral Resources will notify the contractor of the domestic gas demand condition. If domestic gas demand exists, the contractor shall commence negotiations with the domestic consumer. The contractor may only sell its gas to the international market if there is no domestic gas demand or the contractor fails to reach an agreement with domestic consumer. Prior to selling its gas to international market, the contractor must obtain an export approval from the Minister of Trade, which is based on a recommendation from the Directorate General of Oil and Gas of the Ministry of Energy and Mineral Resources (“DGOG”).

Under the Oil and Gas Law of 2001, new cooperation contracts are subject to a broader Government approval process. Negotiation of cooperation contract terms with potential contractors is handled primarily by SKK MIGAS. The relevant work area is awarded by either competitive tender or direct award, and the Indonesian Parliament must be notified of the production sharing arrangements entered into under such cooperation contract. The Government may implement policies regarding oil and gas exploration and production that differ from previous policies.

Not all of the implementing regulations to the Oil and Gas Law of 2001 have been issued and some have only been recently enacted. Accordingly, the full impact of the Oil and Gas Law of 2001, the related implementing regulations and any change in Indonesian oil and gas laws on our financial and operational status cannot be determined at this time. Furthermore, it is anticipated that a new oil and gas law will be enacted in the future, the substance, form and timing of which is uncertain. To the extent the new law or the implementing regulations to the Oil and Gas Law of 2001 or their implementation or interpretation by Indonesian regulatory authorities, courts or SKK MIGAS and BPH MIGAS are adverse to us, our business, financial condition, results of operations and prospects could be materially and adversely affected.

Our compliance with or breach of environmental regulations in Indonesia and in the countries in which we operate could materially and adversely affect our business, financial condition, results of operations and prospects.

We are subject to various environmental laws and regulations concerning land use, air emissions, water discharge, waste materials and abandonment of our wells and other operating structures in connection with the design and operation of our upstream and downstream oil, gas and geothermal facilities in Indonesia and other countries in which we operate, transact business or have interests. Numerous government agencies and departments issue environmental rules and regulations, which are often difficult and costly to comply with and which carry substantial penalties for non-compliance.

We cannot assure you that we will not be in breach of any applicable environmental laws and regulations, be subject to stricter enforcement or interpretation of existing environmental laws and regulations, or that such laws and regulations will not become more stringent in the future. It is possible that any breach or such stricter enforcement may give rise to liabilities which we may have to incur potentially significant costs to remedy arising from the discharge of oil, natural gas or other pollutants into the air, soil or water. For example, in March 2018, an incident involving one of our undersea pipelines from our Lawe-Lawe Terminal in North Penajam Paser to our refinery facility in

Balikpapan resulted in a large oil spill in Balikpapan Bay in East Kalimantan, which required us to undertake various environmental mitigation and recovery efforts and to pay compensation fees to the affected community. In August 2018, we also experienced an oil spill at our fuel terminal in Wayame, which gave rise to additional cleanup costs. Similar events may occur in the future and expose us to similar liabilities. In July 2019, we experienced a “well kick” in the Java Sea near Karawang (West Java) at an offshore platform operated by PHE ONWJ (as defined herein) where we are developing a reactivated well. Residents of nearby Banten Bay and Thousand Island have filed a class action lawsuit against us and PHE ONWJ in the Central Jakarta District Court for the impact of such oil spill. In August 2018, the court ruled against us and PHE ONWJ. We and PHE ONWJ have appealed the decision and the appeal is pending. An investigation by the Directorate of Special Crime and the West Java Regional Police is also pending. We are implementing responsive environmental mitigation measures and undertaking recovery efforts, which are estimated to be completed in 2021. Evaluation of our mitigation and recovery efforts will continue until 2023 in coordination with the Government and other key stakeholders. Such liabilities may have an adverse effect on our business, financial condition, results of operations and prospects.

The environmental management systems that apply to us are EMS ISO 14001 and Environmental Compliance Performance Evaluation Program (*Program Penilaian Peringkat Kinerja Perusahaan dalam Pengelolaan lingkungan*, or “PROPER”) administered by the Ministry of Environment and Forestry. The Ministry of Environment and Forestry in Indonesia rates companies in accordance with PROPER, which consists of a series of five ratings ranging from “gold” (the highest possible rating) to “black” (the lowest possible rating). In 2018, two of our operating units that had blue PROPER ratings during the July 2017 to June 2018 appraisal period had received a red PROPER rating, which indicates the units are partially out of compliance due to a lack of monitoring activities at various locations.

On October 3, 2009, Law No. 32 of 2009 on Protection and Management of Environment was enacted which required that all current environmental management licenses be integrated into the environmental permit issued and introduced more stringent penalties for breaches of environmental laws and regulations; it was further amended by the Job Creation Law (the “Environmental Law”). On February 23, 2012, the Government enacted Regulation No. 27 of 2012 on Environmental Permit (*Izin Lingkungan*) (“Regulation No. 27”) which requires that in addition to an environmental impact analysis (*Analisa Mengenai Dampak Lingkungan*) (“AMDAL”) approval, an environmental management effort plan (*Upaya Pengelolaan Lingkungan*) (“UKL”) or an environmental monitoring effort plan (*Upaya Pemantauan Lingkungan*) (“UPL”), an environmental permit from the Ministry of Environment and Forestry or governor or mayor/head of regent of their respective areas would need to be obtained. Although all AMDALs, UKLs, and UPLs, existing before the implementation of Regulation No. 27 would be accepted as valid environmental permits, we are currently taking steps to improve our management of sludge and produced water in order to comply with the standards set by the Environmental Law. However, there can be no assurance that we will be able to do so. Under the Environmental Law, if obligations in the AMDAL approval or UKL or UPL are not met, one of the sanctions that could be imposed is the revocation of our environmental permit. Revocation of an environmental permit may lead to nullification of our business license which may require us to cease certain operations and have a material adverse effect on our business, financial condition, results of operations and prospects. See “Business — Environmental Matters.” The enactment of further implementing regulations relating to the Environmental Law could cause us to incur significant additional costs or delay in the completion of our projects under development in order to comply with such new regulations.

Given the possibility of unanticipated regulatory or other developments, including more stringent environmental laws and regulations, the amount and timing of future environmental compliance expenditures could vary substantially from their current levels. These changes could limit the availability of our funds for other purposes. We cannot predict what additional environmental legislation or regulations will be enacted in the future or the potential effects on our business, financial condition, results of operations and prospects.

Increased regulation by governments and governmental agencies may increase the cost of regulatory compliance and limit our access to new exploration properties.

The oil and gas industry is generally subject to regulation and intervention by governments throughout the world in such matters as the award of exploration and production contracts, the imposition of specific drilling obligations, environmental, health and safety controls, controls over the development and decommissioning of a field (including restrictions on production) and possibly, nationalization, expropriation, cancellation or non-renewal of contract rights.

Within Indonesia, where our operations are primarily located, the evolving roles of SKK MIGAS, BPH MIGAS and the Ministry of Energy and Mineral Resources, coupled with political changes in Indonesia, have allowed other Government agencies such as the Minister of Trade and the Ministry of Environment and Forestry to increase their roles in administering and regulating the oil and gas industry in Indonesia. The continued expansion of the roles of governmental agencies may result in the adoption of new regulations, legislation and practices that we would be required to comply with.

New regulations, legislation and practices may be adopted by the Government and other governments or governmental agencies in countries which we have operations in response to evolving practices or specific incidents, which may result in more stringent regulation of our oil and gas activities, particularly relating to environmental, health and safety controls and oversight of drilling operations, as well as access to new areas. Any new regulations, legislation and practices could increase the cost of compliance and may require changes to our drilling operations, exploration, development and decommissioning plans and could impact our ability to capitalize on our assets and limit our access to new exploration properties or operatorships. We buy, sell and trade oil and gas products in certain regulated commodity markets. Failure to respond to changes in trading regulations could result in regulatory action and damage to our reputation.

In addition, regulations and directives of national and local governments with respect to matters such as limitations on production volumes and exports, pricing policies, environmental protection controls, nationalization or privatization of assets, expropriation and cancellation of rights, may affect us. We are directly and/ or indirectly subject to all these risks and to any adverse consequences flowing from these risks as a result of our business activities.

The oil and gas industry is also subject to the payment of royalties and taxation, which tend to be high compared with those payable in respect of other commercial activities, and we operate in certain tax jurisdictions that have a degree of uncertainty relating to the interpretation of, and changes to, tax law. As a result of new laws and regulations or other factors, we could be required to curtail or cease certain operations, or we could incur additional costs.

Risks Relating to Indonesia

We are incorporated in Indonesia and a substantial portion of our assets and operations are located in Indonesia. Due to the concentration of our assets and operations in Indonesia, future political, economic, legal and social conditions in the country or region, as well as certain actions and policies that the Government may, or may not, take or adopt could materially and adversely affect our business, financial condition, results of operations and prospects and our ability to make payments under the Notes.

Depreciation and fluctuations in the value of the Rupiah against foreign currencies may materially and adversely affect our financial condition and results of operations.

The Rupiah has experienced significant volatility in the past, particularly during economic downturns. There can be no assurance that the Rupiah will not depreciate or remain volatile in the

future, that the Government's current exchange rate policy will remain the same, or that the Government will, or will be able to, act when necessary to stabilize, maintain or increase the value of the Rupiah, and will not act to devalue the Rupiah, or that any such action, if taken, will be successful.

The Rupiah has generally been freely convertible and transferable (except that Indonesian banks may not transfer Rupiah to persons outside of Indonesia and may not conduct certain transactions with non-residents). However, from time to time, Bank Indonesia has intervened in the currency exchange markets in furtherance of its policies, either by selling Rupiah or by using its foreign currency reserves to purchase Rupiah. There can be no assurance that the current floating exchange rate policy of Bank Indonesia will not be modified or otherwise changed, that additional depreciation of the Rupiah against other currencies, including the U.S. dollar, will not occur, or that the Government will take additional action to stabilize, maintain or increase the value of the Rupiah, or that any of these actions, if taken, will be successful. Modifications of the current floating exchange rate policy could result in significantly higher domestic interest rates, liquidity shortages, capital or exchange controls or the withholding of additional financial assistance by multinational lenders. This could result in a reduction of economic activity, an economic recession or loan defaults, and as a result, we may also face difficulties in implementing our business strategy. Any of the foregoing consequences could have a material adverse effect on our business, financial conditions, results of operations and prospects.

Our payments within Indonesia are made in Rupiah due to compliance with applicable laws in Indonesia requiring payments to be denominated in Rupiah, while most of our operating costs, particularly in relation to the procurement of crude oil and oil products, are incurred and paid in U.S. dollars. Any adverse changes in the value of the Rupiah against the other currencies, including the U.S. dollar, could have a material adverse effect on our financial condition, results of operations or cash flows.

Regional or global economic changes may materially and adversely affect the Indonesian economy and our business.

The regional Southeast Asia and global economies have been adversely affected during prolonged economic downturns, including during the economic crisis that affected Southeast Asia, including Indonesia, from mid-1997 and the global financial crisis in 2007-2008, which was triggered in part by the subprime mortgage crisis in the United States, caused failures of large U.S. financial institutions and rapidly evolved into a global credit crisis. These extremely negative economic developments have adversely affected both developed economies and developing markets, including Indonesia and other Association of Southeast Asian Nations ("ASEAN") countries. Global financial markets have also recently experienced volatility due to political uncertainty following political elections in the U.S. and Western Europe and the 2016 United Kingdom national referendum in which a majority of voters elected to withdraw from the European Union. Uncertainty over the outcome of the Eurozone's government's financial support programs and the stability of the European Union and worries about sovereign finances generally are ongoing.

Indonesia and other ASEAN countries have been negatively affected, along with developing market countries globally, by the weak financial and economic conditions in developed markets. Although the Government has in the past taken steps to maintain economic stability and public confidence in the Indonesian economy in response to such conditions internationally, any continuation of weak financial and economic conditions in developed markets may negatively impact economic growth, the Government's fiscal position, the Rupiah's exchange rate and other facets of the Indonesian economy.

A loss of investor confidence in the financial systems of emerging or other markets may cause increased volatility in Indonesian financial markets which may, in turn, adversely affect the Indonesian

economy in general. Any worldwide financial instability could also have a negative impact on the Indonesian economy, which could have an adverse effect on our business, financial condition, results of operations and prospects. There can be no assurance that the recent improvement in economic conditions will continue or that adverse economic conditions will not recur. Such developments could have a material adverse effect on us and our business, financial condition, results of operations and prospects. Economic instability may also result in a shortage in the availability of credit, a reduction in foreign direct investment, the failure of global financial institutions, a drop in the value of global stock markets, a slowdown in global economic growth and a drop in demand for certain commodities which we produce.

Changes to trade policies, treaties and tariffs in the jurisdictions in which we operate, or the perception that these changes could occur, could adversely affect our international and cross-border operations, our financial condition and results of operations. U.S. President Donald Trump's administration has advocated greater restrictions on trade generally and increases on tariffs on goods imported into the United States, particularly from China. Further, the U.S. or China could impose additional sanctions that could restrict us from doing business directly or indirectly in either country. These or similar actions, or adverse spillover effects of foreign trade policies, treaties or tariffs, could have a material adverse impact on our profitability and operations.

The COVID-19 pandemic created a severe impact to the global and the Indonesian economy. The Indonesian economy is suffering from the COVID-19 through both domestic and external channels. On the domestic front, mobility restrictions and social distancing depressed economic activity. Contact-intensive sectors that need employees at the workplace and face-to-face contacts with customers are vulnerable to mobility restrictions and often the most labor intensive (e.g. services, certain activities in manufacturing). On the external front, Indonesia is exposed to the COVID-19 shock through trade and commodity prices as well as investment and portfolio flows. Economic growth among Indonesia's top export destinations, which are China, Japan, United States, India, Singapore, Malaysia, Thailand, Euro Area and Australia, contracted in 2020 and 160 countries around the globe were projected to be in recession in 2020, including all G20 countries and EMEs, except China. Several sectors including mining and manufacturing have significant exposure to foreign demand. Lastly, Indonesia is dependent on capital flows to finance its fiscal and current account deficits according to the World Bank.

There can be no assurance that any short-term improvement in economic conditions will continue or the previous adverse economic condition in Indonesia and the rest of the Asia-Pacific region will not occur in the future. The current global economic situation could deteriorate or have an impact on Indonesia and our business. Any of the foregoing could materially and adversely affect our business, financial condition, results of operations and prospects, and on our ability to make payments under the Notes.

Political and social instability in Indonesia may materially and adversely affect us.

Political campaigns, elections and other developments in Indonesia have in the past and may continue to bring a degree of political and social uncertainty to Indonesia. Indonesia continues to face various socio-political issues and has, from time to time, experienced political instability and social and civil unrest. Such instances of unrest have highlighted the unpredictable nature of Indonesia's changing political landscape. Indonesia also has many political parties, without any one party winning a clear majority to date. These events have resulted in political instability, as well as general social and civil unrest on certain occasions in recent years.

Indonesia also has a history of demonstrations and social protests concerning Indonesian politics as well as in response to specific issues, including fuel subsidy reductions, privatization of state assets, anticorruption measures, minimum wage, decentralization and provincial autonomy, actions of former Government officials and their family members, potential increases in electricity tariffs, human rights

violations and international geopolitical events, such as past U.S. led military campaigns in Afghanistan and Iraq. Although these demonstrations have generally been peaceful, some have turned violent. There can be no assurance demonstrations or protests will not occur in the future or that such events will not adversely affect our business or operations.

Separatist movements and clashes between religious and ethnic groups have resulted in social and civil unrest in parts of Indonesia. Should these events occur in the vicinity of our facilities or transport routes, our business and operations may be adversely affected. Political and social unrest may occur if the results of future elections are disputed or unpopular. Political and social developments in Indonesia have been unpredictable in the past and, as a result, confidence in the Indonesian economy has remained low. Any resurgence of political instability could lead to extended disruptions in our operations and/or adversely affect the Indonesian economy, which could adversely affect our business.

We are particularly susceptible to the risks and consequences of political and social instability because the Government is our sole shareholder. In addition, political and social instability or unrest may give rise to changes in government laws, regulations or policies that have material adverse consequences on us. There can be no assurance that social and civil disturbances will not occur in the future and on a wider scale, or that any such disturbances will not, directly or indirectly, materially and adversely, affect our business, financial condition, results of operations and prospects, and our ability to make payments under the Notes.

Regional autonomy may have a material adverse effect on our business through imposition of local restrictions, taxes and levies.

Indonesia is a large and diverse nation covering a multitude of ethnicities, language, traditions and customs. During the administration of the former President Suharto, the central government controlled and exercised decision-making authority on almost all aspects of national and regional administration, including the allocation of revenues generated from extraction of national resources in the various regions. This led to a demand for greater regional autonomy, in particular with respect to the management of local economic and financial resources. In response to the demand for greater regional autonomy, the Indonesian Parliament in 1999 passed Law No. 22 of 1999 regarding Regional Autonomy (“Law No. 22/1999”) and Law No. 25 of 1999 regarding Fiscal Balance Between The Central Government and the Regions (“Law No. 25/1999”). Law No. 22/1999 has been revoked and replaced by the provisions of regional autonomy in Law No. 23 of 2014 on Regional Government (“Law No. 23/2014”) which has been amended from time to time, lastly by Government Regulation in Lieu of Law No. 1 of 2020 on State Financial and the Stability of the Financial System Policies for the Mitigation of the COVID-19 Pandemic (“GR Law 1/2020”) and the Job Creation Law. Law No. 25/1999 has been revoked and replaced by Law No. 33 of 2004 regarding the Fiscal Balance between the Central and the Regional Governments, and partially revoked by GR Law 1/2020. Under these regional autonomy laws, regional autonomy was expected to give the regions greater powers and responsibilities over the use of “national assets” and to create a balanced and equitable financial relationship between central and local governments. However, certain regional governments have put in place various restrictions, taxes and levies which may differ from restrictions, taxes and levies imposed by other regional governments and/or are in addition to restrictions, taxes and levies stipulated by the central government. Conflicting and/or additional restrictions, taxes and levies that may be imposed by the applicable regional authorities may have a material adverse effect on our business and operations located throughout Indonesia.

It may not be possible for investors to effect service of process or to enforce certain judgments on the Issuer or its management.

The Issuer is a state-owned company established with limited liability in Indonesia. All of the commissioners, directors and executive officers, as applicable, of the Issuer reside outside the United

States. Substantially all of the assets of the Issuer and these other persons are located outside the United States. As a result, it may be difficult for investors to effect service of process upon the Issuer or such persons within the United States or other jurisdictions, or to enforce against the Issuer or such persons in such jurisdiction, judgments obtained in courts of that jurisdiction, including judgments predicated upon the civil liability provisions of the federal securities laws of the United States or any state thereof.

We have been advised by our Indonesian legal advisors, Ali Budiardjo, Nugroho, Reksodiputro, that judgments of non-Indonesian courts are not enforceable in Indonesian courts, although such judgments could be admissible as non-conclusive evidence in a proceeding on the underlying claim in an Indonesian court. There is doubt as to whether Indonesian courts will enter judgments in original actions brought in Indonesian courts predicated solely upon the civil liability provisions of jurisdictions other than Indonesia. As a result, holders of the Notes, as claimants, would be required to pursue claims against us or our commissioners and directors in Indonesian courts on the basis of Indonesian law, which would require re-examination of the underlying claim. There can be no assurance that the claims or remedies available under Indonesian law will be the same, or as extensive, as those available in other jurisdictions.

Indonesia's legal system is a civil law system based on written statutes, and decided legal cases do not constitute binding precedent and are not systematically published. The administration of laws and regulations by courts and government agencies may be subject to considerable discretion. In addition, because relatively few disputes relating to commercial matters and modern financial transactions and instruments are brought before Indonesia's courts, such courts do not necessarily have the experience of courts in other countries. There is uncertainty as to how long it will take for proceedings in Indonesian courts to be concluded and the outcome of proceedings in Indonesian courts may be more uncertain than that of similar proceedings in other jurisdictions. Accordingly, it may not be possible for investors to obtain swift and equitable enforcement of their legal rights.

Holders of the Notes will be exposed to a legal system subject to considerable discretion and uncertainty and may have difficulty pursuing claims under the Notes.

Indonesian legal principles relating to the rights of debtors and creditors, or their practical implementation by Indonesian courts, may differ materially from those that would apply within the jurisdiction of the United States or European Union member states. Neither the rights of debtors nor the rights of creditors under Indonesian law are as clearly established or recognized as under legislation or judicial precedent in the United States and most European Union member states. In addition, under Indonesian law, debtors may have rights and defenses to actions filed by creditors that such debtors would not have in jurisdictions with more established legal regimes such as those in the United States and European Union member states.

Indonesia's legal system is a civil law system based on written statutes in which judicial and administrative decisions do not constitute binding precedent and are not systematically published. Indonesia's commercial and civil laws, as well as rules on judicial process, were historically based on pre-independence Dutch law in effect prior to Indonesia's independence in 1945 and some have not been revised to reflect the complexities of modern financial transactions and instruments. Indonesian courts are often unfamiliar with sophisticated commercial or financial transactions, leading in practice to uncertainty in the interpretation and application of Indonesian legal principles. The application of Indonesian laws depends, in large part, upon subjective criteria such as the good faith of the parties to the transaction and principles of public policy, the practical effect of which is difficult or impossible to predict. Indonesian judges operate in an inquisitorial legal system and have very broad fact-finding powers and a high level of discretion in relation to the manner in which those powers are exercised. In practice, Indonesian court decisions may omit, or may not be decided upon, a legal and factual analysis of the issues presented in a case. As a result, the administration and enforcement of laws and

regulations by Indonesian courts and governmental agencies may be subject to considerable discretion and uncertainty. Furthermore, corruption in the court system in Indonesia has been widely reported in publicly available sources.

There is also no assurance that Indonesian courts would enforce, or even consent to adjudicating agreements that are governed by non-Indonesian law. On September 2, 2013, holders of notes issued by BLD Investments Pte. Ltd and guaranteed by PT Bakrieland Development Tbk (“Bakrieland”) under a trust deed governed under English law, filed a suspension of debt payment petition with the Jakarta Commercial Court on grounds that, among other things, Bakrieland had failed to comply with its obligation to repay the outstanding amount of the notes when noteholders exercised their put option under the terms of the notes. In its decision dated September 23, 2013, the Jakarta Commercial Court ruled, among other things, that as the trust deed relating to the notes is governed by English law, all disputes arising out of or in connection with the trust deed must be settled by English courts and the Jakarta Commercial Court did not therefore have authority to examine and adjudicate the case.

As a result, it may be difficult for holders of the Notes to pursue a claim against the Issuer in Indonesia, which may adversely affect or eliminate entirely the holders’ ability to obtain and enforce a judgment against the Issuer in Indonesia or increase the holders of the Notes’ costs of pursuing, and the time required to pursue, claims against the Issuer.

Increased regulation by governments and governmental agencies may increase the cost of regulatory compliance and limit our access to new exploration properties.

The oil and gas industry is generally subject to regulation and intervention by governments throughout the world in such matters as the award of exploration and production contracts, the imposition of specific drilling obligations, environmental, health and safety controls, controls over the development and decommissioning of a field (including restrictions on production) and possibly, nationalization, expropriation, cancellation or non-renewal of contract rights.

Within Indonesia, where our operations are primarily located, the evolving roles of SKK MIGAS, BPH MIGAS and the Ministry of Energy and Mineral Resources, coupled with political changes in Indonesia, have allowed other Government agencies such as the Minister of Trade and the Ministry of Environment and Forestry to increase their roles in administering and regulating the oil and gas industry in Indonesia. The continued expansion of the roles of governmental agencies may result in the adoption of new regulations, legislation and practices that we would be required to comply with.

New regulations, legislation and practices may be adopted by the Government and other governments or governmental agencies in countries which we have operations in response to evolving practices or specific incidents, which may result in more stringent regulation of our oil and gas activities, particularly relating to environmental, health and safety controls and oversight of drilling operations, as well as access to new areas. Any new regulations, legislation and practices could increase the cost of compliance and may require changes to our drilling operations, exploration, development and decommissioning plans and could impact our ability to capitalize on our assets and limit our access to new exploration properties or operatorships. We buy, sell and trade oil and gas products in certain regulated commodity markets. Failure to respond to changes in trading regulations could result in regulatory action and damage to our reputation.

In addition, regulations and directives of national and local governments with respect to matters such as limitations on production volumes and exports, pricing policies, environmental protection controls, nationalization or privatization of assets, expropriation and cancellation of rights, may affect us. We are directly and/ or indirectly subject to all these risks and to any adverse consequences flowing from these risks as a result of our business activities.

The oil and gas industry is also subject to the payment of royalties and taxation, which tend to be high compared with those payable in respect of other commercial activities, and we operate in certain tax jurisdictions that have a degree of uncertainty relating to the interpretation of, and changes to, tax law. For example, PGN is currently subject to on-going VAT disputes with the Indonesian Directorate General of Tax (“DGT”) in respect of natural gas sold and the Rupiah component of PGN’s billing. See “Business — Legal Proceedings”. As a result of new laws and regulations or other factors, we could be required to curtail or cease certain operations, or we could incur additional costs.

Indonesia is located in an earthquake and active volcanic zone and is subject to significant geological risk and other natural disasters that could lead to property damage, loss of life, social unrest and economic loss.

The Indonesian archipelago is one of the most seismically active regions in the world. Because it is located in the convergence zone of three major lithospheric plates, it is subject to significant seismic activity that can lead to destructive volcanoes, earthquakes and tsunamis, or tidal waves. For example, in September 2018, a 7.5 magnitude earthquake struck off the central island of Sulawesi and triggered a tsunami that hit the coastal city of Palu. The region is also prone to heavy rains and flooding. The region is also prone to volcanic eruptions, such as recent eruptions of Mount Agung, Mount Merapi and Mount Sinabung. These types of natural disasters have the potential to, among other things, displace local residents and disrupt air travel and local tourism.

While such events have not had a significant economic impact on the Indonesian capital markets in the past, the Government has had to expend significant amounts of resources on emergency aid and resettlement efforts. A significant portion of these costs has been underwritten by foreign governments and international aid agencies. However, there can be no assurance that such aid will continue to be forthcoming, or that it will be delivered to recipients on a timely basis. If the Government is unable to timely deliver foreign aid to affected communities, political and social unrest could result. Additionally, recovery and relief efforts are likely to continue to strain the Government’s finances and may affect its ability to meet its obligations on its sovereign debt. Any such failure on the part of the Government, or declaration by it of a moratorium on its sovereign debt, could potentially trigger an event of default under numerous private-sector borrowings including ours, thereby materially and adversely affecting our business, financial condition, results of operations and prospects, and our ability to make payments under the Notes.

In addition, there can be no assurance that future geological or meteorological occurrences or other natural disasters will not significantly impact the Indonesian economy. A significant earthquake or other geological disturbance or other natural disasters in any of Indonesia’s more populated cities and financial centers could severely disrupt the Indonesian economy and undermine investor confidence, thereby materially and adversely affecting our business, financial condition, results of operations and prospects, and our ability to make payments under the Notes.

Terrorist attacks, terrorist activities and certain destabilizing events have led to substantial and continuing economic and social volatility in Indonesia, which may materially and adversely affect our business.

The conflicts in the Middle East and past terrorist attacks in North America and Europe have resulted in substantial and continuing economic volatility and social unrest globally and in Southeast Asia. Further developments stemming from these events or other similar events could cause further volatility. Any additional significant military or other response by affected countries or any further terrorist activities could also materially and adversely affect international financial markets and the Indonesian economy.

In Indonesia during the past several years, there have been various bombing incidents directed toward the Government, foreign governments, and public and commercial buildings frequented by foreigners, including international hotels and the Jakarta Stock Exchange Building. For example, a suicide bombing in Surabaya in May 2018 killed and injured several people. Indonesian and foreign government officials have indicated that these bombings may be linked to international terrorist organizations. In the past, there have also been various terrorist attacks directed towards the Government, foreign governments and public and commercial buildings frequented by foreigners in Indonesia, which killed and injured a number of people.

There can be no assurance that further terrorist acts will not occur in the future. A number of governments have issued warnings to their citizens in relation to a perceived increase in the possibility of terrorist activities in Indonesia, targeting foreign, particularly U.S., interests. Such terrorist acts could destabilize Indonesia and increase internal divisions within the Government as it considers responses to such instability and unrest, thereby adversely affecting investors' confidence in Indonesia and the Indonesian economy. Violent acts arising from and leading to instability and unrest have in the past had, and could continue to have, a material adverse effect on investment and confidence in, and the performance of, the Indonesian economy, and in turn our business. Any of the events described above, including damage to our assets, could cause interruption to parts of our business and materially and adversely affect our financial condition, results of operations and prospects, and our ability to make payments under the Notes.

An actual or perceived outbreak of an infectious disease or any other serious public health concerns in Asia (including Indonesia) and elsewhere may adversely impact our business, results of operations and financial condition.

The outbreak of an infectious disease in Asia (including Indonesia) and elsewhere, together with any resulting restrictions on travel or quarantines imposed, could have a negative impact on the economy and business activity in Indonesia and thereby adversely impact our revenue. Examples are the outbreak in 2003 of Severe Acute Respiratory Syndrome in Asia (SARS), the outbreaks in 2004 and 2005 of Avian influenza, or bird flu, in Asia, the outbreak in 2009 of Influenza A (H1N1), the outbreak in early 2017 of Diphtheria, the Zika virus and the COVID-19 in 2019.

There can be no assurance that any precautionary measures taken against infectious diseases would be effective. Any intensification or recurrence of past outbreaks or the emergence of other contagious disease or any other serious public health concern in Indonesia may adversely affect our business, financial condition, results of operations and prospects.

Labor activism, unrest and employment legislation may materially and adversely affect us.

In March 2003, the Government enacted Law No. 13/2003 (the "Labor Law") as amended by the Job Creation Law, and has further issued implementing regulations allowing employees to form unions without interference from employers. The Labor Law increased, among other things, the amount of severance, service and compensation payments payable to employees upon termination of employment. Based on this law, companies that have 50 employees or more are required to have a bilateral forum consisting of both employers and employees, and a labor union with more than half of a company's employees participating as members may represent the employees to negotiate the collective labor agreements with the employers. The law also established more permissive procedures for staging strikes. Under the Labor Law, employees have the right to terminate their employment, such as if there is an acquisition or merger or consolidation of their employer and receive severance pay, tenure appreciation pay and other compensation which are calculated based on their basic salary and fixed allowances, as well as their length of employment with such employer.

Following its enactment, several labor unions urged the Constitutional Court of the Republic of Indonesia (Mahkamah Konstitusi Republik Indonesia) (the "Indonesian Constitutional Court") to

declare certain provisions of the Labor Law unconstitutional and order the Government of Indonesia to revoke those provisions. The Indonesian Constitutional Court declared the Labor Law valid except for certain provisions, including those relating to the right of an employer to terminate the employment of an employee who committed a serious violation and to criminal sanctions against an employee who instigates or participates in an illegal labor strike. As a result, we may not be able to rely on certain provisions of the Labor Law.

The liberalization of regulations permitting the formation of labor unions combined with weak economic conditions has resulted, and will likely continue to result in, labor unrest and activism in Indonesia.

Labor unrest and activism in Indonesia could disrupt our operations, our suppliers or contractors and could affect the financial condition of Indonesian companies in general, depressing the prices of Indonesian securities on the Indonesian or other stock exchanges and the value of the Rupiah relative to other currencies. Such events could materially and adversely affect our business, financial condition, results of operations and prospects, and our ability to make payments under the Notes. In addition, general inflationary pressures or changes in applicable laws and regulations could increase labor costs, which could have a material adverse effect on our business, operational results, financial condition and prospects.

The Labor Law provides that the employer is not allowed to pay an employee wage below the minimum wage stipulated annually by the provincial or regional/city government. The minimum wage is set in accordance with the need for a decent standard of living and taking into consideration the productivity and growth of the economy, however as there are no specific provisions on how to determine the amount of a minimum wage increase, minimum wage increases can be unpredictable. Minimum wage increases can be unpredictable due to local regulations. For example, pursuant to local regulations promulgated in Jakarta, the minimum wage increased from Rp. 3,100,000 per month in 2016 to Rp. 3,355,750 per month in 2017, Rp. 3,648,036 per month in 2018, Rp. 3,940,973 per month in 2019 and Rp. 4,276,349 per month in 2020. Further minimum wage increases in Indonesia could have a material adverse effect on our business, cash flows, financial condition and prospects.

Indonesian accounting standards differ from those in the United States.

We prepare our consolidated financial statements in accordance with IFAS, which differs from U.S. GAAP. As a result, our consolidated financial statements and reported earnings could be significantly different from those that would be reported under U.S. GAAP. This Offering Memorandum does not contain a reconciliation of our consolidated financial statements to U.S. GAAP, and there can be no assurance that such reconciliation would not reveal material differences. See “Summary of Certain Significant Differences Between IFAS and U.S. GAAP” for a summary of certain differences that may be applicable to us.

Downgrades of credit ratings of Indonesia and Indonesian companies could materially and adversely affect us and the market price of the Notes.

In 1997, certain internationally recognized statistical rating organizations, including Moody’s, Standard & Poor’s and Fitch, downgraded Indonesia’s sovereign rating, the credit ratings of various credit instruments of the Government and the credit ratings of a large number of Indonesian banks and other companies. Currently, Indonesia’s sovereign foreign currency long-term debt is rated “Baa2 (stable)” by Moody’s, “BBB (negative)” by Standard & Poor’s and “BBB (stable)” by Fitch. These ratings reflect an assessment of the Government’s overall financial capacity to pay its obligations and its ability or willingness to meet its financial commitments as they become due.

No assurance can be given that Moody's, Standard & Poor's, Fitch or any other statistical rating organization will not downgrade the credit ratings of Indonesia or Indonesian companies. Any such downgrade could have an adverse impact on liquidity in the Indonesian financial markets, the ability of the Government and Indonesian companies, including us, to raise additional financing and the interest rates and other commercial terms at which such additional financing is available and could have a material adverse effect on our business, financial condition, results of operations and prospects.

Risks Relating to the Structure of a Particular Issue of Notes

A wide range of Notes may be issued under the Program. A number of these Notes may have features which contain particular risks for potential investors. Set out below is a description of certain such features.

Notes subject to optional redemption.

An optional redemption feature is likely to limit the market value of the Notes. During any period when we may elect to redeem Notes, the market value of those Notes generally will not rise substantially above the price at which they can be redeemed. This also may be true prior to any redemption period.

We may be expected to redeem Notes when our cost of borrowing is lower than the interest rate on the Notes. At those times, an investor generally would not be able to reinvest the redemption proceeds at an effective interest rate as high as the interest rate on the Notes being redeemed and may only be able to do so at a significantly lower rate. Potential investors should consider reinvestment risk in light of other investments available at that time.

Partly-paid Notes.

We may issue Notes where the issue price is payable in more than one installment. Failure to pay any subsequent installment could result in an investor losing all of its investment.

Floating Rate Notes with a multiplier or other leverage factor.

Notes with floating interest rates can be volatile investments. If they are structured to include multipliers or other leverage factors, or caps or floors, or any combination of those features or other similar related features, their market values may be even more volatile than those for securities that do not include those features.

Fixed/Floating Rate Notes.

Fixed/Floating Rate Notes may bear interest at a rate that we may elect to convert from a fixed rate to a floating rate, or from a floating rate to a fixed rate. Our ability to convert the interest rate will affect the secondary market and the market value of such Notes since we may be expected to convert the rate when it is likely to produce a lower overall cost of borrowing. If we convert from a fixed rate to a floating rate, the spread on the Fixed/Floating Rate Notes may be less favorable than then prevailing spreads on comparable Floating Rate Notes tied to the same reference rate. In addition, the new floating rate at any time may be lower than the rates on other Notes. If we convert from a floating rate to a fixed rate, the fixed rate may be lower than then prevailing rates on our Notes.

Foreign Currency Notes.

Notes denominated in foreign currencies are exposed to the risk of changing foreign exchange rates. Currency values may be affected by complex political and economic factors, including governmental action to fix or support the value of a currency, regardless of other market forces. Noteholders may risk losing their entire investment if exchange rates of the relevant currency do not move in the anticipated direction. This risk is in addition to any performance risk that relates to us or the type of note being issued.

Notes issued at a substantial discount or premium.

The market values of securities issued at a substantial discount or premium to their nominal amount tend to fluctuate more in relation to general changes in interest rates than do prices for conventional interest-bearing securities. Generally, the longer the remaining term of the securities, the greater the price volatility as compared to conventional interest-bearing securities with comparable maturities.

Notes where denominations involve integral multiples.

In the case of Notes which have denominations consisting of a minimum Specified Denomination plus one or more higher integral multiples of another smaller amount, it is possible that Notes may be traded in amounts that are not integral multiples of such minimum Specified Denomination. In such a case, a Noteholder who, as a result of trading such amounts, holds a nominal amount of less than the minimum Specified Denomination will not receive a Definitive Note in respect of such holding (should Definitive Notes be printed) and would need to purchase a nominal amount of Notes such that it holds an amount equal to one or more Specified Denominations.

If Definitive Notes are issued, holders should be aware that Definitive Notes which have a denomination that is not an integral multiple of the minimum Specified Denomination may be illiquid and difficult to trade.

Notes carrying an interest rate linked to “benchmarks” may be exposed to changes to the relevant “benchmark”.

The London Interbank Offered Rate (“LIBOR”), the Euro Interbank Offered Rate (“EURIBOR”) and other interest rates or other types of rates and indices which are deemed to be “benchmarks” are the subject of ongoing national and international regulatory reform. Following the implementation of any such potential reforms, the manner of administration of benchmarks may change, with the result that they may perform differently than in the past, or benchmarks could be eliminated entirely, or there could be other consequences which cannot be predicted. For example, on July 27, 2017, the United Kingdom Financial Conduct Authority announced that it will no longer persuade or compel banks to submit rates for the calculation of the LIBOR benchmark after 2021 (the “FCA Announcement”). The FCA Announcement indicates that the continuation of LIBOR on the current basis cannot be guaranteed after 2021. On September 21, 2017, the European Central Bank announced that it would be part of a new working group tasked with the identification and adoption of a “risk free overnight rate” which can serve as a basis for an alternative to current benchmarks used in a variety of financial instruments and contracts.

Following the implementation of any such potential reforms, the manner of administration of LIBOR, EURIBOR or other benchmark indices may change, with the result that it may perform differently than in the past, or benchmarks could be eliminated entirely, which could have a material

adverse effect on the value of any Floating Rate Notes where the interest rate is calculated with reference to the relevant benchmark indices or may have other consequences that cannot be predicted.

Notes carrying an interest rate which may be converted from fixed to floating interest rates, and vice versa, may have lower market values than other Notes.

Fixed Rate Notes and Floating Rate Notes (as defined in the terms and conditions of the Notes) may bear interest at a rate that the Issuer may elect to convert from a fixed rate to a floating rate, or from a floating rate to a fixed rate. The Issuer's ability to convert the interest rate will affect the secondary market and the market value of such Notes since the Issuer may be expected to convert the rate when it is likely to produce a lower overall cost of borrowing. If the Issuer converts from a fixed rate to a floating rate, the spread on the Fixed Rate Notes may be less favorable than then prevailing spreads on comparable Floating Rate Notes tied to the same reference rate. In addition, the new floating rate may at any time be lower than the rates on other Notes. If the Issuer converts from a floating rate to a fixed rate, the fixed rate may be lower than then prevailing rates on its Notes.

Risks Relating to the Notes

The Notes will be unsecured obligations of the Issuer and will be structurally subordinated to the claims of creditors of the Issuer's subsidiaries.

The claims of all existing and future third-party creditors of the Issuer's subsidiaries as to the cash flows and assets of such companies will have priority over the claims of the shareholders of such subsidiaries, including the Issuer, and the creditors of such shareholders (such as holders of the Notes). As of December 31, 2019 and September 30, 2020, we had total debt (comprising short-term loans, long-term liabilities — bank loans — net (including current portion), due to the Government — two-step loans, and bonds payables) of US\$16,611.9 million and US\$18,709.1 million, respectively of which US\$3,941.7 million and US\$4,453.3 million, respectively, was third-party debt of our subsidiaries. The indenture constituting the Notes (the "Indenture") does not contain any restrictions on the ability of the Issuer or its respective subsidiaries to incur additional indebtedness.

The Indenture contains, and the indentures for the USD-denominated senior notes issued by our direct subsidiary PGN also contains, events of default triggered upon the cross-default and/or cross-acceleration of our and its respective material subsidiaries indebtedness above certain thresholds. Any default by any the Issuer's or PGN's material subsidiaries on its indebtedness could result, depending on the circumstances and the amounts involved, in events of default at various levels of the Issuer group's structure.

The Issuer may not have the ability to raise the funds necessary to finance an offer to repurchase the Notes upon the occurrence of certain events constituting a change of control triggering event or otherwise as required by the Indenture governing the Notes.

Upon the occurrence of certain events constituting a change of control triggering event, the Issuer is required to offer to repurchase all outstanding Notes at a purchase price in cash equal to 101% of their principal amount plus accrued and unpaid interest to the date of purchase. If any such event triggering the Issuer's repurchase obligations were to occur, we cannot assure you that the Issuer would have sufficient funds available at such time to pay the purchase price of the outstanding Notes.

The change of control provision contained in the Indenture may not necessarily afford you protection in the event of certain important corporate events, including a reorganization, restructuring, merger or other similar transaction involving the Issuer that may adversely affect you, because such

corporate events may not involve a change in ownership or control or a downgrade of the ratings of the Notes in accordance with the terms of the Indenture, and even if they do, may not constitute a “Change of Control Triggering Event” as defined in the Indenture. Except as described under Condition 5A in “Description of the Notes,” the Indenture does not contain provisions that require the Issuer to offer to repurchase or redeem the Notes in the event of a reorganization, restructuring, merger, recapitalization or similar transaction.

The Notes do not contain restrictive financial or operating covenants.

The Indenture governing the Notes will contain various covenants intended to benefit the interests of the holders of the Notes that limit our ability to, among other things, incur liens under certain circumstances, consolidate or merge with or into, or sell substantially all of our assets to, another person. These covenants are subject to a number of important exceptions and qualifications. For more details, see “Description of the Notes.”

The Indenture governing the Notes, however, does not contain restrictive financial or operating covenants or restrictions on the payments of dividends, the incurrence of indebtedness, the issuance or repurchase of securities by us, and the entry into sale and leaseback transactions. In addition, the Indenture does not contain any other covenants or provisions designed to afford holders of the Notes protection in the event of a highly leveraged transaction involving us or in the event of a decline in our credit rating or the rating of the Notes as the result of a takeover, recapitalization, highly leveraged transaction or similar restructuring involving us that could adversely affect such holders. Subject to the terms of our existing corporate debt and other credit facilities, we may incur substantial additional indebtedness in the future.

There has been no prior market for the Notes; the absence of a prior market in the Notes may contribute to a lack of liquidity and the market price of the Notes following this offering may be volatile.

Notes may have no established trading market when issued, and one may never develop. There can be no assurance as to the liquidity of any market that may develop for the Notes, the ability of holders of the Notes to sell their Notes or the prices at which holders of the Notes would be able to sell their Notes. The Notes could trade at prices that may be lower than their initial offering price depending on many factors, including prevailing interest rates, our financial condition and operating results and the market for similar securities. This is particularly the case for Notes that are especially sensitive to interest rate, currency, credit or market risks, and/or are designed for specific investment objectives or strategies or have been structured to meet the investment requirements of limited categories of investors. The Issuer and the Arrangers and Dealers have no obligation to make a market in the Notes. In addition, the market for debt securities in emerging markets has been subject to disruptions that have caused substantial volatility in the prices of securities similar to the Notes. There can be no assurance that the markets for the Notes, if any, will not be subject to similar disruptions. Any disruptions in these markets may have a material adverse effect on the holders of the Notes.

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

The market price of the Notes may be adversely affected by declines in the international financial markets and world economic conditions. The market for securities of Indonesian issuers is, to varying degrees, influenced by economic and market conditions in other markets, especially those in Asia. 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, including Indonesia. Since the global financial crisis of 2007-2008, international financial markets have experienced significant volatility. If similar developments occur in the international financial markets in the future, the market price of the Notes could be adversely affected.

The ratings assigned to the Program may be lowered or withdrawn entirely in the future.

The Issuer has been assigned an overall credit rating of “Baa2” (stable) by Moody’s, “BBB” (negative) by Standard & Poor’s and “BBB” (stable) by Fitch. In addition, the Program has also been assigned a rating of “Baa2” by Moody’s, “BBB” by Standard & Poor’s and “BBB” by Fitch. These ratings may be lowered or withdrawn entirely in the future. The ratings address the ability to perform obligations under the terms of the Notes and the credit risks in determining the likelihood that payments will be made when due. Additionally, one or more independent credit rating agencies may assign credit ratings to an issue of Notes. A rating is not a recommendation to buy, sell or hold securities and may be subject to revision, suspension or withdrawal at any time. No assurances can be given that a rating will remain for any given period of time or that a rating will not be lowered or withdrawn entirely by the relevant rating agency if in its judgment circumstances in the future so warrant.

Holders of the Notes may be excluded from receiving compensation in respect of a consent, waiver or amendment to the Indenture or the Notes.

We are generally excluded from paying any consideration, directly or indirectly, to any holder of the Notes for or as an inducement to any consent, waiver or amendment of any of the terms or provisions of the Indenture or the Notes unless such consideration is offered to be paid or is paid to all holders that consent, waive or agree to amend such term or provision. However, we will be permitted to exclude holders of the Notes in any jurisdiction where such consent, waiver or amendment or payment of consideration for such consent, waiver or amendment, in either case in the manner we deem appropriate, would not be permitted under applicable law in such jurisdiction or would require us to (a) file a registration statement subjecting us or any of our subsidiaries to ongoing periodic reporting or similar requirements, (b) qualify as a foreign corporation or other entity or as a dealer in securities in such jurisdiction if we are not otherwise required to so qualify, (c) generally consent to service of process in any such jurisdiction, or (d) subject us or any of our subsidiaries to taxation in any such jurisdiction if we are not otherwise so subject. We intend to evaluate at the time of any consent, waiver or amendment the costs, potential liabilities and any other factors we consider appropriate at the time associated with extending such consent, waiver or amendment into the relevant jurisdictions. On the basis of this evaluation, we will then make a decision as to how to proceed and whether to extend such consent, waiver or amendment. We cannot assure you that we will include holders of the Notes in jurisdictions where the above exclusions are permitted.

The transfer of Notes is restricted, which may adversely affect their liquidity and the price at which they may be sold.

The Notes have not been registered under, and the Issuer is not obligated to register the Notes under, the Securities Act or the securities laws of any other jurisdiction and, unless so registered, may not be offered or sold except pursuant to an exemption from or a transaction not subject to, the registration requirements of the Securities Act and any other applicable laws. See “Transfer Restrictions.” We have not agreed to, or otherwise undertaken, to register the Notes (including by way of an exchange offer), and we have no intention to do so.

An Indonesian court has certain limited rights of a trustee, acting on behalf of holders of certain notes, in a decision that affected the holders’ rights and the terms of the notes in connection with a court-supervised debt restructuring.

Indonesian law does not recognize equitable principles in general including, without limitation, the relationship of trustee and beneficiary or other fiduciary relationships as would be the case in common law jurisdictions. In several court-supervised debt restructuring proceedings in Indonesia (*Penundaan Kewajiban Pembayaran Utang* or “PKPU,” governed by Law No. 37 of 2004 concerning

bankruptcy and PKPU), the PKPU administrator and the Supervisory Judges at the Commercial Court failed to acknowledge the noteholders or the trustee as creditors of the company. In the PKPU proceeding of PT Trikonsel Oke Tbk (“Trikonsel”) in early 2016 (the “Trikonsel PKPU”), the PKPU administrators rejected claims in connection with certain foreign currency bonds, concluding that the relevant trustees did not have any standing to make claims on behalf of the relevant noteholders. The PKPU administrators further held that only individual noteholders that had filed claims on their own would be able to participate in the PKPU proceedings and to vote on the restructuring plan. This stance was further affirmed by the Commercial Court and the Trikonsel PKPU was settled in September 2016, through the ratification of a composition plan (*rencana perdamaian*) which was approved by certain noteholders of Trikonsel, and then ratified by the Jakarta Commercial Court.

In December 2014, the Supervisory Judge in proceedings before the Commercial Court of the Central Jakarta District Court determined that noteholders were not creditors of PT Bakrie Telecom Tbk. (“Bakrie Tel”) for purposes of its PKPU proceeding (the “Bakrie Tel PKPU”). Bakrie Tel guaranteed US\$380 million of senior notes issued by a Singapore-incorporated special purpose vehicle that is a subsidiary of Bakrie Tel. The proceeds from the offering of the notes were on-lent to Bakrie Tel pursuant to an intercompany loan agreement, which was guaranteed by Bakrie Tel and assigned to the noteholders as collateral. In its decision affirming the composition plan, the Commercial Court accepted the Supervisory Judge’s determination that the relevant creditor of BakrieTel in respect of the US\$380 million notes was the issuer subsidiary, rather than the noteholders or the trustee, and gave no effect to the guarantee. As such, only the intercompany loan was recognized by the Commercial Court as indebtedness on which Bakrie Tel was liable for purposes of the Bakrie Tel PKPU. As a result, only the issuer subsidiary had standing as a Bakrie Tel creditor to vote in the Bakrie Tel PKPU proceedings, which substantially altered the terms of the U.S. dollar bonds and the guarantee.

It may be difficult or impossible for holders of the Notes or the Trustee to enforce all of their rights under the Notes, including being able to vote in PKPU proceedings in Indonesia. There can also be no assurance that in the future, a PKPU administrator or Commercial Court will not issue a similar decision in PKPU proceedings such as the decision in the Trikonsel PKPU in relation to the capacity of the Trustee or holders of the Notes as our creditors, if we were to contest the enforcement by the Trustee or the holders of the Notes of our obligations under the Notes.

Enforcing the rights of holders of the Notes across multiple jurisdictions may prove to be difficult.

The Notes will be issued by the Company, which is established and existing under the laws of Indonesia. The Notes and the Indenture will be governed by the laws of the State of New York. In the event of a bankruptcy, insolvency, PKPU or similar event, proceedings could be initiated in Indonesia and the United States. Such multi-jurisdictional proceedings are likely to be complex and costly for creditors and may otherwise result in uncertainty and delay regarding the enforcement of the rights of the holders of the Notes. The rights of holders of the Notes under the Notes will be subject to the insolvency and administrative laws of several jurisdictions and there can be no assurance that the holders of the Notes will be able to effectively enforce their rights in such complex multi-jurisdictional bankruptcy, insolvency or similar proceedings. In addition, the bankruptcy, insolvency, administrative, PKPU proceedings and other laws of Indonesia and the United States may be materially different from, or be in conflict with, each other and those with which holders of the Notes may be familiar, including in the areas of the rights of creditors, priority of government entities 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 laws should apply and could adversely affect the ability of the holders of the Notes to enforce their rights under the Notes in the relevant jurisdictions or limit any amounts that they may receive.

Indonesian law requiring agreements involving Indonesian parties, which includes the Indenture and certain other documents entered into in connection with the Program or any issue of Notes thereunder, to be written in the Indonesian language may raise issues as to the enforceability of such agreements.

Pursuant to the Indonesian Language Regulations, agreements between Indonesian entities and other parties must be set out in Bahasa Indonesia, which is the national language of Indonesia, save that where such party is a foreign entity or individual, the agreement may also be prepared in the language of such foreign party or in the English language. PR No. 63, however, provides that the Bahasa Indonesia version of the agreement should be the original or master version, while the English version or the national language version of the foreign party is treated as an equivalent of, or a translation of, the Bahasa Indonesia version of the agreement. Under PR No. 63, in the event of a discrepancy or inconsistency, the prevailing language must be the language as agreed between the parties in the agreement.

The West Jakarta District Court issued a decision in June 2013 which voided a loan agreement on the basis that it was, among other reasons, not executed in Bahasa Indonesia. The decision of the court disagreed with the findings in the Ministry of Law and Human Rights Clarification Letter No. M.HH.UM.01.01-35 TAHUN 2009, dated December 28, 2009 and concluded that until Law No. 24 is subject to judicial review before the Constitutional Court and amended, the requirement for agreements to which Indonesian entities are a party to be executed in Bahasa Indonesia remains, notwithstanding that a Presidential Regulation has not been enacted. In 2014 and 2015, the case was brought before the High Court of Jakarta and the Supreme Court, both of which affirmed the decision by the West Jakarta Court. The Supreme Court affirmation on the case concludes that every agreement that falls under the provisions of Law No. 24 must be executed in Bahasa Indonesia, although versions in other languages are allowed.

PR No. 63 remains inconclusive as to whether the agreements identified in the Indonesian Language Regulations entered into between Indonesian parties and non-Indonesian private institutions, and not set out in Bahasa Indonesia, would be invalid or unenforceable. However, the Indenture and certain other documents entered into in connection with the Program or any issue of Notes thereunder will be prepared in both English and Bahasa Indonesia versions and executed simultaneously, as permitted under the Indonesian Language Regulations, and, pursuant to the Indonesian Language Regulations, each version will be considered equally original. All of these documents will provide that in the event of any discrepancy or inconsistency, the parties agree that the English version would prevail and the Bahasa Indonesia version will be amended to conform with the provisions of the English version. Furthermore, some concepts in the English language may not have a corresponding term in Bahasa Indonesia, or may not be fully captured by the Bahasa Indonesia version. If this occurs, there can be no assurance that the Notes, the Indenture and the Program Agreement will be as described in this Offering Memorandum, or will be interpreted and enforced by the Indonesian courts as intended.

The Indonesian Language Regulations do not specify any sanction for non-compliance. We cannot predict as to how the implementation of this new regulation will impact the validity and enforceability of the Notes under Indonesian laws. This creates uncertainty as to the ability of holders of Notes to enforce the Notes in Indonesia.

USE OF PROCEEDS

We intend to use net proceeds from the issue of each Tranche of Notes to finance capital expenditures and for general corporate purposes or as set forth in the Pricing Supplement applicable to such Notes.

EXCHANGE CONTROLS

Exchange Controls

Indonesia has limited foreign exchange controls. Law No. 24 of 1999, dated May 17, 1999, on the Flow of the Foreign Exchange System and Exchange Rate System provides that a person may hold and use foreign currency freely in the Republic of Indonesia. However, to maintain the stability of the Rupiah, and to prevent the utilization of the Rupiah for speculative purposes by non-residents, Bank Indonesia has introduced regulations to restrict the movement of Rupiah from banks within Indonesia to offshore banks, an offshore branch of an Indonesian bank, or any investment denominated in Rupiah with foreign parties and/or Indonesian parties domiciled or permanently residing outside Indonesia, thereby limiting offshore trading to existing sources of liquidity. In addition, Bank Indonesia has the authority to request information and data concerning the foreign exchange activities of all persons and legal entities that are domiciled, or who plan to be domiciled in Indonesia for at least one year. If requested by Bank Indonesia, we must also provide Bank Indonesia with information and documents relating to the reporting of foreign exchange activities.

Purchasing of Foreign Currencies against Rupiah through Banks

Foreign Exchange Transaction Against Rupiah between Banks and Domestic Parties

Bank Indonesia introduced Bank Indonesia Regulation No. 18/18/PBI/2016 dated September 7, 2016 on Foreign Exchange Transaction Against Rupiah between Banks and Domestic Parties, as implemented by Board of Governance Member Regulation No. 20/16/PADG/2018 dated August 15, 2018 on Foreign Exchange and Transactions Against Rupiah between Banks and Domestic Parties (“Regulation 18/18”). Under Regulation 18/18, any conversion of Rupiah into foreign currency for spot and standard derivative (plain vanilla) transactions that exceed certain thresholds described below must be based on an underlying transaction and supported by underlying transaction documents. The thresholds are as follows: (i) the purchase of foreign currency through a spot transaction in an amount exceeding US\$25,000 (or its equivalent) per month per customer, (ii) the purchase of foreign currency through a derivative transaction in an amount exceeding US\$100,000 per month (or its equivalent) per customer, (iii) the sale of foreign currencies against Rupiah through forward or option transactions in an amount exceeding US\$5,000,000 and US\$1,000,000 (or its equivalent) per transaction per customer, respectively, or (iv) for the purchase of foreign currency in the form of a call spread option in any amount, there must be an underlying transaction. Further, the maximum amount of a foreign exchange conversion cannot exceed the value of the underlying transaction.

Under Regulation 18/18, an “underlying transaction” can be: (i) the trade of goods and services (including income and expense estimation), (ii) an investment in the form of direct investment, portfolio investment, loans, capital, and other investments, both domestic and overseas, and/or (iii) a grant of a facility or credit from a bank in foreign currency and/or in Rupiah for trading and investment activities. The following are each not an “underlying transaction: (i) the placement of funds in commercial banks in Indonesia (among others, savings, demand deposits, time deposits, and negotiable certificates deposit), (ii) money transfers by a funds transfer/remittance company, (iii) undrawn credit facilities (including standby loans and undisbursed loans), and (iv) the use of the negotiable instrument of Bank Indonesia in foreign currencies.

Any Indonesian customer entering into: (i) a foreign exchange spot transaction against Rupiah in an amount exceeding US\$25,000 or its equivalent per month per customer for a spot transaction or US\$100,000 or its equivalent per month per customer for a standard derivative (plain vanilla) transaction, or (ii) a call spread option against Rupiah in any amount, will be required to submit supporting documents to the transacting bank. These documents include a duly stamped or

authenticated written statement confirming that: (i) the underlying transaction document is valid and correct, (ii) the amount of foreign currency purchased is or will not exceed the amount stated in the underlying transaction document, and (iii) in case the underlying transaction document is only an estimation, the total needs, purpose of utilization, and date of foreign currencies utilization. For the purchase of foreign currencies not exceeding such thresholds, the Indonesian parties must declare in a duly stamped letter or authenticated written statement that its aggregate foreign currency purchases do not exceed each threshold (as applicable) per month in the Indonesian banking system.

Foreign Exchange Transaction Against Rupiah between Banks and Foreign Parties

Bank Indonesia Regulation No. 18/19/PBI/2016 dated September 7, 2016 on Foreign Exchange Transaction Against Rupiah between Banks and Foreign Parties, as implemented by Board of Governance Member Regulation No. 20/17/PADG/2018 dated August 15, 2018 on Foreign Exchange Transaction Against Rupiah Transactions between Banks and Foreign Parties (“Regulation 18/19”) adopts thresholds and documentation requirements for foreign exchange transactions between banks and foreign parties that are similar to the thresholds and requirements of Regulation 18/18 described in “— *Foreign Exchange Transaction Against Rupiah between Banks and Domestic Parties*” above. Under Regulation 18/19, any conversion of Rupiah into foreign currency for spot and standard derivative (plain vanilla) transactions that exceed certain thresholds described below must be based on an underlying transaction and supported by underlying transaction documents. An “underlying transaction” under Regulation 18/19 may be: (i) a domestic and international trade of goods and services; and/or (ii) an investment in the form of direct investment, portfolio investment, loans, capital and other investment, both domestic and overseas.

Any foreign party entering into: (i) a foreign exchange spot transaction against Rupiah in an amount exceeding US\$25,000 (or its equivalent) per month per foreign party for a spot transaction and US\$100,000 (or its equivalent) per transaction per foreign party or outstanding per bank for a standard derivative (plain vanilla) transaction, or (ii) a call spread option against the Rupiah in any amount, will be required to submit certain supporting documents to the transacting bank. These documents include a duly stamped or authenticated written statement confirming that: (a) the underlying transaction document is valid and correct, (b) the amount of foreign currency purchased is or will not exceed the amount stated in the underlying transaction document, (c) in case the underlying transaction document is only an estimation of the purchase of foreign currencies against Rupiah, the total needs, purpose of utilization, and date of foreign currencies utilization, and (d) in case the underlying transaction document is only an estimation of the sale of foreign currencies against Rupiah, the source of funds, amount, and availability date of the foreign currencies, in the event that the underlying transaction document is only an estimation. For the purchase of foreign currencies not exceeding such thresholds, the foreign parties must declare in a duly stamped letter or authenticated written statement that its aggregate foreign currency purchases do not exceed each threshold (as applicable) per month per foreign party in the Indonesian banking system. Such written statement may be in the form of e-mail, SWIFT message, negative confirmation or business internet banking.

As a state-owned company, we are also subject to Bank Indonesia requirements which restrict our ability to source U.S. dollars only from three Indonesian state-owned enterprise banks: PT Bank Mandiri (Persero) Tbk, PT Bank Negara Indonesia (Persero) Tbk and PT Bank Rakyat Indonesia (Persero) Tbk.

CAPITALIZATION

The following table sets forth our consolidated capitalization as of September 30, 2020. This table should be read in conjunction with “Use of Proceeds,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our unaudited interim consolidated financial statements as of September 30, 2019 and 2020 and for the periods then ended and the related notes thereto included elsewhere in this Offering Memorandum. There have been no material changes to our capitalization since September 30, 2020.

	As of September 30, 2020 (unaudited) (US\$ in millions)
Indebtedness	
Short-term loans	1,410.6
Long-term liabilities — bank loans — net (including current portion)	1,571.1
Due to the Government — two-step loans ⁽¹⁾	725.9
Bonds payables ⁽²⁾	15,001.5
Total debt	<u>18,709.1</u>
Equity	
Share capital	
Authorized — 600,000,000 ordinary shares at par value of Rp. 1,000,00 (full amount)	
per share Issued and paid-up — 171,227,044 shares	16,191.2
Additional paid-in capital	(857.8)
Government contributed assets pending final clarification of status	1.4
Other equity components	(64.3)
Retained earnings	
— Appropriated	12,681.8
— Unappropriated	(530.5)
Total equity attributable to owners of the parent entity	27,421.8
Non-controlling interests	2,152.2
Total equity	<u>29,574.0</u>
Total capitalization⁽³⁾	<u>48,283.1</u>

Notes:

- (1) Includes Government-channeled financings obtained from the Overseas Economic Cooperation Fund Japan, the Japan International Cooperation Agency, the International Bank for Reconstruction and Development and the Japan Bank for International Cooperation. See Notes 19b, 19c, 19d, 19h and 18i of our consolidated financial statements as of and for the nine months ended September 30, 2020 for more information on the two-step loans.
- (2) Includes the following (all bonds issued by the Issuer unless otherwise noted): (i) US\$1,000.0 million 5.25% senior notes due 2021 and US\$500.0 million 6.5% senior notes due 2041, both of which were issued in May 2011, (ii) US\$1,250.0 million 4.88% senior notes due 2022 (of which US\$1,242.0 million 2022 Notes remains outstanding) and US\$1,250.0 million 6.0% senior notes due 2042, both of which were issued in May 2012, (iii) US\$1,625.0 million 4.3% senior notes due 2023 and US\$1,625.0 million 5.625% senior notes due 2043, both of which were issued under the Program in May 2013, (iv) US\$1,500.0 million 6.45% senior notes due 2044 issued under the Program in 2014, (v) US\$1,350.0 million 5.125% senior notes due 2024, issued in 2014 by PGN, (vi) US\$625 million 4.450% senior notes due 2024 issued in 2017 by PT Saka Energi Indonesia, (vii) US\$750.0 million 6.5% senior notes due 2048, which were issued under the Program in November 2018, (viii) US\$750.0 million 3.65% senior notes due 2029, which were issued under the Program in July 2019, (ix) US\$750.0 million 4.70% senior notes due 2049, which were issued under the Program in July 2019, (x) US\$500.0 million 3.10% senior notes due 2030, which were issued under the Program in January 2020, (xi) US\$1,000.0 million 4.175% senior notes due 2050, which were issued under the Program in January 2020 and (xii) US\$650.0 million 3.10% senior notes due 2030, which were issued under the Program in February 2020 and (xiii) US\$800.0 million 4.15% senior notes due 2060, which were issued under the Program in February 2020. There is bonds from Elnusa related to Sukuk Ijarah on August 3, 2020 with detail: US\$46.9 million 9.00% due in 2025. This amount is presented net of discount and issuance cost.
- (3) Represents total debt plus total equity.

SELECTED CONSOLIDATED FINANCIAL AND OTHER DATA

The selected audited consolidated financial information as of and for the years ended December 31, 2019, 2018 and 2017 have been derived from our audited consolidated financial statements which are included elsewhere in this Offering Memorandum. The selected unaudited interim consolidated financial information as of and for the nine-month periods ended September 30, 2020 and 2019 have been derived from our unaudited interim consolidated financial statements included elsewhere in this Offering Memorandum. These financial statements have been prepared on the same basis as our audited consolidated financial statements. Our results for any interim period may not be indicative of our results for the full year or for any other period.

You should read the following selected consolidated financial information in conjunction with our consolidated financial statements and related notes, “Presentation of Financial and Other Data” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included elsewhere in this Offering Memorandum. Our consolidated financial statements have been prepared and presented in accordance with IFAS, which differs in certain respects from U.S. GAAP. In making an investment decision, you should rely upon your own examination of the terms of the offering of the Notes and the financial information included in this Offering Memorandum. You should consult your own financial advisors for an understanding of the differences between IFAS and other GAAP you may be more familiar with, including U.S. GAAP, and how these differences may affect the financial information included in this Offering Memorandum. See “Summary of Certain Significant Differences Between IFAS and U.S. GAAP.”

Consolidated Statement of Profit or Loss and Other Comprehensive Income Data

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
		(Restated)		(Unaudited) (Restated)	
	(US\$ in millions)				
Sales and other operating revenues					
Domestic sales of crude oil, natural gas, geothermal energy and oil products	39,788.8	44,742.5	43,783.5	32,429.5	24,501.8
Subsidy reimbursements from the government	3,572.1	5,632.5	4,875.1	3,654.6	2,493.5
Export of crude oil, natural gas and oil products . . .	1,874.3	3,637.0	3,628.9	2,484.0	2,620.5
Marketing fees	25.5	15.4	—	9.4	—
Revenues from other operating activities	915.1	4,083.8	2,505.0	750.1	634.9
Total sales and other operating revenues	46,175.7	58,111.2	54,792.5	39,327.5	30,250.6
Costs of sales and other direct costs					
Cost of goods sold	(33,175.7)	(42,787.9)	(39,559.7)	(29,113.0)	(20,602.2)
Upstream production and lifting costs	(3,421.2)	(4,386.5)	(4,999.7)	(3,573.5)	(3,546.2)
Exploration costs	(165.4)	(267.7)	(206.9)	(120.1)	(111.6)
Expenses from other operating activities	(1,016.4)	(1,357.5)	(1,868.2)	(1,330.5)	(1,720.8)
Total cost of sales and other direct costs	(37,778.7)	(48,799.6)	(46,634.5)	(34,137.1)	(25,980.9)
Gross profit	8,397.1	9,311.5	8,158.0	5,190.4	4,269.7
Selling and marketing expenses	(1,590.2)	(1,642.8)	(1,624.9)	(1,082.2)	(813.9)
General and administrative expenses	(1,606.7)	(1,412.2)	(1,635.2)	(1,196.0)	(1,026.9)
Gain (loss) on foreign exchange — net	58.1	19.6	289.4	140.5	(640.2)
Finance income	233.8	257.1	1,221.7	400.7	326.4
Finance costs	(818.0)	(836.7)	(968.3)	(722.9)	(761.7)
Share in net profit of associates and joint venture . .	37.9	122.7	80.3	59.7	(17.2)
Other expenses — net	(831.4)	(77.3)	(638.9)	(333.9)	(987.9)
	(4,516.5)	(3,596.6)	(3,275.9)	(2,734.0)	(3,921.4)

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
	(Restated) (US\$ in millions)			(Unaudited) (Restated)	
Profit before income tax	3,880.6	5,741.9	4,882.1	2,456.4	348.4
Income tax expense — net	1,170.4	(3,016.2)	(2,264.1)	(1,675.8)	(1,046.4)
Profit for the period/year after the effect of merging entity's income adjustment	<u>2,710.2</u>	<u>2,725.7</u>	<u>2,618.0</u>	<u>780.5</u>	<u>(698.0)</u>
Other Comprehensive (Loss) Income					
Items not to be reclassified to profit or loss in subsequent periods (net of tax)					
Remeasurement of net defined benefit liability	(125.7)	228.5	(93.3)	(37.7)	(6.3)
Foreign exchange difference from translation of financial statements in foreign currency	8.8	(79.6)	48.2	(63.3)	0.2
Share of other comprehensive income of associates	(26.3)	(127.1)	(144.7)	93.5	(409.6)
Other comprehensive income (loss), net of tax	<u>(143.2)</u>	<u>21.8</u>	<u>(189.9)</u>	<u>(7.5)</u>	<u>(415.6)</u>
Total comprehensive income for the period/ year after the effect of merging entity's income adjustment	<u>2,567.0</u>	<u>2,747.6</u>	<u>2,428.2</u>	<u>773.0</u>	<u>(1,113.7)</u>
Adjustment of merging entity's income:					
Owners of the parent entity	(86.5)	(50.5)	0.3	(3.0)	(0.8)
Non-controlling interests	(71.7)	(39.2)	0.1	(2.9)	(0.7)
	<u>(157.6)</u>	<u>(89.7)</u>	<u>0.3</u>	<u>(5.9)</u>	<u>(1.5)</u>
Profit for the period/year before the effect of merging entity's income adjustment attributable to:					
Owners of the parent entity	2,540.2	2,526.8	2,529.3	730.4	(530.5)
Non-controlling interests	12.4	109.3	89.0	44.2	(169.0)
	<u>2,552.6</u>	<u>2,636.0</u>	<u>2,618.4</u>	<u>774.7</u>	<u>(699.5)</u>
Adjustment of merging entity's comprehensive income:					
Owners of the parent entity	(87.7)	(49.3)	(0.4)	(2.9)	(0.8)
Non-controlling interests	(72.1)	(39.0)	(1.7)	(2.9)	(0.7)
	<u>(160.0)</u>	<u>(88.3)</u>	<u>(2.1)</u>	<u>(5.8)</u>	<u>(1.5)</u>
Total comprehensive income for the period/ year before effect of merging entity's comprehensive income (loss) adjustment attributable to:					
Owners of the parent entity	2,363.3	2,536.6	1,989.5	363.0	(801.8)
Non-controlling interests	43.7	122.8	427.2	404.2	(313.4)
	<u>2,407.0</u>	<u>2,659.3</u>	<u>2,416.6</u>	<u>767.2</u>	<u>(1,115.2)</u>

Consolidated Statement of Financial Position

	As of December 31,			As of September 30,
	2017	2018	2019	2020
	(Restated) (US\$ in millions)			(Unaudited)
Assets				
Current assets				
Cash and cash equivalents	6,429.2	9,123.5	6,770.2	10,206.4
Restricted cash	119.7	108.9	182.1	180.8
Short-term investments	249.3	225.2	392.6	291.0
Trade receivables				
Related parties	1,095.0	1,297.7	1,554.1	1,776.7
Third parties	1,620.4	1,982.9	1,957.7	1,629.2
Due from the Government — current portion	1,492.6	1,834.3	3,375.8	1,632.7
Other receivables				
Related parties	255.1	149.2	182.5	184.3
Third parties	622.2	735.8	958.1	882.4
Inventories	6,040.2	6,327.4	5,897.1	5,062.1
Prepaid taxes — current portion	794.6	822.1	1,364.2	788.9
Prepayments and advances	477.3	536.5	449.7	579.8
Other investments	27.3	80.2	85.8	16.3
Total current assets	19,222.7	23,223.5	23,169.8	23,230.5
Non-current assets				
Due from the Government — net of current portion	663.1	2,924.1	3,313.8	2,571.0
Deferred tax assets	1,374.8	1,445.3	1,511.2	1,168.9
Long-term investments	2,969.7	2,822.3	2,987.0	2,585.2
Fixed assets	12,510.4	12,934.9	13,454.2	13,752.5
Right of use asset	—	—	—	1,963.5
Oil & gas and geothermal properties	18,031.4	18,614.3	19,756.8	19,398.0
Prepaid taxes — net of current portion	829.3	820.3	875.9	1,087.7
Other non-current assets	1,981.7	2,088.2	2,229.9	2,018.4
Total non-current assets	38,360.3	41,649.4	44,128.8	44,545.1
Total assets	57,583.1	64,872.9	67,298.7	67,775.6
Liabilities and equity				
Short-term liabilities				
Short-term loans	452.9	4,353.4	1,285.4	1,410.6
Trade payables				
Related parties	49.3	78.8	73.3	74.0
Third parties	3,914.9	3,609.8	4,591.8	2,769.8
Due to the Government — current portion	1,050.6	1,207.7	940.4	984.3
Taxes payable				
Income taxes	309.7	468.5	200.3	334.0
Other taxes	251.8	259.8	304.2	366.2
Accrued expenses	2,029.6	2,149.0	2,815.7	2,763.2
Long-term liabilities — current portion	372.4	421.6	581.2	125.4
Lease liabilities — current portion	50.4	58.7	44.5	730.3
Bonds payable — current portion	—	—	—	391.4
Other payables				
Related parties	56.6	52.5	72.7	44.3
Third parties	1,132.3	1,212.8	1,122.5	1,053.2
Deferred revenue — current portion	260.8	202.0	257.0	228.8
Total short-term liabilities	9,880.9	14,015.9	12,244.5	11,301.5

	As of December 31,			As of September 30,
	2017	2018	2019	2020
	(Restated) (US\$ in millions)			(Unaudited)
Long-term liabilities				
Due to the Government — net of current portion	780.6	795.1	796.0	774.5
Deferred tax liabilities	2,848.4	3,307.6	3,731.6	3,424.6
Long-term liabilities — net of current portion	1,963.7	1,718.5	1,434.1	1,419.7
Lease liabilities — net of current portion	158.9	103.3	135.0	1,215.0
Bonds payables	10,385.9	11,094.1	12,614.5	14,610.2
Employee benefit liabilities	2,225.8	1,866.7	2,014.9	2,026.6
Provision for decommissioning and site restoration	2,129.3	2,029.7	2,458.9	2,600.7
Deferred revenue — net of current portion	42.7	74.6	53.8	111.7
Other non-current payables	84.7	178.9	508.1	717.0
Total long-term liabilities	20,620.1	21,168.6	23,747.0	26,900.1
Total liabilities	30,501.0	35,184.5	35,991.5	38,201.6
Equity				
Equity attributable to owners of the parent entity				
Share capital				
Authorized — 600,000,000 (2019 and 2018) and 200,000,000 (2017 and 2016) ordinary shares at par value of Rp. 1,000,000 (full amount) per share,				
Issued and paid up — 171,227,044 shares (2019 and 2018) and 133,090,697 shares (2017 and 2016)	13,417.0	16,191.2	16,191.2	16,191.2
Additional paid-in capital	2.7	(924.3)	(924.3)	(857.8)
Merging entity's equity	1,840.1	40.1	44.3	—
Government contributed assets pending final clarification of status	1.4	401.1	146.6	1.4
Other equity components	487.7	617.1	77.2	(64.3)
Retained earnings				
Appropriated	6,871.1	8,796.4	10,770.5	12,681.8
Unappropriated	2,540.2	2,526.8	2,529.3	(530.5)
Total Equity Attributable to Owners of the Parent Entity	25,160.2	27,648.3	28,834.8	27,421.8
Non-controlling interest	1,921.8	2,040.0	2,472.4	2,152.2
Total equity	27,082.1	29,688.3	31,307.2	29,574.0
Total liabilities and equity	57,583.1	64,872.9	67,298.7	67,775.6

Consolidated Statement of Cash Flows Data

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
		(Restated)		(Unaudited) (Restated)	
	(US\$ in millions)				
Cash flows from operating activities:					
Cash receipts from customers	40,387.2	49,045.2	52,051.3	38,161.9	31,652.7
Cash receipts from the Government	3,787.9	7,805.6	7,195.1	4,728.6	5,909.9
Cash receipts from tax restitution	616.8	185.0	83.0	39.0	77.6
Payments to suppliers	(29,366.8)	(38,333.6)	(40,803.2)	(28,944.0)	(25,816.5)
Payments to the Government	(7,524.6)	(11,279.6)	(9,587.7)	(7,161.0)	(4,323.4)
Payments of corporate income taxes	(2,104.8)	(2,692.8)	(2,456.3)	(2,033.1)	(1,116.4)
Cash paid to employees and management	(1,589.0)	(1,693.7)	(1,989.5)	(1,534.1)	(1,328.5)
Receipts from (placement of) restricted cash	(156.0)	73.2	(47.0)	(11.5)	(46.8)
Receipts of interest	35.9	62.0	45.7	18.7	136.1
Net cash generated from operating activities	4,086.5	3,171.3	4,491.4	3,264.5	5,144.5
Cash flows from investing activities:					
Proceeds from disposal of short-term investment	99.9	198.4	162.8	98.0	269.8
Proceeds from disposal of long-term investments	15.8	—	—	—	70.1
Interest received from investments	18.2	14.3	6.2	9.7	4.2
Cash receipts from other investing activities	28.7	262.2	99.0	0.4	1.9
Proceeds from sale of fixed assets	0.1	0.2	1.3	1.1	13.4
Dividends received from associates	81.6	214.1	99.8	14.8	31.2
Purchases of fixed assets	(1,002.2)	(1,301.5)	(1,295.2)	(985.6)	(1,007.5)
Purchases of oil and gas and geothermal properties	(892.0)	(1,482.5)	(2,360.8)	(1,372.5)	(1,705.0)
Placements in long-term investments	(660.0)	(1,062.2)	(290.3)	(90.7)	(143.1)
Placements in short-term investments	(226.3)	(237.6)	(340.8)	(123.3)	(92.1)
Payments for exploration and evaluation assets	(37.2)	(99.5)	(7.0)	(30.5)	(48.6)
Placement of restricted cash	(29.4)	(26.2)	2.20	(0.7)	44.9
Addition of participating interest	—	—	—	—	—
Acquisition of subsidiary net of cash acquired	—	—	8.5	17.0	—
Cash obtained due to change of control	203.2	—	—	—	—
Net cash used in investing activities	(2,399.7)	(3,520.4)	(3,914.3)	(2,462.2)	(2,560.8)
Cash flows from financing activities:					
Proceeds from short-term loans	4,048.9	9,500.1	7,176.3	5,733.3	5,274.3
Proceeds from bond issuance	625.0	734.4	1,498.9	1,498.9	2,969.1
Proceeds from long-term loans	663.4	263.1	418.0	415.2	547.4
Repayments of short-term loans	(3,786.7)	(5,591.4)	(10,285.2)	(8,375.6)	(5,130.1)
Repayments of long-term loans	(2,103.7)	(467.0)	(526.5)	(491.1)	(916.4)
Dividend payments	(868.5)	(587.1)	(563.1)	(318.0)	(574.3)
Payments of finance costs	(523.4)	(538.9)	(622.8)	(337.5)	(486.2)
Repayments of bonds payables	—	(37.6)	—	—	(608.6)
Receipts from (placement of) restricted cash	(13.2)	(0.3)	(139.0)	(1.0)	(0.4)
Net cash generated from (used in) financing activities	(1,958.4)	3,275.2	(3,043.6)	(1,875.9)	(1,074.4)
Net increase (decrease) in cash and cash equivalents	(271.6)	2,926.2	(2,466.4)	(1,073.6)	3,658.1
Effect of exchange rate changes on cash and cash equivalents	(37.4)	(231.8)	113.1	59.5	(221.9)
Cash and cash equivalents at beginning of the period/period	6,738.1	6,429.2	9,123.5	9,123.5	6,770.2
Cash and cash equivalents at end of the period/year	6,429.2	9,123.5	6,770.2	8,109.4	10,206.4

Segment Results

The following table presents segment revenues and results for our upstream and downstream segments for the periods indicated. This table should be read together with our consolidated financial statements, including the notes thereto, appearing elsewhere in this Offering Memorandum. Our segment results are derived from our total segment revenues, after deducting total costs of sales and other direct costs, selling and marketing expenses and general and administrative expenses relating to such segments. For more information, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Overview of Segment Results.”

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
				(Unaudited)	
	(US\$ in millions)				
Total upstream segment revenues	7,966.3	12,552.6	12,123.6	8,890.5	6,121.8
Upstream segment results	3,327.9	5,960.6	5,112.7	3,835.7	1,635.3
Total downstream segment revenues	37,372.7	46,091.3	44,417.3	31,861.4	24,490.8
Downstream segment results	1,282.2	(286.8)	(784.2)	(1,336.2)	346.9

Non-GAAP and Other Financial Data

	As of or for the Years Ended December 31,			As of or for the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
	(Unaudited)				
	(US\$ in millions, except ratios and percentages)				
Capital expenditure ⁽¹⁾	5,535.8	4,553.3	5,166.0	2,626.7	5,172.5
Interest expense ⁽²⁾	564.1	582.4	816.0	608.9.0	603.5.0
Adjusted EBITDA ⁽³⁾	7,119.1	9,215.6	7,922.0	5,162.7	3,884.8
Total debt ⁽⁴⁾	13,841.3	18,267.4	16,611.9	17,159.0	18,709.1
Total debt/Adjusted EBITDA (times)	1.9	2.0	2.1	3.3 ⁽⁶⁾	4.8 ⁽⁶⁾
Adjusted EBITDA/Total sales and other operating revenues (%)	15.4	15.9	14.5	13.1	12.8
Total debt to Total equity (%)	51.1	61.5	53.1	57.3	63.3
Adjusted EBITDA/Interest expense (times)	12.6	15.8	9.7	8.5	6.4
Dividend payout ratio (%) ⁽⁵⁾	27.6	23.1	22.3	—	—

Notes:

- (1) Capital expenditure is comprised of additions to fixed assets, oil and gas and geothermal properties and long term investments — investments in oil and gas blocks-net. For details of our capital expenditure, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Indebtedness.” The following table reconciles our net income under IFAS to our definition of capital expenditure for the periods indicated:

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
	(Unaudited)				
	(US\$ in millions)				
Additions of fixed assets	1,700.2	1,513.0	1,842.3	818.5	3,261.3
Additions of oil and gas, and geothermal properties	3,835.6	3,040.3	3,294.3	1,808.2	1,897.0
Additions of long term investments — investments in oil and gas blocks-net	—	—	29.4	—	14.2
Capital expenditure	<u>5,535.8</u>	<u>4,553.3</u>	<u>5,166.0</u>	<u>2,626.7</u>	<u>5,172.5</u>

- (2) Interest expense is comprised of finance costs for short-term loans, long-term loans and bonds. For details of our loans and bonds, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Indebtedness.” The following table reconciles our net income under IFAS to our definition of interest expense for the periods indicated:

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
				(Unaudited)	
	(US\$ in millions)				
Finance Costs:					
Short-term loans	8.5	56.5	99.6	81.7	26.1
Long-term loans	203.0	174.0	144.4	112.3	74.6
Bonds	352.6	351.9	572.0	414.9	502.8
Interest expense	564.1	582.4	816.0	608.9	603.5

- (3) We calculate Adjusted EBITDA by adding depreciation, depletion and amortization, finance costs and income tax expense — net to profit for the period/year before the effect of merging entity’s income adjustment and subtracting finance income, in accordance with BUMN Regulation KEPMEN 100. BUMN Regulation KEPMEN 100 requires adjustment for all finance costs and does not take into account the effects of merging entity’s income adjustment, which arise in connection with acquisitions during the year or period. In comparison, our calculations of EBITDA in the past adjusted for interest expense and not accretion expenses related to decommissioning and site restoration or other finance costs and took into account the effects of merging entity’s income adjustment. Adjusted EBITDA and the related ratios presented in this Offering Memorandum are therefore not comparable to our previously disclosed EBITDA and related ratios.

Adjusted EBITDA is a supplemental measure of our performance and liquidity that is not required by or presented in accordance with IFAS or U.S. GAAP. Adjusted EBITDA is not a measurement of financial performance or liquidity under IFAS or U.S. GAAP and should not be considered as an alternative to net income, operating income or any other performance measures derived in accordance with IFAS or U.S. GAAP or an alternative to cash flows from operating activities as a measure of liquidity. In addition, Adjusted EBITDA is not a standardized term, hence a direct comparison between companies using such term may not be possible. We have included Adjusted EBITDA because we believe it is an indicative measure of our operating performance and is used by investors and analysts to evaluate companies in our industry. The following table reconciles our net income under IFAS to our definition of Adjusted EBITDA for the periods indicated:

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
	(Unaudited)				
	(US\$ in millions)				
Profit for the period/year before the effect of merging entity’s income adjustment	2,552.6	2,636.0	2,618.4	774.7	(699.5)
Adjustments:					
Finance income	(233.8)	(257.1)	(1,221.7)	(400.7)	(326.4)
Finance costs	818.0	836.7	968.3	722.9	761.7
Income tax expense — net	1,170.4	3,016.2	2,264.1	1,675.8	1,046.4
Depreciation, depletion and amortization expense . . .	2,811.9	2,983.8	3,292.9	2,390.0	3,102.6
Adjusted EBITDA	7,119.1	9,215.6	7,922.0	5,162.7	3,884.8

- (4) Total debt is comprised of short-term loans, long-term liabilities — bank loans — net (including current portion), due to the Government — two-step loans and bonds payables. “Two-step loans” is comprised of: (i) the Ulubelu and Lahendong geothermal project loan, (ii) the Lumut Balai geothermal project loan, (iii) the Ngurah Rai Airport refueling facility construction project loan, (iv) the South Sumatera West Java gas transmission pipeline development project loan, (v) the Domestic Gas market development project loan and (vi) gas transmission and distribution project Phase II project loan. For details, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Capital Resources — Indebtedness.”

- (5) Dividend payout ratios are calculated as dividends paid during the year equivalents in U.S. dollars divided by the previous year's profit for the year before the effect of merging entity's income adjustment. Dividend payout ratio is a supplemental measure of our performance and liquidity that is not required by or presented in accordance with IFAS or U.S. GAAP. Dividend payout ratio is not a measurement of financial performance or liquidity under IFAS or U.S. GAAP and should not be considered as an alternative to net income, operating income, or any other performance measure derived in accordance with IFAS or U.S. GAAP or an alternative to cash flow from operating activities as a measure of liquidity. In addition, dividend payout ratio is not a standardized term, hence a direct comparisons between companies using such a term may not be possible. For details of our dividend payout ratios, see "Risk Factors — Risk relating to our Company — We are subject to the control of the Government and there is no guarantee that they will always act in our best interests. We also derive certain benefits from being a state-owned entity, and we cannot guarantee that any or all of these benefits will continue." The following table reconciles our net income under IFAS to our definition of dividend payout ratios for the periods indicated:

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
	(Unaudited)				
	(US\$ in millions except percentages)				
Dividend paid during the year/period equivalents in U.S. dollars	868.5	587.1	563.1	—	—
Prior year profit for the period/year before merging entity's income adjustment attributable to owners of the parent entity	<u>3,147.0</u>	<u>2,540.2</u>	<u>2,526.8</u>	<u>—</u>	<u>—</u>
Dividend payout ratio (%)	<u>27.6</u>	<u>23.1</u>	<u>22.3</u>	<u>—</u>	<u>—</u>

- (6) Total debt/Adjusted EBITDA ratios for the nine-month periods ended September 30, 2019 and 2020 are calculated based on total debt as of such dates and Adjusted EBITDA for the nine-month periods then ended. Therefore, they are not comparable to, and are higher than, our total debt/Adjusted EBITDA ratios for the years ended December 31, 2017, 2018 and 2019, which are calculated using Adjusted EBITDA for the twelve-month periods then ended.

Selected Reserve, Production and Operating Data

Except where attributed to Wood Mackenzie, all information in this Offering Memorandum relating to oil and gas reserves is presented on the basis of our “net reserves” which represents our share of the gross reserves in a block, field or specified area, attributable to our working interest before deducting the share payable to the Government as owner of the reserves, pursuant to the terms of the relevant production sharing arrangement or cooperation contract and the cost recovery and any applicable taxes. In this Offering Memorandum, except where attributed to Wood Mackenzie estimates of our oil and gas reserves as of December 31, 2018 and 2017 have been prepared in a manner consistent with PRMS 2007. Beginning in 2019, we began classifying and estimating our reserves in a manner consistent with PRMS 2018. Accordingly, in this Offering Memorandum, estimates of our oil and gas reserves as of December 31, 2019 and September 30, 2020 have been prepared in a manner consistent with PRMS 2018. Investors should note that different reserves reporting systems employ different assumptions, and that our methodologies for classifying reserves and our reserves classifications vary in certain respects from the methodologies and classifications used by oil and gas companies subject to the reporting obligations of the SEC. As a result, because of the impact of such assumptions or differences in the methodologies of resource management systems, identical raw data can produce varying estimates of reserves. For more information, see “Presentation of Financial and Other Information — Oil and Gas Reserves.”

The information on our oil and gas production presented and referred to as “production” in this Offering Memorandum is our “net production” and represents our share of the oil and/or gas production from a block, field or specified area, attributable to our working interest before deducting the share payable to the Government pursuant to the terms of the relevant production sharing arrangement or cooperation contract and the cost recovery and any applicable taxes. See “Risk Factors — Risks Relating to Our Upstream Operations — Our crude oil, natural gas and geothermal reserve estimates are uncertain and may prove to be incorrect over time or may not accurately reflect actual reserve levels, or even if accurate, technical limitations may prevent us from retrieving these reserves” and “Business — Pertamina Upstream Business — Reserves.”

The following table sets forth the present value and estimated volume of our total net oil and gas proved and proved plus probable reserves.

	Crude Oil (mmbbls)	Natural Gas (bcf)	Combined (mmboe)
2020 (as of September 30, 2020)⁽¹⁾			
Total net proved plus probable reserves (as of September 30, 2020)	1,365.4	7,593.1	2,676.0
Probable reserves	337.8	1,812.5	650.7
Total net proved reserves (as of September 30, 2020)	1,027.6	5,780.6	2,025.3
2019⁽¹⁾			
Total net proved plus probable reserves (as of December 31, 2019)	1,434.4	7,910.6	2,799.8
Probable reserves	326.9	1,780.3	634.2
Total net proved reserves (as of December 31, 2019)	1,107.5	6,130.3	2,165.6
2018⁽¹⁾			
Total net proved plus probable reserves (as of December 31, 2018)	1,362.8	7,825.4	2,713.4
Probable reserves	290.7	1,628.0	571.7
Total net proved reserves (as of December 31, 2018)	1,072.0	6,197.4	2,141.7
2017⁽¹⁾			
Total net proved plus probable reserves (as of December 31, 2017)	1,606.3	8,574.0	3,084.6
Probable reserves	356.6	1,655.0	641.6
Total net proved reserves (as of December 31, 2017)	1,249.7	6,919.0	2,443.0

Note:

- (1) Beginning in 2019, we began classifying and estimating our reserves in a manner consistent with PRMS 2018. Accordingly, estimates of our oil and gas reserves as of December 31, 2019 and September 30, 2020 have been prepared in a manner consistent with PRMS 2018. Estimates of our oil and gas reserves as of December 31, 2018 and 2017 have been prepared in a manner consistent with PRMS 2007. Investors should note that different reserves reporting systems employ different assumptions, and that our methodologies for classifying reserves and our reserves classifications vary in certain respects from the methodologies and classifications used by oil and gas companies subject to the reporting obligations of the SEC. As a result, because of the impact of such assumptions or differences in the methodologies of resource management systems, identical raw data can produce varying estimates of reserves.

The following table sets forth our average daily oil and gas production and average realized sales prices for the periods indicated.

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
Average daily oil and gas production:					
Crude oil (mbbls/d)	341.7	393.4	410	409.9	411
Natural gas (mmcf/d)	2,035.4	3,058.9	2,647.9	2,805.1	2,805.5
Total (mboe/d)	693.0	921.4	900.8	894.0	868
Average realized sales prices:					
Crude oil (US\$ per bbl)	51.2	70.6	67.0	65.2	41.3
Natural gas (US\$ per mcf)	5.8	6.3	6.3	6.5	5.4

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

You should read the following discussion in conjunction with our consolidated financial statements and the related notes, "Presentation of Financial and Other Data," "Summary Consolidated Financial and Other Data" and "Selected Consolidated Financial and Other Data" included elsewhere in this Offering Memorandum. Our consolidated financial statements have been prepared and presented in accordance with IFAS, which differs in certain respects from U.S. GAAP. See "Summary of Certain Significant Differences Between IFAS and U.S. GAAP." Unless otherwise indicated, references in this section to years are to our fiscal year ended December 31 in such year.

Overview

We are a fully integrated national oil, gas and geothermal company, wholly owned by the Government and headquartered in Jakarta, Indonesia. We have an operating history of more than 60 years. We were established on December 10, 1957 and became an Indonesian limited liability company in 2003.

We are engaged in a broad spectrum of upstream and downstream oil, gas, geothermal, petrochemical and other energy operations. Our lines of business are organized into upstream and downstream sectors in accordance with Indonesian oil, gas and geothermal regulations. We are also mandated by the Government to distribute subsidized fuel, LPG and CNG in Indonesia and to assist in its efforts to encourage the use of LPG as a substitute for kerosene in Indonesian households under the kerosene conversion program and to encourage the use of CNG as an alternative fuel.

In April 2018, the Issuer acquired the Government's 56.96% interest shares in PGN to establish a state-owned oil and gas holding enterprise that combines our fully integrated oil, gas and geothermal operations with the natural gas distribution and transmission business of PGN. In December 2018, the Issuer transferred 51.0% of its stake in PT Pertamina Gas to PGN, which reduced the Issuer's effective total ownership in PT Pertamina Gas from 100.0% to 78.05%. The transfer of Pertagas to PGN is intended to grow our gas business by creating an extensive and far-reaching distribution and transmission pipeline network in Indonesia and unlocking benefits of scale.

We derive our sales and other operating revenues primarily from sales of refined petroleum products, sales of crude oil and natural gas, sales of processed gas products, sales of steam and electricity and sales of petrochemical products.

Factors Affecting Our Business and Results of Operations

The main factors affecting our business and results of operations are described below.

PSO Mandate

In 2017, 2018 and 2019 and in the nine months ended September 30, 2020, 27.5%, 26.5%, 29.9% and 31.4%, respectively, of our sales and other operating revenues (excluding marketing fees) were derived from the distribution of our various fuel products pursuant to our PSO mandate from the Government. Under our PSO mandate, we distribute certain grades of oil products to the public at regulated prices. We receive subsidy reimbursements from the Government for the distribution of certain of these products under our PSO mandate, in particular automotive diesel oil, kerosene, and LPG in 3kg cylinders, in accordance with a pre-set formula which is revised from time to time by the Government.

We participate in an annual tender process for the PSO mandate and have been granted a PSO mandate in each of the last three years. Based on the total amount of subsidized fuel distributed in Indonesia (based on publicly available Government data), we had 98.2% of the PSO market in each of 2017, 2018 and 2019. We believe this is due to our extensive distribution network. If the number of oil and gas companies which are granted the PSO mandate increases or the other holders of the PSO mandate expand their distribution networks, our share of the PSO market would be reduced, which would in turn affect our revenue from the distribution of subsidized fuel.

Historically, the Government's regulated prices of subsidized fuel products have not been sufficient to meet our costs of producing or importing and distributing for certain fuel products, and we rely on subsidy reimbursements from the Government to address the shortfall between the regulated retail prices and our costs of producing or importing and distributing such fuel. The subsidy reimbursement amount for automotive diesel oil is subject to a fixed amount set by the Government. The subsidy reimbursement formula determined by the Government for kerosene distributed under the PSO mandate is based on MOPS's three-month average price for jet kerosene (which is the Oil Fuel Market Index Price for kerosene) less the regulated retail price. Based on Decree of the Minister of Energy and Mineral Resources No. 61K/12/MEM/2019, the subsidy reimbursement formula for LPG in 3kg cylinders is based on the benchmark price for LPG in 3kg cylinders, which is determined by the market index price for LPG in 3kg cylinders (as stipulated by the Government) applicable in the relevant month, plus distribution (including handling) costs and margins less the regulated retail price. The Government sets these subsidy reimbursement amounts and formulas in conjunction with the setting of the State Budget.

In setting these subsidy reimbursement formulas, the Government assumes that the price of crude oil will not exceed a certain threshold. In 2017, 2018 and 2019, the Government assumed with respect to the margin component of the subsidy reimbursement formulas for kerosene and LPG that the cost of crude oil would not be greater than US\$51.20, US\$70, and US\$70, respectively, per barrel. In 2020, the Government has assumed with respect to the margin component of the subsidy reimbursement formulas for kerosene and LPG that the cost of crude oil will not be greater than US\$40.00 per barrel. Under these subsidy reimbursement formulas, fluctuations in the cost of purchasing crude oil and LPG are intended to be matched by the fluctuations in MOPS or the market index price (as stipulated by the Government) and the margin is intended to compensate us for distribution, transportation and other costs and to provide for the opportunity to realize profits from the remainder. If crude oil prices exceed the ceiling price assumed by the Government or our transportation, distribution or other costs increase, we may not be able to recover the full costs of distributing subsidized fuel and LPG under the compensation formula and may incur losses as a result.

Because the margin component of the compensation formula and regulated retail prices of subsidized fuel products are fixed by the Government, whenever crude oil exceeds the ceiling price assumed by the Government (as it has in the past) or our transportation, distribution or other costs increase, we may not be able to recover the full costs of producing and distributing subsidized fuel and LPG under the subsidy reimbursement formula and may incur losses as a result. In particular, the costs of fuel required in our refining activities fluctuate with the costs of crude oil and increases in the costs of crude oil cause our costs of refining subsidized fuel to increase. We may not be able to recover such increased costs due to the fixed margin of these subsidy reimbursement formulas. In addition, the fixed subsidy reimbursement amounts for automotive diesel oil typically does not cover the full costs of producing and distributing automotive diesel oil, which are partially or fully offset by the sales of our other products.

The Government pays subsidy reimbursements to us on a monthly basis. In determining the subsidy reimbursement payable to us in any given month for the distribution of kerosene, the Government's policy is to use MOPS from the month immediately prior to the month which the subsidy reimbursement claim relates to. This lag in the value of MOPS used in the subsidy

reimbursement formula may result in the compensation we receive under our PSO mandate for kerosene being insufficient to cover the cost of our raw materials in months where there is a significant increase in crude oil prices from the previous month.

In 2017, 2018, 2019, 2020 and 2021, we have received or expect to receive (as applicable) compensation from the Government under our PSO mandate as set forth in the table below.

	Compensation for Production and Distribution of Oil Products	Compensation for Production and Distribution of LPG
2017	Rp. 500.0 per liter for automotive diesel oil MOPS + 2.49% of MOPS + Rp. 263.0 per liter less the regulated retail price for kerosene	CP Aramco + US\$84.00 /mt + 3.64% CP Aramco + Rp. 1,950.0/kg less the regulated retail price
2018	Rp. 2,000.0 per liter for automotive diesel oil MOPS + 2.49% of MOPS + Rp. 263.0 per liter less the regulated retail price for kerosene	CP Aramco + US\$84.00 /mt + 3.64% CP Aramco + Rp. 1,950.0/kg less the regulated retail price
2019	Rp. 2,000.0 per liter for automotive diesel oil MOPS + 2.49% of MOPS + Rp. 263.0 per liter less the regulated retail price for kerosene	103.85% market index price of LPG in 3kg cylinders (as stipulated by the Government) + US\$50.11/mt + Rp. 1,879.0/kg
2020	Rp. 1,000.0 per liter for automotive diesel oil MOPS + 2.49% of MOPS + Rp. 263.0 per liter less the regulated retail price for kerosene	103.85% market index price of LPG in 3 kg cylinders (as stipulated by the Government) + US\$50.11/mt + Rp. 1,879/kg
2021	Rp. 500.0 per liter for automotive diesel oil	103.85% market index price of LPG in 3 kg cylinders (as stipulated by the Government) + US\$50.11/mt + Rp. 1,879/kg

The amount of subsidy reimbursements that we receive from the Government typically increases in line with increases in the price of crude oil and natural gas globally and in Indonesia because, historically during periods of rising crude prices, the Government has chosen to increase our subsidy reimbursement amounts in 2017 instead of increasing regulated fuel prices in the country. In 2017, 2018, 2019 and in the nine months ended September 30, 2020, domestic sales of crude oil, natural gas, geothermal energy and oil products represented 86.2%, 77.0%, 79.9% and 81.0%, respectively, of our total sales and other operating revenues while cost subsidy reimbursements under our PSO mandate represented 7.7%, 9.7%, 8.9% and 8.2%, respectively, of our total sales and other operating revenues.

From 2017 to 2018, as a percentage of our total sales and other operating revenues, our domestic sales revenue decreased, cost subsidy reimbursements increased and, on a combined basis, domestic sales and cost subsidy reimbursements decreased as a percentage of our total sales and other operating revenue due to increased revenues from crude exports and other operating activities, including additional amounts received from the Government for the difference between the formula price and the government price of crude oil. From 2018 to 2019, as a percentage of our total sales and other operating revenues, our domestic sales revenue increased, cost subsidy reimbursements decreased and, on a combined basis, domestic sales and cost subsidy reimbursements increased as a percentage of our

total sales and other operating revenue due to declining domestic sales of crude oil, natural gas, geothermal, and oil products caused and decreasing sales volume of general fuel. In the nine-month period ended September 30, 2020, as a percentage of our total sales and other operating revenues, our domestic sales revenue increased, cost subsidy reimbursements increased and, on a combined basis, domestic sales and cost subsidy reimbursements decreased as a percentage of our total sales and other operating revenue due to a decline in oil prices and a decline in the fixed subsidy tariff for automotive diesel oil, which was revised downwards from Rp2,000.0 per liter in 2019 and Rp1,000.0 per liter in 2020.

Although crude oil prices rose in 2017 and regulated retail sales prices under the PSO mandate continued to be insufficient to cover our costs of producing and distributing those PSO fuel products in that year, the subsidy reimbursements that we received in 2017 for the distribution of LPG in 3kg cylinders under the compensation formula reduced the shortfall between the retail sales prices and our production and distribution costs for those products and offset the losses that we incurred for the distribution of other oil products under the PSO mandate. In contrast, in 2018, subsidy reimbursements that we received from the Government for the distribution of PSO fuel products were insufficient to cover our costs of production and distribution of those products and, pursuant to Presidential Regulation No. 43 of 2018, which amends Presidential Regulation No. 191 of 2014, concerning the Provision, Distribution and Retail Price of Oil Fuels (“PR 43/2018”), we received additional amounts from the Government to compensate us for the difference between the formula price and the government price of crude oil. In 2019, the subsidy reimbursements that we received from the Government decreased by 13.44% compared to 2018. The decrease was due to the decline in average CP Aramco price in 2019 as well as the stipulation of Minister of Energy and Mineral Resources’ Decree Number 61 of 2019, effective since 2019, which caused the subsidy value per kg to drop by Rp. 500/kg.

In the near term, we expect our costs of production and distribution to increase due to increasing oil prices globally. To date, the Government has not adjusted the regulated prices of crude oil or our price-regulated products to take into account these rising costs. If oil prices continue to increase and Government-regulated pricing formulae remain unchanged, and if no further action is taken by the Government to address any shortfalls, we would expect our profit margins on such products to decline.

See also “Business — Pertamina Downstream Business — PSO” and “Risk Factors — Risks Relating to Our Downstream Operations — We compete with other oil and gas companies in connection with our downstream activities and for the PSO mandate,” “Risk Factors — Risks Relating to Our Downstream Operations — A substantial part of our revenues is derived from the provision of subsidized fuel products” and “Risk Factors — Risks Relating to Our Downstream Operations — We may not be able to pass on increases in costs of our raw materials for products distributed under our PSO or other mandates from the Government or where the prices of such products are fixed at the request of the Government” for more information relating to our PSO mandate.

Price of Crude Oil, Natural Gas and Refined Products

Our operating results are impacted by the international market prices for crude oil and refined products. The volatility of the market prices of crude oil, natural gas and refined products is subject to a variety of factors beyond our control, including international events and circumstances, political developments and instability in petroleum producing regions such as the Middle East, Latin America and Western Africa. Higher prices for crude oil and natural gas generally have a positive effect on our operating profit in our upstream business, as our exploration and production business benefits from the increase in prices of the oil and gas we produce and deliver. Lower crude oil and natural gas prices generally have a corresponding negative effect in our upstream business. In our downstream segment, changes in the price of crude oil also affect the world market prices for certain petrochemical

feedstocks. As a result, our costs for producing petrochemical products typically track crude oil prices. The effect of changes in crude oil and natural gas prices on our refined petroleum products business depends on the rate and extent to which the prices of such products adjust to reflect those changes. For example, the average realized sales prices of crude oil has declined to US\$41.3 per bbl from US\$65.2 per bbl for the nine months period ended September 30, 2020 as compared to the nine months period ended September 30, 2019. In the nine months ended September 30, 2020, our total sales and other operating revenues decreased by US\$9,076.9 million, or 23.1%, to US\$30,250.6 million from US\$39,327.5 million in the nine months ended September 30, 2019. This decrease was primarily due to a decrease in subsidy reimbursements from the Government and a decrease in domestic sales of crude oil, natural gas, geothermal energy and oil products, and the lower selling prices of automotive diesel oil, pertamax, pertamax turbo, pertadex, avtur, LPG PSO and petrochemical product (asphalt, paraxylene, propylene) as well as a decrease in revenues from other operating activities as further described below, all of which are partly attributable to the COVID-19 pandemic.

Our policy is to use as much of the crude oil which we produce as we can as feedstock in our refineries and to purchase crude oil on the open market to meet any shortfall between our crude oil production (either in the quality or quantity of the crude oil) and the demands of our refineries. A portion of the crude oil we produce is not of suitable quality for our refineries. We generally either trade such crude oil in exchange for crude oil of suitable quality or sell such crude oil either on the term or spot market. In 2017, 2018 and 2019 and the nine months ended September 30, 2020, 80.8%, 80.5%, 78.0% and 74.5%, respectively, of the crude oil we produced was used as feedstock in our refineries (a portion of which was our DMO), while the balance of our crude oil production in such years was either traded or sold to third parties. See “Business — Pertamina Upstream Business — Sales and Distribution — Crude Oil” for more information on our crude oil sales.

The crude oil we supply to our refineries and trade is sold at the prevailing market price of crude oil so increases in crude oil prices would increase revenues in our upstream segment. We purchase more crude oil than we trade or sell to third parties so increases in the price of crude oil cause our costs of producing refined products to increase. For example, we commonly purchase Azeri crude oil from Azerbaijan and Bonny Light crude oil, Qua Iboe crude oil and Escravos crude oil from Nigeria for our refineries as they are well suited for blending with the crude oil we produce before refining. These purchases are made at spot market rates through producers (including national oil companies), equity holders (including multinational oil companies) and trading companies, so increases in the costs of Azeri crude oil, Bonny Light crude oil, Qua Iboe crude oil and Escravos crude oil on the spot market tend to cause our costs of production to increase.

Because demand for refined products in Indonesia exceeds the total production output of Indonesian refineries, we also import refined products to meet local demand. Fluctuations in the price of crude oil also affect market prices for certain petroleum products. Increases in the price of the refined products which we import would increase our purchasing costs. Such increases in our costs of producing and importing refined products may have a negative impact on our profits if the prices at which such products can be distributed do not fluctuate to the same extent because such prices are regulated due to market forces or otherwise.

Crude Oil, Natural Gas and Refined Product Production Volumes

Our sales and other operating revenues are positively correlated with our crude oil and natural gas production volumes, which in turn depend primarily on the level of the proven and developed reserves in the fields in which we have an interest. The level of proven and developed reserves is affected by such factors as:

- the extent to which we acquire interests in producing reserves or acquire other companies that own producing reserves;

- the rate at which exploration leads to successful discoveries and the speed at which successful exploration and development move to production;
- the speed at which we and our partners deplete the reserves through production of crude oil and natural gas; and
- the expiration and extension of the terms of the production sharing arrangements under which we and our partners produce crude oil and natural gas.

As our policy is to use as much of the crude oil which we produce as we can as feedstock in our refineries, our level of crude oil production directly affects the amount of refined products we can produce for sale or need to purchase in open markets. Other factors that affect our refining levels are the availability of suitable feedstock for purchase in the open markets and our refining capacity.

In addition, our refined products production levels are directly affected by the total production capacity of our six refineries, which has remained constant at 1,031.0 mbbls/d for each of the past three years and as of September 30, 2020. Our average utilization rate for our refineries was 79.0% in 2017, 83.1% in 2018, and 94.5% in 2019, respectively. Our total production capacity is affected by the facilities in place at our refineries, and our average processing capacity utilization rate is affected by the efficiency of our facilities and may also be affected by periods of scheduled and unscheduled downtime and the availability of suitable feedstock.

Our results of operations are also affected by the mix of refined products that we produce and sell. Certain non-subsidized refined products, such as our petrochemical products, provide us with higher margins than other products, such as subsidized fuels distributed under our PSO mandate. For example, in the last three years, our sales of assignment motor gasoline have decreased while our sales of non-subsidized higher grade gasoline have increased. This shift has primarily been driven by regulatory restrictions on assignment motor gasoline sales (see “— Government Ownership and Regulation”) and strong demand for our non-subsidized higher grade product. Key factors contributing to our product mix in a given period will include the types of refined products that are in our product portfolio, the types of refined products that are subject to Government subsidies, customer demand, and our ability to produce such fuels. Our product portfolio and our ability to produce certain products is dependent on the NCI of our refining facilities.

The Terms of Our PSCs

Our PSCs contain customary cost recovery provisions which permit us to recover approved costs incurred in capital investment for exploration and development, and production and operating expenses against available revenues generated by the PSC after deduction of first tranche petroleum (“FTP”). Under FTP terms, the Government and the contractor are entitled to take and receive oil and gas of a certain percentage each year of the total production in a particular production area, depending on contract terms, before any deduction for cost recovery. After FTP and recovery of all approved costs, the Government is entitled to a specified profit share of the remaining production and we keep the rest as our profit share.

Because our recoverable costs are customarily settled in gas and oil, the exact amount realizable by us out of these cost recoveries varies depending on the market prices of gas and oil. For example, if oil prices decrease, our cost recovery portion of production will rise and our net entitlement under our PSCs will therefore also rise in terms of the number of barrels of oil. However, despite such increase in our net entitlement, a decline in oil prices may lead to a decline in revenues from the sales of the oil that we receive from our net entitlement. The international market for gas and oil is volatile, and has

recently been characterized by significant price fluctuations. See “Risk Factors — Risks relating to our Company — The volatility in the prices of crude oil, natural gas and our refined products and the uncertainty of the market dynamics for oil and gas could adversely affect our business, financial condition, results of operations and prospects.”

Our share of our PSCs’ pre-tax profits, as set forth in our various PSCs, ranged from 30% to 86% for oil and 40% to 87% for gas, depending on the production sharing arrangement and without taking into account the impact of cost recovery and DMO. DMO are established by SKK MIGAS on a contract-by-contract basis. Under PEP’s and PEPC’s PSC relating to all of our wholly owned oil and gas fields, our share of profits before tax for oil and gas is 67.2%, which is higher than other PSCs in Indonesia. After a period of five years commencing from the month of the first delivery of crude oil produced from each new field in a given contract area, the contractor will typically be subject to DMO to sell approximately 7.5% to 16.8% of the crude oil produced from the contract area at a subsidized price, ranging from 15% to 25% of the market price, depending on the PSC. The size of our DMO and the discount to market price at which we must fulfill them would have a direct effect on revenues from our upstream business. In each of 2017, 2018 and 2019, our DMO accounted for 25% of our net crude oil production.

The feedstock that we purchase from our upstream operations for our refineries includes our DMO. Under the PSCs to which PEP or PEPC are party, we are not required to sell crude oil under our DMO at a subsidized price and we receive market price for the crude oil delivered under our DMO. The majority of the crude oil which we supply under our DMO is provided by PEP and PEPC. In addition, in accordance with the Oil and Gas Law of 2001, our production sharing arrangements include a DMO provision with respect to gas production. The size of our DMO with respect to our gas production and the terms, including the price at which we are required to supply the gas, has a direct effect on revenues from our upstream business.

We expect our allocation of FTP and net entitlement to increase in line with an anticipated decline in Indonesia’s production of crude oil due to current production being mature and the expectation that no new major discoveries will be made in the current decade. We expect to import more crude oil and feedstock for our refineries in future years as a result of this decline in our FTP allocation and net entitlement which will cause our costs of sales to increase.

Indonesian income tax rates (including dividend tax) on our PSCs currently vary depending on the contract terms for the applicable PSC where revenue is generated, and this percentage changes our effective tax rate. The average income tax rates (including dividend tax) applicable to our PSCs ranges from 25% to 48%. Our income tax expense is significantly influenced by the fact that PSCs cannot be consolidated for Indonesian income tax purposes, as this prevents us from off-setting losses from one PSC from profits from another PSC. Each PSC is taxed individually and no cross deduction is allowed.

See “Indonesian Regulatory Framework — Oil and Gas Regulation — Upstream — PSCs” for further information.

Movements in the Exchange Rate Between the Rupiah and U.S. Dollar

Although the U.S. dollar is our functional and reporting currency, as approximately 80% of our revenues were directly or indirectly denominated in U.S. dollars in 2017, 2018 and 2019 and the nine months ended September 30, 2020, respectively, fluctuations in the exchange rate between the Rupiah and the U.S. dollar would still affect our results of operations. A depreciation of the Rupiah against the U.S. dollar has a negative effect on revenues and receivables paid in Rupiah. Our payments within Indonesia are made in Rupiah due to compliance with applicable laws in Indonesia requiring payments to be denominated in Rupiah, while most of our operating costs, particularly in relation to the

procurement of crude oil and oil products, are incurred and paid in U.S. dollars. However, as prices of our refined products and our gas sales agreements are based on U.S. dollars converted to Rupiah, an appreciation of the Rupiah against the U.S. dollar may also have a negative effect on our business as it may reduce our prices in Rupiah terms.

Trade Receivables

As of December 31, 2019, we had trade receivables of US\$3,551.8 million, 44.3% of which was owed to us by our related parties. Out of this amount, as of December 31, 2019, US\$420.5 million was owed to us by PT Perusahaan Listrik Negara (Persero) (“PLN”) and its subsidiaries, our related party and a Government-owned electricity company, and US\$432.8 million was owed to us by the Indonesian Armed Forces and the Ministry of Defense. As of September 30, 2020, we had trade receivables of US\$3,405.9 million, 52.2 % of which was owed to us by related parties. Out of this amount, US\$558.6 million was owed to us by the Indonesian Armed Forces and Ministry of Defense, US\$555.0 million was owed to us by PT Garuda Indonesia (Persero) Tbk (“Garuda”), and US\$350.5 million was owed to us by PLN and its subsidiaries. Garuda is an Indonesian air carrier that has been significantly and adversely affected by the on-going COVID-19 pandemic. In December 2020, we reached an agreement with Garuda to restructure their amounts payable to us, pursuant to which US\$5.0 million is payable upfront, 5% is payable within approximately one year, 10% is payable within approximately two years, and the remainder is payable within approximately three years, in each case from the date of the agreement. See also “*Risk Factors — Risks Relating to Our Company — We are exposed to credit risk on our trade receivables*”.

As of September 30, 2020, the top ten parties from which trade receivables were due were the Indonesian Armed Forces and Ministry of Defense, PT Garuda Indonesia (Persero) Tbk, PLN and its subsidiaries, PPT Energy Trading Co, Ltd, PT Pupuk Indonesia (Persero), PT Patra SK, PT Merpati Nusantara Airlines (Persero), Polisi Republik Indonesia (“Polri”), PT Donggi-Senoro LNG, PT Aneka Tambang.

Our outstanding trade receivables are not covered by credit insurance (although certain of our trade receivables from unrelated third parties are covered by collateral and/or bank guarantees). We have procedures such as credit scoring, collateral requirement and regular confirmation and reconciliation, to monitor and limit exposure to credit risk on our outstanding trade receivables. We make provisions for impairment of trade receivables from related and third parties on an individual basis. Based on management’s review of the collectible balances of trade receivables as of December 31, 2017, 2018 and 2019 and September 30, 2020, our management believes that the provision for impairment made with respect to each such period is adequate to cover potential losses as a result of uncollected trade receivables, including taking into account the restructured payment arrangement entered into with Garuda described above and the impact of the COVID-19 pandemic on our counterparties in general. We have also implemented a credit management system that monitors customer usage of credit limits and automatically blocks credit lines beginning on the seventh day of nonpayment after a maturity date, and we impose penalties on overdue payments on a case-by-case basis.

As of December 31, 2017, 2018 and 2019 and September 30, 2020, we had made provisions for impairment in respect of trade receivables from third parties of US\$212.6 million, US\$230.1 million, US\$219.4 million and US\$280.1 million, respectively, and provisions for impairment in respect of trade receivables from related parties of US\$46.8 million, US\$32.7 million, US\$69.1 million and US\$186.2 million, respectively. The higher provisions for impairment in respect of trade receivables from related parties in 2019 primarily related to the Indonesian Armed Forces and Ministry of Defense.

Government Ownership and Regulation

The Government is our sole shareholder and, through its agencies, it is likely to continue to retain control over us. We derive certain benefits from being a Government-owned entity, including a

favorable allocation of net entitlement under certain of our PSCs, access to two-step loans, which are loans disbursed through a lending mechanism managed by the Government which have favorable terms and are only available to Government-owned entities and a right to request to renew cooperation contracts on our existing oil and gas blocks in Indonesia.

The Government could affect us through other actions, such as the alterations to the PSO mandate and the compensation we receive under it, the retail price which it sets for assignment fuel products, renegotiation or nullification of existing concessions and contracts, the imposition of taxes and foreign exchange restrictions or requiring that we supply fuel to our related parties at a discounted rate. Furthermore, because the majority of our accounts receivable are from Government-owned entities and the Government is our sole shareholder, we may have limited courses of action against it.

The oil, gas and geothermal industry in Indonesia is highly regulated and in the past the oil, gas and geothermal regulatory regimes have been subject to frequent change. We are subject to similar industry risks as other oil, gas and geothermal companies operating in Indonesia with respect to changes in governmental regulation, which may positively or adversely affect our business, financial condition, results of operations and prospects. For example, in May 2018, the Government enacted PR 43/2018, which limits the sale of assignment motor gasoline in Java province. This change, together with the recent growth in sales of non-subsidized higher grade gasoline, has led in a decrease in our assignment motor gasoline sales from US\$11,488.5 million in 2016 to US\$5,429.3 million in 2017 and US\$4,509.2 million in 2018, US\$4,914.9 million in 2019 and USD\$2,525,0 million in the nine months ended September 30, 2020. For more information, see “Risk Factors — Risks Relating to the Oil, Gas and Geothermal Industry.”

As our sole shareholder, the Government has the power to control the amount and timing of dividends payable by us to them as our sole shareholder. We have historically been required to pay dividends to the Government as an estimated amount based on a specified percentage of our distributable profit as shown in our unaudited financial statements in advance of our audited financial statements becoming available. As of December 31, 2017, 2018, 2019 and 2020, we declared dividends of Rp. 12.1 trillion (US\$907.4 million), Rp. 8.6 trillion (US\$614.9 million), Rp. 7.95 trillion (US\$552.7 million), and Rp8.5 trillion (US\$599.2 million) respectively, to the Government.

See “Risk Factors — Risks Relating to our Company — We are subject to the control of the Government and there is no guarantee they will always act in our best interests. We also derive certain benefits from being a state-owned entity, and we cannot guarantee that any or all of these benefits will continue,” “Risk Factors — Risks Relating to our Company — We are exposed to credit risk on our trade receivables,” and “Risk Factors — Risks Relating to Our Downstream Operations — We may not be able to pass on increases in costs of our raw materials for products distributed under our PSO or other mandates from the Government or where the prices of such products are fixed at the request of the Government.”

Growth Strategy

We have in the past pursued and plan to continue to pursue strategic acquisitions, joint ventures and investments, in particular with respect to assets that are in production or advanced stages of development, that will expand our oil, gas and geothermal business, in Indonesia and internationally and develop our gas infrastructure in Sumatra and Java. We also aim to maintain our existing leadership in our downstream businesses by growing and optimizing our refining capabilities, expanding our retail fuel station network and solidifying our market leadership in fuel, gas and petrochemical products distribution in Indonesia, and also increase our upstream businesses whether through the acquisition of assets or businesses in the African, Commonwealth of Independent States, South America and other potential regions. In the long term, we aim to supplement our existing core

businesses and become one of Asia's leading integrated energy companies by becoming the largest petrochemical distributor in Indonesia, one of the largest power producers in Indonesia, and a producer of biofuels and LNG in addition to our current role as an operator of LNG plants on behalf of the Government. In line with these expansion goals, we anticipate that we will also need to increase our storage capacity, invest in our transmission and distribution infrastructure and network. In addition, we also plan to add to our renewable energy businesses in anticipation of increasing energy demands in this space, through investments in geothermal, electric vehicle, solar, biomass and hydroelectric projects.

The implementation of our growth strategy may increase our debt financing requirements, lead to increased levels of debt and debt servicing costs and significant capital expenditures in the future. See also "Risk Factors — Risks Relating to Our Company — We may be unable to accomplish our development plans for our projects on schedule or within our budgeted costs and we are unable to give any assurance that these plans, if completed, will achieve our development aims."

In April 2018, the Issuer acquired the Government's 56.96% interest in PGN to establish a state-owned oil and gas holding enterprise that combines our fully integrated oil, gas and geothermal operations with the natural gas distribution and transmission business of PGN. PGN is a public company that is listed on the Indonesia Stock Exchange, under the ticker symbol "PGAS," and certain additional information regarding PGN, including its annual reports and financial statements, are publicly available. The Issuer is the largest shareholder of PGN.

At the time, the Issuer and PGN held 60.0% and 40.0% respectively, of PT Nusantara Regas ("Regas"), which develops and operates LNG storage facilities and regasification terminals. As a result of the Issuer's acquisition of PGN, the Issuer has 82.78% effective ownership of Regas and control over its activities. Accordingly, the Issuer has consolidated Regas in its consolidated financial statements since the acquisition of PGN completed.

In December 2018, PGN acquired from the Issuer a 51.0% stake in PT Pertamina Gas. Through the acquisition of PT Pertamina Gas, PGN also acquired PT Pertamina Gas' subsidiaries PT Pertagas Niaga, PT Perta Arun Gas, PT Perta Daya Gas and PT Perta Samtan. The Issuer retains a 49.0% direct stake in PT Pertamina Gas. While the Issuer's effective total ownership in PT Pertamina Gas (i.e. including its indirect stake via its ownership of PGN) is reduced from 100.0% to 78.05%, the transfer of Pertagas to PGN intends to grow our gas business by creating an extensive and far-reaching distribution and transmission pipeline network in Indonesia and unlocking benefits of scale.

For more information about PGN, see "Business — Pertamina Gas Business — Gas Transmission and Distribution Through PGN."

In 2020, we have started the process of re-organizing and streamlining our operations and structure by establishing six major business lines, namely upstream, refinery and petrochemical, commercial and trading, gas, power and NRE, and shipping, although the transfers of our business operations to these sub-holdings are yet to be formalized.

Business Update on COVID-19

The COVID-19 pandemic has also directly impacted our business operations, requiring us to adopt precautionary measures such as telecommuting, rotation of office hours among employees, limiting face-to-face meetings and restricting domestic and overseas business travel. The current COVID-19 pandemic has affected, and we expect it to continue to affect, our ability to continue doing business with our customers, suppliers, third-party services providers and other parties that we conduct business

with or that operate within our supply chains for our various businesses, whether due to restrictions placed on business activities and movements in Indonesia, in the countries where they are located, or other regions operating within our supply chains, or other reasons stemming from COVID-19. We have also experienced general delays in our operations due to safety measures implemented by us or our customers in response to COVID-19.

Our logistics services have also been affected by heightened restrictions at the ports we operate, which have resulted in delayed port clearance and extended crew change processes. We have also faced delays in the extension of certain permits we require for our operations such as, in particular, in relation to our river and sea transportation services, due to social distancing measures implemented at Government offices resulting in prolonged processing periods. Further, although the current COVID-19 pandemic has not lead to any major disruptions to operations at our concessions or facilities, we may be required to suspend or shut down operations at some or all of our concessions or facilities as a result of the pandemic. While we have established temperature screening checkpoints and temporary medical facilities and isolation areas at all our work sites as well as established COVID-19 testing facilities for our employees and their families, we cannot assure you that such measures or any other actions we have taken to mitigate the effects of the pandemic on our business operations will be adequate.

In response to the COVID-19 pandemic, we have implemented the below initiatives:

- maintaining strict safety protocols including implementation of health protocols in accordance with the direction of the Minister of BUMN, “PERTAMINA Siaga COVID-19” followed by formation of COVID-19 task force in early march of 2020, create the “3t” – testing, tracing and treatment and initiate a call center 135 for workers and families;
- maintaining cost leadership program;
- maintaining production under COVID-19 to reduce imports;
- increasing revenue under COVID-19 by optimizing Pertamina loyalty program and discount program to increase revenue;
- optimizing contract by renegotiating contracts denominated in foreign currencies to be paid in Rupiah;
- improving energy efficiency by replacing the refinery fuel and electricity use with natural gas from PLN;
- improving operational efficiencies by reducing the integrated port time to decrease cost of goods sold;
- continuing digital transformation by digitizing gas stations and centralized procurement;
- creating inventory management system so to build inventory build-up time when oil prices are low; and
- managing foreign exchange risk through hedging and improved cash flow performance.

Internal Controls Over Financial Reporting

We are committed to establishing and improving policies and practices in order to implement a system of good internal controls and corporate governance. Accordingly, in connection with the annual audits of our consolidated financial statements as of and for the years ended December 31, 2019, 2018

and 2017, we requested that KAP Purwantono, Sungkoro & Surja (the Indonesian member firm of Ernst & Young Global Limited) provide us, from their assessment of our internal controls to determine the nature, extent and timing of audit procedures for the purpose of expressing an opinion on the consolidated financial statements, with management letters identifying, among other matters, aspects of our internal controls relevant to financial reporting that require remediation or improvement, their implications to our consolidated financial statements, and recommendations for remediation or improvement.

The letters issued by KAP Purwantono, Sungkoro & Surja (the Indonesian member firm of Ernst & Young Global Limited) in 2018 and 2019 (collectively, the “Management Letters”) identified a number of aspects of our internal controls and operations relevant to financial reporting which the independent auditors observed and for which the independent auditors recommended remediation or improvement. We also expect to receive a management letter from KAP Purwantono, Sungkoro & Surja in connection with the financial period ended December 31, 2020

Following our receipt of each of the Management Letters, we took measures to remedy the deficiencies and to ensure the completeness, timeliness and accuracy of our consolidated financial statements. Among other things, we have:

- improved systems for recording of fiscal assets;
- replaced or repaired oil tank measuring devices which are known to be unreliable;
- reviewed and corrected income tax and value-added tax reconciliations;
- adopted the most recent recommended IT protocols, configurations and controls;
- performed periodic physical checks of certain land assets;
- corrected the calculation and presentation of employee loan balance;
- centralized our human resources function;
- established criteria for obsolete and slow moving inventory; and
- monitoring over the completion of assets under construction.

In addition, we are in the process of implementing the following measures to address additional recommendations related to oil tank measuring devices, inventory monitoring systems and IT systems.

We also requested and received from our independent auditors similar management letters identifying, among other matters, aspects of our internal controls relevant to financial reporting that require remediation or improvement, their implications to our consolidated financial statements, and recommendations for remediation or improvement in connection with the annual audits of our consolidated financial statements as of and for the years ended December 31, 2012, 2013 and 2014 and have taken measures to remedy the deficiencies identified and adopt the recommendations set forth therein.

As of the date of this Offering Memorandum, we believe that we have or are in the process of addressing the majority of the issues identified in the Management Letters. Our independent auditors expressed an unqualified opinion on our audited consolidated financial statements for the years ended December 31, 2019, 2018 and 2017. See also “Risk Factors — Risks Relating to Our Company — If we fail to establish or maintain an effective system of internal controls, we may be unable to accurately report our financial results or prevent fraud.”

Critical Accounting Policies

Our critical accounting policies and practices are those that we believe are the most important to the presentation of our financial condition and results of operations and that require subjective judgment on behalf of management. In many cases, the accounting treatment of a particular transaction is specifically dictated by generally accepted accounting principles. We believe the policies and practices described below are our critical accounting policies and practices. For a summary of all our accounting policies, including the policies discussed below, see Notes 2 and 3 to the consolidated financial statements as of and for the years ended December 31, 2019, 2018 and 2017, which are included elsewhere in this Offering Memorandum.

In the application of our accounting policies, we are required to make estimates, judgments and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. These estimates and assumptions are based on historical experience and other factors we consider relevant.

Judgments made by our management in the process of applying our accounting policies that have the most significant effects on amounts in our consolidated financial statements relate to (i) exploration and evaluation expenditure, (ii) development expenditure, and (iii) uncertain tax exposure. For more information on judgments related to exploration and evaluation expenditure, see “— Oil and Gas Properties.” Development activities commence after a project is sanctioned by the appropriate level of management, and our judgement is required in determining when a project is economically viable.

We base our assumptions and estimates on parameters that are available when our consolidated financial statements were prepared. Existing circumstances and assumptions about future developments may change due to changes in the market and conditions arising beyond our control. Areas in which we rely on the use of assumptions and estimates relate to (i) impairment of non-financial assets; (ii) reserve estimates; (iii) oil and gas, and geothermal properties; (iv) provision for the impairment of loans and receivables; (v) amounts due from the Government; (vi) depreciation, estimate of residual values and useful lives of fixed assets; (vii) deferred tax assets; and (viii) provision for decommissioning and site restoration.

Impairment of Non-Financial Assets

In accordance with our accounting policy, each asset or cash generating unit (“CGU”) is evaluated every reporting period to determine whether there are any indications of impairment.

The determination of fair value and value in use requires management to make estimates and assumptions about expected production and sales volumes, commodity prices (considering current and historical prices, price trends and related factors), reserves, operating costs, decommissioning and site restoration cost, and future capital expenditure. These estimates and assumptions are subject to risk and uncertainty. There is a possibility that changes in circumstances may alter these projections, which may have an impact on the recoverable amount of the assets.

Reserve Estimates

Proved oil and gas reserves are the estimated quantities of crude oil and natural gas which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions. Proved reserves include:

- proved developed reserves: amounts of hydrocarbons that are expected to be retrieved through existing wells, facilities and operating methods; and

- proved undeveloped reserves: amounts of hydrocarbons that are expected to be retrieved following new drilling, facilities and operating methods.

The accuracy of proved reserve estimates depends on a number of factors, assumptions and variables such as the quality of available geological, technical and economic data, results of drilling, testing and production after the date of the estimates, the production performance of the reservoirs, production techniques, projecting future rates of production, the anticipated cost and timing of development expenditures, the availability for commercial market, anticipated commodity prices and exchange rates.

As the economic assumptions used to estimate reserves change from year to year, and additional geological data are generated during the course of operations, estimates of reserves may change from year to year. Changes in reported reserves may affect our financial results and financial position in a number of ways, including:

- Depreciation and amortization, which are determined on a unit of production basis, or where the useful economic lives of assets change.
- Decommissioning, site restoration and environmental provision may change where changes in estimated reserves affect expectations about the timing or cost of these activities.
- The carrying value of deferred tax assets/liabilities may change due to changes in estimates of the likely recovery of the tax benefits.

We estimate proven reserves on the basis of our oil and gas resource management system, which contains procedures for classifying and estimating reserves. Until December 31, 2018, the procedures for our oil and gas resource management system and the classifications of our reserves were consistent with PRMS 2007. PRMS 2007 was generally considered the oil and gas industry standard for reserve reporting until it was superseded by PRMS 2018 in 2018. Accordingly, in this Offering Memorandum, estimates of our oil and gas reserves as of December 31, 2018 and 2017 have been prepared in a manner consistent with PRMS 2007. Beginning in 2019, we began classifying and estimating our reserves in a manner consistent with PRMS 2018. Accordingly, in this Offering Memorandum, estimates of our oil and gas reserves as of September 30, 2020 and December 31, 2019 have been prepared in a manner consistent with PRMS 2018. The characteristics of the estimation uncertainty of natural reservoirs of oil and gas reserve may lead to changes in the estimated reserves due to the additional data obtained by us.

Oil and Gas, and Geothermal Properties

We follow the principles of the “successful efforts” method of accounting for our oil and natural gas exploration and evaluation activities.

For exploration and exploratory-type stratigraphic test wells, costs directly associated with the drilling of those wells are initially capitalized as assets under construction within oil and gas properties, pending determination of whether potentially economically viable oil and gas reserves have been discovered by the drilling effort.

Such estimates and assumptions may change as new information becomes available. If we do not discover potentially economically viable oil and gas quantities in a well, the well costs are expensed as a dry hole and are reported in exploration expense.

Provision for the Impairment of Loans and Receivables

Provision for the impairment of receivables is maintained at a level considered adequate to provide for potentially uncollectible receivables. In this case, we use the best available facts and conditions including but not limited to the duration of our relationship with the customer and the customer's credit status based on reports from third parties and known market factors, to record specific reserves for customers against the amount due to reduce the our receivables to the amount expected to be collected.

These specific provisions are re-evaluated and adjusted if we receive additional information that affects the amounts estimated. In addition to specific provisions for receivables that are individually significant, we also recognize collective impairment provisions for debtors' credit risk which are grouped based on similar credit characteristics, and although not specifically identified as requiring specific provisions, have a higher risk of default than when the receivables are initially given to the debtor.

Collective provisions are recognized based on historical loss experience using various factors such as the historical performance of debtors in the collective group, and consideration of deterioration in the performance of the markets in which the debtor operates and identified structural weaknesses or deterioration in cash flow performance of the debtors.

If we have determined that the receivables from sales on credit are unlikely to be collected, the income on the sale is recognized only when the cash is received.

The adoption of SFAS 71 causes changes in the valuation of the estimates and significant judgments regarding the provision for impairment losses on receivables. In determining expected credit losses, our management is required to exercise judgment in defining what constitutes a significant increase in credit risk and in making assumptions and estimates, to relate relevant information about past events, current conditions and estimates of economic conditions. Consideration applies in determining the lifetime period and the initial recognition point.

The impact of COVID-19 on reducing accounts receivable

COVID-19 causes economic uncertainty in the future, which affects our expected credit calculations. Therefore, in preparing this Offering Memorandum, we have taken the following steps to evaluate the impact of COVID-19:

- Conducted reviews of communications taking place in the market to get an overview of the impact of COVID-19 in Indonesia;
- Conducted reviews on the impact of the economic downturn based on previous historical experiences;
- Carry out weighting changes in scenarios after considering future economic forecasts where bad scenarios are weighted more than calculated on January 1, 2020; and
- Conducted individual studies of several customers engaged in industries that were significantly affected by COVID-19, such as the airline industry.

Due from the Government

We recognize amounts due from the Government for cost subsidies for certain fuel products, 3kg LPG cylinders and marketing fees in relation to the Government's share of crude oil, natural gas and

LNG. We make an estimation of the amount due from the Government based on the actual delivery volume parameter and rates based on government regulations. The amount is subject to audit and approval by the BPK. The actual results may be different to the amounts recognized.

Depreciation, Estimate of Residual Values and Useful Lives of Fixed Assets

The useful lives of our investment properties and fixed assets are estimated based on the period over which the asset is expected to be available for use. Such estimation is based on a collective assessment of similar businesses, internal technical evaluations and experience with similar assets.

Deferred Tax Assets

Deferred tax assets are recognized only where it is considered more likely than not that they will be recovered, which is dependent on our assessment of the generation of sufficient future taxable profits.

Provision for Decommissioning and Site Restoration

We are required to carry out future decommissioning of oil and gas production facilities and pipelines at the end of their economic lives. Our largest decommissioning obligations relate to the plugging and abandonment of wells and the removal and disposal of oil and gas platforms and pipelines in our contract areas.

Most of these decommissioning events are many years in the future and the precise requirements that will have to be met when the removal event actually occurs are uncertain. Decommissioning technologies and costs are constantly changing, as well as political, environmental, safety and public expectations. Consequently, the timing and amounts of future cash flows are subject to significant uncertainty. Changes in the expected future costs are reflected in both the provision and the related asset and could have a material impact on our consolidated financial statements.

Overview of Certain Key Line Items

Sales and Other Operating Revenues

Our sales and other operating revenues are primarily derived from domestic sales of crude oil, natural gas, geothermal energy and refined oil products. We also derive revenues from subsidy reimbursements from the Government for subsidized fuel products, additional amounts from the Government for the difference between the formula price and the government price of crude, export sales of crude oil, natural gas and oil products, marketing fees and revenues from our other operating activities.

Domestic sales of crude oil, natural gas, geothermal energy and oil products. Revenue from the production of crude oil and natural gas are recognized on the basis of the provisional entitlements method at the point of lifting. Differences between the actual liftings of crude oil and natural gas result in a receivable when final entitlements exceed liftings of crude oil and gas (i.e. an underlifting position) and in a payable when lifting of crude oil and natural gas exceed final entitlements (i.e. an overlifting position). Underlifting and overlifting volumes are valued based on the annual weighted average ICP for crude oil and price as determined in the respective sale and purchase contract for natural gas.

In 2017, 2018, 2019 and the nine months ended September 30, 2020, domestic sales of crude oil, natural gas, geothermal energy and oil products represented 86.2%, 77.0%, 79.9% and 81.0%, respectively, of our total sales and other operating revenues. The largest component of our domestic

sales of these products relates to the retail sale of automotive diesel oil and assignment motor gasoline under our PSO mandate as further described below. The balance is composed of domestic sales of other products.

In 2017, 2018 and 2019 and in the nine months ended September 30, 2020, 27.5%, 26.5%, 29.9% and 31.4%, respectively, of our sales and other operating revenues (excluding marketing fees) were derived from the distribution of our various fuel products pursuant to our PSO mandate from the Government. In 2017, 2018 and 2019 and in the nine months ended September 30, 2020, 27.5%, 26.5%, 29.9% and 31.4%, respectively, of our sales and other operating revenues (excluding marketing fees) were derived from the distribution of our various fuel products pursuant to our PSO mandate from the Government. In 2018, our total sales and other operating revenues increased from 2017 due to higher sales volumes and higher MOPS while the quantity and price of subsidized fuel products remained largely unchanged. In 2019, our total sales and other operating revenues increased from 2018 due to higher other operating revenue. In 2017 and 2018, there was a disparity between the retail price of specific fuel type (JBT) solar and specific fuel type assignment (JBKP) premium (Jamali and Non-Jamali) and the subsidized prices that we are entitled to from the Government. Our other operating revenue included US\$3,905.5 million from the Government to make up for the 2017 and 2018 price disparity. In 2019, we again received payments from the Government to make up for the disparity between retail and subsidized fuel prices. The amount recorded as other operating revenue in 2019 was US\$1,522 million of our 2019 revenues. Therefore, our other operating revenue decreased from 2018 to 2019 because the additional amount paid by the Government to us in 2019 reflected one year's worth of additional payments, compared to the two years' worth of additional payments received in 2018. For subsidized fuel and LPG in 3kg cylinders distributed under our PSO mandate, we receive both the retail price from the consumer as well as a cost subsidy reimbursement from the Government. See "Business — Pertamina Downstream Business — PSO" for a description of the PSO system and a description of how such cost subsidy reimbursements are determined. For subsidized fuel and LPG in 3kg cylinders distributed under our PSO mandate, we receive both the retail price from the consumer as well as a cost subsidy reimbursement from the Government. See "Business — Pertamina Downstream Business — PSO" for a description of the PSO system and a description of how such cost subsidy reimbursements are determined.

While domestic sales of crude oil, natural gas, geothermal energy and oil products declined as a percentage of our total sales and other operating revenues between 2017 and 2018, our subsidy reimbursements from the government increased as a percentage of our sales and other operating revenues over the same period. See "— Subsidy reimbursements from the Government." In addition, in 2018, subsidy reimbursements that we received from the Government for the distribution of PSO fuel products were insufficient to cover our costs of production and distribution of those products and, pursuant to PR 43/2018 (as defined below), we received additional amounts from the Government to compensate us for the difference between the formula price and the government price of crude oil. In 2017, 2018, 2019 and in the nine months ended September 30, 2020, domestic sales of crude oil, natural gas, geothermal energy and oil products and subsidy reimbursements from the government accounted for 93.9%, 86.7%, 88.8% and 89.2% of our sales and other operating revenues, respectively. In addition, in 2019 and for the nine months ended September 30, 2020, domestic sales of crude oil, natural gas, geothermal energy and oil products and subsidy reimbursements from the government and revenues from other operating activities (which primarily comprised additional amounts from the Government to compensate us for the difference between the formula price and the government price of crude) accounted for 80.2% and 80.7% of our sales and other operating revenues, respectively.

See also "— Overview of Segment Results."

Subsidy reimbursements from the Government. We receive regular cost subsidy reimbursements from the Government for subsidized fuel and LPG we distribute under our PSO mandate. These reimbursements represented 7.7%, 9.7%, 8.9% and 8.2% of our sales and other operating revenues in 2017, 2018, 2019 and the nine months ended September 30, 2020, respectively. Our reimbursements

were higher in 2017 as they were primarily driven by increased subsidy reimbursements received for sales of LPG in 3kg cylinders, in 2018 as they were primarily driven by increased subsidy reimbursements received for sales of certain fuel products, kerosene and LPG in 3kg cylinders, and in 2019 the decrease was affected by the decline in average CP Aramco price in 2019 as well as the stipulation of Minister of Energy and Mineral Resources' Decree Number 61 of 2019, effective since 2019, which thus drove down the subsidy value per kg.

Export of crude oil, natural gas and oil products. We export some of the oil products and crude oil we produce to foreign markets. In 2017, 2018, 2019 and the nine months ended September 30, 2020, these sales represented 4.1%, 6.3%, 6.6% and 8.7%, respectively, of our sales and other operating revenues.

We also derive sales and other operating revenues from marketing fees and from our other operating activities. In 2017, 2018, 2019 and the nine months ended September 30, 2020, the most significant contributions to revenue from our other operating activities came from shipping services, upstream support services, amounts received to cover the disparity between retail and subsidized prices and upstream support services, respectively.

In our upstream segment, we derive sales and other operating revenues primarily from exploration, drilling, development and production of crude oil, natural gas and geothermal energy, provision of technology services and drilling services primarily within Indonesia. In order to achieve upstream segment growth, we seek to increase production and to increase our number of new oil and gas reserves through improved oil recovery and enhanced oil recovery for existing assets and acquisitions of oil and gas blocks.

In our downstream segment, we derive sales and other operating revenues primarily from domestic sales of oil products and subsidies from the Government in relation to the distribution of certain subsidized fuel products and LPG in 3kg cylinders. We also derive sales and other operating revenues from sales of non-subsidized fuel products, LPG in 12kg and 50kg cylinders, non-assignment LPG in 3kg, 5.5kg, and 12kg cylinders and other non-fuel products.

Revenues from other operating activities. Revenues from other operating activities comprises revenues from other business services, such as natural gas transport, upstream support, shipping, insurance, and health and hospital services. In addition, in 2018, revenues from other operating activities primarily comprised one-time additional amounts received from the Government in relation to Government-regulated fuel prices, which is detailed below.

In 2018, PR 43/2018 amended Article 14 paragraph (8) of Presidential Regulation No. 191 of 2014. PR 43/2018 authorized the Minister of Energy and Mineral Resources to set the retail price for automotive diesel oil distributed under the PSO mandate at a level that is different from the retail price determined under the statutory subsidy reimbursement formula. The factors that PR 43/2018 requires the Minister of Energy and Mineral Resources to consider in exercising this authority include the Government's financial capacity, retail consumer purchasing power, and general economic and social conditions. PR 43/2018 also grants the Minister of Finance discretion to set additional policies, in coordination with the Minister of Energy and Mineral Resources and the Minister of State-Owned Enterprises, to address revenue surpluses or deficits encountered by an entity with a PSO mandate due to fluctuations in the retail price of fuel. In 2018 and 2019, we received US\$3,907.1 million and US\$2,220.3 million relating to the difference between the formula price and the government price of crude oil as a result of the Government's exercise of its authority under PR 43/2018.

Costs of Sales and Other Direct Costs

Cost of sales and other direct costs consist of cost of goods sold, which is comprised of production costs and purchases of oil products and other products, upstream production and lifting costs, exploration costs and expenses relating to other operating activities.

In 2017, 2018, 2019 and the nine months ended September 30, 2020, cost of goods sold accounted for 87.8%, 87.7%, 84.8% and 79.3%, respectively, of our total cost of sales and other direct costs. The key components in cost of goods sold are described below.

Production costs. Production costs primarily represent costs related to the purchase of crude oil as feedstock for our refining operations, which we classify as direct materials. We import crude oil under term as well as spot contracts. The cost of importing crude oil accounts for a very substantial portion of our production costs, and is principally affected by the price and the quantity of crude oil we import. The quantity of crude oil we import typically increases as a result of increases in the amount of domestic crude oil which the Government is entitled to receive under production sharing arrangements and cooperation contracts, which we process on its behalf. Our production costs also include certain overhead costs, including supporting materials, rent, depreciation, salaries, wages and other employee benefits, utilities, infrastructure and fuel, customs and duties, maintenance and repairs, freight and transportation, materials and equipment, professional services, overhead and business travel, in each case directly related to production. Production costs represented 57.6%, 56.1%, 54.7% and 56.4% of our total cost of goods sold in 2017, 2018, 2019 and the nine months ended September 30, 2020, respectively.

Purchases of oil products and others. In order to supplement the oil and other petrochemical products we produce and meet domestic demand, we import some of these products from foreign sources, including assignment motor gasoline, automotive diesel oil, industrial and marine fuel oil and other oil products, and we also make domestic purchases of other oil products, and geothermal energy. The related costs are recorded under this category. The costs of importing automotive diesel oil, other oil products (such as asphalt, avtur, Pertamina, butane and propane) and motor gasoline comprise a significant portion of these costs and typically increase when Indonesia's domestic fuel consumption exceeds domestic fuel production. Purchases of oil products and others represented 44.8%, 44.7% and 43.8% and 39.8% of our total cost of goods sold in 2017, 2018, 2019 and the nine months ended September 30, 2020, respectively.

Our cost of sales and other direct costs represented 81.8%, 84.0%, 85.1% and 85.9% of our sales and other operating revenue in 2017, 2018, 2019 and the nine months ended September 30, 2020, respectively. Our cost of sales and other direct costs as a percentage of sales and other operating revenue is typically higher during periods of higher crude oil prices because the pricing formulae on our subsidized fuel products generally do not allow us to pass on all of our increased costs to consumers, nor do the subsidies we receive from the Government completely cover such increases. In 2018 and 2019, to address the shortfall between the subsidy reimbursements we receive from the Government for fuel products distributed under our PSO mandate and the higher cost of crude oil feedstock due to higher prices set by the Government, we received additional amounts from the Government for the difference between the formula price and the government price of crude oil.

Operating Expenses and Other Non-Operating Income/(Expenses) — Net

Operating expenses and other non-operating income/(expenses) — net represents the balance for a given period of certain factors affecting our results of operations and is defined as the sum of the following income statement line items: (i) selling and marketing expenses; (ii) general and administrative expenses; (iii) gain/loss on foreign exchange — net; (iv) finance income; (v) finance costs; (vi) share in net profit of associates and joint venture; and (vii) other expenses — net.

Selling and marketing expenses are primarily incurred in connection with freight and transportation, salaries, wages and other employee benefits, depreciation of fixed assets used in our selling, and LPG filling fees. General and administrative expenses primarily include salaries, wages and other employee benefits, taxes, retributions and penalties, and professional services and others, which comprises depreciation, depletion and amortization, rental, material and equipment, maintenance and repair, training, education and recruitment, business travel and other expenses. Other expenses — net is a general line item for other expenses and other income, which varies from year to year. For 2017, other expenses — net primarily included provisions for tax disputes, provisions for impairment of certain assets such as oil and gas property, provision for impairment of goodwill, tax refund and final income tax asset revaluation. For 2018, other expenses — net primarily included provisions for impairment of certain assets such as oil and gas assets, decrease in value of investments in oil and gas blocks and tax penalties. For 2019, other expenses — net primarily included provision for an onerous contract of LNG, provision for impairment of receivable, correction of take or pay contract of LNG and impairment of fixed assets. For the nine months ended September 30, 2020, other expenses — net primarily included a provision for impairment of oil and gas assets, provision for impairment of investment in oil and gas blocks and provision for impairment of receivables. Other income typically comprises income from contract and material penalties and claims, gains on adjustment of fair value of other investments and rental income.

Income Tax Expense — Net

We had been subject to corporate income tax at the rate of 25% from 2010 until 2019. In 2020, the corporate income tax rate changed from 25% to 22%. As our subsidiaries are taxed on an individual basis, in addition to the taxes that we are subject to on a consolidated basis, our effective tax rates (calculated as income tax expense — net divided by profit before income tax expense) for 2017, 2018, 2019 and for the nine months ended September 30, 2020, were 30.2%, 52.5%, 54.6% and 300.4%, respectively. Income tax expense — net is net of deferred income tax benefits and expenses.

Profit for the Period/Year After the Effect of Merging Entity's Income Adjustment

Our profit for the period/year after the effect of merging entity's income adjustment attributable to owners of the parent entity is our net income (including PGN) and represented 106.2%, 103.4%, 100.0% and 99.8% of our profit for the period/year before the effect of merging entity's income adjustment attributable to owners of the parent entity in 2017, 2018, 2019 and the nine months ended September 30, 2020, respectively.

Overview of Segment Results

We have three operating segments: upstream, downstream and others. The operating segment which we classify as “others” consists of office and house rentals, hotel operation, air transportation services, health services and operation of hospitals, investment management, gas transportation services, human resources development services and insurance services. Our gas and new and renewable energy business activities are also grouped into our “others” segment because they have not have met the quantitative threshold as a reportable operating segment.

Our segment results are derived from our total segment revenues, after deducting total costs of sales and other direct costs, selling and marketing expenses and general and administrative expenses relating to such segments. We eliminate intercompany balances and transactions to derive our total consolidated segment revenues and results after eliminations, however we believe that our total consolidated segment revenues are an indicative measure of our performance as our intercompany transactions (for example, sales of crude oil from our upstream segment to our downstream segment for use as feedstock) are generally entered into on arm's length terms. Our segment revenues and results are presented in Note 42 to the consolidated financial statements, which are included elsewhere in this Offering Memorandum.

Results of Operations

Unless otherwise indicated, our results of operations are presented and discussed below on a consolidated basis.

The following table provides a breakdown of our profit for the period/year after the effect of merging entity's income adjustment by showing each item in U.S. dollar amounts and as a percentage of sales and other operating revenue for the periods indicated. This table should be read together with our consolidated financial statements, including the notes thereto, appearing elsewhere in this Offering Memorandum.

	For the Years Ended December 31,						For the Nine-Month Periods Ended September 30,			
	2017		2018		2019		2019		2020	
	(US\$ in millions, except percentages)						(Unaudited)			
	%		%		%		%		%	
Total sales and other operating revenue	46,175.7	100.0	58,111.2	100.0	54,792.5	100.0	39,327.5	100.0	30,250.6	100
Total cost of sales and other direct costs	(37,778.7)	81.8	(48,799.6)	84.0	(46,634.5)	85.1	(34,137.1)	86.8	(25,980.9)	85.9
Total operating expenses and other non-operating income/ (expenses) ⁽¹⁾	(4,516.5)	9.8	(3,568.6)	6.1	(3,275.9)	6.0	(2,734.0)	7.0	(3,921.4)	13.0
Profit before income tax	3,880.6	8.4	5,741.9	9.9	4,882.1	8.9	2,456.4	6.2	348.4	1.2
Income tax expense — Net . . .	(1,170.4)	2.5	(3,016.2)	5.2	(2,264.1)	4.1	(1,675.8)	4.3	(1,046.4)	3.5
Profit (Loss) for the period/ year after the effect of merging entity's income adjustment	2,710.2	5.9	2,725.7	4.7	2,618.0	4.8	780.5	2.0	(698.0)	(2.3)

Note:

- (1) Comprised of selling and marketing expenses, general and administrative expenses, gain (loss) on foreign exchange — net, finance income, finance costs, share in net profit of associates and joint venture, and other expenses — net.

The following tables provide a breakdown of our sales (before elimination of inter-segment sales and expenses) and the results for our upstream and downstream segments for the periods indicated. See “Business — Pertamina Upstream Business” and “Business — Pertamina Downstream Business” for a description of our upstream and downstream segments. This table should be read together with our consolidated financial statements, including the notes thereto, appearing elsewhere in this Offering Memorandum.

Upstream

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
	(US\$ in millions)			(Unaudited)	
External upstream sales	4,489.3	7,054.5	6,412.9	4,699.2	2,767.7
Inter-segment sales	3,477.0	5,498.1	5,710.7	4,191.3	3,354.0
Total upstream segment revenues	7,966.3	12,552.6	12,123.6	8,890.5	6,121.8
Upstream segment results	3,327.9	5,960.6	5,112.7	3,835.7	1,635.3

Downstream

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
	(US\$ in millions)			(Unaudited)	
External downstream sales	37,000.6	45,691.6	44,064.3	31,383.1	24,829.5
Inter-segment sales	372.2	399.7	353.1	478.3	(338.7)
Total downstream segment revenues	37,372.7	46,091.3	44,417.4	31,861.4	24,490.8
Downstream segment results	1,282.2	(286.8)	(784.2)	(1,336.2)	346.9

The nine-month period ended September 30, 2019 compared with the nine-month period ended September 30, 2020

Total Sales and Other Operating Revenues

In the nine months ended September 30, 2020, our domestic sales of crude oil, natural gas, geothermal energy and oil products decreased by US\$7,927.7 million from US\$32,429.5 million to US\$24,501.8 million for the nine months ended September 30, 2019. Our total sales and other operating revenues decreased by US\$9,076.9 million, or 23.1%, to US\$39,327.5 million from US\$39,327.5 million in the nine months ended September 30, 2019. This decrease was primarily due to a decrease in subsidy reimbursements from the Government and a decrease in domestic sales of crude oil, natural gas, geothermal energy and oil products because of the lower selling prices of certain types of our products including automotive diesel oil, pertamax, pertamax turbo, pertadex, avtur, LPG PSO and petrochemical product (asphalt, paraxylene, propylene) as well as a decrease in revenues from other operating activities as further described below, all of which are partly attributable to the COVID-19 pandemic. The average price of the ICP in September 2019 was US\$62.03 per barrel while in September 2020 it was US\$39.80 per barrel and the average price of MOPS for gasoline (RON 88), automotive diesel oil (gas oil 0.25% sulfur) and aviation turbine fuel in September 2020 was US\$74.2373.14 per barrel, while in September 2019 it was US\$48.66 per barrel.

In our upstream segment, our total segment revenues before eliminations in connection with our accounts consolidation decreased by US\$2,768.7 million, or 31.1%, to US\$6,121.8 million from US\$8,890.5 million in the nine months ended September 30, 2019. This decrease was primarily due to a decline in crude oil and gas price and as well as decreased production of gas.

In our downstream segment, our total segment revenues before eliminations in connection with our accounts consolidation decreased by US\$7,370.6 million, or 23.1%, to US\$24,490.8 million from US\$31,861.4 million in the nine months ended September 30, 2019. This decrease was primarily due to lower average selling price for downstream products in 2020 compared to 2019 and a decrease in our revenue from our domestic sales of downstream products. These sales were conducted in Rupiah and booked in U.S. dollars and thus are adversely affected by the weakening of the Indonesian Rupiah against the U.S. dollar by over 3% from 2019 to 2020.

Total Cost of Sales and Other Direct Costs

In the nine months ended September 30, 2020, our total cost of sales and other direct costs decreased by US\$8,156.2 million, or 23.9%, to US\$25,980.9 million from US\$34,137.1 million in the nine months ended September 30, 2019. This decrease was primarily due to decrease in our cost of good sold. Total cost of sales and other direct costs as a percentage of revenue decreased from 86.8% in the nine months ended September 30, 2019 to 85.9% in the nine months ended September 30, 2020 primarily due to the realization of economies of scale enabling us to sell higher volume of our products in 2020, without significantly increasing our production and operating costs.

Segment Results

In the nine months ended September 30, 2020, our consolidated segment results after eliminations decreased by US\$483.0 million, or 16.6%, to US\$2,429.0 million from US\$2,912.0 million in the nine months ended September 30, 2019. Our consolidated segment results after eliminations as a percentage of our total sales and other operating revenues for the nine months ended September 30, 2020 was 8.0% compared to 7.4% for the nine months ended September 30, 2019 primarily due to a disproportionate decrease in total sales and other operating revenues compared to the decrease in cost of sales and other direct costs.

In the nine months ended September 30, 2020, in our upstream segment, our results before eliminations decreased by US\$2,200.4 million, or 57.4%, to US\$1,635.3 million from US\$3,835.7 million in the nine months ended September 30, 2019. This decrease was primarily due to our upstream segment revenues declining from 2019 to 2020 as the selling prices for our upstream products decreased in line with the decrease in ICP, while our upstream costs and expenses did not decrease significantly.

In our downstream segment, our results before eliminations amounted to a profit of US\$346.9 million in the nine months ended September 30, 2020 as compared to a loss of US\$1,336.2 million in the nine months ended September 30, 2019 primarily due to increased margins from our sale of oil products as the spreads between ICP and MOPS, which is a reference for the pricing of our crude oil purchases, and MOPS which is a reference for the pricing of our oil product sales, has widened.

Operating Expenses and other Non-Operating Expenses — Net

In the nine months ended September 30, 2020, we had operating expenses and other non-operating expenses — net of US\$3,921.4 million compared to operating expenses and other non-operating expenses — net of US\$2,734.0 million in the nine months ended September 30, 2019, an increase of US\$1,187.4 million or 43%. The increase was primarily attributable to (i) loss on foreign exchange-net, and (ii) higher other expenses — net primarily due to provision for impairments in receivables, provision for impairment of oil and gas assets, impairments of fixed assets and provision for impairment of investment in oil and gas blocks.

Income Tax Expense — Net

In the nine months ended September 30, 2020, our income tax expense — net decreased by US\$629.5 million, or 37.6%, from US\$1,675.8 million in the nine months ended September 30, 2019 to US\$1,046.4 million in the nine months ended September 30, 2020. In the nine months ended September 30, 2020, we had lower current tax expense due to a decrease in revenue in our upstream segment, primarily as a result of a decrease in the price of the ICP in the nine months ended September 30, 2020, as compared with the same period in 2019. For these reasons, our effective tax rate (calculated as income tax expense — net divided by profit before income tax expense) was 300.4% in the nine months ended September 30, 2019 and 68.2% in the nine months ended September 30, 2020.

Profit for the Period After the Effect of Merging Entity's Income Adjustment

For the reasons described above, in the nine months ended September 30, 2020, our loss for the period after the effect of merging entity's income adjustment decreased by US\$(1,478.6) million, or 189.4%, to US\$(698.0) million from US\$780.5 million in the nine months ended September 30, 2019.

As a percentage of our sales and other operating revenue, profit for the period after the effect of merging entity's income adjustment decreased from 2.0% in the nine months ended September 30, 2019 to -2.3% in the nine months ended September 30, 2020.

2019 compared with 2018

Sales and Other Operating Revenues

In 2019, our sales and other operating revenues decreased by US\$3,318.7 million, or 5.71%, to US\$54,792.5 million from US\$58,111.2 million in 2018. This decrease was primarily due to the declining domestic sales of crude oil, natural gas, geothermal, and oil products as well as the decreasing sales volume of general fuel in 2019. The domestic sales of crude oil, natural gas, geothermal, and oil products in 2019 was US\$43,784 million, declining by 2.14% compared to US\$44,743 million in 2018. The key factor contributing to the decline was the lower average sales price in products, influenced by the lower realization of ICP and published price in 2019 compared to 2018. The average ICP of 2019 was US\$62.38/barrel, whereas the average ICP of 2018 was US\$67.47/barrel. Whereas, the average price of Mean of Platts Singapore (MOPS) of 2019 was USD73.87/barrel and the price in 2018 was USD81.71/barrel.

Several subsidiaries' own performance contributed to the decreasing sales volume of general fuel in 2019. Pertamina EP was experiencing a decline in oil revenue of US\$73.8 million due to the declining oil price of PEP in 2019, which was US\$62.33/barrel compared to US\$66.99/barrel in 2018, and the decline in gas revenue of US\$37.9 million due to the decrease in gas lifting in 2019, amounting to 12,593,296 MSCF compared to 2018. Nusantara Regas was also experiencing a decrease in revenue from Nusantara Regas, totaling US\$60 million was caused by the decrease in Representative Export Petroleum (REP) in 2019, which was US\$60.48/barrel compared to US\$67.94/barrel in 2018. Additionally, the volume of gas transfer for the 2019 Gas Sales Contract (51,634,211 MMBTU) was smaller in value compared to the volume of gas transfer for the 2018 Gas Sales Contract (61,753,209 MMBTU), which influenced the decreasing domestic sales of crude oil, natural gas, geothermal, and oil products.

In our upstream segment, our total segment revenues before eliminations in connection with our accounts consolidation decreased by US\$429 million, or 1.8%, to US\$12,123.6 million from US\$12,552.6 million in 2018. This decrease was primarily due to a decrease in natural gas production and crude oil price. In 2019, the volume of crude oil lifted was 136,124 mboe while in 2018 it was 129,231 mboe.

In our downstream segment, our total segment revenues before eliminations in connection with our accounts consolidation decreased by US\$1,673.9 million, or 3.6%, to US\$44,417.4 million from US\$46,091.3 million in 2018. This decrease was due to decreased sales of fuel oil Non PSO, non fuel oil and aviation oil.

Cost of Sales and Other Direct Costs

In 2019, our cost of sales and other direct costs decreased by US\$2,165.1 million, or 4.44%, to US\$46,634.5 million from US\$48,799.6 million in 2018. This decrease was primarily due to a decrease of cost of sales. The cost of sales in 2019 was US\$39,560 million, which decreased by 7.54% from US\$42,788 million in 2018. The decline was mainly caused by the lower prices of raw materials and imports of products, which were affected by a decline in the 2019 realization of ICP and published oil prices compared with the previous year. The average ICP of 2019 amounted to US\$62.38/barrel, whereas the average ICP of 2018 reached US\$67.47/barrel. Additionally, the average MOPS PSA of 2019 was US\$73.87/barrel and the average MOPS PSA in the previous year was US\$81.71/barrel. For the same reasons, cost of sales and other direct costs as a percentage of revenue increased to 85.1% in 2019 from 84.0% in 2018.

Segment Results

In 2019, our consolidated segment results after eliminations decreased by US\$1,358.6 million, or 21.7%, to US\$4,897.9 million from US\$6,256.5 million in 2018. Our consolidated segment results after eliminations as a percentage of our sales and other operating revenues for 2019 was 8.9% compared to 10.8% for 2018. This decrease was primarily due to declines in domestic sales of crude oil, natural gas, geothermal, energy and oil products in 2019 compared to 2018. Average ICP in 2019 was US\$62.38/bbl and US\$67.47/bbl in 2018. Average MOPS in 2019 was US\$73.87/bbl and 81.71/bbl in 2018.

In 2019, in our upstream segment, our results before eliminations decreased by US\$847.9 million, or 14.2%, to US\$5,112.7 million from US\$5,960.6 million in 2018. This decrease was primarily due to a decrease in crude oil price compared to 2018 as discussed above.

In our downstream segment, our results before eliminations amounted to a loss of US\$784.2 million as compared to loss of US\$286.8 million in 2018. In 2019, our cost of sales and other direct costs decreased by US\$2,165 million, or 4.5%, to US\$46,634.5 million from US\$48,799 million in 2018. This decrease was primarily due to a decrease in cost of goods sold by US\$3,228.2 million, or 7.5%, to US\$39,559.7 million in 2019 from US\$42,787.9 million in 2018 as a result of the lower prices of raw materials and imports of products, which were affected by a decline in the 2019 realization of ICP and published oil prices compared with the previous year. The average ICP of 2019 amounted to US\$62.38/barrel, whereas the average ICP of 2018 reached USD67.47/barrel. On the other hand, the average MOPS PSA of 2019 was US\$73.87/barrel and the average MOPS PSA in the previous year was USD81.71/barrel.

Operating Expenses and other Non-Operating Expenses — net

In 2019, we had operating expenses and other non-operating expenses — net of US\$3,275.9 million compared to operating expenses and other non-operating expenses — net of US\$3,569.6 million in 2018, a decrease of US\$293.7 million or 8.2%. The decrease was primarily attributable to (i) the rise in general and administrative expenses of US\$223.0 million or 15.8% decrease from US\$1,635.0 million in 2018, resulting from the decrease in expenses over the operational activities of Pertamina's subsidiaries, and (ii) a decrease of expenses deriving from operational activities of Pertamina's subsidiaries, namely PT Pertamina Patra Niaga, in the amount of US\$93 million, PT Elnusa Tbk, in the amount of US\$112 million, and PT Pertamina International Shipping, in the amount of US\$88 million.

Income Tax Expense — Net

In 2019, our income tax expense — net decreased by US\$752.1 million, or 24.9%, to US\$2,264.1 million from US\$3,016.2 million in 2018. The decrease was primarily due to a decrease in profit before income tax to US\$4,882.1 million from US\$5,741.9 million.

Profit for the Year After the Effect of Merging Entity's Income Adjustment

For the reasons described above, in 2019, our profit for the year after the effect of merging entity's income adjustment decreased by US\$107.7 million, or 4%, to US\$2,618.0 million from US\$2,725.7 million in 2018. As a percentage of our sales and other operating revenue, profit for the year after the effect of merging entity's income adjustment increased from 4.7% in 2018 to 4.8% in 2019.

2018 compared with 2017

Sales and Other Operating Revenues

In 2018, our sales and other operating revenues increased by US\$11,935.5 million, or 25.8%, to US\$58,111.2 million from US\$46,175.7 million in 2017. This increase was primarily due to an increase in domestic sales of non-subsidized fuel products as a result of higher sales volume. Sales volume of oil products in 2018 reached 88.72 million KL compared to 85.74 million KL in 2017, driven by strong domestic demand for our fuel products. The ICP actual price and published price increased in 2018 as compared to 2017. The average price of the ICP in 2018 was US\$67.47 per barrel while in 2017 it was US\$51.17 per barrel. The average price of MOPS PSA in 2018 was US\$81.45 per barrel while in 2017 it was US\$64.85 per barrel.

In our upstream segment, our total segment revenues before eliminations in connection with our accounts consolidation increased by US\$4,586.3 million, or 57.6%, to US\$12,552.6 million from US\$7,966.3 million in 2017. This increase was primarily due to an increase in the volume of crude oil lifted and an increase in the ICP in 2018 compared to 2017 as discussed above. In 2018, the volume of crude oil lifted was 129,231 mboe while in 2017 it was 111,555 mboe.

In our downstream segment, our total segment revenues before eliminations in connection with our accounts consolidation increased by US\$8,718.6 million, or 23.3%, to US\$46,091.3 million from US\$37,372.7 million in 2017. This increase was due to higher sales volume, particularly from non-subsidized fuel products, increase in the prices of non-subsidized fuel-products, as well as payments received from the Government in connection with the price differences in subsidized fuel products such as kerosene and those sold under the brand names “Premium” and “Solar/Biosolar.”

Cost of Sales and Other Direct Costs

In 2018, our cost of sales and other direct costs increased by US\$11,020.9 million, or 29.2%, to US\$48,799.6 million from US\$37,778.7 million in 2017. This increase was primarily due to an increase in our cost of goods sold by US\$9,612.2 million, or 29.0%, to US\$42,787.9 million in 2018 from US\$33,175.7 million in 2017 as a result of increased feedstock requirements in line with our higher downstream sales volumes for the year, as well as higher Indonesian domestic crude oil prices set by the Government, which drove higher direct materials costs as the majority of our feedstock was sourced domestically. For the same reasons, cost of sales and other direct costs as a percentage of revenue increased to 84.0% in 2018 from 81.8% in 2017.

Segment Results

In 2018, our consolidated segment results after eliminations increased by US\$1,056.4 million, or 20.3%, to US\$6,256.5 million from US\$5,200.1 million in 2017. Our consolidated segment results after eliminations as a percentage of our sales and other operating revenues for 2018 was 10.8% compared to 11.3% for 2017. This increase was primarily due to the higher selling prices of our upstream products as a result of an increase in the ICP in 2018 compared to 2017 as discussed above and the higher sales volumes in our downstream segment of products such as mixed LPG, non-subsidized fuel products sold under the brand name “Premium” and motor gasoline sold under the brand names “Pertalite (RON 90)” and “Solar/Biosolar.”

In 2018, in our upstream segment, our results before eliminations increased by US\$2,632.7 million, or 79.1%, to US\$5,960.6 million from US\$3,327.9 million in 2017. This increase was primarily due to the higher selling prices of our products as a result of an increase in the ICP in 2018 compared to 2017 as discussed above.

In our downstream segment, our results before eliminations amounted to a loss of US\$286.8 million as compared to income of US\$1,282.2 million in 2017. In 2018, our cost of sales and other direct costs increased by US\$11,020.9 million, or 29.2%, to US\$48,799.6 million from US\$37,778.7 million in 2017. This increase was primarily due to an increase in cost of goods sold by US\$9,612.2 million, or 29.0%, to US\$42,787.9 million in 2018 from US\$33,175.7 million in 2017 as a result of an increase in prices of Indonesian and imported crude oil during 2018 as compared with 2017 prices, which drove higher direct materials costs and costs of imports of other oil products.

Operating Expenses and other Non-Operating Expenses — net

In 2018, we had operating expenses and other non-operating expenses — net of US\$3,569.6 million compared to operating expenses and other non-operating expenses — net of US\$4,516.5 million in 2017, a decrease of US\$946.9 million or 21.0%. The decrease was primarily attributable to (i) lower other expenses — net primarily due to income, penalties and claims received under contracts with third parties, gains on fair value adjustments of other investments, and the absence of provisions for impairment of goodwill and for tax disputes and income tax asset revaluation in 2018 as compared to 2017, (ii) an increase in share in net profit of associates and joint ventures due to an amount of US\$76.1 million generated by Seplat Petroleum Development Company plc, a company in M&P's group, (iii) lower general and administrative expenses due to lower salaries, wages and other employee benefits in line with a decrease in our number of permanent employees of 1,451 from 31,569 as of December 31, 2017 to 30,118 employees as of December 31, 2018, and (iv) higher finance income due to higher balances of time deposits during 2018 as compared to 2017, which were partially offset by (x) higher selling and marketing expenses, (y) a decrease in gain on foreign exchange — net, and (z) higher finance costs due to increased indebtedness in 2018.

Income Tax Expense — Net

In 2018, our income tax expense — net increased by US\$1,845.8 million, or 157.7%, to US\$3,016.2 million from US\$1,170.4 million in 2017. In 2018, we had higher current tax expense due to higher income taxes paid by subsidiaries and higher consolidated corporate income tax expense in line with increased revenues as described above, as well as a deferred income tax expense as compared to a deferred income tax benefit in 2017. For these reasons, our effective tax rate¹ was 52.5% in 2018 and 30.2% in 2017. This increase was primarily due to the higher selling prices of our upstream products as a result of an increase in the ICP in 2018 compared to 2017 as discussed above, partially offset by increased taxation. This increase was primarily due to the higher selling prices of our upstream products as a result of an increase in the ICP

Profit for the Year After the Effect of Merging Entity's Income Adjustment

For the reasons described above, in 2019, our profit for the year after the effect of merging entity's income adjustment decreased by US\$107.7 million, or 4.0%, to US\$2,618.0 million from US\$2,725.7 million in 2018. As a percentage of our sales and other operating revenue, profit for the year after the effect of merging entity's income adjustment increased from 4.7% in 2018 to 4.8% in 2019.

Liquidity and Capital Resources

Our principal sources of liquidity consist of cash flows generated from operating activities, bank facilities and other debt financing, and our existing cash, cash equivalents and bank deposits. We believe that our future cash flows from operations, borrowing capacity (including under the Program)

¹ The effective tax rate is calculated as income tax expense — net divided by profit before income tax.

and cash and cash equivalents in hand will be sufficient to fund our planned capital expenditures and investments, debt maturities and our present working capital requirements. We regularly evaluate our current and future financing needs and may, depending on market conditions, access the capital markets opportunistically from time to time to strengthen our capital position, manage our debt maturity profile and provide us with additional liquidity. Our ability to obtain adequate financing may be limited by our financial condition and results of operations and the liquidity of international and domestic financial markets.

The following table sets forth a summary of our consolidated cash flows for the periods indicated.

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
	(Unaudited)				
	(US\$ in millions)				
Net cash generated from operating activities	4,086.5	3,171.3	4,491.4	3,264.5	5,144.5
Net cash used in investing activities	(2,399.7)	(3,520.4)	(3,914.3)	(2,462.2)	2,560.8
Net cash generated from (used in) financing activities	(1,958.4)	3,275.2	(3,043.6)	(1,875.9)	1,074.4
Net increase (decrease) in cash and cash equivalents	(271.6)	2,926.2	(2,466.4)	(1,073.6)	3,658.2
Effect of exchange rate changes on cash and cash equivalents	(37.4)	(231.8)	113.1	59.5	(221.9)
Cash and cash equivalents at beginning of the year . .	6,738.1	6,429.2	9,123.5	9,123.5	6,770.2
Cash and cash equivalents at end of the year	6,429.2	9,123.5	6,770.2	8,109.4	10,206.4

Net Cash Generated from Operating Activities

Net cash generated from operating activities includes funds provided by our operating activities and net cash inflows or outflows from changes in operating assets and liabilities.

Net cash generated from operating activities was US\$5,144.5 million in the nine-month period ended September 30, 2020, which consisted primarily of aggregate cash receipts from customers, the Government and a tax restitution of US\$37,640.2 million offset by aggregate cash payments to suppliers, the Government, for corporate income taxes and to employees and management of US\$32,495.5 million. The increase in net cash generated from operating activities in the nine-month period ended September 30, 2020, as compared to the same period in 2019, was primarily attributable to a decrease in cash payments to the Government.

Net cash generated from operating activities was US\$3,264.5 million in the nine-month period ended September 30, 2019, which consisted primarily of aggregate cash receipts from customers, the Government and a tax restitution of US\$42,929.5 million offset by aggregate cash payments to suppliers, the Government, for corporate income taxes and to employees and management of US\$39,665.0 million. The increase in net cash generated from operating activities in the nine-month period ended September 30, 2019, as compared to the same period in 2018, was primarily attributable to an increase in cash receipts from customers due to more favorable exchange rates, an increase in cash receipts by subsidiaries from the Government as well as a decrease in payments to the Government, which were partially offset by an increase in payments to suppliers due to an increase in the volume of purchases and an increase in cash paid to employees and management due to an increase in personnel.

Net cash generated from operating activities was US\$4,491.4 million in 2019, which consisted primarily of aggregate cash receipts from customers, the Government and a tax restitution of

US\$59,329.4 million offset by aggregate cash payments to suppliers, the Government, for corporate income taxes and to employees and management of US\$54,838 million. The increase in net cash generated from operating activities in 2019, as compared to 2018, was primarily attributable to an increase in cash payments from customers as a result of the increasing sales quantities up to 5.47 million KL in 2019.

Net cash generated from operating activities was US\$3,171.3 million in 2018, which consisted primarily of aggregate cash receipts from customers, the Government and a tax restitution of US\$57,035.8 million offset by aggregate cash payments to suppliers, the Government, for corporate income taxes and to employees and management of US\$53,864.5 million. The decrease in net cash generated from operating activities in 2018, as compared to 2017, was primarily attributable to an increase in cash payments to suppliers and to the Government for its share of crude oil supplied to our refineries due to an increase in the average ICP from US\$51.17 per barrel in 2017 to US\$67.47 per barrel in 2018, which was partially offset by an increase in cash receipts from customers and from the Government.

Net cash generated from operating activities was US\$4,086.5 million in 2017, which consisted primarily of aggregate cash receipts from customers, the Government and tax restitution of US\$44,791.8 million offset by aggregate cash payments to suppliers, the Government, for corporate income taxes and to employees and management of US\$40,705.3 million. The decrease in net cash generated from operating activities in 2017, as compared to 2016, was primarily attributable to a reduction in cash receipts from customers primarily as a result of lower sales of certain subsidized fuel products, as well as an increase in cash payments to the Government for its share of crude oil supplied to our refineries due to an increase in the average ICP from US\$40.16 per barrel in 2016 to US\$51.17 per barrel in 2017.

Net Cash Used in Investing Activities

Net cash used in investing activities was US\$2,560.8 million in the nine months ended September 30, 2020, US\$2,462.2 million in the nine months ended September 30, 2019, US\$3,914.3 million in 2019, US\$3,520.4 million in 2018 and US\$2,399.7 million in 2017. These amounts are primarily attributable to (i) purchases of fixed assets of US\$1,007.5 million nine months ended September 30, 2020, US\$985.6 million in the nine months ended September 30, 2019, US\$1,295.2 million in 2019, US\$1,301.5 million in 2018, and US\$1,002.3 million in 2017, (ii) purchases of oil and gas and geothermal properties of US\$1,705.0 million in the nine months ended September 30, 2020, US\$1,372.5 million in the nine months ended September 30, 2019, US\$2,360.8 million in 2019, US\$1,482.5 million in 2018, and US\$892.0 million in 2017, (iii) placements in short- and long-term investments of US\$235.2 million in the nine months ended September 30, 2020, US\$214.0 million in the nine months ended September 30, 2019, US\$631.1 million in 2019, US\$1,299.8 million in 2018, and US\$886.3 million in 2017 and (iv) dividends received from associates of US\$31.2 million in the nine months ended September 30, 2020, US\$14.8 million in the nine months ended September 30, 2019, US\$99.8 million in 2019, US\$214.1 million in 2018, and US\$81.6 million in 2017.

In 2019, we also had cash receipts from other investing activities of US\$99.0 million related to investments from subsidiaries.

Net Cash Generated from (Used in) Financing Activities

We recorded net cash used in financing activities of US\$1,875.9 million in the nine months ended September 30, 2019, US\$3,043.6 million in 2019 and US\$1,958.4 million in 2017. We recorded net cash generated from financing activities of US\$1,074.4 million in the nine months ended September 30, 2020 and US\$3,275.2 million in 2018.

Our net cash generated from financing activities of US\$1,074.4 million in the nine months ended September 30, 2020, consisted primarily of proceeds from short-term loans of US\$5,274.3 million, proceeds from bond issuance of US\$2,969.1 and proceeds from long-term loans of US\$547.4 million. This was offset by repayments of short-term loans of US\$5,130.1 million, repayments of long-term loans of US\$916.5 million, dividend payments of US\$574.6, repayments of bonds of US\$608.6, payments of finance costs of US\$486.2 million and placement of restricted cash of US\$0.4 million.

Our net cash used in financing activities of US\$1,875.9 million in the nine months ended September 30, 2019, consisted primarily of proceeds from short-term loans of US\$5,733.3 million and proceeds from bond issuance of US\$1,498.9 million and proceeds from long-term loans of US\$415.2 million. This was offset by repayments of short-term loans of US\$8,375.6 million, repayments of long-term loans of US\$491.1 million, payments of finance costs of US\$337.5 million and placement of restricted cash of US\$1.0 million.

Our net cash used in financing activities of US\$3,034.6 million in 2019 consisted primarily of proceeds from short-term loans of US\$7,176.3 million and proceeds from long-term loans of US\$418 million. This was partially offset by repayments of short-term loans of US\$(10,285.2) million, repayments of long-term loans of US\$526.5 million, payment of a dividend of US\$563.1 million to the Government, payment of finance costs of US\$622.8 million and receipt from restricted cash of US\$139.0 million.

Our net cash generated from financing activities of US\$3,275.2 million in 2018, consisted primarily of proceeds from short-term loans of US\$9,500.1 million and proceeds from bond issuance of US\$734.4 million. This was partially offset by repayments of short-term loans of US\$(5,591.4) million, payment of a dividend of US\$587.1 million to the Government, payment of finance costs of US\$538.9 million, repayments of long-term loans of US\$467.0 million, a repayment of bonds of US\$37.6 million and placement of restricted cash of US\$0.3 million.

Our net cash used in financing activities of US\$1,958.4 million in 2017 consisted primarily of proceeds from short-term loans of US\$4,048.9 million and proceeds from long-term loans of US\$663.4 million. This was partially offset by repayments of short-term loans of US\$3,786.7 million, repayments of long-term loans of US\$2,103.7 million, payment of a dividend of US\$868.5 million to the Government, payment of finance costs of US\$523.4 million and placement of restricted cash of US\$13.2 million.

Indebtedness

The following table shows the amount of our total consolidated short-term loans, long-term liabilities — bank loans — net (including current portion), due to the Government — two-step loans, and bonds payables outstanding as of December 31, 2017, 2018 and 2019 and as of September 30, 2019.

	As of December 31,			As of September 30,
	2017	2018	2019	2020
				(Unaudited)
	(US\$ in millions)			
Short-term loans	452.9	4,353.4	1,285.4	1,410.6
Long-term liabilities — bank loans — net (including current portion)	2,285.7	2,081.4	1,970.8	1,571.1
Due to the Government — two-step loans ⁽¹⁾	716.8	738.5	741.2	725.9
Bonds payables	10,385.9	11,094.1	12,614.5	15,001.5
Total debt	13,841.3	18,267.4	16,611.9	18,709.1

Note:

- (1) Includes Government-channeled financings obtained from the Overseas Economic Cooperation Fund Japan, the Japan International Cooperation Agency, the International Bank for Reconstruction and Development and the Japan Bank for International Cooperation. See Notes 18b, 18c, 18d, 18g, 18h and 18i of our consolidated financial statements for more information on the two-step loans.

As of December 31, 2019, the current portion of our long-term bank loans without taking account any issuance costs-net was US\$531.7 million and the non-current portion was US\$1,442.2 million. As of September 30, 2020, the current portion of our long-term bank loans without taking account any issuance costs-net was US\$151.5 million and the non-current portion was US\$1,420.1 million.

Short-Term Loans

As of December 31, 2019 and September 30, 2020, we have access to unsecured short-term revolving credit facilities in the form of letters of credit post import financing of up to an aggregate of US\$10,807 million US\$9,197 million Rp. 2,000,000 million and Rp. 2,000,000 million, respectively. These facilities are denominated in U.S. dollars and Rupiah and provided by several Indonesian and international banks, including Mandiri (Persero) Tbk., PT Bank Negara Indonesia (Persero) Tbk., PT Bank Rakyat Indonesia (Persero) Tbk., PT Bank Central Asia Tbk., PT Bank Permata Tbk., Tbk, PT Bank HSBC Indonesia, UOB Indonesia, Standard Chartered Indonesia, PT Bank Tabungan Pensiunan Nasional (which was previously known as PT Bank Sumitomo Mitsui Indonesia), The Bank of Tokyo-Mitsubishi UFJ, LTD., PT Bank DBS Indonesia, PT Bank Mizuho Indonesia, PT Bank Maybank Indonesia Tbk, ANZ Jakarta, Deutsche Bank AG Jakarta, Banque Nationale de Paris Paribas, Singapore Branch, Crédit Agricole Corporate Investment Bank, Singapore Branch, Natixis, Singapore Branch, Citibank, N.A. Indonesia,., Societe Generale, Sumitomo Mitsui Banking Corporation, Singapore Branch and Intesa Sanpaolo Singapore, which we use in connection with our trading activities, of which we have utilized cumulatively US\$5,421 million as of December 31, 2019 and US\$4,329 million as of September 30, 2020. Drawdowns from these facilities are subject to further approvals of the relevant financial institutions. These short-term revolving credit facilities will expire in accordance with their terms in the course of each financial year. We intend to enter into new revolving credit facilities with the same or new lenders and maintain access to up to 9,447 million and IDR 2,000,000 million in aggregate of short-term revolving credit facilities during the course of the year. As of the date of this Offering Memorandum, our short-term revolving credit facilities have not been reduced and/or withdrawn by our lenders.

The terms of our short-term revolving credit facilities include a number of customary covenants, undertakings and events of default that, among other things, restrict, our ability to create liens, sell assets, engage in different business activities or effect a consolidation or merger, subject to certain exceptions, and require us to provide certain financial information to our lenders. In addition, some facility agreements require that the Government of Indonesia continue to maintain a minimum percentage of ownership in our company, for example, 50.0% of our equity share capital, or the right to otherwise direct our policies or operations.

Long-term Liabilities — Bank Loans

Our long-term loans outstanding as of December 31, 2017, 2018 and 2019 and as of September 30, 2020 consisted of both Rupiah and foreign currency obligations. The following table shows the currency denomination of our outstanding long-term bank and two-step loans and bonds as of September 30, 2020.

	U.S. dollar (in millions)	Japanese Yen (in billions)
Total long-term liabilities — bank loans — net (including current portion), due to the Government — two-step loans and bonds	1,571.1	0

On July 2, 2019, we entered into a framework agreement with the Export-Import Bank of Korea (“EIBK”), as lender, pursuant to which EIBK agreed to make available funds of up to \$1.5 billion by way of an uncommitted line of credit to enable us to make payments under certain contracts entered into by us and a Korean entity. We may utilize such funds by negotiating and entering into loan agreements under the framework agreement subject to certain conditions relating to the maximum commitment amount permitted under each individual loan facility depending on its use of proceeds. Once an amount has been utilized, such sum may not be reutilized under the framework agreement. The framework agreement contains customary representations, warranties, undertakings and events of default for an agreement of this nature. This framework agreement aims to fund our infrastructure projects, such as new refineries and expansion of existing plants, contribute to our downstream expansion drive and facilitate the involvement of South Korean companies as partners in our projects, including the RDMP and the Balikpapan refinery upgrade in east Kalimantan province. The line of credit is valid for two years and tenor of each individual loan facility cannot exceed 15 years.

In 2017, Etablissements Maurel et Prom entered into a US\$600.0 million syndicated loan facility, as parent and guarantor, with two national banks and seven overseas banks, with The Bank of Tokyo Mitsubishi UFJ, Ltd., Hong Kong Branch acting as the facility agent, and PT Pertamina Internasional Eksplorasi dan Produksi (“PIEP”) acting as the sponsor, for indebtedness refinancing. The syndicated loan facility bears interest at LIBOR plus 1.5% margin and must be repaid on a quarterly basis from March 2020 through to its maturity in December 2023. This syndicated loan facility is unsecured and requires that we provide certain information undertakings as well as financial covenants.

On October 19, 2016, we entered into a facility agreement with Sumitomo Mitsui Banking Corporation, as mandated lead arranger and bookrunner, the original lenders named therein as original lenders, Sumitomo Mitsui Banking Corporation Singapore Branch, as facility agent and Sumitomo Mitsui Banking Corporation (China) Limited as sinosure agent. Under the facility agreement, we are granted covered term loans of up to US\$77.8 million and a commercial term loan of up to \$13.7 million, to finance the acquisition of three medium range tankers and related equipment. Each utilization under the facility agreement is to be repaid in installments with final maturity dates falling seven to nine years after the date of drawdown. The loans carry interest rates of LIBOR plus a margin ranging between 1.0% and 1.2% per annum. The facilities agreement contains customary undertakings and events of default for a facility of this nature, subject to agreed exceptions, limitations and qualifications. In addition, we are required to maintain a Consolidated EBITDA to Consolidated Interest Payable ratio that is not less than 3.0 to 1.0 and ensure that our Consolidated Net Debt does not exceed 2.0 times our tangible net worth at the end of each half and full financial year.

On August 31, 2016, we entered into a facilities agreement with the Bank of Tokyo — Mitsubishi UFJ, Ltd. as the facility agent, BNP Paribas, Sumitomo Mitsui Banking Corporation, Citigroup Global Markets Singapore Pte. Ltd., DBS Bank Ltd., Mizuho Bank, Ltd., PT Bank Negara Indonesia (Persero), Tbk., Bank of Tokyo-Mitsubishi UFJ, Ltd., as the mandated lead arrangers and bookrunners, and the lenders that are party to that agreement from time to time. Under the facilities agreement, as amended

on November 2, 2016, we are granted four facilities in an aggregate principal amount of term loans up to US\$1.5 billion, which may be used for general corporate purposes (including in connection with any refinancing of existing indebtedness). Each utilization under the facilities agreement is to be repaid in installments with the final maturity date falling five years after the date of drawdown. The facilities carry an interest rate of LIBOR plus a margin ranging between 1.1% and 1.2% per annum. The facilities agreement contains customary undertakings and events of default for a facility of this nature, subject to agreed exceptions, limitations and qualifications. In addition, we are required to maintain a Consolidated EBITDA to Consolidated Interest Payable ratio that is not less than 3.0 to 1.0 and ensure that our Consolidated Net Debt does not exceed 2.0 times our tangible net worth at the end of each half and full financial year.

In December 2015, we entered into a US\$150.0 million loan facility with PT Sarana Multi Infrastruktur (Persero). The loan facility bears interest at one, three or six months LIBOR plus a margin of 1.65% per annum. The principal payment is due to be fully paid at the end of the facility in December 2025.

We have also received financing from the Government in the form of a two-step loan from the Overseas Economic Cooperation Fund (“OECF”) Japan. The Government originally lent to OECF an amount of ¥11,816.0 million (US\$104.9 million), pursuant to a loan agreement between the Government and OECF dated November 29, 1994. We, in turn, borrowed ¥1,172.9 million (US\$10.4 million) from OECF under a two-step loan agreement dated May 7, 2007 among us as borrower, the Government as co-obligor and OECF as lender. The proceeds of this loan were used to finance the construction of the Airport Fuel Filling Depot of Ngurah Rai International Airport in Bali. The two-step loan matures 30 years from November 29, 1994, the date of the loan agreement between the Government and OECF. There is no collateral given by the Company for the two-step loan, as the Government remains the primary obligor of the loan. The two-step loan bears interest at 3.1% per annum. Any late principal payments will be subject to a 2% per annum penalty.

We have also received financing from the Government in the form of a two-step loan from the Japan International Cooperation Agency (“JICA”). The Government obtained a loan of ¥26,966.0 million (US\$239.3 million) from JICA under which we were appointed as executing and implementing agency, pursuant to a loan agreement between the Government and JICA dated March 29, 2011. The loan is to be utilized for the implementation of the Lumut Balai geothermal power plant project. There is no collateral given by the Company for this two-step loan, as the Government remains the primary obligor of the loan. The two-step loan is available as two loan facilities, one of which is ¥25,834.0 million (US\$229.3 million) and is related to the construction of the project and bears interest at 0.6% per annum and the other facility is ¥1,132.0 million (US\$10.0 million) and is related to consultants for the project and bears interest at 0.02% per annum. Any late principal payments will be subject to a 2% per annum penalty.

We received financing from the Government in the form of a two-step loan from the World Bank’s International Bank for Reconstruction and Development (“IBRD”). The Government obtained a loan of US\$300.0 million from IBRD under which we were appointed as executing agency, pursuant to two loan agreements, each between the Government and IBRD dated December 5, 2011. One loan amounted to US\$175.0 million and the other amounted to US\$125.0 million. The loans are to be utilized for the implementation of the Ulubelu and Lahendong geothermal clean energy investment project. There is no collateral given by the Company for this two-step loan, as the Government remains the primary obligor of the loan. Repayment of the loan principal will be on a semi-annual basis, commencing on October 10, 2020 until October 10, 2035 for the US\$175.0 million loan, and commencing on October 10, 2021 until April 10, 2051 for the US\$125.0 million loan. The interest rate for the tranche of US\$175.0 million is LIBOR plus 0.45% and an additional variance spread, and the interest rate for the tranche of US\$125.0 million is 0.5%.

We received financing from the Government in the form of a two-step loan from the Japan Bank for International Cooperation (“JBIC”). On May 28, 2003, the Government obtained two loans consisting of ¥44,702.0 million (US\$402.3 million) and ¥4,386.0 million (US\$39.5 million), with interest rates of 1.45% and 1.25% per annum respectively. The loans are to be utilized for the implementation of the development of a gas transmission and pipeline from South Sumatra to West Java and a distribution pipeline in West Java.

We received financing from the Government in the form of a second two-step loan from IBRD. On April 3, 2006, the Government obtained a loan of US\$80 million to finance a domestic gas market development project. The IBRD’s interest rate to the Government is LIBOR plus 1.00% per annum.

On September 15, 2000, PGN and the Government entered into a loan agreement, which provides for the Government’s relending of EIB loan proceeds not exceeding €70.0 million (US\$54.6 million) to PGN as part of the financing of the gas transmission and distribution project phase II. The loans consist of €44.3 million (US\$51.3 million) and €10.3 million (US\$11.9 million), with interest rates of 4.9% and 5.3% respectively.

Our bank loans are to finance our capital expenditures and to provide working capital. Our subsidiaries’ long-term bank loans are collateralized by certain of our subsidiaries’ assets such as receivables, inventories, long-term assets and other assets.

Bonds

As of September 30, 2020, we have issued US\$1,000.0 million 5.25% due in 2021 Notes (of which US\$391.4 million 2021 Notes remains outstanding), US\$500.0 million 6.50% senior notes due in 2041, US\$1,250.0 million 4.88% due in 2022 Notes of which US\$1,242.0 million 2022 Notes remains outstanding, US\$1,250.0 million 6.00% notes due 2042 of which US\$1,221.6 million 2042 Notes remains outstanding, US\$1,350.0 million 5.13% notes due 2024, US\$625.0 million 4.45% notes due 2024, and US\$46.9 million 9.00% notes due 2025.

We established the Program on May 3, 2013 and increased the Program Limit from US\$5,000 million to US\$10,000 million in 2014 and further increased the Program Limit from US\$10,000 million to US\$20,000 million in 2020. As of September 30, 2020, we have issued, under the Program, US\$1,625.0 million 4.30% senior notes due 2023, US\$1,625.0 million 5.63% senior notes due 2043 (of which US\$1,433 million 2043 Notes remains outstanding), US\$1,500 million 6.45% senior notes due 2044 and US\$750.0 million 6.50% senior notes due 2048, US\$750.0 million 3.65% senior notes due 2029, US\$750.0 million 4.70% senior notes due 2049, US\$500.0 million 3.10% senior notes due 2030, US\$1,000 million 4.175% senior notes due 2050, US\$650.0 million 3.10% senior notes due 2030 and US\$800.0 million 4.15% senior notes due 2060. We regularly evaluate our current and future financing needs and may opportunistically pursue financing opportunities from time to time, including through further issuances of Notes under the Program, if we consider market conditions to be favorable.

As of September 30, 2020, our subsidiary PGN has issued US\$1,350.0 million 5.13% senior notes due 2024, our subsidiary PT Saka Energi Indonesia has issued US\$625.0 million 4.45% senior notes due 2024, and our subsidiary Elnusa has issued US\$46.9 million 9.00% senior notes due in 2025.

All of these notes are unsecured.

The interest rates on our long-term bank loans and bonds during 2018, 2019 and 2020 are set forth in the table below. All bonds were issued by the Issuer unless otherwise noted.

	2018	2019	2020
Rupiah long-term loans	2.35% – 13.00%	7.58% – 10.50%	6.31% – 12.18%
U.S. dollar long-term loans	1.37% – 5.60%	1.37% – 4.65%	1.16% – 3.68%
Senior notes due 2021	5.25%	5.25%	5.25%
Senior notes due 2022	4.88%	4.88%	4.88%
Senior notes due 2023	4.30%	4.30%	4.30%
Senior notes due 2024 ⁽¹⁾	4.45%	4.45%	4.45%
Senior notes due 2024 ⁽¹⁾	5.13%	5.13%	5.13%
Senior notes due 2025	9.00%	9.00%	9.00%
Senior notes due 2029	n/a	n/a	3.65%
Senior notes due 2030	n/a	n/a	3.10%
Senior notes due 2041	6.50%	6.50%	6.50%
Senior notes due 2042	6.00%	6.00%	6.00%
Senior notes due 2043	5.63%	5.63%	5.63%
Senior notes due 2044	6.45%	6.45%	6.45%
Senior notes due 2048	6.50%	6.50%	6.50%
Senior notes due 2049	n/a	n/a	4.70%
Senior notes due 2050	n/a	n/a	4.18%
Senior notes due 2060	n/a	n/a	4.15%

Note:

(1) Issued by our subsidiaries.

Capital Expenditures

Our capital expenditures relate primarily to our exploration, development and production projects, to purchase interests in other companies engaged in exploration, development and production projects, the maintenance and upgrading of our refineries and repayments of outstanding debt. Our principal sources of funding for our capital expenditures consist of cash flows generated from operating activities, project financing arrangements and other debt financing, and our existing cash, cash equivalents and bank deposits.

The following table sets out our actual capital expenditures by business segment for each of the years ended December 31, 2017, 2018 and 2019 and for the nine-month periods ended September 30, 2019 and 2020. We consider any purchase orders which are outstanding as of a fiscal year or period to be our outstanding capital expenditure commitments for such year or period.

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
	(US\$ in millions)			(Unaudited)	
Upstream	3,672.7	3,110.8	3,397.7	1,833.6	1,911.2
Downstream	1,529.1	1,135.6	1,390.2	572.0	3,100.0
Others	334.0	306.9	378.1	221.1	161.3
Total	<u>5,535.8</u>	<u>4,553.3</u>	<u>5,166.0</u>	<u>2,626.7</u>	<u>5,172.5</u>

The following table sets out our budgeted capital expenditures by business sector for the year ending December 31, 2021 excluding PGN. Our budgeted capital expenditures include amounts budgeted for upstream exploration and drilling, investments in grass roots refineries, upgrades to existing refineries and gas infrastructure and potential growth through domestic and international acquisitions in each year and other uncommitted capital expenditures. This information reflects our current expectations only and our actual capital expenditures in any such year may differ materially from the projections set out below. See “Risk Factors — Risks Relating to Our Company — We may be unable to accomplish our development plans on schedule or within our budgeted costs or that these plans, if completed, will achieve our development aims” and “Risk Factors — Risks Relating to our Company — Our business is capital intensive, and if we are unable to obtain financing on reasonable terms to fund future capital expenditures, we may be unable to implement our development plans.”

	For the Year Ending December 31, 2021
	(US\$ in millions)
Upstream	
Oil and gas exploration and production	4,661
Geothermal	155
Drilling services	250
Total	5,066
Downstream	
Refining	3,813
Marketing and trading	622
Shipping	317
Total	4,752
Gas	639
Non-Core businesses	231
Total	10,689

As of September 30, 2020, our unrealized total outstanding capital expenditure commitments amounted to US\$3,598.0 million.

We expect our capital expenditures for 2021 to be significantly higher than 2020 in terms of budgeted amount and intended purposes, based on our current estimates of various major project development timelines and subject to the finalization of, and any subsequent updates to, our annual budget for 2021.

We expect that investment in oil and gas exploration and development and our refineries will continue to represent the majority of our capital expenditures. Such capital expenditures are expected to relate to domestic and international acquisitions of new fields and development of existing fields or interests therein and expansion of our existing refineries and construction of new refineries in East Java and Balongan. In our upstream business sector, we intend to boost levels of production and to increase the number of new oil and gas reserves organically through recovery of existing assets or inorganically through mergers and acquisitions of oils and gas blocks both at home and abroad. In our downstream business sector, we also intend to expand our shipping fleet, construct a refrigerated LPG terminal and expand our network of retail fuel stations which are owned and operated by us. For more information, see “Business — Pertamina Upstream Business — Upstream Strategy” and “Business — Pertamina Downstream Business — Downstream Strategy.”

We plan to fund the capital and related expenditures principally through cash provided by operating activities and long-term debt. See “Risk Factors — Risks Relating to Our Company — We may seek to incur additional indebtedness in the future, which could adversely affect our business or financial condition.”

Contractual Obligations

The following table summarizes our contractual financial liabilities (including anticipated interest payable) as of September 30, 2020.

	Total	Less than 1 year	1-5 Years	More than 5 Years
		(US\$ in millions)		
Short-term loans	1,410.6	1,410.6	—	—
Trade payables	2,843.8	2,843.8	—	—
Due to the Government	1,893.7	999.2	304.1	590.5
Accrued expenses	2,610.8	2,610.8	—	—
Other payables	1,097.5	1,097.5	—	—
Long-term liabilities	3,547.6	1,004.4	1,986.5	556.7
Bonds payables	27,556.8	1,047.0	7,105.9	19,403.9
Other non-current payables	717.0	60.6	616.8	39.6
Total	41,677.8	11,073.9	10,013.3	20,590.7

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements that we believe have or are reasonably likely to have a current or future material effect on our financial condition, change in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

Inflation

According to the Central Bureau of Statistics (Badan Pusat Statistik, formerly known as Biro Pusat Statistik) Indonesia, Indonesia's annual overall inflation rate as measured by the consumer price index was approximately 3.6% in 2017, 3.13% in 2018, 2.7% in 2019 and 0.9% as of September 2020. An increase in inflation may affect our cost of doing business, borrowing money and the selling prices of our products.

Market Risks

Our primary market risk exposures are to fluctuations in exchange rates, oil and gas prices and interest rates.

Foreign Exchange Risks

We conduct our business primarily in U.S. dollars, which is our functional and reporting currency. Our payments within Indonesia are conducted in Rupiah due to compliance with applicable laws in Indonesia requiring payments to be denominated in Rupiah, while most of our operating costs, particularly in relation to the procurement of crude oil and oil products, are made in U.S. dollars. As a result, we are exposed to the fluctuations of the exchange rate of the Rupiah to the U.S. dollar, particularly for cash and cash equivalents and trade receivables due from the Government and trade payables and short-term loans due to the Government and long-term liabilities. As export sales of crude oil, condensate and gas are determined and paid in U.S. dollars, while domestic sales of refined products are conducted in Rupiah, but based on market prices denominated in U.S. dollars, approximately 80% of our revenues are directly or indirectly denominated in U.S. dollars which reduces our exposure for foreign exchange risks.

A significant portion of our long-term total debt is denominated in U.S. dollars. The following table sets forth certain information regarding our U.S. dollar long-term total debt exposure for the periods indicated.

	As of December 31,			As of September 30,
	2017	2018	2019	2020
				(Unaudited)
	(US\$ in millions, except percentages)			
Total U.S. dollar long-term liabilities — bank loans — net (including current portion) and bonds payables	12,671.6	13,175.5	14,585.3	16,572.6
Total U.S. dollar long-term liabilities — bank loans — net (including current portion) and bonds payables as a percentage of total long-term bank loans (including current portion) and bonds payables	81.9%	100.0%	100.0%	100.0%

We manage our exposure to foreign exchange risk through effective management of cash flows. In addition, we have entered into forward and currency option contracts that are used as a hedge for the exposure to changes in cash flows. In accordance with PBI 16/21/2014 (as defined below), our policy is to hedge a minimum of 25% of any amount of foreign currency liabilities that exceeds our foreign currency assets. See “Indonesian Regulatory Framework — Indonesian Regulation of Offshore Borrowings.” The durations of our hedges vary depending on the nature of the foreign currency exposure.

The Rupiah is a generally freely convertible currency but as a state-owned company, we are subject to Bank Indonesia requirements which restrict our ability to source U.S. dollars to three Indonesian state-owned enterprise banks, PT Bank Mandiri (Persero) Tbk, PT Bank Negara Indonesia (Persero) Tbk and PT Bank Rakyat Indonesia (Persero) Tbk.

A strengthening or weakening of the Rupiah against the U.S. dollar would have increased or decreased equity and profit or loss by the amounts shown below. This analysis is based on foreign currency exchange rate variances that were considered to be reasonably possible at the dates indicated below. The analysis assumes that all other variables, in particular interest rates, remain constant and excludes any impact on forecasted sales and purchases.

	Strengthening		Weakening	
	Equity	Profit or loss	Equity	Profit or loss
	(US\$ in millions)			
September 30, 2020 (Rupiah 1% movement)	154.2	152.4	(151.1)	(149.4)
December 31, 2019 (Rupiah 1% movement)	109.9	108.0	(107.7)	(105.9)
December 31, 2018 (Rupiah 3% movement)	364.0	358.9	(342.8)	(338.0)
December 31, 2017 (Rupiah 3% movement)	272.2	267.0	(256.3)	(251.5)

Commodity Price Risks

Although we believe that the oil and gas price assumptions on which we have based our long-term development, budget projections, and reserves estimates are realistic and sustainable, we are exposed to fluctuations in prices of crude oil, natural gas, and refined products whose prices are determined by reference to international market prices which are volatile.

We purchase substantial volumes of crude oil from international suppliers in connection with our downstream operations and sell substantial volumes of refined products and petrochemicals to

domestic and international buyers. We do not currently enter into commodity derivative instruments or futures to hedge the potential price fluctuations of these products or for other purposes. Therefore, fluctuations of prices of crude oil, natural gas, refined products and petrochemicals may have a significant effect on our operating expenses other non-operating income/(expenses) and net income. However, the cost recovery provided to us under our production sharing arrangements and cooperation contracts gives us a partial natural hedge against commodity price fluctuations. We are considering hedging arrangements to manage our commodity price risks and may enter into such arrangements in the future.

See also “Risk Factors — Risks Relating to Our Company — The volatility in the prices of crude oil, natural gas and our refined products and the uncertainty of the market dynamics for oil and gas could adversely affect our business, financial condition, results of operations and prospects.”

Interest Rate Risks

We are exposed to cash flows interest rate risk resulting from fluctuations in interest rates on our short-term and long-term debt, cash and cash equivalents, long-term investments and long-term liabilities with floating interest rates. In addition, we are exposed to fair value interest rate risk on our bonds payables, cash and cash equivalents, amounts due to the Government, short-term investments, long-term liabilities and other assets and liabilities with fixed interest rates. As of December 31, 2019, US\$4,718.1 million, or 7.0%, of our financial assets and US\$3,287.6 million, or 9.1%, of our financial liabilities carried floating interest rates, and US\$6,244.2 million, or 9.3%, of our financial assets and US\$13,616.4 million, or 37.8%, of our financial liabilities carried fixed interest rates. As of September 30, 2020, US\$8,093.2 million, or 11.9%, of our financial assets and US\$2,996.1 million, or 7.8%, of our financial liabilities carried floating interest rates, and US\$5,490.0 million, or 8.1%, of our financial assets and US\$17,778.4 million, or 46.5%, of our financial liabilities carried fixed interest rates. See “Liquidity and Capital Resources — Indebtedness.” Borrowings issued at variable rates expose us to cash flow interest rate risk. We monitor interest rates to assess the potential impact of changes in these rates on our financial position. We do not currently engage in any hedging activities against interest rate risk.

A change of 0.4% and 0.4% in floating interest rates as of December 31, 2019 and September 30, 2020 would have increased or decreased income before tax by US\$4.4 million and US\$4.4 million, respectively. This analysis assumed that all other variables, in particular foreign currency rates, remain constant.

Credit Risk

We are exposed to counterparty credit risks on unpaid receivables, cash and cash equivalents and investments in debt securities. As of September 30, 2020, we had trade receivables of US\$3,405.9 million, 52.2% of which was owed to us by our related parties. Our largest trade receivable balances were due from the Indonesian Armed Forces and the Ministry of Defense in the amount of US\$558.6 million, and PT Garuda Indonesia (Persero) Tbk in the amount of US\$555.0 million. Garuda is an Indonesian air carrier that has been significantly and adversely affected by the on-going COVID-19 pandemic. In December 2020, we reached an agreement with Garuda to restructure their amounts payable to us, pursuant to which US\$5.0 million is payable upfront, 5% is payable within approximately one year, 10% is payable within approximately two years, and the remainder is payable within approximately three years, in each case from the date of the agreement. While we have not recorded any related write-off of the receivables payable to us from Garuda, the future outlook of the COVID-19 pandemic and pace of recovery remains uncertain and the global economy and financial markets remain unpredictable and volatile. As a result, there remains a risk that we will need to enter into similar alternative repayment arrangements in the future with Garuda or other customers, as well as a risk of write-offs and losses if we are ultimately unable to collect amounts due to us.

We make impairment provisions for our trade receivables in accordance with our accounting policies. Impairment provisions are made for commercial trade receivables based on receivable aging analysis at the end of each accounting period. As of December 31, 2019 and September 30, 2020, we made provisions for impairment of trade receivables from third parties of US\$219.4 million and US\$280.1 million, respectively, and for impairment of trade receivables from related parties of US\$69.1 million and US\$186.2 million, respectively. Based on our management's review of the collectability of each balance of trade receivables as of December 31, 2019 and September 30, 2020, our management was of the view that the provision for impairments of trade receivables was adequate, including taking into account the restructured payment arrangement entered into with Garuda described above and the impact of the COVID-19 pandemic on our counterparties in general.

We have procedures such as credit scoring, collateral requirement and regular confirmation and reconciliation, to monitor and limit exposure to credit risk on our outstanding trade receivables. Through this process, a portion of our credit sales are secured with customer collateral and/or bank guarantees. We have also implemented a credit management system that monitors customer usage of credit limits and automatically blocks credit lines beginning on the seventh day of nonpayment after a maturity date, and we impose penalties on overdue payments on a case-by-case basis.

Liquidity Risk

The amount of liquidity we require for our operations is uncertain and our operations may be adversely affected if we do not have sufficient working capital to meet our cash and operational requirements. This may occur as a result of, amongst other reasons, delays in the payment of the Government's subsidies. We use a significant amount of cash in our operations, primarily to procure commodities and raw materials. In particular, one of our principal operating costs is the acquisition of feedstock for our refineries. Due to the volatility in market prices for crude oil, natural gas and their refined products and fluctuations in exchange rates, our working capital and costs for our upstream and downstream operations tend to be uncertain.

We fund our operations principally through cash flow from operations, a significant portion of which comprises sales, subsidy payments, short-term working capital facilities (including bank overdrafts, letters of credit and revolving credits), and long-term bank loans. In accordance with the terms of the PSO mandate, we are required to submit our claim for subsidy to the Government on a monthly basis for the subsidized fuel that we distributed in the preceding month.

As of December 31, 2017, 2018 and 2019 and the nine months ended September 30, 2020, we had cash and cash equivalents of US\$6,429.2 million, US\$9,123.5 million, US\$6,770.2 million and US\$10,206.4 million, respectively.

We manage our liquidity risk by continuously monitoring forecast and actual cash flows and matching the maturity profiles of account receivables and payables.

Recent Accounting Pronouncements

The following are several accounting standards issued by the Indonesian Financial Accounting Standards Board ("DSAK") that are considered relevant to our financial reporting, but were not yet effective for consolidated financial statements as of September 30, 2020 and December 31, 2018, 2017 and 2016 and the nine-month periods ended September 30, 2020 and 2019 and the years ended December 31, 2018, 2017 and 2016:

The following standards have been issued and became effective on January 1, 2020

- *Amendment of SFAS 15: Investment in Associates and Joint Ventures;*

- *Amendments of SFAS 62: Insurance Contract;*
- *SFAS 71: Financial Instruments;*
- *SFAS 72: Revenue from Contracts with Customers;*
- *SFAS 73: Leases;*
- *Amendment of SFAS 71: Financial Instruments; and*
- *Amendment of SFAS 1: Presentation of Financial Statements and SFAS 25: Accounting Policies, Changes in Accounting Estimates and Errors.*

The following standard that has been issued and have become effective on January 1, 2020:

- *Amendment of SFAS 22: Business Combinations on Business Definitions.*

We are currently evaluating and have not yet determined the effects of these accounting standards on our consolidated financial statements. We effectively implemented SFAS 73: Leasing for the financial year beginning January 1, 2020, but did not restate comparative figures for the previous reporting period as permitted under the special transitional provisions in the standard. See “Risk Factors — Risks Relating to Our Company — Changes to IFAS standards for lease accounting may adversely affect our financial results and position.” For more information, see Note 2b to our consolidated financial statements included elsewhere in this Offering Memorandum.

INDUSTRY OVERVIEW

The following section contains the Wood Mackenzie Report, which was commissioned by us and prepared by our energy industry consultant, Wood Mackenzie. Other than information about Pertamina that was provided by us to Wood MacKenzie, the industry and market data in the Wood Mackenzie Report has not been independently verified by us, the Arrangers or the Dealers, and neither we, except with respect to information which we have provided, nor the Arrangers or any Dealer make any representation as to the accuracy or completeness of such data or any assumptions relied upon therein.

This section contains or refers to forward-looking statements made by Wood Mackenzie based on current expectations, including, but not limited to, information regarding energy demand, energy production, and oil and gas reserves. Forward-looking statements are subject to significant risks and uncertainties, as actual outcomes may differ materially from such forecasts. The Wood Mackenzie report contains certain projections of the Indonesia oil and gas industry performance for 2020, as actual data and statistics for 2020 are not available at the time of the report. These projections are based on estimates and assumptions, which are subject to risk and uncertainty, due in part to the ongoing COVID-19 pandemic. Accordingly, investors should note that the actual performance of the Indonesia oil and gas industry for 2020 may differ materially from the projections contained therein, and should not place undue reliance on such information.

1. Indonesia Overview

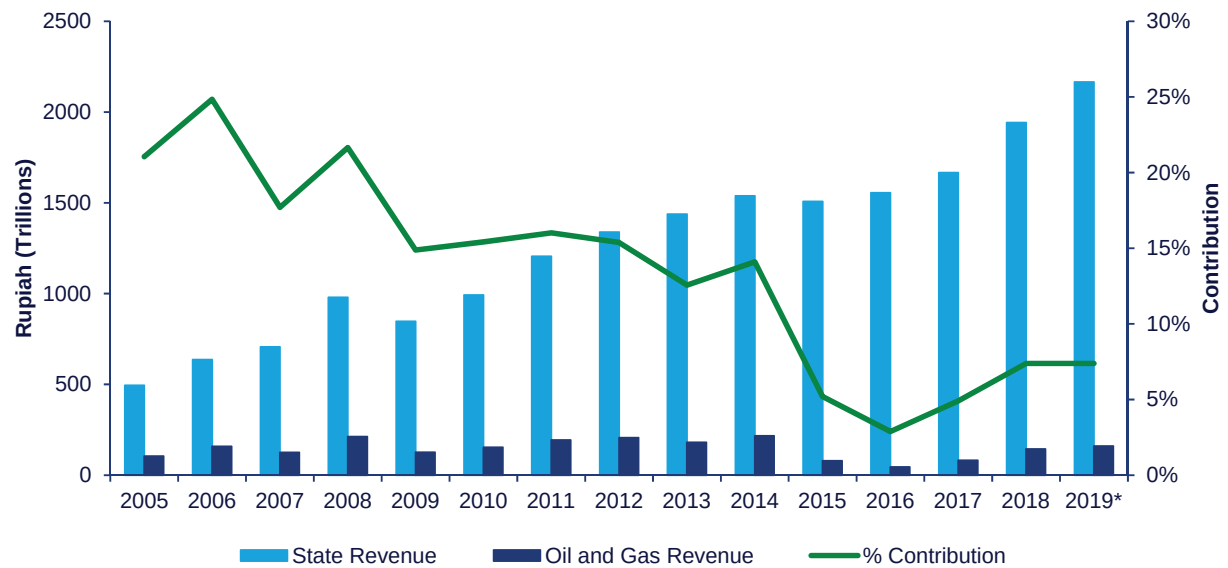
1.1. Macroeconomic overview

Indonesia is the largest economy in Southeast Asia, both in terms of domestic value-added GDP and population size. The country registered a real GDP growth of 5.1% in 2019 but the economy contracted in 2020 due to the COVID-19 pandemic. However, we believe Indonesia is poised for robust long-term growth as the working age population expands and the cost environment for businesses remains competitive.

Indonesia's long-term GDP outlook is based on Wood Mackenzie's assessment of its labour, capital stock (driven by investment) and productivity growth. From a labour input perspective, Indonesia will enjoy favourable demographics over the long term, as the healthy expansion of the working age population will decrease its dependency ratio and increase domestic savings. Secondly, productivity growth is another key driver of long-term GDP growth.

Therefore, Wood Mackenzie expects Indonesia's GDP to grow from US\$1,205 billion (in 2010 dollars) in 2019 to US\$1,547 billion by 2025, a compounded annual growth rate ("CAGR") of 4.2%. Wood Mackenzie expects this to be supported by an increase of 13 million in population size from a population of 270 million in 2019. The oil and gas industry remain an important contributor to the Indonesian economy, and is expected to have accounted for 7% of Government revenue in 2019.

Figure 1 Upstream Contribution to Indonesia's State Revenue



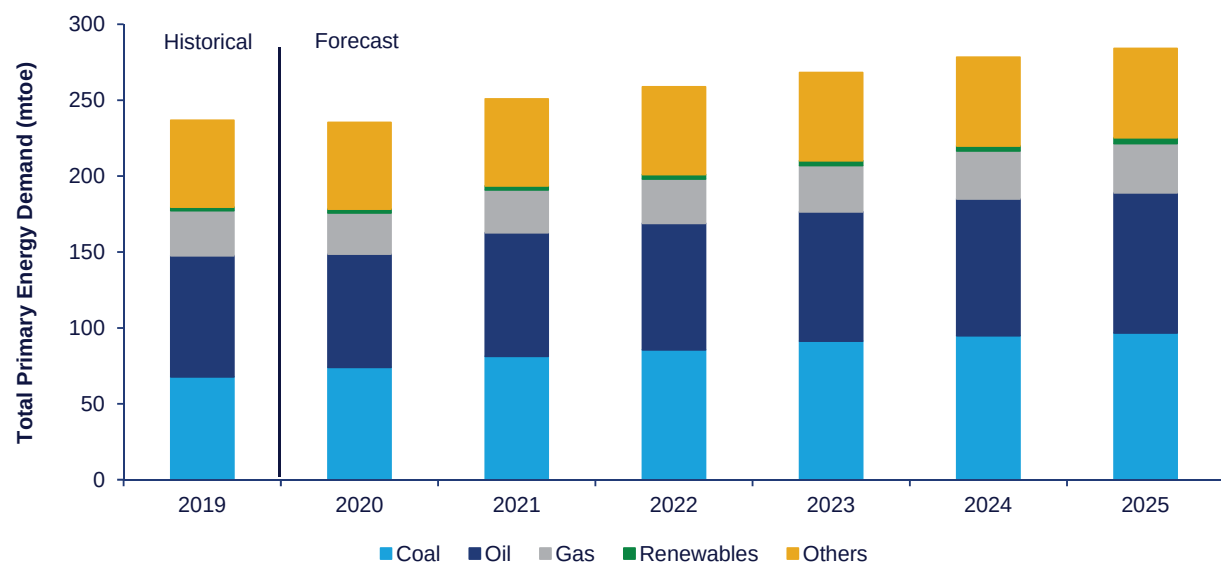
*Note: 2019 is based on target of state budget

Source: PWC 2019 Indonesia Oil and Gas Guide

Indonesia's primary energy consumption is dominated by oil (34% of total primary energy demand in 2019), mainly used in the transport sector. Other solid fuels, which consist mainly of non-commercial biomass used for cooking in the residential, commercial and agricultural sectors, also feature prominently in the current energy mix as a large proportion of Indonesians reside in rural areas and remain unconnected to the power grid. As urbanisation continues, and power grid connectivity improves, other solid fuel demand is forecast to decline from 25% in 2019 to 21% by 2025.

The abundance and cost competitiveness of indigenous coal means that it will see continued and growing use in the power and industry sectors, rising from 29% in 2019 to 34% in 2025.

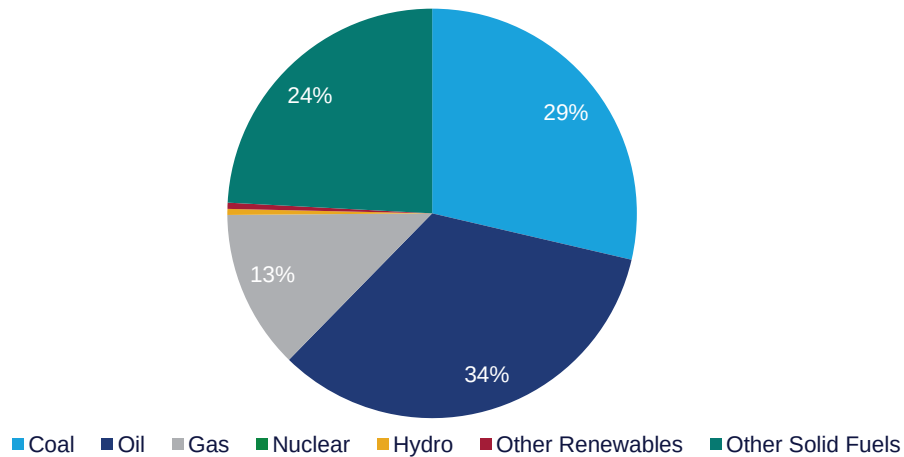
Figure 2 Indonesia Energy Consumption by Fuel



Source: Wood Mackenzie ETO 2020

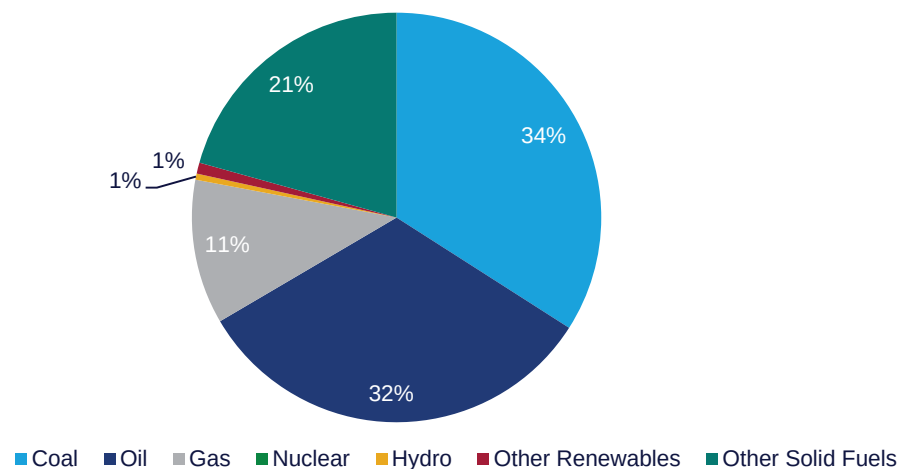
Wood Mackenzie expects Indonesia's total energy demand to increase from 237 mmtoe in 2019 to 284 mmtoe by 2025, representing a CAGR of 3.1%. While the industrial and transport sectors are expected to maintain their shares of total demand throughout the forecast period, it is the robust growth of the power sector which is expected to drive total demand.

Figure 3 Indonesia Fuel Mix 2019



Source: Wood Mackenzie

Figure 4 Indonesia Projected Fuel Mix 2025



Source: Wood Mackenzie

1.2. Regional comparison

1.2.1. Reserves and resources

Wood Mackenzie categorises oil and gas reserves as:

Commercial — Commercial assets are defined as those on production, under development or likely to be developed. Wood Mackenzie sub-classifies commercial assets as:

- On production (onstream): the field is currently producing

- Approved for development (under development): the field is currently in the main construction phase, with the final investment decision having been taken.
- Justified for development (probable development): The field development plan is mature, and the development is expected to proceed. Typical indicators are positive economics, momentum and alignment between stakeholders to start development in the short to medium term and no major contingencies or issues that could materially delay or suspend development activity.

Using Wood Mackenzie’s methodology, commercial reserves are broadly equivalent to proved and probable reserves.

Sub-commercial resources — Sub-commercial assets contain discovered volumes of petroleum potentially recoverable by a development project but not currently considered to be commercial. This may be due to a number of reasons. For example, a lack of development plans, low resource volumes, technical constraints, low product quality, or the lack of accessible markets (such as stranded gas deposits) or viable price regimes. Wood Mackenzie further sub-classifies sub-commercial assets as:

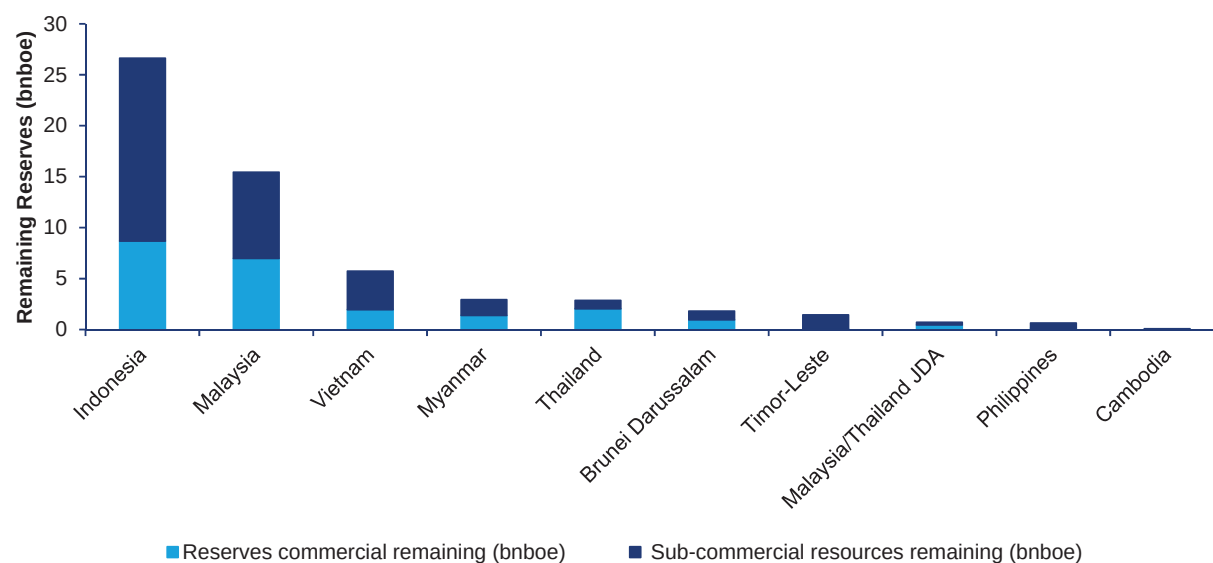
- Economically viable (good technical): these are fields that could be economic under our current costs and price projections, but significant uncertainty remains over the nature and timing of their development.
- Not viable (contingent): these are fields we do not expect to be developed under current costs and price projections. To become economically viable, these fields may require a breakthrough in technology, a step-change in prices, new fiscal terms or access to yet unplanned infrastructure or markets.

Wood Mackenzie has been publishing analyses of commercial reserves on a field-by-field basis for over 45 years in its Upstream Service. The analysis and supporting data, such as reserves, production profiles and timings, are Wood Mackenzie’s own opinion. These are developed based on Wood Mackenzie’s conversations with the operator of each field (and often with the non-operating partners as well). This research is supplemented by an assessment of materials in the public domain, including government estimates of reserves, and documentation released by oil companies for public relations and regulatory purposes.

Sub-commercial resources are estimated on a discovery-by-discovery basis by Wood Mackenzie. As with the commercial fields, Wood Mackenzie discusses the size of the sub-commercial resources in each discovery with the operator and often the non-operating partners. Where this information is confidential for a discovery, Wood Mackenzie estimates the size of the sub-commercial resources based on recent discoveries in the region. In addition, resource estimate may change as appraisal is carried out on a discovery. Procedures used to estimate sub-commercial resources are less rigorous than those used for commercial reserves.

As at January 2020, Indonesia had the largest commercial oil and gas reserves and resources in Southeast Asia with around 8.7 billion barrels of oil equivalent (“boe”), 78% of which is gas (c. 38.7 trillion cubic feet (“tcf”). Malaysia is the next largest resource holder with commercial reserves of around 7.0 billion boe, 74% of which is gas (c 29.4 tcf). The other countries in Southeast Asia have significantly smaller volumes of commercial reserves. Including sub-commercial resources, Indonesia has the largest reserves and resources base in Southeast Asia, with 26.6 billion boe, of which 87% is gas.

Figure 5 Regional Remaining Reserves and Resources as of January 2021



Source: Wood Mackenzie

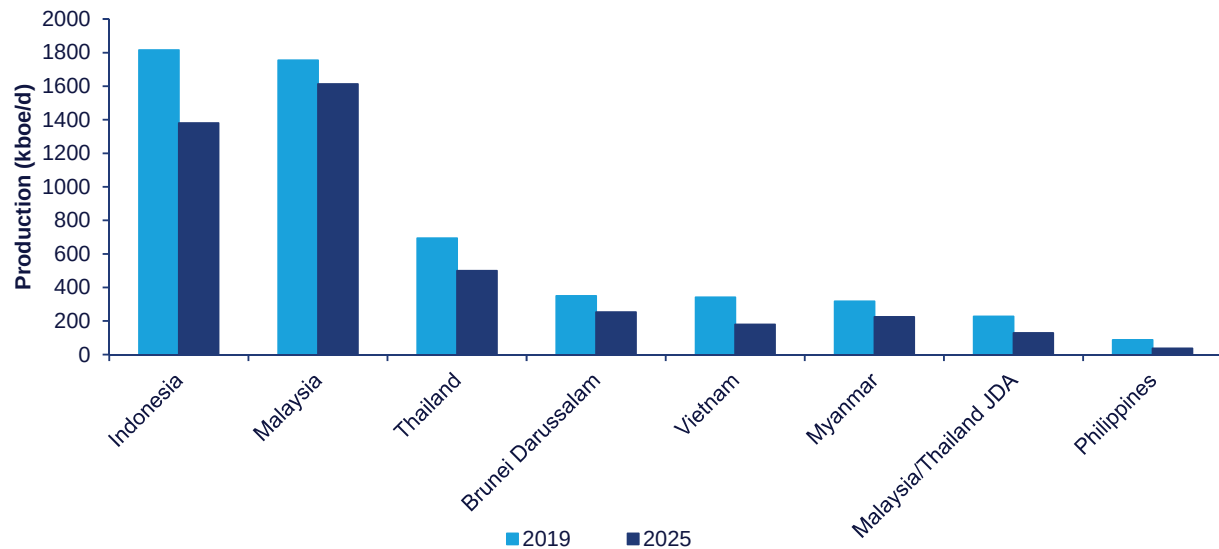
1.2.2. Production

Indonesia had the highest oil and gas production in Southeast Asia in 2019, in line with its leading regional position as the largest holder of commercial reserves. In 2019, Indonesia produced 1.82 million barrels of oil equivalent per day (“Mboe/d”) of oil and gas, of which 61% was gas. Malaysia produced around 1.75 Mboe/d with 64% being gas. The other countries in Southeast Asia had significantly lower production levels than Indonesia and Malaysia.

By 2025, production from Indonesia’s existing commercial fields is expected to decline to around 1.38 Mboe/d, with gas expected to make up around 72% of total commercial production. Malaysia’s commercial production is also expected to decline by 2025, to 1.6 Mboe/d, with 72% being gas.

Wood Mackenzie expects that some of Indonesia’s sub-commercial resource will be progressed and could mature into commercial developments. These resources are excluded from the 2025 production forecast but may have a positive impact on future production levels if development progresses successfully.

Figure 6 Regional Production

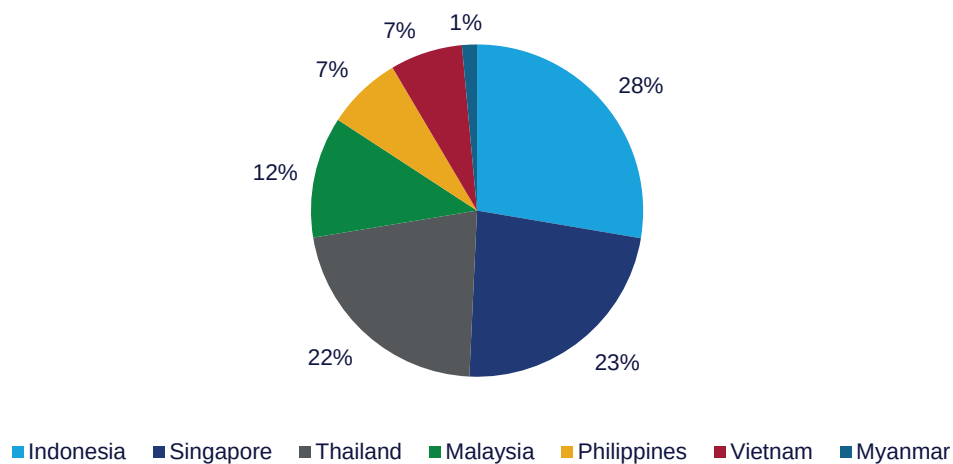


Source: Wood Mackenzie

1.2.3. Consumption

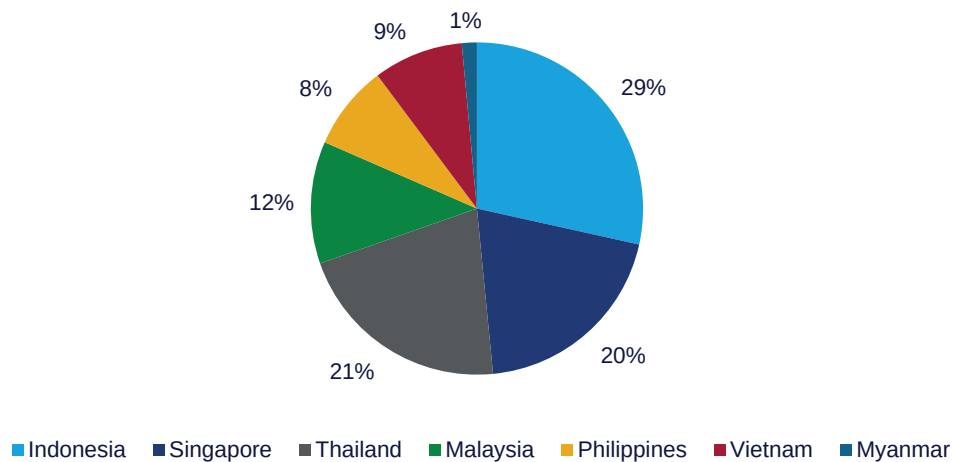
The Southeast Asian region, comprising of Singapore, Thailand, Philippines, Vietnam, Malaysia, Indonesia, and Myanmar accounted for about 19% of total Asia Pacific demand for oil products in 2019. Total demand for oil products in Southeast Asia is forecasted by Wood Mackenzie to grow from 6.8 Mboe/d in 2019 to over 7.5 Mboe/d by 2025; this represents a 1.8% CAGR.

Figure 7 Southeast Asia Oil Demand in 2019



Source: Wood Mackenzie

Figure 8 Forecast Southeast Asia Oil Demand in 2025



Source: Wood Mackenzie

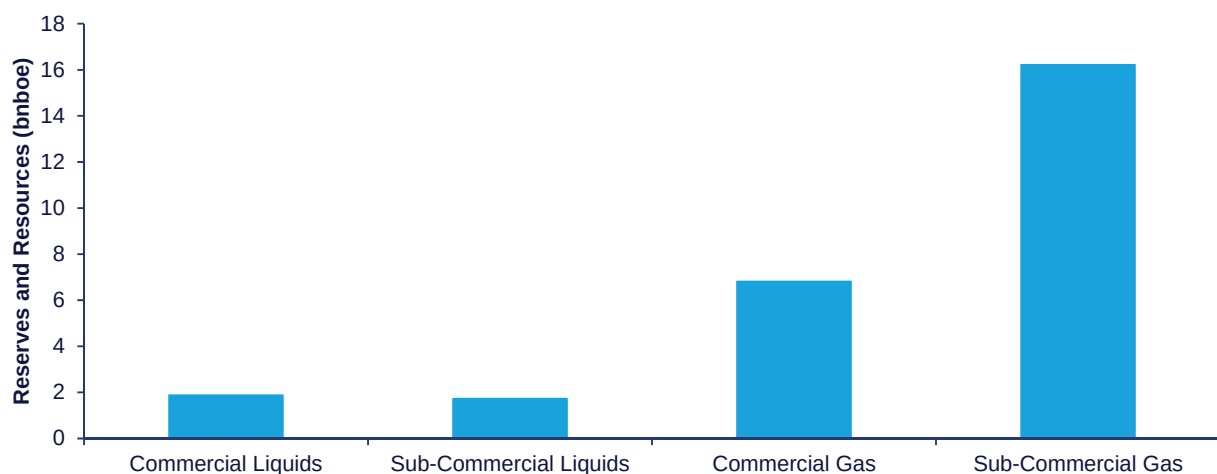
2. Indonesia Upstream Oil & Gas Overview

2.1. Oil and gas reserves

By Wood Mackenzie's estimates, Indonesia has remaining liquids resources (total commercial and sub-commercial) of 3.6 billion boe, of which around 1.9 billion boe are commercial reserves and 1.7 billion boe are sub-commercial resource. Indonesia has remaining gas reserves & resources of 23.0 billion boe (c. 131 tcf), of which around 6.8 billion boe (c. 39 tcf) are commercial reserves and 16.2 billion boe (c. 92 tcf) are sub-commercial resources.

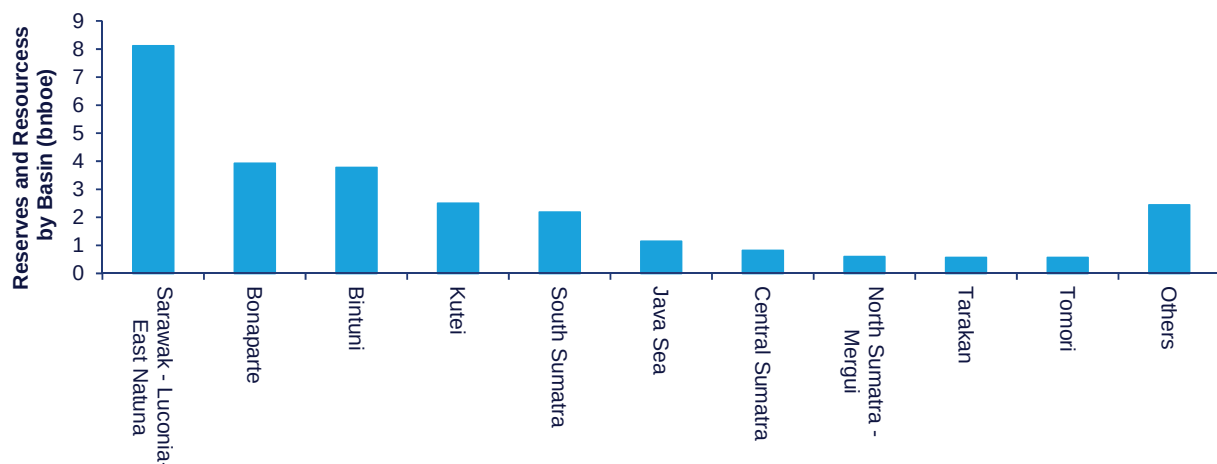
Commercial liquids reserves are concentrated in the Central Sumatra (620 million boe) & Java Sea (471 million boe) basins. Other basins play a smaller part in contributing to liquids reserves. By contrast, most of commercial gas reserves are found in the Bonaparte (11.9 tcf), Bintuni (9.4 tcf) and Kutei (5.9 tcf) basins. In terms of undeveloped resource, Sarawak East Natuna is the most prolific gas basin, hosting the Natuna D Alpha PSC, which has c. 46.0 tcf of sub-commercial gas.

Figure 9 Remaining Reserves by Category as of January 2021



Source: Wood Mackenzie

Figure 10 Remaining Reserves by Basin as of January 2021

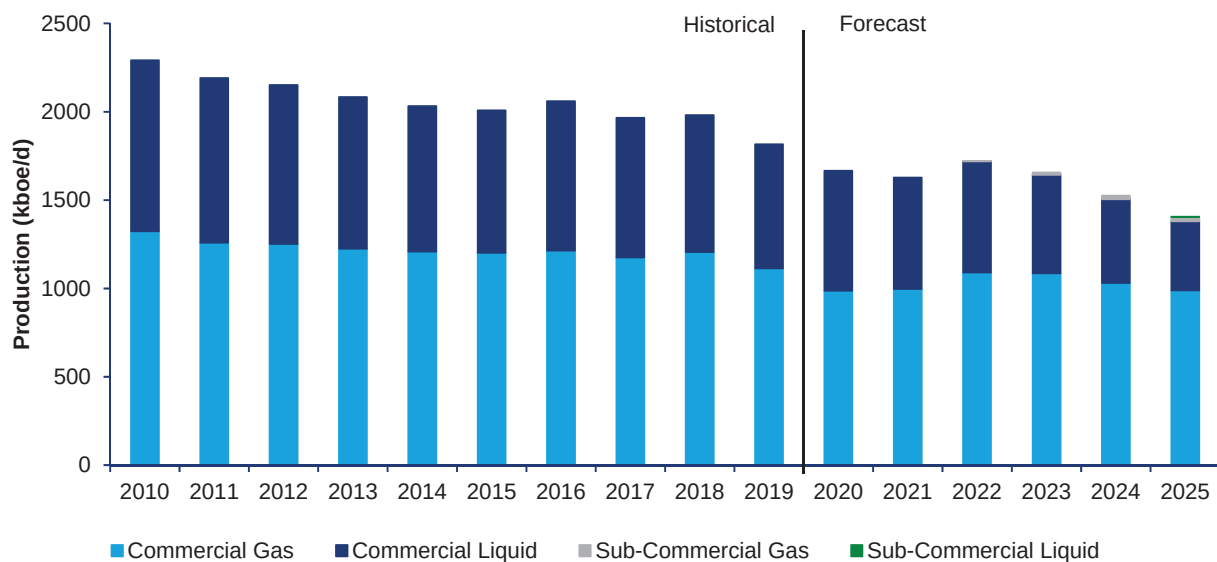


Source: Wood Mackenzie

2.2. Oil and gas production

Oil and gas production in Indonesia in 2019 amounted to 1.8 Mboe/d (39% liquids). While liquids production declined from 968 kb/d in 2010 to 701 kb/d in 2019, gas production increased over the same period from 1.3 Mboe/d to 1.8 Mboe/d.

Figure 11 Indonesia Oil and Gas Production



Source: Wood Mackenzie

Overall oil and gas production from existing commercial fields in Indonesia has declined over the past 10 years and is expected to fall to 1.4 Mboe/d by 2025, led by a decline in liquids production from 0.7 Mboe/d in 2019 to 0.4 Mboe/d in 2025.

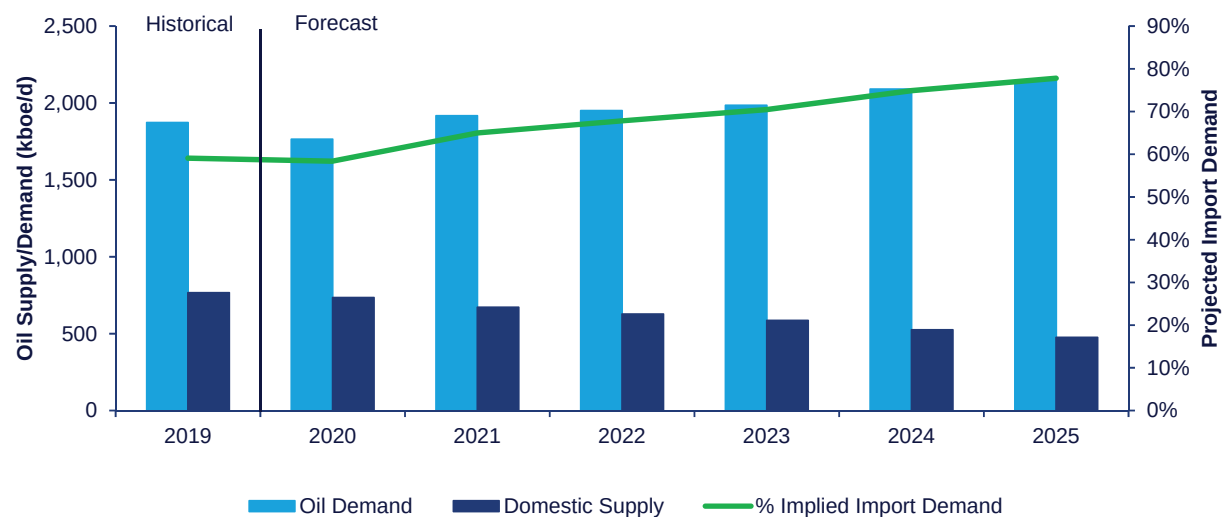
Taking into account fields currently classified as sub-commercial, Wood Mackenzie forecasts that gas production will decline from 1.1 Mboe/d in 2019 to 1.0 Mboe/d in 2025.

2.3. Oil supply and demand balance

Indonesian oil product demand is projected to increase from 1.9 Mboe/d in 2019 to 2.1 Mboe/d in 2025, representing a CAGR of 2.4%. The main driver of this demand growth is expected to be the transport sector (road, aviation and maritime), which accounted for 61% of oil demand in 2019. Industrial and RCA demand will provide a small source of demand growth (0.3% and 1.5% 2019-2025 CAGRs respectively).

With Indonesian domestic oil production in decline, the supply-demand gap is growing larger through the forecast period. Indonesia switched from being a net crude oil exporter to a net importer around 2003. In 2019, the country was estimated to have imported over 1.1 Mboe/d (net) of oil (inclusive of all crude and refined oil products), an estimated 59% of its overall demand. Based on Wood Mackenzie's (commercial fields) supply and demand assumptions, Indonesia's imports will continue to grow. Net oil import is estimated to increase to 1.7 Mboe/d of oil by 2025, accounting for 78% the country's oil demand requirements.

Figure 12 Indonesia Oil Supply-Demand Balance



Source: Wood Mackenzie

2.4. Gas supply and demand balance

Indonesia's gas market grew in 2019. However, demand in 2020 is expected to have contracted by 3% in 2020 due to the COVID-19 pandemic. Indonesia's economy and gas demand are expected to recover in 2021. Wood Mackenzie expects the country's gas demand to increase by 0.7 billion cubic feet per day ("bcfd") from 3.4 bcfd in 2019 to 4.1 bcfd in 2025; The industrial and power sectors will drive gas demand growth.

We expect LNG imports to also increase with increasing gas demand. By 2025, we estimate that LNG imports will account for 30% of Indonesia's gas demand. The growing share of LNG in total gas demand offers new opportunities in both LNG procurement and regas infrastructure projects, although there are challenges unique to the Indonesian market.

This is against a backdrop of an increasing domestic gas supply which is expected to increase albeit at a slower pace as compared to gas demand growth. Total gas supply is expected to increase from 6.8 bcfd in 2019 to 7.1 bcfd in 2025. This commercial gas production includes pipeline and LNG export projects.

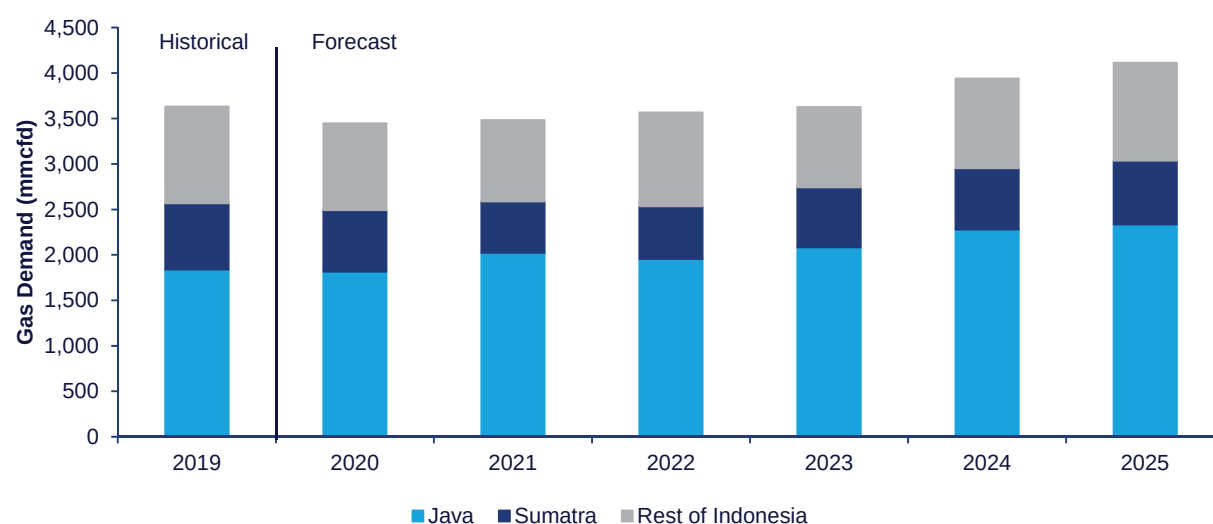
Regionally, supply from Java is expected to increase in the near to medium term (2019-2025). Contracted gas supply from the Java region is forecast to increase from 1.3 bcf/d in 2019 to 1.7 in 2025. We estimate a small amount (c. 140 million cubic feet per day ('mmcf/d')) of uncontracted gas supply to be available in Java in 2025.

On the other hand, contracted gas supply in Sumatra is expected to decline from 1.6 bcf/d in 2019 to 1.1 bcf/d in 2023 due to natural decline of onstream fields. However, supply is expected to increase post 2024 due to the development of the Kali Berau Dalam discovery in the Sakakemang PSC block. We estimate the PSC could add another 300 mmcf/d of production in 2025.

Remaining gas production in Indonesia is from the Kalimantan, Papua and Sulawesi regions. The majority of Kalimantan's gas production is exported from these regions via LNG due to its distance from the domestic gas demand centres in Indonesia. Given the hydrocarbon maturity of the Kalimantan region, contracted gas supply is expected to decline from 1.5 bcf/d in 2019 to 0.9 bcf/d in 2025. Papua gas production was 1.2 bcf/d in 2019. Its gas production is expected to increase to 1.8 bcf/d as Tangguh Train 3 reaches plateau in 2023/2024.

In terms of supply-demand balance, several markets will face supply constraints in the near term. Some markets in Indonesia, particularly West Java and North Sumatra, will continue to face supply constraints due to the decline in the existing piped gas supply into the markets. The Sakakemang PSC in Sumatra will provide additional supply, but we believe that the volumes are still insufficient to replace the declining Corridor field that is currently producing around 800 mmcf/d. West Java and North Sumatra will increasingly rely on LNG volumes to meet its gas demand. LNG demand is expected to continue growing post 2025 as power demand grows further. The development of small-scale LNG projects across the country could provide additional upside to LNG demand in the longer term.

Figure 13 Indonesia Gas Demand by Region



Source: Wood Mackenzie

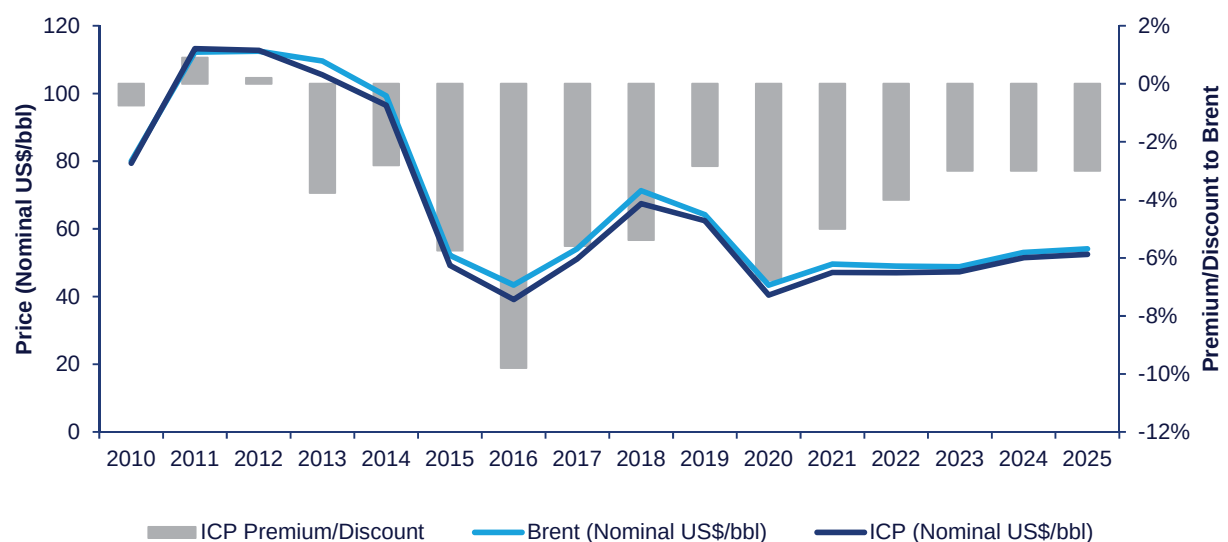
Indonesia's key gas-producing regions, such as South Sumatra and East Kalimantan, are also at risk of facing supply constraints unless new upstream projects progress on time and additional reserves are discovered. Both South Sumatra and East Kalimantan have been exporting gas, but the decline in gas production and an increase in local demand may threaten the sustainability of these exports. The discovery in Sakakemang PSC and the extension of Corridor PSC to the incumbent operator could spur further exploration and drilling activity in the area.

2.5. Oil pricing

Historically, Indonesia has followed the OPEC line when pricing its crude for export, via an official Government Selling Price (GSP). In March 1989, the new Indonesian Crude Price (ICP) formula was introduced and was calculated as a 52-week historic average of the Asian Petroleum Price Index (APPI) for the Minas, Tapis, Dubai, Oman and Gippsland crudes.

In October 1999, the formula for calculating the ICP was changed. It was calculated as 40% of the month's average of Platts' price assessments, 40% of the month's average of RIM assessments and 20% of the month's average of the APPI assessments. This was changed again in 2007, with the weight of APPI assessments reduced to 5% and Platts and RIM increased to 47.5% each. In 2008, the Indonesian government removed APPI assessments all together, and derived ICP prices from 50% of the month's average of Platts' price assessments, and 50% of the month's average of RIM assessments. In July 2016, the ICP was switched to a dated Brent formula. As of July 2018, the ICP was further revised to a Dated Brent plus/minus an alpha. We assume ICP to continue trading at a discount to Brent going forward.

Figure 14 ICP vs Brent Pricing Assumption



Source: Wood Mackenzie

2.6. Gas pricing

Historically, pipeline gas prices are based on a fixed-plus-escalation formula while domestic LNG is indexed to the Indonesian Crude Prices (ICP). More recently PLN, Indonesia's national power company, has also been successful in obtaining a fixed price formula (with no escalation), starting with the Cepu gas agreement signed in November 2017.

The government has sought to lower gas prices for both the industrial and the power sector in recent years. The intention of keeping gas prices low in the industrial sector is to support the competitiveness of local industries and manufacturers in export markets. Concurrently, the government is slowly removing subsidies for power tariffs and PLN has been lobbying to reduce fuel prices in order to manage power generation cost. As a result, the government issued Presidential Regulation 40/2016 and MEMR issued regulation No. 45/2017 providing price caps for the industry and power sector respectively.

Following the regulations introduced in 2016 and 2017, Minister Decree No. 8/2020 was issued on 2 April 2020. The decree capped domestic gas prices at US\$6 per million british thermal units (“mmbtu”) at the plant gate for seven key industries. Parties had one month to complete all related documentations including making amendments to any impacted Gas Sales Agreements. The government issued a regulation (i.e. Minister Regulation 89K/10/MEM/2020) on 13 April 2020 that specified all the impacted GSAs and their new prices.

Similarly, the electricity sector saw further confirmation of its price cap of US\$6/mmbtu at the plant gate through Minister Regulation 10/2020 on 6 April 2020. Minister Decree 91/K/12/MEM/2020 dated 22 April 2020 quickly followed, specifying which Gas Sales Agreements have been impacted and its corresponding revised prices. We understand that relevant contract revisions have been made and the price cap has been implemented.

2.7. Upstream licensing trends

Prior to 1960, three foreign companies operated in Indonesia under concession agreements (Caltex Pacific Indonesia, Stanvac, and Shell). In 1963, these concessions were converted to Contract of Work agreements whereby each of the contract holders became a contractor to the State. New companies who wanted to operate in Indonesia, however, were offered the then-new concept of Production Sharing Agreement. Most companies now operating in Indonesia do so under the terms of a Production Sharing Contract (PSC).

In addition to the PSC, several other types of contracts have been employed, which are variations on the PSC format and include Technical Assistance Contracts (TAC); Joint Operating Agreements (JOA); Enhanced Oil Recovery Contracts (EOR); and Operation Cooperation Contracts (KSO).

In January 2017 the MEMR introduced the Gross Split PSC terms through decree 8/2017. The Gross Split PSC removes the cost recovery mechanism, and the government and contractors split gross revenues. Upstream operations continue to be supervised and managed by SKKMIGAS, but the new terms offer the operators a greater degree of freedom in managing the budget, costs and asset operations. The new terms are applied to future licence awards and contract extensions. Contractors may also choose to adopt the new terms for existing PSCs.

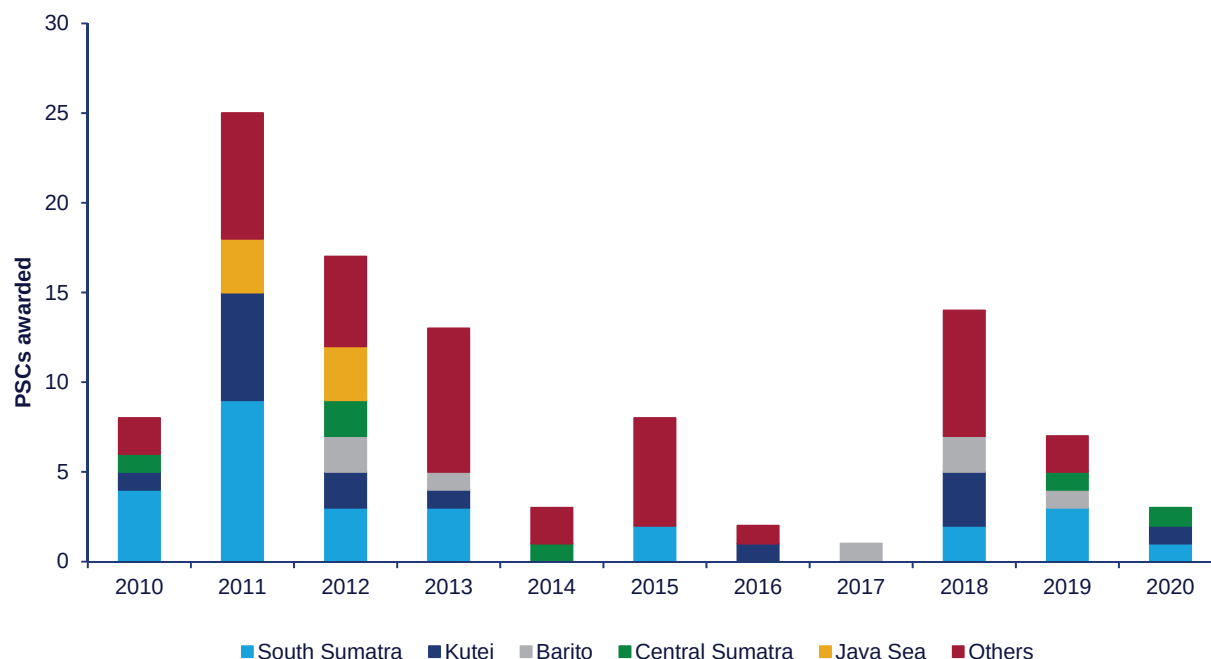
In September 2017, the MEMR enacted a new regulation (MEMR 52/2017), that revised the earlier Gross Split PSC regulation. The Contractor’s base share of revenues is kept at the same level, but the revision includes improved revenue share and higher thresholds for cumulative production, the introduction of sliding scale progressive revenue share based on oil and gas prices and additional revenue share for the second and subsequent PODs on the same PSC.

Under the Gross Split PSC, the government’s base share of revenues is 57% for oil production and 52% for gas production. The contractor share of revenues can be increased, depending on field complexity. For example, a deepwater or an unconventional field would increase the contractor’s share of gross revenues by 16%. The prevailing rules of taxation are understood to apply. DMO oil will receive full market price.

In December 2017, the government issued decree GR 53/2017, confirming tax rules for Gross Split PSCs. The decree confirms income tax and withholding tax rates as mentioned in the current applicable law (25% and 20% respectively). The main changes include introduction of a loss carry forward limit of 10 years, waivers for Import duty and VAT until commercial production, and depreciation schedule using double Unit-of-Production method for all pre-production expenditures.

MEMR 12/2020, ratified in July 2020, confirmed the re-instatement of cost recovery terms as an option for new block awards, in response to declining industry interest in Indonesia's acreage offerings.

Figure 15 Indonesian Exploration and Production PSC awards by Year and Basin



Source: Wood Mackenzie

Exploration acreage in Indonesia is primarily offered via annual bidding rounds, of which there are usually 2-3 each year. Blocks are awarded via a Regular Tender or Direct Offer. Under the Regular Tender, both signature bonus and working commitments are biddable, above a specified minimum determined by the Ministry of Energy and Mineral Resources. The Direct Offer scheme allows operators to perform an initial technical evaluation of proposed acreage, under a Joint Study Area agreement (JSA), and to then match the highest bidder during the Regular Tender. Both conventional and unconventional acreage is awarded via the Regular Tender and Direct Offer system.

Since 2016, Indonesia has awarded several PSC extensions, primarily to Pertamina and its subsidiaries. For this section we have only reviewed the offer and award of new exploration blocks and have excluded the extension of existing producing assets

Exploration activity at the start of the 2010s was boosted by high interest in Indonesia's unconventional potential, with a record number of CBM licences awarded in 2011 and the first shale gas acreage awarded in 2013. However, conventional licensing activity has remained subdued, with low levels of frontier acreage awards and several established E&P players exiting the country.

Of the 11 blocks awarded in 2014, nine (six conventional, three unconventional) were awarded through direct offer, and two under regular tender. 24 bids were received for 14 of the 16 blocks on offer. Both Shell and Statoil (now Equinor) added new acreage to their deepwater positions in East Indonesia. Shell's Pulau Moa Selatan block mark edits return as an operator in Indonesia after almost two decades, while Statoil's Aru Trough I block builds on existing interests in the Kai-Aru Basin. The licenses for these blocks were signed in 2015.

PETRONAS and ConocoPhillips consolidated existing positions in offshore Java and onshore Kalimantan respectively. The North Madura II licence adjoins PETRONAS' Ketapang PSC, and

ConocoPhillips, via its ownership of Petcon Resources, added new acreage close to its acreage in Palangkaraya block.

The 2015 conventional licensing round offered six blocks under regular tender and two blocks under direct offer. The post-tax profit sharing for oil in the round ranged from 70:30 to 65:35 in favour of the government. Post-tax profit sharing for gas production was 60:40, with the exception of Southwest Bengara at 65:35. Despite the post-tax profit split increase for investors, there were no awards made for this bid round.

The 2016 conventional licensing round was announced in July 2016, with seven blocks under regular tender and seven blocks through direct offer. Bidders were invited to bid on signature bonus and profit share splits, which have been fixed in the past. Most of the blocks offered fell within the frontier region.

The 2017 licensing round saw five out of the ten conventional blocks offered attracting bids — all through regular tender. No unconventional blocks were awarded. This was the first bid round to incorporate the Gross Split PSC terms. Five different companies were awarded acreage, all of which have existing positions in the country.

Indonesia carried out three rounds of licensing in 2018. The first round offered 24 conventional and two unconventional blocks. In August 2018, Indonesia launched the second licensing round, offering three exploration blocks and three PSC extensions. Finally, the third licensing round offered four conventional blocks through the direct proposal scheme. Overall, in 2018, nine exploration blocks were awarded.

As in 2018, three licensing rounds were launched in 2019. Indonesia completed its first bid round for the year offering two production blocks onshore Sumatra, and three exploration blocks across Natuna, Kalimantan and West Papua. Two of the five blocks were awarded to KUFPEC Ventures and the combined Sonoro Energy and PT Menara Global Energy; the remaining three blocks were not awarded as the bidders had not met the auction requirements. A third award was made in August 2019, with a consortium of Eni, Pertamina Hulu Energi and Neptune Energy securing the West Ganai PSC with a signature bonus of US\$30.1 million and a firm investment commitment of US\$159.3 million for the first three years, including seismic acquisition and four exploration wells.

Also launched in May 2019, the second 2019 bid round included the West Kampar, Kutai and Bone blocks which had been relinquished by previous operators. A third 2019 bid round was announced in July 2019, including four blocks, Cendrawasih VIII, Belayan I, West Tanjung I and East Gebang. Signature bonuses were set at US\$2.5 million for each block, with minimum work commitments including G&G studies and seismic data acquisition. To date, none of the blocks offered in the second or third bid rounds of 2019 have been awarded.

Efforts to launch new acreage in 2020 were hampered by low oil prices and disruption caused by the COVID-19 pandemic.

CBM

The first Indonesian CBM licences were awarded in 2008, with seven blocks going to a mix of local and international companies. This was followed by a further 13 awards in 2009, three in 2010 and 23 in early 2011. Acreage awards to date have been focused on Kalimantan or Sumatra, involving companies of varying stature — from ExxonMobil, BP, Total, Medco Energi, Dart Energy and VICO, to small indigenous companies. However, poor initial results from test drilling have led to the majority of acreage being relinquished, particularly in Kalimantan.

Shale

Plans for the award of shale gas unconventional acreage were announced in December 2012. Six blocks believed to be prospective for shale gas were announced as a part of a regular tender offer for 2013, and Pertamina was awarded the Sumbagut PSC in May 2013. Two further shale gas blocks were offered up in December 2013 as part of the first unconventional petroleum bidding round for 2013. The Kisaran, Palmerah and Selat Panjang unconventional PSCs were awarded in March 2015. All three blocks have underlying conventional licenses which share the same acreage.

TAC and KSO contracts

Pertamina regularly offers areas from its own-operated acreage to contractors. These areas, which cover either discrete mature fields, or under-explored non-productive acreage, are operated under a Technical Assistance Contract (TAC). After Pertamina EP was formed, new areas have been offered under an Operation Cooperation (KSO) contract. It is understood that expiring TAC contracts will be transformed into KSO contracts, should they be extended.

The KSO contract is effectively a subcontract whereby Pertamina EP still holds the licence for the block, and the contractor conducts exploration activities or operations on an existing discovery. There are two subdivisions of this contract type: production and exploration. The contracts last for up to 15 and 20 years respectively but may be cancelled after set periods early in the contract. The contractor earns its fees from any incremental hydrocarbons produced above an agreed baseline.

Of the 14 blocks offered in 2006, seven were for exploration acreage and seven for production areas. All awards were made to Indonesian companies. In total, 10 blocks were awarded on 24 April 2007. Three exploration blocks were awarded: Suci and Kendal in Java and Kamundan in West Java. The seven production areas were Perlak, in North Sumatra, Ibul Tenggara, Sungai Lilin and Tanjung Tiga Timur in South Sumatra, Sambidoyong in Java, Bangkudulis in northern Kalimantan, and Wiriagar (Oil) in West Java.

The contracts for operating the Sambidoyong and Wiriagar (Oil) areas, awarded to Elnusa, were later cancelled by Pertamina EP. The last KSO award was made in 2016.

2.8. Exploration spending and activity

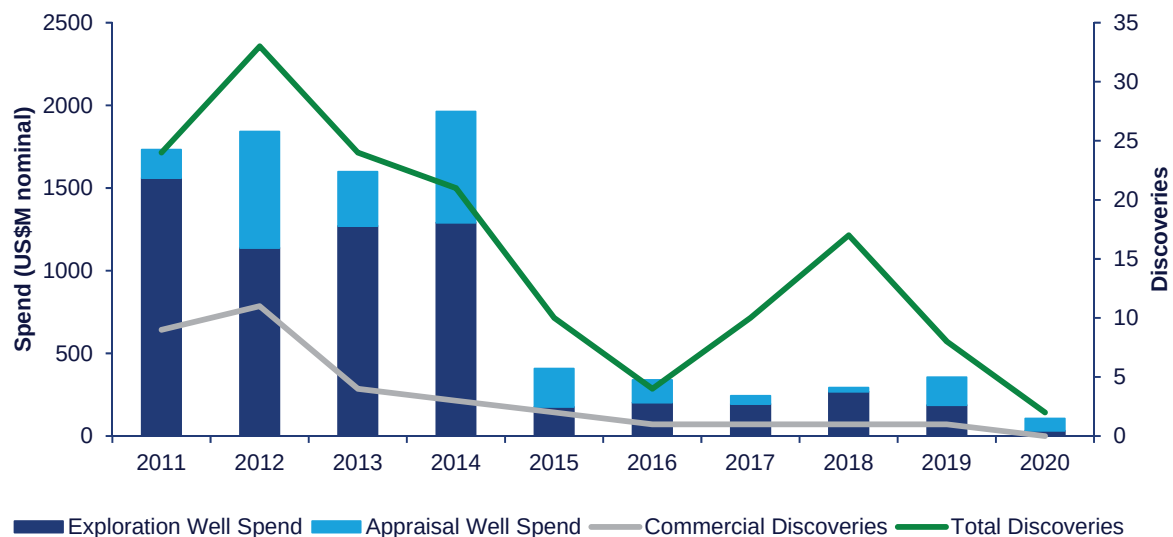
Between 2011 and 2020, Wood Mackenzie estimates that US\$6.3 billion (nominal terms) has been spent on exploration drilling in Indonesia with a further US\$2.6 billion (nominal terms) spent on appraisal drilling. Wildcat drilling, i.e. high-risk exploration well, in Indonesia's frontier basins initially proved disappointing, with a number of operators re-evaluating their exploration plans. Several companies including Anadarko, Equinor, Hess, Marathon, Murphy and PTTEP, have either exited Indonesia or reduced their exposure to the countries' highly prospective but high-risk frontier regions.

Over the past 10 years, discoveries (both commercial and technical combined) peaked in 2012 with 33 discoveries. Between 2016 and 2019, only one commercial discovery had been made per year.

Exploration activity in terms of wells drilled had already started to decline in Indonesia since 2012. Drilling has continued to decline year on year with the exception of 2019 during which 36 wells were drilled. 2020 was the year with the lowest drilling activity with only 11 wells drilled amid the pandemic and dire economic situation. Drilling has been concentrated in the traditional producing basins of Sumatra, Java and East Kalimantan.

Indonesia is viewed by many as having considerable oil and gas potential, particularly in the eastern basins, where large areas, both onshore and offshore, remain relatively unexplored. The lack of infrastructure and the harshness of the terrain, particularly in frontier areas, makes it difficult for oil and gas potential to be realized. For example, many of the prospective onshore areas are in remote jungle regions.

Figure 16 10-Year Exploration and Appraisal Spend and Discoveries



Source: Wood Mackenzie

In 2019, Repsol made the Kali Berau Dalam discovery in the Sakakemang PSC block, containing an estimated 2 tcf recoverable dry gas (350 mmboe), with upside potential from future appraisal. This is one of the largest exploration discoveries in recent years.

Upcoming exploration activity of note is expected to focus on opportunities close to existing infrastructure in the Natuna Sea, the Kutei Basin, East Java. Several IOCs are planning drilling campaigns offshore North Sumatra, which could open a significant new deepwater play.

2.9. Development spending and activity

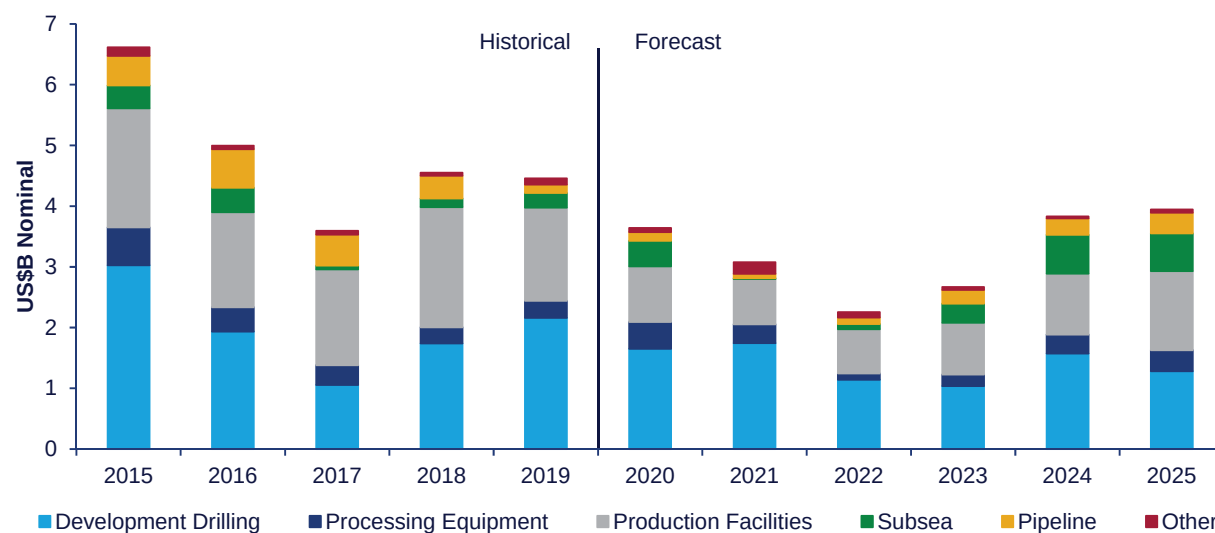
Between 2011 and 2020, Wood Mackenzie estimates that US\$59.4 billion (nominal terms) of capital expenditure was spent on Indonesian oil and gas fields and associated infrastructure. The five-year outlook (2021-25) for capital expenditure is estimated to be US\$15.8 billion (nominal terms). The top five developments during this period are the Offshore Mahakam & Rokan PSC extensions, Ganai PSC, Rapak PSC and North West Java PSC (combined US\$7.4 bn, nominal terms).

Development spend in Indonesia picked up significantly between 2011 and 2014 (from US\$6.1 bn to US\$9.7 bn, nominal terms). The largest contributors to this increase were the Rokan PSC area, where a continued program of infill drilling and EOR techniques (steam- and water-flood) drove higher capex, as well as the increased development drilling activity at the Offshore Mahakam PSC.

While Rokan and Offshore Mahakam drove the increased spend from 2011-2014, declining spend on these two areas also contributed to the sharp fall in development activity in Indonesia from 2015-17 (from US\$6.6bn to US\$3.6 bn). Spend at other smaller contract areas and fields such as the Corridor PSC and Pertamina's Java fields fell, largely in response to the oil pricing environment, and were not replaced with new projects given the limited upstream sanctions over this period.

With limited near-term growth opportunities in Indonesia, we do not forecast a significant growth in development expenditure. Capital expenditure is expected to decline further to US\$2.7 bn in nominal terms by 2023. Spend is expected to be concentrated in developing incremental brownfield upside at the larger PSCs, and sustaining feedgas supply into Indonesia's LNG liquefaction facilities. However, we expect an increase in development spend from 2023 due to higher development spending for production facilities (e.g. in Rokan, Dara, Ganai PSC, Sakakemang PSC) and subsea facilities (Ganai, Masela and Rapak PSC).

Figure 17 Indonesian Development Spend

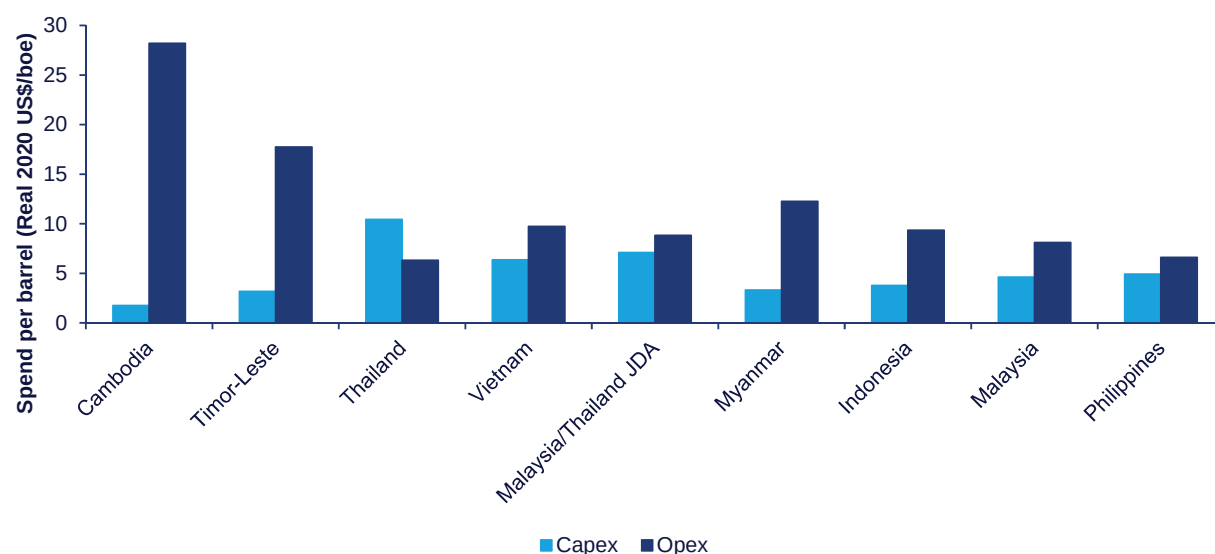


Source: Wood Mackenzie

2.10. Regional cost competitiveness

Cost competitiveness is defined here as current year (i.e. forecast full year 2020) capex and opex per barrel, in real 2020 US\$ terms. Indonesia ranks as the third lowest cost province in aggregate behind Cambodia, Timor-Leste, Thailand, Vietnam, Malaysia/Thailand JDA and Myanmar. Indonesia ranks as third lowest and fifth highest in the region for unit capex and opex respectively.

Figure 18 Capex and Opex Spend per Barrel by Country



Source: Wood Mackenzie

2.11. Oil infrastructure

Indonesia has a total of nine active oil refineries, located in East Kalimantan, Java, Sumatra and West Papua, seven of which are wholly owned and operated by Pertamina. Pertamina began oil refining through its first refinery at Sungai Pakning in Riau, which started operations in 1969, with a capacity of 50,000 b/d. Through a series of acquisitions and capacity expansions, Pertamina has a current refining capacity of over 1,000,000 b/d

To reduce its reliance on imported petroleum products, Indonesia is increasing domestic product supply by increasing refining capacity through refinery expansions and construction of new grassroots refineries. An upgrade of residual cracking capacity at the Cilacap refinery was brought onstream in September 2015, and a continuous catalytic reformer upgrade is planned for 2018. Further upgrades and expansions are also planned for the Balikpapan, Dumai and Balongan refineries.

Previous efforts for new grassroots refineries were set back by the subsidised domestic market, as it did not provide a sufficient rate of return. However, the Indonesian government removed subsidies in the retail sector in January 2015 with the fall in global crude oil price. In August 2016, the Indonesian government launched a regulation enabling the development of private-owned mini-refineries, with capacities up to 20,000 b/d, near upstream production facilities. Pertamina is currently actively working on two new grassroots refinery projects.

2.12. Gas infrastructure

Gas in Indonesia has historically been developed for export. As such, most of the infrastructure investment has been in LNG facilities. There are three LNG plants in operation: Bontang in East Kalimantan, Donggi-Senoro in Sulawesi and Tangguh in West Papua. The Arun facility in North Sumatra ceased operation in 2014 and has been converted into a regasification plant.

Indonesia's first LNG was produced by the Bontang plant. The plant is owned by the Government of Indonesia. There are currently eight processing trains, with a capacity of 22.2 mmtpa. The Offshore Mahakam PSC supplies over 50% of the feedstock for the plant which has struggled with under-supply since 2005.

The Arun LNG plant started production in 1978. The liquefaction plant was operated by PT Arun. At peak there were six trains onstream, with a capacity of 12.3 mmtpa. Following depletion of the fields that supplied the plant, and the expiry of the last export contracts in 2014, Arun LNG has been converted into a 1.5-mmtpa regasification facility. The plant received its first LNG cargo in February 2015 from the Tangguh LNG plant, with gas delivered to local industry via the Pertagas-operated Arun-Belawan pipeline. The regas facility is operated by Pertamina.

First LNG was shipped from the Tangguh LNG plant in July 2009. Gas from fields located on the Berau, Muturi and Wiriager PSCs supply two trains with a total capacity of 7.6 mmtpa. In September 2012, BP submitted plans for the construction of a third LNG train, to take total production capacity up to 11.4 mmtpa. Tangguh LNG train 3 is expected onstream in 2021, with 40% of the additional capacity expected to be allocated to the domestic market.

The Donggi-Senoro LNG plant in Sulawesi shipped its first LNG cargo in August 2015. Traditionally, Indonesian LNG projects have been integrated, with the LNG plant owned by the government and operated on a non-profit basis. In these projects the government took on lending risk to effectively debt-finance the project. However, the 2-mmtpa DSLNG plant, which is supplied by gas from the Pertamina Sulawesi and Senoro-Toili blocks, is the first LNG facility in Indonesia where the project financing risk lies with the project consortium.

Third party access on current regasification terminals in Indonesia are expected to be limited, as Pertamina also acts as gas aggregator. The Benoa terminal is used solely for PLN's power plant operations.

In the meantime, small-scale LNG is proceeding in East Kalimantan. The Sambera gas power plant saw its own small-scale onshore LNG storage and regasification facility in July 2018, led by PLN and Pertamina operating on a five-year Build, Operate, Transfer (BOT) scheme.

In terms of pipelines, the lack of gas interconnection infrastructure divides Indonesia into several regional markets. Java Island is separated into the West Java, Central Java and East Java markets, while Sumatra Island is segregated into the Aceh/North Sumatra and Central/South Sumatra markets. Pipeline infrastructure outside Java and Sumatra is very limited, except in the East Kalimantan region around the Bontang LNG plant.

Existing inter-regional pipeline connections include the Grissik-Duri and the Grissik-Singapore pipelines connecting South Sumatra with Central Sumatra, Batam, and Singapore, and the SSWJ I and II pipelines connecting South Sumatra with West Java. In North Sumatra, the Arun-Medan pipeline was completed in December 2014, connecting the gas markets in Aceh and Medan. Export pipelines also exist in the Natuna Sea, delivering gas to Singapore and Malaysia.

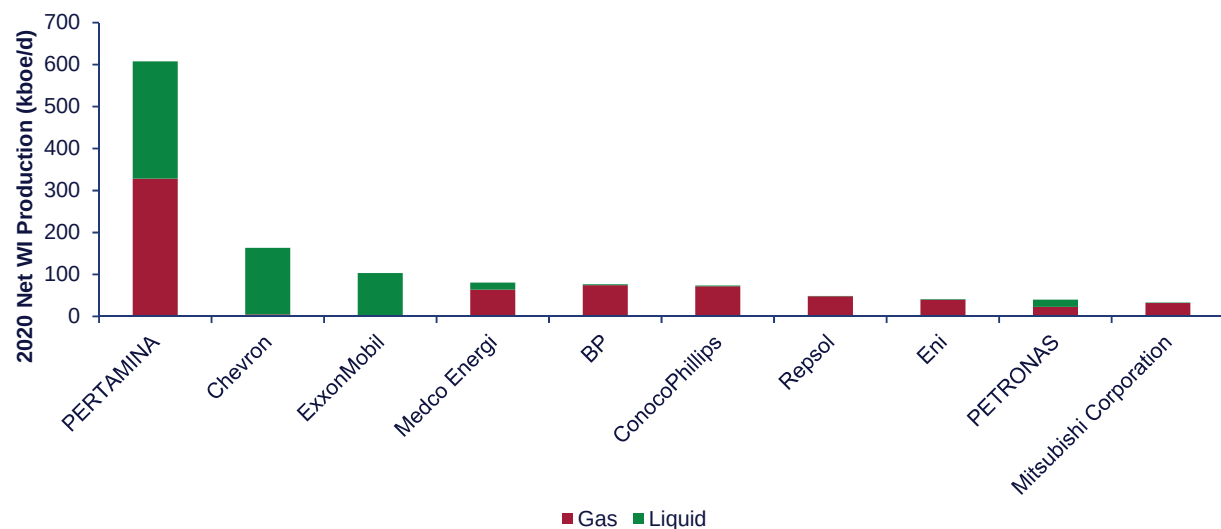
The market is growing as additional pipelines are being built. The Gundih-Tambak Lorok pipeline was commissioned in September 2014, supplying gas to Semarang. Another pipeline to Semarang from Muriah was completed in August 2015. The Cilegon-Bitung pipeline, which is part of PGN's gas pipeline expansion in West Java began operating in 2015. In 2016, the Arun-Medan pipeline was extended further to Sei Mangke. Also, in 2016, the spur line from Muara Karang to Muara Tawar in West Java was completed and is being extended further. In 2018, the Duri-Dumai pipeline and Grissik-Palembang pipeline was commissioned linking key gas production fields with the refinery plants and fertiliser plants in Dumai and Palembang respectively. The next major pipeline construction will be the Gresik-Semarang, expected to be completed in 2021 aligned with the start of Jambaran-Tiung Baru gas field.

2.13. Competitive analysis

The following charts illustrate companies in Indonesia ranked by Wood Mackenzie's estimates of oil equivalent production in 2020 and block and net acreage positions as at January 2021

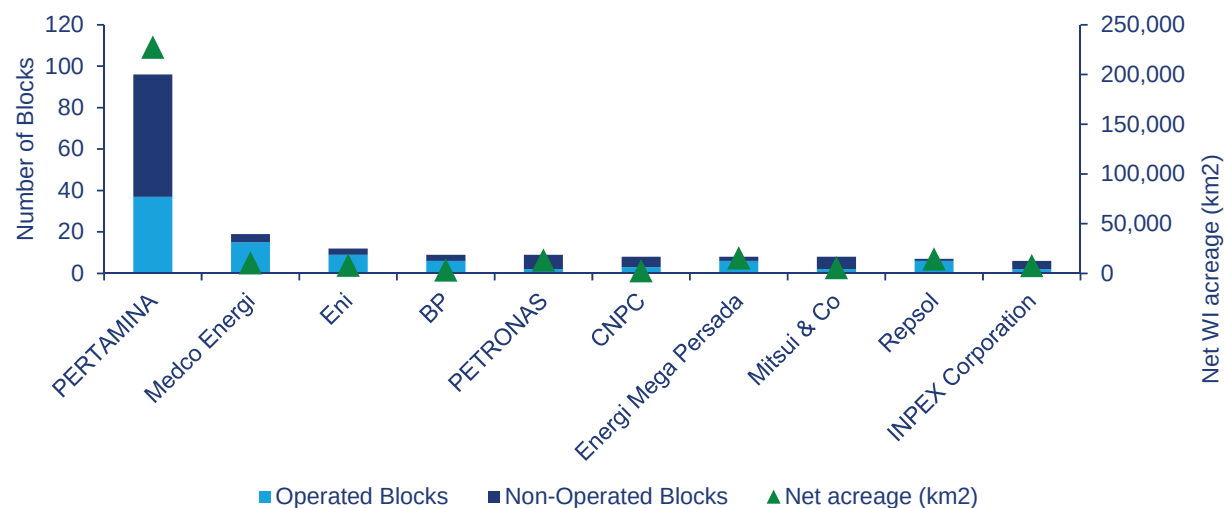
As at January 2021, Pertamina is the largest E&P player in Indonesia in terms of active blocks, net acreage, commercial reserve and production; Pertamina currently holds the most blocks (90, of which 34 are active blocks) and has the largest net acreage of 227,408 km². Pertamina also owns the largest oil and gas commercial reserve base in Indonesia and is the largest oil and gas producer with 608 kboe/d of net working interest production.

Figure 19 Top 10 E&P Positions by Production



Source: Wood Mackenzie

Figure 20 Top 10 E&P Positions by Block and Acreage*



*Note: Sugico Graha has been excluded from this analysis as they largely procure relinquished blocks from exiting companies, as opposed to other companies which competitively bid for blocks

Source: Wood Mackenzie

3. Indonesia Geothermal Industry Overview

The share of renewable energy capacity in Indonesia declined from 15% in 2011 to 13% in 2020, due to the development of large-scale coal power plants under the Crash Build I programme. With continued investment in renewable energy, we expect the share of renewable energy capacity to increase gradually, reaching 16% in 2025.

Hydro and geothermal are the two biggest sources of renewable energy in Indonesia. In 2019, there were 4.2 GW and 2.0 GW of installed hydro and geothermal power plants, respectively. The Crash Build II programme, introduced in 2009, includes the development of 4.8 GW of geothermal capacity but progress has been slow. We estimate Indonesia's geothermal capacity to reach 3.9 GW by 2025.

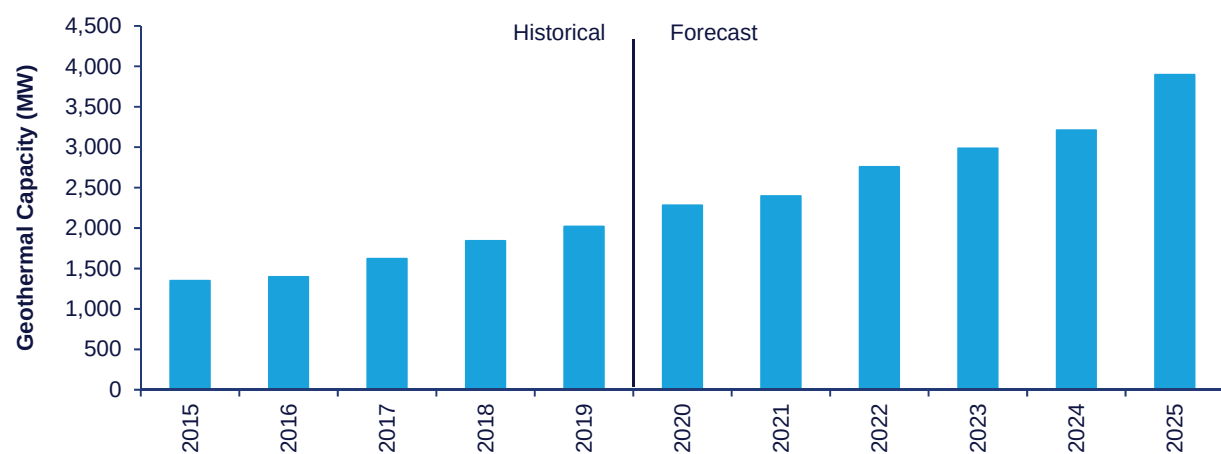
The application of geothermal power started in 1982 when Pertamina developed the first unit of the Kamojang geothermal plant in West Java. Development of geothermal projects has gradually increased since 1997.

Geothermal is a potential abundant source of renewable energy in Indonesia. Although policies were improved in the past few years to make it more attractive to private investors, challenges in financing and connecting the plants to the main grid are still hampering development. The new geothermal law and regulation announced at the end of 2014 were expected to expedite geothermal development in Indonesia, but progress so far has been minimal.

On 18 February 2017, the price reference for electricity from renewable energy was reduced, as stipulated in MEMR Regulation no 12/2017. The regulation marked a shift in the government's approach towards renewable energy, as it seeks to balance the aspiration for renewable energy development with the need to maintain electricity prices at an affordable level. The previous feed-in tariffs were reduced and capped to between 85% and 100% of the average generation cost of each region.

In October 2020, the government announced plans to release new regulation to provide more incentives to support renewable energy development to address concerns raised from the Regulation no 12/2017. The new rules are set to simplify pricing of renewables, including setting feed-in-tariffs (FiTs) for certain technologies instead of negotiating with PLN. The Ministry of Energy and Mineral Resources has introduced plans for the government to pay the potential difference between PLN's average cost of generation (referred to as BPP) and FiT rates to allow renewables developers better returns. PLN's average BPP was US\$76.6/MWh for 2019, which is too low to justify the economics of most renewable projects.

Figure 21 Indonesia Geothermal Capacity Outlook

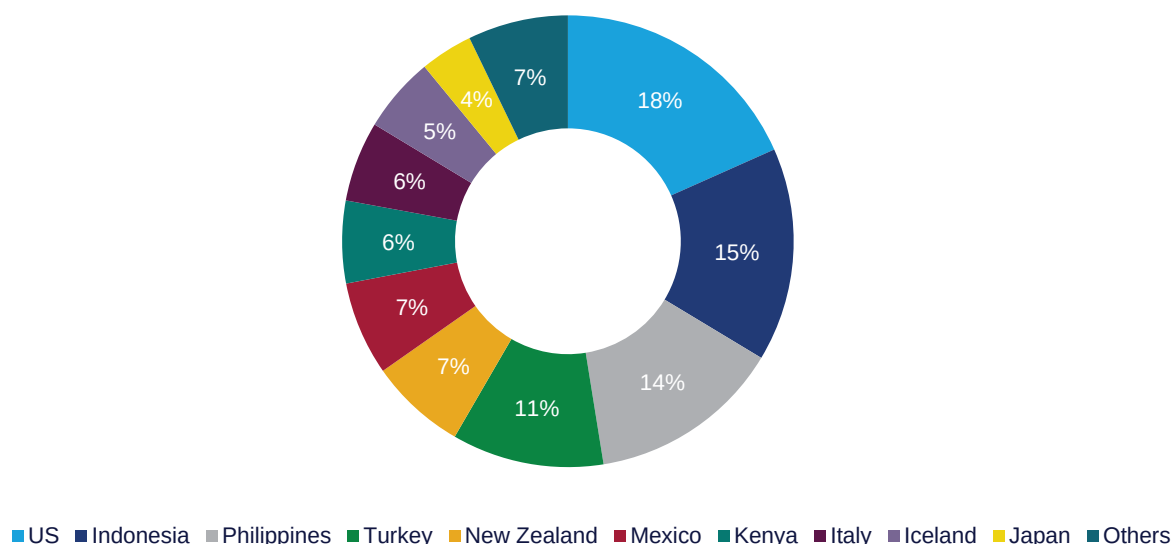


Source: Wood Mackenzie

PT Pertamina Geothermal Energy (PGE) is the main player in the geothermal industry in Indonesia. The other players include Geo Dipa Energi, Chevron, Star Energy, Supreme Energy, Bumigas Energi and Medco Energi. Until 2011, Pertamina was involved in all existing geothermal plants in Indonesia either through its own operations or joint operations with other partners. However, Pertamina transferred its ownership in Geo Dipa Energi to the Government in 2011. With this transfer, GDE is expected to be a competitor to Pertamina for the allocation of geothermal working areas and projects in future. GDE currently operates the Dieng and Patuha power plants.

PGE currently has the second largest geothermal capacity in Indonesia. The company currently has six operating geothermal facilities, namely Kamojang, Karaha, Lahendong, Lumut Balai, Sibayak and Ulubelu with a total capacity of c. 700MW in 2020.

Figure 22 2019 Share of Geothermal Capacity by Country



Source: BP World Energy Statistics Review 2020

4. Downstream Industry Overview

4.1. Global and regional capacity

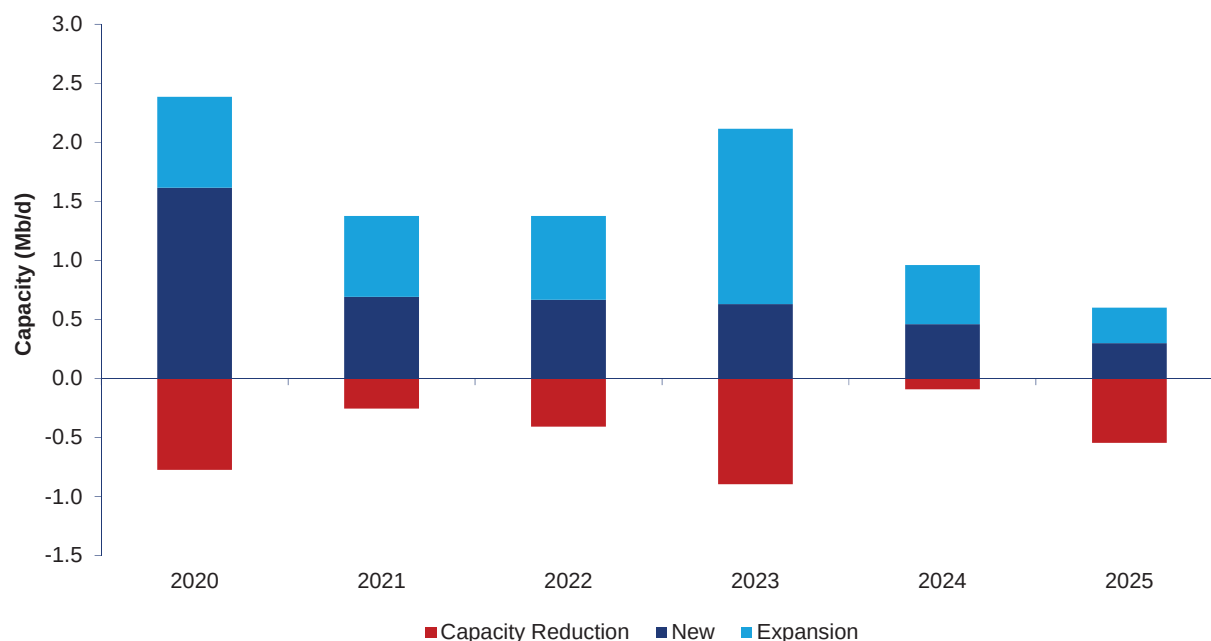
COVID-19 has wreaked havoc on oil demand in 2020. We expect 2020 oil demand to be six million b/d lower than in 2019. On the assumption that an effective vaccine is in use by the end of Q1 2021 we anticipate much of that demand to re-emerge in 2021 and oil demand will be back above 2019 levels in 2022. But the uncertainty and downside risks to that outlook are clear.

Refiners have responded to the drop in demand by sharply cutting crude runs and in some cases idling capacity. Even so, product stock levels have built considerably and those will continue to weigh on margins and refinery utilisation into 2021.

Meanwhile refiners, primarily in Asia and the Middle East, continue to push ahead with the completion of new refineries and expansions. Although there have been a few announcements of project delays due to operational or financial difficulties associated with the virus, we expect most projects to complete given the late stages which many are at. Based on our estimates, refiners will have added a net 6.3 million b/d of capacity between 2019 and 2025. This in a period when oil demand growth will be only 5.9 million b/d. The need for a period of capacity rationalisation seems clear and a prolonged period of weak margins will facilitate that.

The outlook improves by the middle of the decade, as demand growth remains relatively strong in this period. Although the rate of demand growth slows as the energy transition takes hold in the longer term, an expanding population and rising average incomes in the non-OECD provide support. Meeting that demand growth will require further investment in new refining capacity as well as in additional refinery upgrades. The challenge for investors will be to identify the most advantaged locations and configurations. For existing refiners in the mature regions where demand is falling the challenge will be to ensure that they remain more competitive than other regional assets through selective investments, operational excellence and alignment with local environmental policy.

Figure 23 Planned Global CDU Capacity Additions



Source: Wood Mackenzie

There were 260 refineries in Asia Pacific, with a total refining capacity of around 36.9 million b/d by the end of 2019. China accounts for about 45% of the region's refining capacity, followed by India and Japan. The latest new refinery additions in Asia Pacific ex-China were the Nghi Son refinery in Vietnam which started up in 2018, RAPID refinery in Malaysia, which started up in 2019. For China, Hengli Petrochemical started up in Q3 2019 and Zhoushan Petrochemicals phase one came onstream in early 2020.

Refinery capacity has been growing rapidly in Asia Pacific in response to increasing oil product demand but is expected to slow as a result of a slower pace of capacity addition in China and oil demand growth in the region. We anticipate a net addition of 3.8 million b/d of refining capacity in Asia Pacific from 2020 to 2027.

New grassroots refineries, ten in total, account for about 2.6 million b/d of this capacity increase. China will add seven grassroots refineries. The main projects include — Sinopec's Zhanjiang refinery in 2020 and Caojing refinery in 2023, PetroChina's Jieyang refinery in 2023, Hengli and Rongshen's large refinery and petrochemical integrated plants in 2019/2020, Shenghong refinery in 2023, Zhoushan phase two and Yulong refinery in 2024.

Outside of China, the RAPID refinery in Malaysia and Hengyi's refinery in Brunei will be fully operational in 2019 and 2020 respectively. a new refinery is expected to start-up towards end of 2027 in Indonesia (Tuban refinery) and one new refinery in India is expected to start-up by end of 2026 (Barmer refinery).

In addition to the new refineries, many refineries are expanding, or adding downstream upgrading units. As some of these investments focus on residue upgrading, the distillate yields are expected to increase at the expense of residual fuel oil.

4.2. Global and regional utilisation rates

Utilisation rates have been relatively high since 2004 onwards. Refineries were operated at rates close to maximum sustainable rates in many regions. However, constraints in the refining market were

not caused by a lack of crude distillation capacity per se but by several factors in the market including more stringent quality specifications, hurricane related outages in the U.S. Gulf Coast and high market demand for middle distillates such as jet fuel and diesel. These factors resulted in bottlenecks in the overall system

However, containment policies against the COVID-19 pandemic put severe restrictions on personal mobility, which hit gasoline demand hard in 2020. We do expect gasoline to lead the recovery in oil demand, supported in part by passengers shifting from public transport, aviation, or cruising to personal cars.

The disruptive economic effects of the pandemic also had a negative impact on diesel/gasoil demand in 2020. Demand is expected to recover to pre-pandemic levels by mid-2021.

In percentage terms jet fuel has been hit hardest by the pandemic. Although we assume that a vaccine becomes widely available by Q2 2021, some border controls will likely remain in place and consumer precaution will linger. Business travel may be permanently impacted, with companies making greater use of remote communication. Our forecast has jet fuel demand returning to pre-pandemic levels only by 2023.

However, there is downside demand risk for 2021 if vaccines are not effectively distributed and administered globally, and containment policies continue to be enforced by government throughout the year.

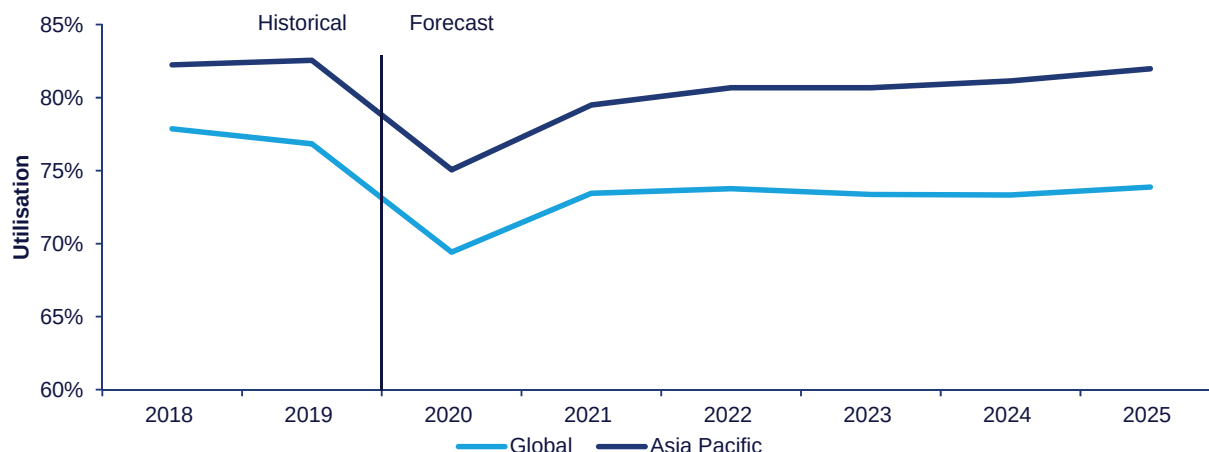
With increasing capacity and slower demand growth, a refinery oversupply situation is expected and will result in low refining margins and low asset utilisation over the next five years. A sustained period of lower margins is expected to put smaller, less complex refiners, subject to market competition, under closure pressure.

We project the average global refinery utilisation rate to fall from 77% in 2019 to 69 % in 2020. Utilisation is expected to increase post 2021 but remain low at an average of 74% between 2021 and 2025. This level of utilisation is lower than the levels seen between 2009 and 2014, during which close to 4.0 million b/d of refinery capacity were closed in Europe, North East Americas and OECD Asia.

We expect the same regions to see refinery closures and capacity reductions in response to a sustained period of low margins. All the three regions are set to see declining domestic demand, have limited, or no access to advantaged feedstocks and energy sources, and have several relatively small scale, older assets which will struggle to compete with new and upgraded refineries in other regions.

Asia Pacific's overall refinery utilisation is higher than the global average but is expected to follow a similar trend as global utilization rates. Utilisation rates is expected to have declined from 83% in 2019 to 75% in 2020, due to the COVID-19 pandemic. Between 2021 and 2025, utilization is expected to average 81%. The pace of refinery capacity addition at an average of 475,000 b/d per annum from 2020 to 2027 will lag behind the average demand growth of 659,000 b/d during the same period. However, most of the deficits emerge from petrochemical feedstocks — LPG and naphtha. NGLs arising from oil and gas production has been the main source of non-refinery supply in Asia, although supply of LPG and naphtha from NGLs is very small compared with the large deficits seen in the region. With many countries are actively pursuing biofuel policies, the biofuel volumes will become the main source of non-refinery supply in Asia.

Figure 24 Global and Regional Refinery Utilisation Rates



Source: Wood Mackenzie

In Asia Pacific, the COVID-19 shock, combined with its disruptive economic effects, caused an estimated 1.8 million b/d contraction in the region's total product demand in 2020, with transport fuels demand most affected. Demand is expected to recover from 2021 and will reach 39.9 million b/d by 2025, 6 million b/d higher than 2020 levels. In India and other emerging economies outside of China, overall demand will continue to rise in the medium to longer term, backed by a substantial increase in working-age population in conjunction with rising average income levels. By contrast, in Japan, South Korea, and other advanced economies in the region, demand will undergo a structural decline due to the combination of multiple factors such as their saturated vehicle ownership, increasing efficiency gains, vehicle electrification in addition to ageing population. China stands between these two opposing trends, with its demand rising through to the early 2030s before declining, although China's demand in 2040 stays substantially higher than its 2019 level.

China and India combined will account for more than 70% of the demand growth between 2020 and 2025. Demand from Indonesia, Vietnam and other Southeast Asian emerging economies account for rest of the growth. By contrast, oil demand in the region's advanced economies (i.e., Taiwan and Singapore in addition to the OECD Pacific countries) will decline in the longer term.

The transport sector will contribute towards most of Asia Pacific's oil demand growth between 2020 and 2025. Transport sector demand is expected to grow by 3.7 million b/d during this period to reach 20.6 million b/d in 2025. About 60% of transport sector growth will be from road transport. Aviation fuel demand is expected to contribute to the 1.2 million b/d; while marine bunker oil demand increases by only 0.3 million b/d between 2020 and 2025.

The petrochemicals sector will also be a significant growth contributor to Asia's oil demand. Petrochemical feedstock sector demand will grow over 1.9 million b/d from 2019 to 2025, accounting for 31% of growth during this period. The bulk of this growth is in China, reflecting its expansion of steam cracking, propane dehydrogenation (PDH), and aromatics production capacities.

Residential/commercial demand growth will be slow, mainly because of fuel switching to natural gas and electricity. Demand in industry and power generation will remain largely flat, as manufacturers and utilities further shift to cleaner alternative fuels while pursuing higher efficiency.

4.3. Global and regional refining margins

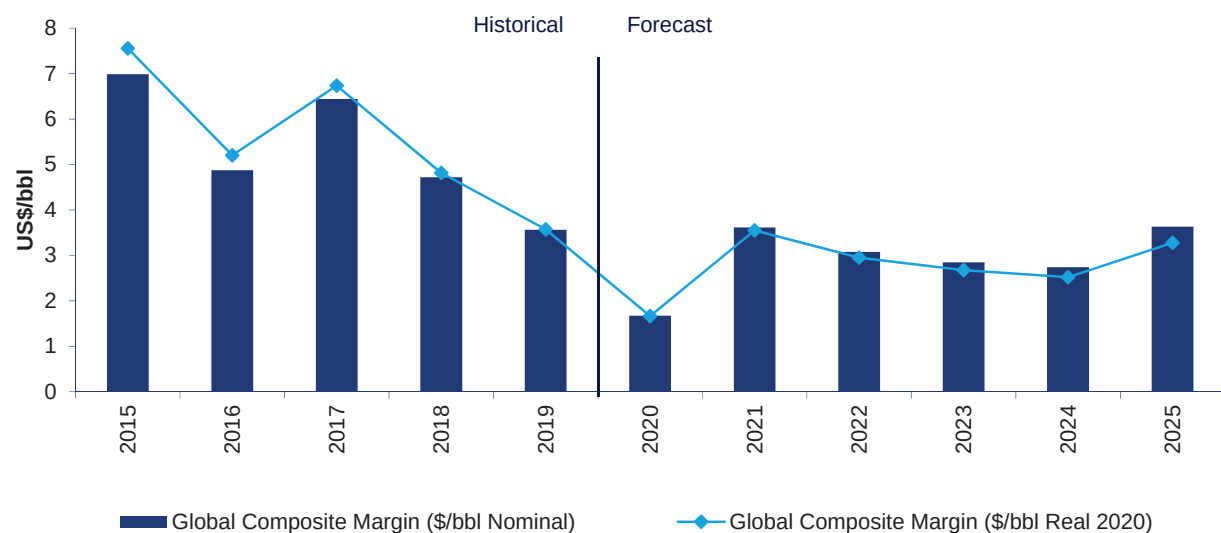
Global refining margins

2020 was expected to be one of the best years for refining industry because of IMO's bunker fuel quality specification change, but COVID-19 turned it into the worst year in refining history. Our global composite fell in 2020 as global demand declines because of COVID-19. Product inventories are at record highs and refiners are running at all time low utilization rates. Products cracks reached record low and regional margins in Asia reached lowest levels in recent history.

OPEC+ production cuts and sanctions on Iran and Venezuela removed heavier barrels from the market, which tightened light-heavy spreads, contributing to much weaker margins for refiners running medium, sour crudes.

We expect a recovery in refinery margins in 2021, but not for long. A global refinery capacity addition of more than 7.0 million b/d and non-refinery supply (biofuels, NGLs, CTL etc) of more than 3.5 million b/d in the next seven years outpace demand growth. Global refining market enters a long period of overcapacity. Refinery margins reach bottom of cycle around 2024, by when we expect some weaker refineries to close.

Figure 25 Global Composite Refining Margins*



Source: Wood Mackenzie

*Note: Global composite margin = $[(50\% \times \text{NWE FCC Brent} + 50\% \times \text{NWE FCC Urals}) + (50\% \times \text{USGC FCC LLS} + 50\% \times \text{USGC FCC Mars}) + (30\% \times \text{Singapore FCC Tapis} + 70\% \times \text{Singapore FCC Dubai})] / 3$

Asia refining margins

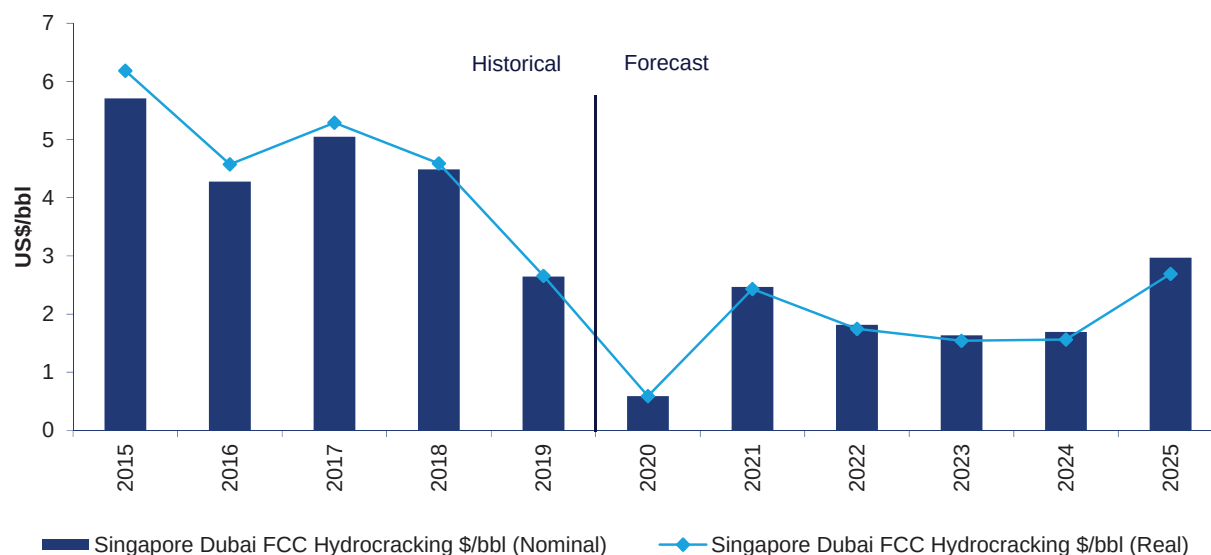
Margins in 2020 fell to the lowest in last 20-25 years because of COVID-19. The weak demand resulted in overcapacity and weak product cracks. However, margins are expected recover in 2021 due to demand recovery. Global overcapacity in refining keeps margins depressed after 2021, with 2024 as bottom of the cycle. FCC refiners will come under severe pressure to reduce runs or force closures.

Dubai FCC/hydrocracking margins are driven primarily by gasoline and middle distillate product cracks, which was extremely weak in 2020. Gasoline crack is expected to recover from 2020 lows in 2021, led by a recovery in demand but the pressure from global overcapacity, relatively weak demand growth for gasoline and a large over-supply in naphtha may weaken gasoline through to 2024.

Middle distillate crack spreads held up well in 2019, off-setting weakness in gasoline, but the impact from COVID-19 results in very weak cracks in 2020. We expect cracks to recover in 2021 led by a recovery in demand. Similar, to gasoline cracks, middle distillate cracks are forecast to weaken from 2022 as more vessels are fitted with scrubbers and VLSFO supply grows. Global refining overcapacity will also weigh on product cracks through to 2023.

Weak margins are expected through 2024 to force some uncompetitive capacity to close, resulting in cracks spreads to rise from 2024.

Figure 26 Dubai FCC/Hydrocracking Gross Refining Margins Forecast

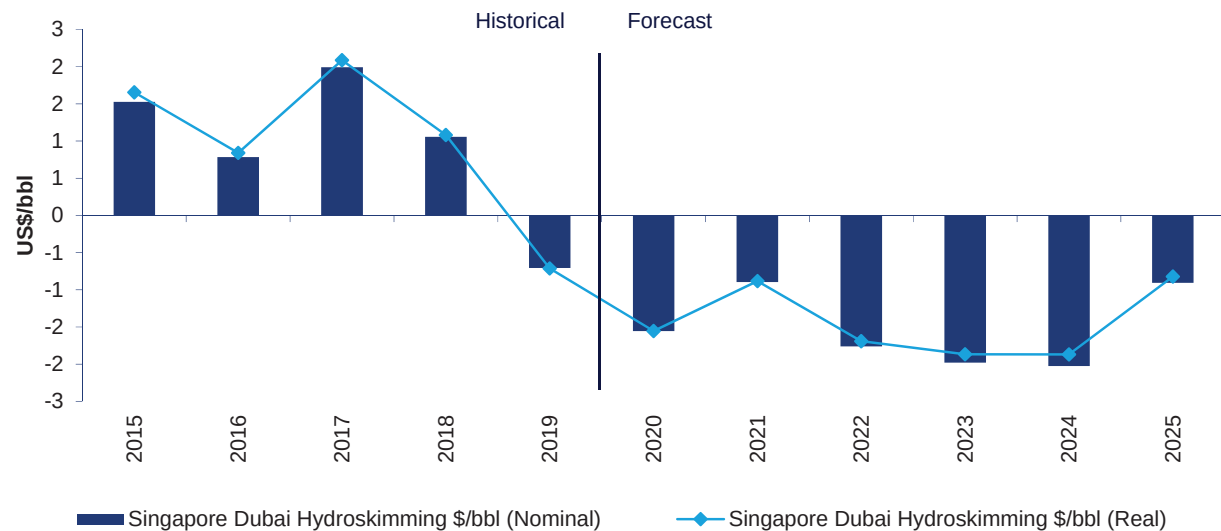


Source: Wood Mackenzie

Dubai hydroskimming margins fell in 2019 and is expected to remain low in the future. Growing spare distillation capacity leads us to forecast that hydroskimming margins should weaken. The low level of hydroskimming margins reflects our view that refiners will not be running distillation units at high levels of utilisation for any sustained period.

Further closures of refining capacity are likely to take place in Asia, particularly at smaller, less efficient plants in countries with mature economies.

Figure 27 Dubai Hydroskimming Gross Refining Margin Forecast



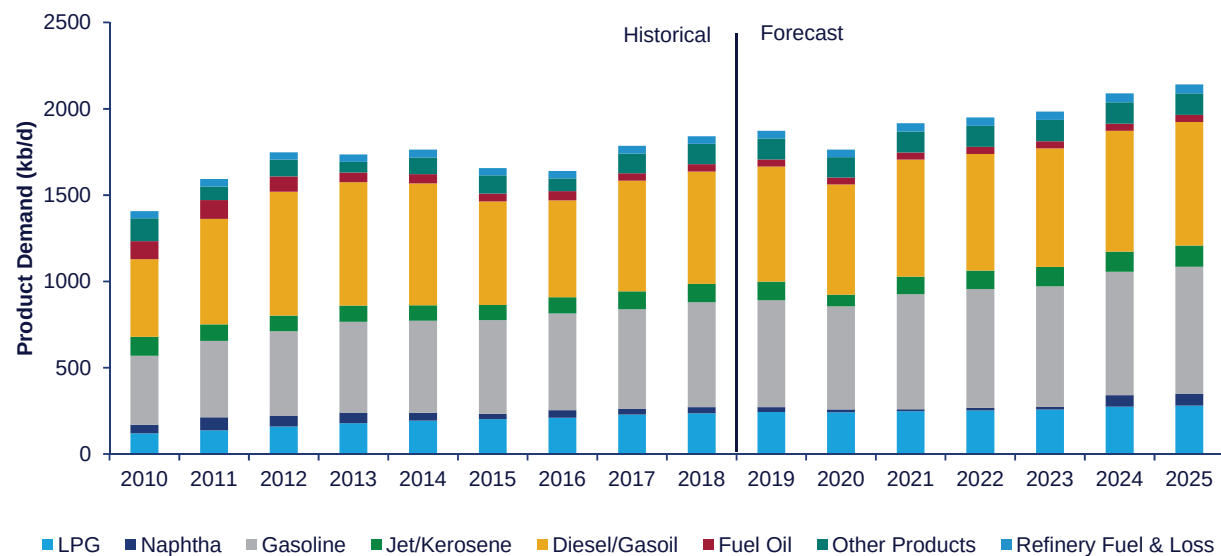
Source: Wood Mackenzie

5. Indonesia Downstream Overview

5.1. Oil products demand

Indonesia oil demand is estimated to shrink by 0.1 million b/d between 2019 and 2020. Looking ahead, Indonesia's total product demand is forecast to grow from 1.8 million b/d in 2020 to 2.1 million b/d in 2025, a CAGR of 4.0%. Transportation demand accounts for around 74% of the demand increase, with road transport alone accounting for 58% of the country's oil demand growth during this period. The residential, commercial and agricultural sector is expected to contribute for the remainder of the growth.

Figure 28 Indonesia Product Demand



Source: Wood Mackenzie

LPG Conversion Program

Total LPG demand is forecast to increase at a CAGR of 2.4% a year from 2019 through to 2025. LPG is mainly used in the residential and commercial sector for cooking. The success of the government conversion program which substitutes kerosene with LPG has seen its consumption grow from 41 kb/d in 2007 to 243 kb/d in 2019, an average growth of more than 16% annually.

While a growing economy will enable more low-income families to replace traditional biomass with LPG for cooking, the government is also looking at Dimethyl Ether from coal and natural gas to replace LPG as the country faces limited domestic supply and increasing imports.

Biofuels

Pertamina started selling biodiesel blends at a select number of service stations in 2006. The proportion of biodiesel varied between 1% and 5% depending upon the prevailing economics of biodiesel production. From January 2009, the government stated it would implement mandatory biofuels blending. The mandates require the inclusion of biodiesel in all diesel/gasoil sold according to the following schedule: 1% in the transport sector, 2.5% in the industrial/commercial sector and 0.25% in the power generation sector. These mandates seem to have spurred some growth in domestic biofuel consumption, but this has been limited to biodiesel, consumption of which is estimated to have reached 18,000 b/d in 2013. This represents around 5.6% of the road diesel demand.

In August 2013, the government issued a decree modifying its earlier biodiesel mandate to accelerate the implementation of biodiesel blending in different sectors. As per this decree, biodiesel use in subsidised diesel was increased from 10% to 15% in April 2015, 20% in 2016. Biodiesel use in the power generation sector was mandated to increase from 7.5% in 2013 to 20% in 2014, 25% in April 2015 and to 30% by 2016 according to the decree issued in March 2015.

The biodiesel 20% was carried out nationwide on 1 September 2018 when blending became economic without government subsidy. The biodiesel 30% (B30) mandate became effective from 1 January 2020. Given that a detailed production allocation mandate was issued to domestic palm-oil producers in October 2019, we expect the B30 mandate to be implemented with high compliance rate. As a result, Indonesia biodiesel consumption is expected to grow from 44,000 b/d in 2019 to 137,000 b/d in 2020. However, the implementation of the mandate is subject to risks such as poor blending economics, logistics constraints, and be further affected by the impact of COVID-19.

The government initially decided to implement the biodiesel 40% (B40) mandate by 2021, with trials planned to start in March 2020. However, due to the impact of COVID-19, they have since pushed back the implementation of this mandate to 2022. However, our view is that Indonesia will not implement this increase in the near term due to limitations in biodiesel production capacity and low oil prices.

Disagreement over the price formula between the government and ethanol producers has resulted in a limited consumption of fuel ethanol. There are regulatory efforts under way to arrive at a price formula for ethanol that will result in supply becoming available. Until an appropriate policy can be implemented, we do not expect significant fuel ethanol use.

5.2. Refining capacity

There are nine refineries in Indonesia, with a total refining capacity of approximately 1.1 million b/d (57 Mtpa). The average refinery size is 127 kb/d. Six of these nine refineries are wholly owned and operated by Pertamina. Pertamina is also understood to be major shareholder for the TPPI refinery in Indonesia.

Of the nine refineries, four are hydroskimming refineries accounting for about 10% of the total capacity. There are three FCC refineries, one hydrocracking refinery and one hydrocracking and coking refinery.

Indonesia has a stated objective to reduce its reliance on imported petroleum products in the medium term. It aims to meet this objective by increasing domestic product supply through refinery expansions and construction of new grassroots refineries. Many foreign investors that showed interests in refining joint-venture projects in the last few years have backed off because of in-sufficient rate of returns from projects or lack of access to domestic retail fuels market amongst many other challenges. The government is working to provide more incentives to make new investments more viable.

Currently, Pertamina is actively working on two new grassroots refinery projects. For the first refinery project, it is working with Rosneft for a new refinery project in Tuban, Indonesia, which is expected to come online towards end-2027. The grassroots Tuban refinery project has made some progress as the joint venture of Pertamina and Rosneft signed Tuban refinery design contract in October 2019.

For the second new refinery project, in December 2018, Pertamina partnered with Oman overseas oil & gas (OOG) to develop a new 300 kb/d grassroots refinery in Bontang. We believe that OOG has withdrawn from this project and Pertamina is looking for new partners. The final investment decision is still pending as Pertamina is conducting feasibility studies. We have not included this new refinery in our forecast modelling.

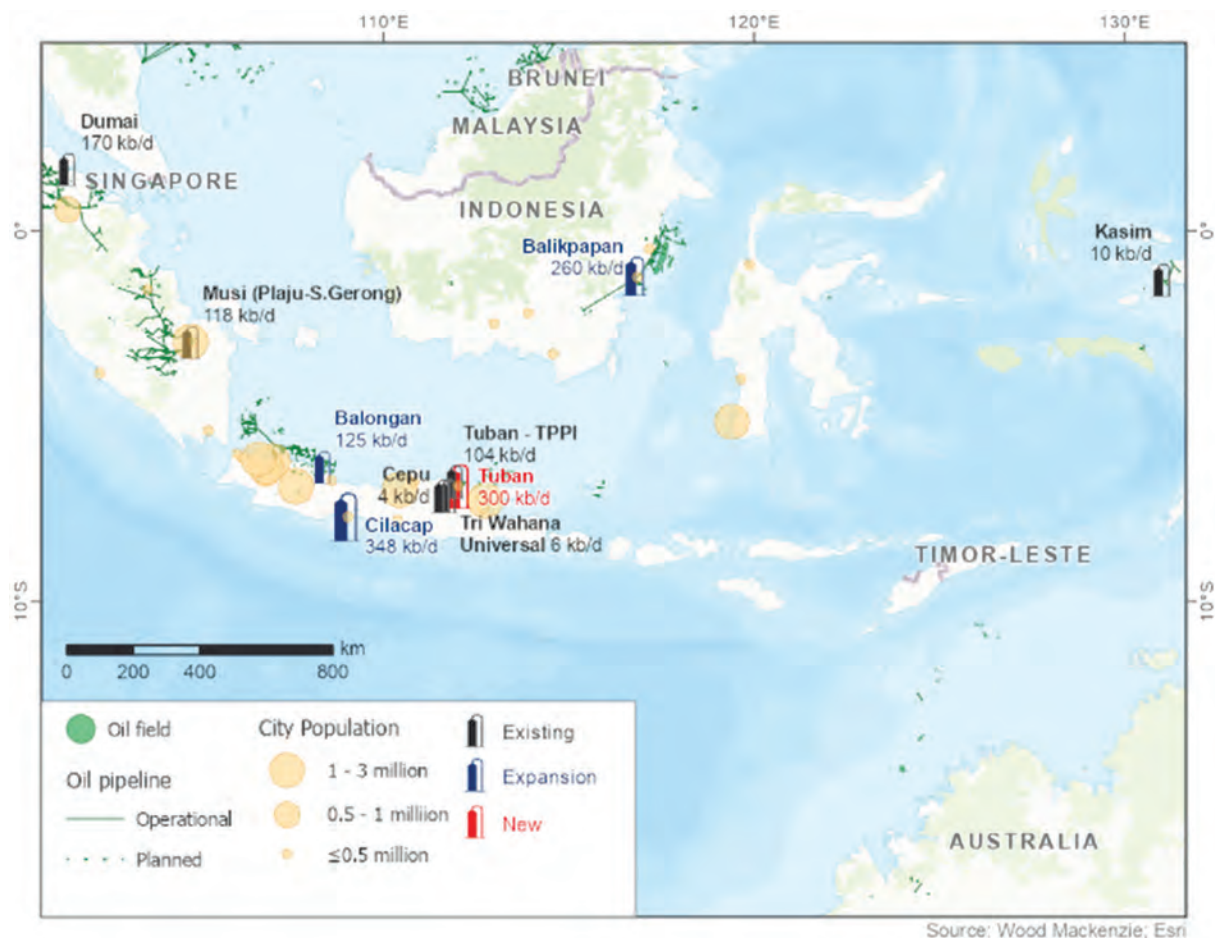
Pertamina's plans to revamp its existing refineries with foreign partners is a positive development. It is actively working on upgrading and expanding its four refineries — Dumai, Balongan, Cilacap and Balikpapan. In the past many years, Pertamina has entered agreements with Saudi Aramco, JX Nippon Oil & Energy Corp and China Petroleum & Chemical Corp (Sinopec) to progress on its Refining Development Master Plan (RDMP). This initiative aims to improve Pertamina refineries' operational capacity, complexity and competitiveness. However, JX, Sinopec and Aramco have called off their investment plans.

The first refinery expansion project to be completed will be Balikpapan, although Pertamina is still looking for partners for this project. In October 2016, Pertamina entered into a licensing agreement with Axens for its residue upgrading project in Balikpapan. This project involves a 100,000 b/d CDU expansion, the addition of a new RFCC, diesel hydrotreater and sulphur removal units, to reduce the refinery's fuel oil production and increase its low-sulphur diesel and gasoline production. We forecast the project completion to be in 2023 and have modelled the investment impact on refinery yields in our refinery supply outlook.

In May 2016, Pertamina and Saudi Aramco awarded a detailed engineering study to expand the Cilacap refinery from its current 348,000 b/d to 400,000 b/d refining capacity. Although Saudi Aramco has recently stopped their partnership with Pertamina, we believe that Pertamina will continue with the project either by finding another partner, or developing the project on their own, with the expansion expected to be completed in 2026. Pertamina also replaced its semi-regen reformer with a continuous catalytic reformer (CCR) and added an isomerisation unit as a part of the Blue Sky project at the Cilacap refinery in 2019.

Balongan refinery is also planning to expand its capacity by 145,000 b/d by 2026. Overall, Indonesia's refining capacity is expected to increase by about 600,000 b/d by end of 2027.

Figure 29 Indonesian CDU Capacities



Source: Wood Mackenzie

5.3. Imports and exports

Indonesia is net importer for most products in general, except for fuel oil; we expect that trend to continue.

Indonesia became a net importer of LPG when the policy of using LPG over kerosene for domestic cooking was adopted in 2008-2009. LPG is mainly imported from the Middle East and North America.

Indonesia is a small net importer of naphtha for use in gasoline blending and as petrochemical feedstock, with most of the imports sourced from Russia and the Caspian region, and North West Europe.

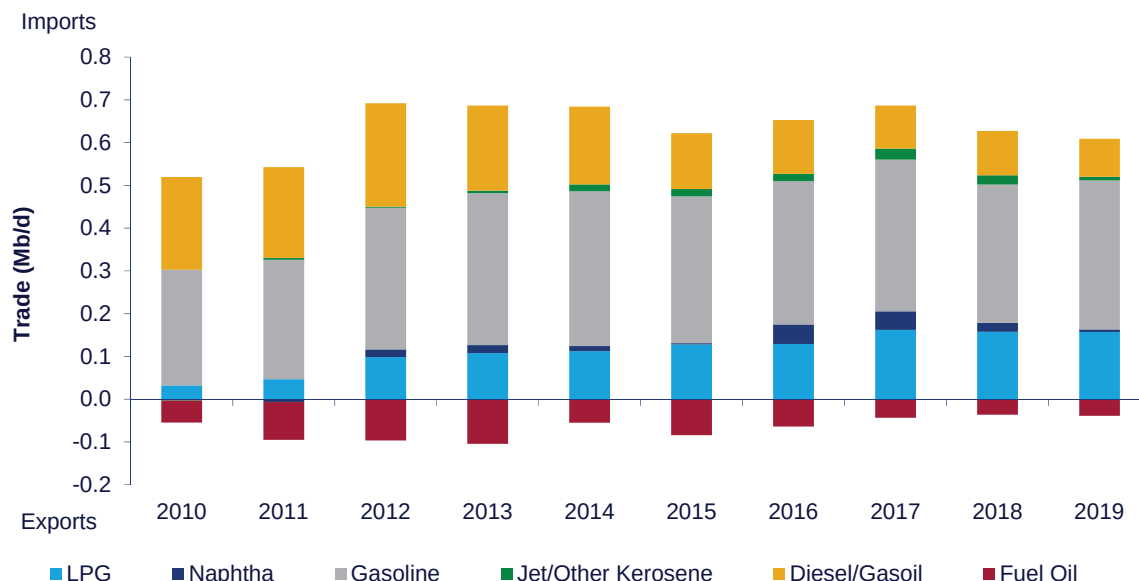
Indonesia is a large net importer of gasoline. Gasoline is mainly sourced from the regional trading hub of Singapore and Malaysia.

Indonesia is a small net importer of jet/kerosene. The imports are mainly jet fuel from South East & Other Asia due to its rising aviation demand. A small surplus is of jet/kero is expected in 2020 due to low demand.

Indonesia is a large net importer of diesel/gasoil, sourced largely from Singapore. Net imports have remained high despite refineries maximised diesel/gasoil production.

Indonesia is a small net exporter of fuel oil. The exports are largely to Singapore to meet its large bunker fuel oil demand.

Figure 30 Indonesian Net Trade



Source: Wood Mackenzie

5.4. Regional competitive analysis

Indonesia's downstream refining segment operates within the highly competitive refining sector of Southeast Asia which includes regional refiners such as PETRONAS, PTT, Petron, ExxonMobil, Shell, Chevron, Singapore Refining Company and PetroVietnam.

Several measures can be used to compare and benchmark refinery performance by both asset and company.

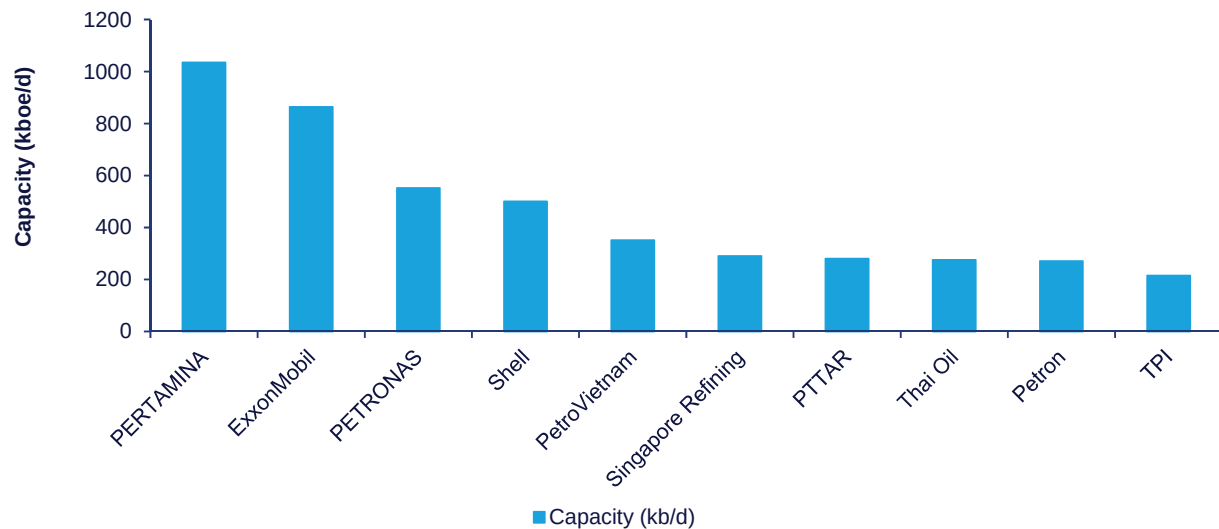
Size — refining is capital intensive and large facilities capture scale economies and have lower per unit operating costs. For the same configuration a larger facility would typically be more cost efficient and hence able to capture higher cash cost margin than a smaller facility.

Pertamina has the largest presence in Southeast Asia with a combined capacity of 1,035 kb/d, all of which are in Indonesia. Comparatively, Exxon (864 kb/d), PETRONAS (552 kb/d) and Shell (500 kb/d) are the next few major refinery players in the region, with their facilities located mostly in Singapore. Across the top 10 companies, their average refining capacity in Southeast Asia is 463 kb/d.

Complexity — a measure of the refinery's capability to process difficult feeds such as heavy and high sulphur crudes, and to convert low value streams such as fuel oil to higher value transportation fuels. A higher complexity means a greater ability to take advantage of lower-cost crudes to produce a greater proportion of high value products, hence realising higher gross margins. The Nelson Complexity Index (NCI) is a typical indicator to compare the complexity levels of refineries. Typically, a complex refiner realises a higher gross margin relative to a simple refiner under the same market environment.

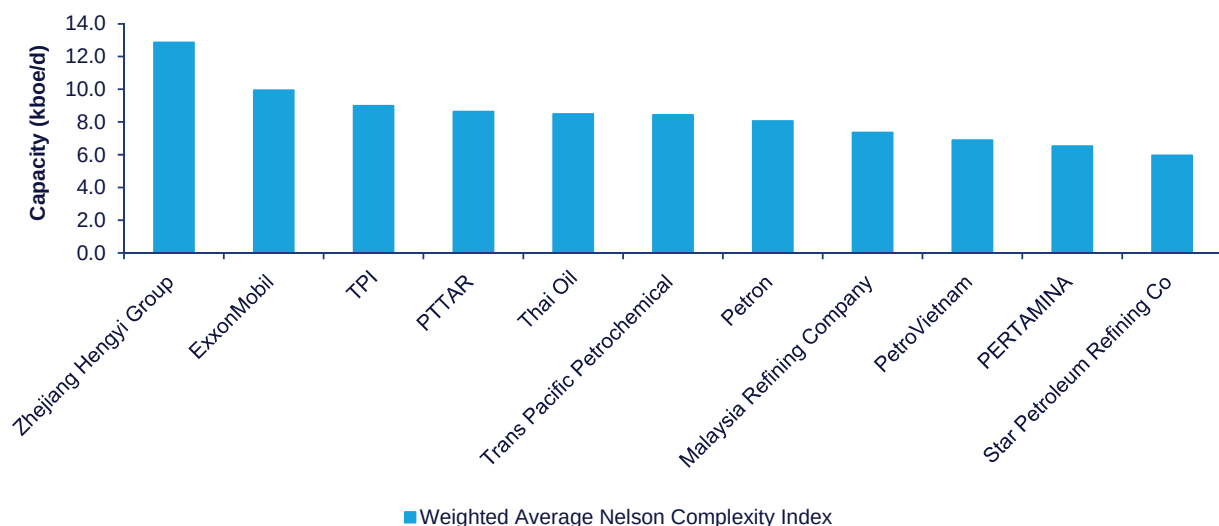
Most of the refineries in Southeast Asia have high complexities to maximize yields of high value products like gasoline and diesel for domestic markets. Currently, the average NCI is determined to be 7.2.

Figure 31 South East Asian Refining Capacity: Top 10 Operators



Source: Wood Mackenzie

Figure 32 South East Asian Top 10 Companies by Complexity Index (Weighted by CDU Capacity)



Source: Wood Mackenzie

6. Indonesia Marketing Industry Overview

The downstream marketing business in Indonesia is conducted by business entities legally registered in Indonesia that have obtained a business permit from the Ministry of Energy and Mineral Resources. Marketing business activities which require business licenses are processing, transportation, storage and trading. Although various business entities have obtained licenses to operate in one or more sectors, Pertamina is the only company which has full value chain integration in the downstream marketing business as it still owns the majority of the downstream infrastructure to process, transport, store and distribute oil products.

6.1. Infrastructure

Indonesia comprises more than 17,000 islands with over 900 of those permanently inhabited. Distributing oil products throughout Indonesia is a challenging task due to the vast geographical

coverage and the spread of various inland demand areas separated by water bodies and land. In addition, infrastructure constraints such as port limitations, limitations on vessel sizes and the location of terminals and inland depots add to the challenge. The supply chain can be long and involve complex logistics.

For the ease of sales and distribution of refined products, BPH Migas has divided the country into four main regions — WDN I to IV. WDN stand for Wilayah Distribusi Niaga in Bahasa, or commercial distribution area. WDN I comprise Sumatra and include cities such as Medan and Palembang. WDN II comprises Java and includes cities such as Bandung and Surabaya, and Bali. WDN III has the biggest geographical coverage and comprises the islands of Kalimantan, Sulawesi, Maluku and Irian Jaya. WDN IV comprises other smaller islands outside WDN I, II and III.

Many infrastructure-related assets are needed to support and complete the supply chain. There are 7 major terminals which can handle large vessels. There are another 7 transit terminals to handle smaller-sized ships. Most of these terminals are located on the Java Island where the main demand centre is located. There are another 107 fuel depots which have relatively smaller storage capacity as compared to the terminals, out of which 84 are coastal and 23 are inland. These depots are scattered across the country and are located near the demand areas.

Except for WDN IV, each of the distribution areas has its own refineries and domestic supply of refined products. There are three refineries in WDN I, namely PK Brandan (5 kb/d), Dumai (170 kb/d) and Musi (118 kb/d); another three refineries in WDN II, namely Balongan (125 kb/d), Cilacap (348 kb/d) and Cepu (4 kb/d); and two more refineries in WDN III which are Balikpapan (260 kb/d) and Kasim (10 kb/d). The local demand is mostly met by domestic supply. WDN II is an area with a very high oil product demand that attracts imports not only from other areas such as WDN I and III but also from outside the country.

In terms of distribution costs, it can vary from being low due to the existence of pipeline connections to the demand areas, to very high if the supply chain is long with multiple handling of oil products.

Figure 33 Sales and distribution areas of refined products



Source: Wood Mackenzie

Of the more than 7,300 retail fuel filling stations in Indonesia, the clear majority are Pertamina-branded stations. Pertamina dominates the retail marketing sector.

6.2. Key players

Pertamina maintained its retail and distribution monopoly for petroleum products until July 2004, when Shell and Petronas were granted the first licenses for retail sale of petroleum products. Shell was the first foreign oil company to enter Indonesia's retail market with the opening of its first station in early 2005. This was followed by Petronas and Total. Although the downstream marketing industry has attracted more players since Pertamina's monopoly over non-subsidized fuels sales was revoked, progress has been slow to date. Shell currently has more than 70 retail fuel filling stations, while Total now has 20 stations. Petronas exited the retail fuel distribution business in 2012 and sold its retail assets to Pertamina. It continues to operate on the commercial side of the business from its storage units. Although Pertamina no longer has a monopoly on the downstream sector since the liberalization, it still has close to a 100% market share for the retail sector. Pertamina is reported to have 7,146 branded stations at the end of 2019.

These service stations built by foreign oil companies are mainly located in Greater Jakarta with a few stations found in Bandung and Medan. Before 2010, they could only sell non-subsidized fuels in their service stations. However, Petronas and AKR were selected to sell a limited volume of subsidized fuels in specific areas in 2010 and 2011. Although the downstream marketing sector has been gradually liberalized, the Government has been doing it in a tightly controlled manner through the PSO scheme offered to foreign oil companies. In 2019, BP jointly partnered with domestic private fuel distributor AKR to enter into Indonesia's retail fuel sector. It has since started operation at four service stations that sell gasoline since November 2018. The joint venture has plans to open up to 350 retail stations selling fuels and lubricants in the next decade. There are currently 137 AKR branded stations in Indonesia.

It is likely that Pertamina will remain a dominant player for several years because of its established infrastructure and market presence.

6.3. Fuel pricing in Indonesia

Until 2015, gasoline was heavily subsidised in Indonesia and imposed a high fiscal burden on the government. The government removed the subsidies on RON 88 while regulating the price of RON 88. Since early 2018, the government plans to tighten its control over the price of non-regulated fuels nationwide in order to control domestic inflation.

Diesel subsidies were removed along with gasoline subsidies in January 2015.

INDONESIAN REGULATORY FRAMEWORK

Oil and Gas Regulation

Overview

Indonesia's oil and gas resources are deemed to be national assets owned and controlled by the state. Prior to the enactment of the Oil and Gas Law of 2001, oil and gas mining undertakings were controlled by the Government and exclusively carried out by the state petroleum enterprise, *Perusahaan Pertambangan Minyak dan Gas Bumi Negara* (or "PERTAMINA," our Company's legal predecessor), as the sole holder of the "authority to mine" in Indonesian territory. However, PERTAMINA was permitted to cooperate with other parties that were appointed or approved by the Minister of Energy and Mineral Resources to perform its mining undertakings. Investments by any party, foreign or domestic, in oil and gas exploration and production activities in Indonesia were done through a contractual arrangement with PERTAMINA, primarily in the form of production sharing arrangements, which include PSCs, technical assistance contracts ("TACs") and joint operating bodies ("JOBs") (as described in detail below). Under such production sharing arrangements, the oil and gas investor acted as a contractor to PERTAMINA, which held the overall management authority over exploration and production operations.

On November 23, 2001, the Oil and Gas Law of 2001 was enacted, which reformed the oil and gas upstream and downstream sectors in Indonesia by terminating the exclusive rights held by PERTAMINA. Unlike its predecessor law, Government Regulations in Lieu of Law No. 44 of 1960, which did not distinguish between types of oil and gas activities as they were both monopolized by PERTAMINA, the Oil and Gas Law of 2001 categorizes oil and gas activities into upstream and downstream activities. Upstream activities consist of exploration and exploitation of oil and gas resources, while downstream activities encompass processing, transporting, storing and trading of oil and gas.

Pursuant to the Oil and Gas Law of 2001, the oil and gas industry is regulated by the Minister of Energy and Mineral Resources through DGOG. The DGOG is responsible for ensuring that oil and gas related business activities in Indonesia are in compliance with oil and gas regulations. The Oil and Gas Law of 2001 also introduced two new governmental bodies, BPMIGAS and BPH MIGAS, which further regulate various aspects of the oil and gas industry and report to the DGOG. BPMIGAS, a non-profit, Government-owned legal entity, was the exclusive holder of the mine concession right in Indonesia and controlled and supervised upstream activities on behalf of the Government. The functions of BPMIGAS were, among other things, to:

- provide input to the Minister of Energy and Mineral Resources on his policies in preparing and offering areas of operations;
- provide advice on and execute cooperation contracts;
- review and provide input for the Minister of Energy and Mineral Resources to approve the first plan of development for a particular field that will be initially produced within a working area;
- approve the plan of development (other than the first plan of development) and work program and budgets;
- monitor cooperation contracts and existing production sharing arrangements and report their implementation to the Minister of Energy and Mineral Resources; and

- appoint sellers for the state's share of oil and gas produced from a working area, with the goal of maximizing benefit to the state.

On November 13, 2012, the Indonesian Constitutional Court (or *Mahkamah Konstitusi Republik Indonesia*) rendered Decision No. 36/PUU-X/2012, which dissolved BPMIGAS and, consequently, transferred all its duties and functions to the Minister of Energy and Mineral Resources. In response to the decision, the Government has enacted Presidential Regulation No. 95 of 2012 on the Transfer of Duties and Functions of Upstream Oil and Natural Gas Business Activities, which stipulates, among other things, that:

- performance of duties, functions and organization of BPMIGAS shall be transferred to the Minister of Energy and Mineral Resources until new oil and gas regulations are issued.
- any cooperation contract (*Kontrak Kerja Sama*) signed between BPMIGAS and any business entity or permanent establishment shall remain valid until its expiration.
- the entire processing of upstream oil and natural gas activities managed by BPMIGAS shall be continued by the Minister of Energy and Mineral Resources in accordance with the provisions of laws and regulations.

To implement the above regulation, the Government has issued (i) Presidential Regulation No. 9 of 2013 on the Implementation of Management of Upstream Natural Oil and Gas Business Activities, as amended by Presidential Regulation No. 36 of 2018 and (ii) Regulation of Minister of Energy and Mineral Resources No. 17 of 2017 on the Organization and Work Procedures of SKK MIGAS, as amended by Minister of Energy and Mineral Resources Regulation No. 53 of 2017 ("SKK MIGAS Regulations") for the purpose of, among others, the establishment of SKK MIGAS as an interim body supervising the upstream oil and gas business activity pending the issuance of a new oil and gas law. Pursuant to the SKK MIGAS Regulations all duties, functions, existing employees, organizational structure, funding and assets of BPMIGAS are transferred to SKK MIGAS which is directly controlled, monitored and evaluated by a Supervisory Commission led by the Minister of Energy and Mineral Resources.

BPH MIGAS, an independent governmental agency, is tasked with supervisory and regulatory functions over downstream activities in order to ensure the availability and distribution of fuels throughout the Indonesian territory and to promote gas utilization in the domestic market.

Pursuant to the Oil and Gas Law of 2001 and in conjunction with Government Regulation No. 31 of 2003 on the Change of Form of *Perusahaan Pertambangan Minyak dan Gas Bumi Negara* (PERTAMINA) to *Perusahaan Perseroan* (*Persero*), PERTAMINA was converted into a profit based, state-owned company (*Persero*) in the form of a limited liability company, named PT Pertamina (*Persero*). Under the terms of the Oil and Gas Law of 2001 and the Upstream Regulation (as defined below), upon the establishment of BPMIGAS, all rights and obligations of PERTAMINA under all production sharing arrangements (but excluding TACs) then existing were transferred to BPMIGAS through novation agreements and BPMIGAS replaced PERTAMINA as the Government party to all such production sharing arrangements. Further, all of the fields that were designated as PERTAMINA's working areas prior to the enactment of the Oil and Gas Law of 2001 were transferred to BPMIGAS by operation of law. BPMIGAS then entered into a cooperation contract with PEP (the upstream subsidiary of our Company) to grant it working interests in all areas formerly designated as PERTAMINA's.

The Oil and Gas Law of 2001 is an umbrella legislation setting forth general principles to be further developed in a series of Government regulations, presidential decrees and ministerial decrees.

These include Government Regulation No. 35 of 2004, as amended by Government Regulations No. 34 of 2005 and No. 55 of 2009, on Upstream Oil and Gas Business Activities (the “Upstream Regulation”) and Government Regulation No. 36 of 2004, as amended by Government Regulation No. 30 of 2009 concerning Downstream Oil and Gas Business Activities (the “Downstream Regulation”), which implement certain significant aspects of the Oil and Gas Law of 2001.

Upstream

After the implementation of the Oil and Gas Law of 2001, cooperation contracts were introduced to govern the working relationship and sharing of production between the Government and private sector contractors in the Indonesian oil and gas industry. Such cooperation contracts are similar to the production sharing arrangements applicable prior to the implementation of the Oil and Gas Law of 2001. The production sharing arrangements in existence prior to the implementation of the Oil and Gas Law of 2001 will remain in effect until they are terminated on their own terms.

Production Sharing Arrangements

Production sharing arrangements are based on five main principles:

- the contractors are responsible for all investments and production costs (exploration, development and production), including provision of capital to implement the agreed work program;
- the operational risk in performing upstream activities is borne by the contractors;
- the contractors’ investment and production costs may be recovered against production (i.e. “cost recovery”);
- profits are split between the state and the contractors at an agreed rate based on production after the cost recovery portion;
- ownership of tangible assets remains with the state; and
- overall management control remains with SKK MIGAS on behalf of the Government.

Generally, under production sharing arrangements, the operator is required to commit to spending a specified sum of capital to implement a work program approved by the Government. The negotiation of production sharing arrangement terms with potential contractors was handled primarily by the Ministry of Energy and Mineral Resources. Awards of work areas were based on either a competitive tender process and direct offer or whenever relevant under certain circumstances, tender direct offer, and the Indonesian Parliament had to be notified of the production sharing arrangement. Only one working area could be awarded to any one legal entity.

Such designation of an upstream oil and gas work area is specifically regulated under Minister of Energy and Mineral Resources Regulation No. 35 of 2008 on the Guidelines of Designation and Offering of Oil and Gas Working Area. Preparation of a working area for offering by way of a tender process is conducted by the DGOG at the Minister of Energy and Mineral Resources through technical and economic evaluation and data processing and with consideration by SKK Migas. After this process, the DGOG will then propose to the Minister of Energy and Mineral Resources the working area to be determined for offering through the tender process. In determining the working area, the Minister of

Energy and Mineral Resources will consult with the governor who has authority over the area where the working area is located. A tender for a working area is conducted over: (i) an area that has never been determined as a working area; (ii) a part of a relinquished working area as regulated under the relevant PSC; (iii) expired working areas; (iv) a part of working areas that has never been developed and/or is being or has been developed and is being relinquished by the PSC contractor; and/or (v) a part of working areas that has never been developed and/or produced that is being relinquished as proposed by Minister of Energy and Mineral Resources. The offering of a working area will be conducted by the DGOG, and will be announced through printed, electronic and other forms of media and other promotion of such working area. In relation to the offering, the DGOG will prepare and issue a bid document for every working area containing at least: (a) the bidding procedures; (b) geological and oil and gas potential information; (c) forecast of oil and gas reserve and production; and (d) the concept of the PSC.

Moreover, a party that proposes a direct offer for a certain working area must first conduct a joint study with the DGOG. The DGOG may include an appropriately qualified third party in the joint study. Once the joint study is completed and the Minister of Energy and Mineral Resources approves the joint study results, the area will be submitted to tender. However, the party that proposed the direct offer has the right to match the best bid from among the tender participants (the “Right to Match”).

The designation of the working area for a direct offer process is conducted by the DGOG based on an evaluation of the joint study results. The working area must be an open area that has not been reserved by the DGOG for a tender round. In general, the steps for obtaining a PSC through a direct offer are similar to those for obtaining a PSC through an open tender, except that a direct offer involves the Right to Match.

In order to accelerate the increase of domestic production of oil and gas, the Upstream Regulation also provides that in cases of national emergency, with due observance and the benefit of the state, the President may approve requests for certain exceptions under production sharing arrangements and cooperation contracts, such as (i) the offer of participating interest to regional government-owned companies, (ii) the recovery of investment cost and operational cost, and (iii) our Company’s payment obligation to the Government.

In 2012, the President of Indonesia issued Presidential Instruction No. 2 of 2012 on Increase of National Oil Production (“Presidential Instruction No. 2”). Presidential Instruction No. 2 instructed certain ministries, National Land Office, head of BPMIGAS, governors, mayors, heads of regency to take necessary, coordinated and integrated measures to support the government’s plan to increase the national oil production at least 1.01 million barrel per day in 2014. Under Presidential Instruction No. 2, SKK MIGAS, as successor to BPMIGAS, has certain obligations, among others (i) to complete the process approvals for plan of development, work program and budget, authorization for expenditure within a certain period set out under Presidential Instruction No. 2, after submission by a contractor under a PSC; (ii) to complete procurement of goods and services within certain days as set out under Presidential Instruction No. 2; (iii) to increase the efficiency of operational and optimize production facilities; (iv) to optimize production and development fields by using Enhanced Oil Recovery technology; (v) to increase the management and supervision on the implementation of cooperation contracts (including the utilization of shared facilities); (vi) to accelerate the development of new, marginal and idle fields; and (vii) to optimize suspended wells.

Set out below are the most common types of contracts in the Indonesian upstream oil and gas sector:

PSCs

PSCs were the primary production sharing arrangement used prior to the Oil and Gas Law of 2001 to award contractors the rights to explore for oil and gas reserves prior to commercial production.

PSCs were awarded for a term specified by contract, subject to the discovery of commercial quantities of oil and/or gas within a certain period. PSCs created under the prior regulatory framework will remain effective until they are terminated on their own terms. Under a PSC, a contractor is generally required to relinquish specified percentages of the initial contract area by specified dates, except for the areas where oil and gas have been discovered.

SKK MIGAS has replaced PERTAMINA as the Government party to all existing PSCs. SKK MIGAS is responsible for managing all PSC operations; assuming and discharging the contractor from all taxes, other than Indonesian corporate taxes (including the tax on interest, dividends and royalties); obtaining the required approvals and permits; and approving the contractor's work program, budget and plan of development (except the initial plan of development). The responsibilities of a contractor under a PSC generally include advancing necessary funds and capital expenses related to the project, furnishing technical aid and preparing and executing the work program and budget.

Under each PSC, the contractor and SKK MIGAS share the total production in any given period in a ratio agreed between the parties under the terms of that PSC. The contractor generally has the right to recover all funding and development costs, as well as operating costs, against available revenues generated by the PSC after deduction of FTP. Under FTP terms, the parties are entitled to receive a specified portion of total production each year from each production zone or formation, before any deduction for recovery of operating and other costs. The contractor is obligated to pay Indonesian corporate taxes on its specified profit share, including FTP, either at the Indonesian corporate tax rate in effect at the time the PSC is executed or at the prevailing tax rate pursuant to the PSC.

The total of the contractor's share of FTP, production attributable to cost recovery and post-tax profit share represents its net crude entitlement for a given period.

All PSCs in Indonesia are subject to DMO, under which the contractor is required to supply the domestic market at a reduced price with 25% of the contractor's share of total crude oil production under the relevant PSC. This reduced price varies among each PSC, but is in each case calculated at the point of export. Under the prior regulatory framework, DMO did not apply to natural gas production. Under the Oil and Gas Law of 2001, DMO now also applies to natural gas production.

On February 25, 2016, the Government implemented Regulation of the Minister of Energy and Mineral Resources No. 06 of 2016 on Provisions and Procedures of the Stipulation of Allocation and Utilization including Price of Natural Gas, as partially revoked by the Minister of Energy and Mineral Resources Regulation No. 32 of 2017 on the Utilization of and Sales Price for Flare Gas in Upstream Oil and Gas Business Activities ("MR No. 06/2016"). MR No. 06/2016 sets out the Government's policy in relation to the allocation and utilization of natural gas supplied under DMO for domestic consumption and establishes allocation priority towards certain industries. Such industries include the oil and gas industry, the fertilizer industry and the power industry.

MR No. 06/2016 provides that a PSC contractor must make available a specific volume of natural gas for DMO based on an allocation stipulated by the Indonesia Ministry of Energy and Mineral Resources ("MEMR"). The MEMR will stipulate such allocation taking into account the following priorities: (i) to support the Government's program in the provision of natural gas for transportation, households and small-scale consumers, (ii) to improve the production of national oil and natural gas, (iii) for fertilizer industries, (iv) for natural gas-based industries, (v) for electricity generation, and (vi) for other industries using natural gas as fuel. Further, a PSC contractor can only export the natural gas it produces if at least one of the following conditions apply: (a) the needs of natural gas for domestic consumers have been fulfilled, (b) there is no appropriate infrastructure available domestically, or (c) the purchasing power of domestic consumers is not able to fulfil the economics of the gas field. The enactment of MR No. 06/2016 does not affect the validity of allocation and utilization obligations pursuant to DMO in existing PSCs.

With regard to natural gas for the purposes of electricity generation, after the implementation of Minister of Energy and Mineral Resources Regulation No. 45 of 2017, as amended by Minister of Energy and Mineral Resources Regulation No. 10 of 2020 on the Utilization of Natural Gas for Power Generation (“MR No. 45/2017”), a holder of a gas trading license (a “Gas Trading Entity”) that received allocated natural gas may sell natural gas to an Independent Power Producer (“IPP”) or to PLN, subject to the DMO requirements set out by Minister of Energy and Mineral Resources, provided that the Gas Trading Entity has the appropriate natural gas infrastructure and facilities to supply natural gas to the relevant power project operated by such IPP or PLN. MR 45/2017 also sets the maximum price of pipeline natural gas at the plant gate which can be purchased by an IPP or PLN at the highest US\$6 per Million British Thermal Unit (“MMBTU”). If the price of pipeline natural gas at the plant gate is higher than US\$6 MMBTU or the natural gas comes from LNG or CNG, the Minister will instead determine the price of pipeline natural gas at the plant gate based on an adjusted calculation of natural gas price purchased from a contractor by adding distribution costs which include transportation and midstream natural gas costs, which constitutes a reduction of the State’s income portion under the PSC of the relevant working area during the ongoing contract year. The adjusted calculation of natural gas price, however, will not affect the contractor’s income portion under the PSC. In determining such a price, the Minister may assign a State-Owned Enterprise and/or its affiliate that engages in natural gas business activities to distribute natural gas to PLN and/or IPP. MEMR 45/2017 aims to prioritize the use of domestic pipeline natural gas and domestic LNG over imported LNG.

On September 5, 2018, the Minister of Energy and Mineral Resources issued Regulation No. 42 of 2018 on the Priority of Crude Oil Utilization for the Fulfillment of Domestic Needs (“Regulation 42/2018”). Regulation 42/2018 requires us and or/other Indonesian oil processing license (*izin usaha pengolahan minyak bumi*) holders to source crude oil supply from local upstream oil and gas contractors before importing crude oil. In implementing this requirement, upstream oil and gas contractors must first offer their share in crude oil production to us and/or other Indonesian oil processing license holders at least three months before the commencement of the recommendation period for crude oil export by the local upstream oil and gas contractors, subject to negotiation between the parties. We are required to report the result of these negotiations to the DGOG. We may directly appoint upstream oil and gas contractors for the purchase of the crude oil and enter into contracts of up to one year in duration.

Prior to the enactment of the Oil and Gas Law of 2001, each PSC contained a right for PERTAMINA to demand from contractors a specified percentage of their total rights and obligations under that PSC, which is to be offered to either PERTAMINA or a limited liability company designated by PERTAMINA, the shareholders of which must be owned by Indonesian nationals (the “Indonesian Participation Arrangements” or “IPs”). This right lapses if not exercised by PERTAMINA within three months after contractors notify PERTAMINA of their first discovery of petroleum or gas which can be developed commercially within the contract area. Each cooperation contract executed after the date of enactment of the Oil and Gas Law of 2001 similarly contains a right for SKK MIGAS to demand from contractors a specified percentage of their total rights and obligations under that cooperation contracts, which is to be offered to either a local government-owned company to be designated by the local government within which the contract area is located or an Indonesian national company to be designated by the Minister of Energy and Mineral Resources. This requirement to offer is also governed by Regulation of the Minister of Energy and Mineral Resources No. 37 of 2016 on the Offering of 10% of Participating Interests in Oil and Natural Gas Work Areas. The requirement to offer does not apply to extensions of the exploration periods within a PSC. The PSC contractor is required to bear the regional government enterprise’s costs, including historic exploration costs, through to the end of the PSC. Such costs may be recovered through the regional government enterprise’s portion of production and cannot be subject to interest. The recovery of costs must be carried out to ensure that the regional government enterprise receives a portion of the production. If the regional governments enterprise rejects the 10% participating interest offer, the PSC contractor is required to offer the 10%

participating interest to a state-owned company. However, the contractor is not required to bear the state-owned company's costs.

Upon and in consideration for the exercise of such rights, the party whom the right is exercised in favor of reimburses the relevant contractors for an amount equal to that specified percentage of the sum of the costs incurred up to the date of the transfer under the PSC or the cooperation contract, as the case may be. Such reimbursement includes proportion of the compensation bonus and production bonuses previously paid by the relevant contractors. These amounts are to be paid either directly to the relevant contractors in cash or through production installments, depending on the terms of the relevant PSC or cooperation contract.

On December 20, 2010, the Government issued Government Regulation No. 79 of 2010 on Cost Recovery and Income Tax Treatment in the Upstream Oil and Gas Business, as amended by Regulation No. 27 of 2017 ("GR 79/2010"). GR 79/2010 regulates cost recovery under PSCs or cooperation contracts, supplementing the standard provisions relating to cost recovery set out in such contracts. Under GR 79/2010, certain requirements are established for the reimbursement of operational costs. Among other things, the petroleum operation must be in conformity with the work program and budget approved by SKK MIGAS for operational costs to be reimbursable. GR 79/2010 contains transitional provisions permitting provisions in PSCs or cooperation contracts entered into prior to its enactment to remain effective. To the extent that such provisions do not clearly regulate certain matters governed by GR 79/2010, they must be adjusted to conform with GR 79/2010 within three months after the issuance thereof.

On January 16, 2017, the Minister of Energy and Mineral Resources introduced a gross split system for production sharing contracts ("Gross Split PSCs") through the enactment of Regulation No. 08 of 2017, as amended by Regulation No. 52 of 2017 on Gross Split Production Sharing Contracts ("Regulation 8/2017"). The Gross Split PSCs does not contain the traditional cost recovery regime that provides reimbursement of operational costs to the Government's contractors. In the gross split system, the production sharing portion is calculated by adjusting the base split value against the adjustment components. The base split value is a ratio between the Government's and the contractor's respective shares of oil and gas production, which is used for determining the production sharing portion upon the approval of a plan of development. Regulation 8/2017 stipulates the base split value as follow:

- (1) in crude oil production – 57% for Government's portion and 43% for contractor's portion; and
- (2) in natural gas production – 52% for Government's portion and 48% for contractor's portion.

The adjustment components include variable components (status of working area, field location, depth and type of reservoir, availability of infrastructure, contents of carbon dioxide and hydrogen-sulfide, specific gravity of crude oil, local content level during the period of field development and production stage) and progressive components (prices of crude oil and natural gas and production cumulative amount of crude oil and natural gas).

Further, Regulation 8/2017 specifies that the Gross Split PSCs must have at least the following requirements:

- (3) ownership of the natural resources remains with the Government until the hand-over of the project by the contractor (up to the delivery point);

- (4) SKK Migas has control over the operational management of the oil and gas working areas; and
- (5) all capital and operational costs are borne entirely by the contractor.

Following the enactment of Regulation 8/2017, the system of gross split will only apply to new PSCs and all cooperation contracts in the Indonesian oil and gas sector entered into prior to the date of enactment will remain enforceable until their expiration date. If extensions of these cooperation contracts are approved in the future, the contractors will at such time have the option to implement the gross split system or otherwise to maintain the existing cost recovery system. Nonetheless, the gross split system must be applied to all upcoming cooperation arrangements made by and between the Government and contractors for conducting exploration and exploitation in oil and gas working areas, including towards new contacts which areas managed by us.

The cooperation contracts that have replaced the production sharing arrangements (including PSCs) in existence prior to the Oil and Gas Law of 2001 are also commonly referred to as “production sharing contracts” and share many of the characteristics of PSCs described above. Please see “— Upstream — Cooperation Contracts” for more information on these contracts.

Under Article 2(1) of Minister of Energy and Mineral Resources Regulation No. 23 of 2018 as amended by Minister of Energy and Mineral Resources Regulation No. 28 of 2018 and as further amended by Minister of Energy and Mineral Resources Regulation No. 3 of 2019 on the Management of Oil and Gas Working Areas During Final Cooperation Contract Period (“**MR 23/2018**”), the Minister of Energy and Mineral Resources shall determine the management of oil and gas work areas whose underlying cooperation contracts have expired. Such management can be in the form of:

- (6) extension of cooperation contracts by the contractors;
- (7) management by PT Pertamina (Persero); or
- (8) joint management between the contractors and PT Pertamina (Persero).

Moreover, the Indonesian Supreme Court through its Decision No. 69/P/HUM/2018 indicated that the list in Article 2(1) of MR 23/2018 is not based on an order of priority, meaning that no preference should be given to contractors over Pertamina.

TACs

TACs are another form of production sharing arrangement created under the regulatory framework that preceded the Oil and Gas Law of 2001. TACs were awarded for fields having prior or existing production and are valid for a specified term. The oil or gas production is divided into non-shareable and shareable portions. The non-shareable portion represents the production which is expected from the field (based on historic production) at the time the TAC is signed. Under a TAC, the non-shareable portion declines annually. The shareable portion corresponds to the additional production resulting from the operator’s investment in the field and is further split in the same way as for a PSC. The Upstream Regulation provided that existing TACs remain with PERTAMINA (now PT Pertamina (Persero)) and are not renewable after the expiry of the initial term.

JOBs

JOBs are another form of production sharing arrangement created under the regulatory framework that preceded the Oil and Gas Law of 2001. In a JOB, operations are conducted by a JOB headed by the

Issuer and assisted by one or more private sector energy companies through their respective secondees to the JOB. In a JOB, the Issuer is entitled to a specified percentage of the working interest in the project. The balance, after production is applied towards cost recovery and cost bearing as between the Issuer and the private sector participants, is the shareable portion which is generally split in the same way as for an ordinary PSC. Unlike TACs, the Upstream Regulation transferred the rights to operations under existing JOBs from the Issuer to SKK MIGAS by law. However, the working interest that was held by PERTAMINA under the JOB was transferred to our Company. JOBs are not renewable after the expiry of their initial term.

Cooperation Contracts

The Oil and Gas Law of 2001 has replaced production sharing arrangements with cooperation contracts. These cooperation contracts can be similar in form to production sharing arrangements, but may be in a different form. Regardless of the form, certain key principles remain the same as the PSCs. For example, title over resources in the ground remains with the Government (and title to the oil and gas lifted for the contractor's share passes at the point of transfer, usually the point of export), ultimate management control is with SKK MIGAS, and capital requirements and risks are to be assumed by the contractors. These cooperation contracts are to be entered into with SKK MIGAS and thereafter notified in writing to the Parliament. Only one working area will be given to any legal entity. Cooperation contracts can be made for a maximum term of 30 years and can be extended for a maximum of 20 years. Cooperation contracts are divided into exploration and exploitation stage. The exploration stage is for a term of six years, subject to only one extension for a maximum of four years.

In August 2018, the Government issued Presidential Regulation No. 66 of 2018 to further amend Regulation No. 61 of 2015 on Collection and Utilization of Palm Oil Estate Fund, and the Ministry of Energy and Mineral Resources issued Regulation No. 41 of 2018, as amended by Regulation No. 45 of 2018, on Provision and Utilization of Biodiesel Fuel under Financing by the Indonesian Oil Palm Estate Fund. ("MR 41/2018"). MR 41/2018 regulates that an oil fuel business entity must mix biofuel in the form of biodiesel with oil fuel in the form of gas oil in accordance with the mandatory minimum utilization of biofuel in the form of biodiesel sets out by the Minister of Energy and Mineral Resources. The requirement for mandatory use of 20 per cent. locally-blended biodiesel ("B20 fuel") in Indonesia ("Mandatory B20") is further regulated under Regulation of the Minister of Energy and Mineral Resources No. 32 of 2008 as amended by Minister of Energy and Mineral Resources Regulation No. 12 of 2015 on Supply, Utilization of and Trade System of Biofuel as Alternative Fuel. Mandatory B20 is now applicable to both the PSO and non-PSO sectors, which has resulted in the compulsory sale of B20 fuel at all gas stations in Indonesia, including those managed and operated by us.

The Upstream Regulation reiterates the Indonesian Participation Arrangement obligation in cooperation contracts, although the procedure for, and timing of, offering such an interest has been modified. The Minister of Energy and Mineral Resources has a right to request that a contractor who wishes to sell its participating interest under a production sharing arrangement grant a right of first offer to national enterprises such as regional government-owned companies, central government-owned companies, cooperatives, small scale businesses and Indonesian companies wholly owned by Indonesians. Under the Upstream Regulation, such an offer must be made on an "arms-length" basis. These modifications are applicable only to the cooperation contracts entered into after the issuance of the Oil and Gas Law of 2001.

Coal Bed Methane

The Upstream Regulation introduced regulations on CBM. CBM is defined as natural gas (hydrocarbon) with methane gas as its main component, naturally brought about in the coalification process in a trapped and absorbed condition in coal and/or coal layers. The Upstream Regulation states that the development of CBM shall be regulated by Ministerial Decree.

On November 12, 2008, the Minister of Energy Mineral Resources issued Regulation No. 36 of 2008 regarding exploitation of CBM (the “CBM Regulation”). The CBM Regulation confirms that CBM is a non-renewable strategic natural resource that constitutes a national asset controlled by the Government. Control over CBM assets is exercised by the Government in the form of mining concessions. The management and development of CBM tracks the regulations in the oil and gas business, while oversight and supervision of CBM activities is centralized in the DGOG. The procedures for the award of work areas of CBM track the same regulations applicable to conventional oil and gas business.

According to the CBM Regulation, there are four areas in which CBM may be exploited:

- an open area;
- a working area of oil and/or gas;
- a coal contract of work working area; and/or
- a concession area of coal with a maximum size of 3,000 km².

If the CBM to be exploited is located in an existing working area of oil and/or gas subject to the PSC, the CBM Regulation grants the existing contractors under the PSC first priority in the right to exploit CBM in the CBM. Such contractors must (i) fulfill its commitment to explore for oil and/or gas in such area for the first three years pursuant to the PSC; (ii) perform a joint evaluation of the CBM reserves with the DGOG; and (iii) submit to the DGOG a proposal to acquire interest in such CBM working area.

Geothermal Regulation

The geothermal energy industry in Indonesia was previously regulated under Presidential Decree No. 22 of 1981, as amended by Presidential Decree No. 45 of 1991 (the “Old Geothermal Regulation”). Under the Old Geothermal Regulation, which was based on a “total project” concept, PERTAMINA was authorized to undertake exploration and exploitation of geothermal energy resources, to generate electricity from the geothermal energy, and to sell the geothermal energy and/or electricity produced to PLN and other buyers. Therefore, under the Old Geothermal Regulation, when a contractor under a JOC with Pertamina discovered geothermal energy reserves in a commercial quantity as agreed under the JOC and the electricity sales contract, the contractor was automatically allowed under the JOC to exploit the geothermal energy, generate electricity from such geothermal energy and sell the electricity (or the geothermal energy) to PLN.

The Old Geothermal Regulation was revoked by Presidential Decree No. 76 of 2000 (“PD 76”) and as a result, geothermal contractors no longer enjoy the automatic right to exploit discovered geothermal energy reserves and sell the electricity to PLN. Under PD 76, the activities governed by the Old Geothermal Regulation regime was divided into two different business activities: (i) the exploration for and exploitation of geothermal energy; and (ii) the generation of electricity from geothermal energy.

The exploration and exploitation of geothermal energy is now regulated under Law No. 21 of 2014 concerning Geothermal Energy (“Law 21”), as amended by the Job Creation Law. Each of PD 76, Law 21 and Government Regulation No. 7 of 2017 regarding Geothermal for Indirect Utilization (“GR 7”) states that all cooperation contracts for the exploration and exploitation of geothermal resources executed prior to the effectiveness of each of PD 76, Law 21 or Government Regulation No. 59 of 2007 on Geothermal Business Activities (“GR 59”) shall remain in force until the expiry of such contract, provided that (i) pursuant to PD 76, the outcome of a renegotiation conducted by Restructuring and

Rehabilitation Team of PLN does not determine otherwise; and (ii) pursuant to Law 21, an exploitation of the relevant working area must have been conducted at the latest by December 31, 2014. Furthermore, GR 7 also does not regulate the obligation to return the undeveloped concession within a certain period unlike the previous regulation which provided that if the geothermal working area existed prior to GR 59 and there was no cooperation contract relating to such area or exploitation activity in the working area by December 31, 2014, then the holders of such authority, permit or contract are obliged to return the relevant working area to the Government.

Under Law 21 as amended by the Job Creation Law, a legal entity (in the form of a state-owned company, regional state-owned company, cooperative or private legal entity located and conducting its business activities in Indonesia) is required to obtain a business license (*Perizinan Berusaha*) on Geothermal sector (formerly known as a Geothermal License (*Izin Panas Bumi*, “IPB”)) in order to utilize geothermal energy. The business license (*Perizinan Berusaha*) is issued by the Minister of Energy and Mineral Resources. Geothermal energy utilization is categorized as either direct or indirect utilization. Under direct utilization, geothermal energy is used for a purpose other than generating electricity, such as tourism, agribusiness and industry. Under indirect utilization, geothermal energy is used to generate electricity. However, the indirect utilization of geothermal energy in order to generate electricity is also specifically governed under and subject to Law No. 30 of 2009 on Electricity, as amended by Job Creation Law (“Law 30”).

Under Law 30, a company must obtain a business license (*Perizinan Berusaha*) from the Government or applicable regional government in order to supply electricity (which includes the generation, transmission, distribution and sale of electricity). A business license (*Perizinan Berusaha*) is required for (i) a company that primarily provides electricity to the public (prior to the enactment of the Job Creation Law known as Electricity Supply Business License (*Izin Usaha Penyediaan Tenaga Listrik* – “IUPTL”)), and (ii) a company that sells electricity in excess of its private use to the public (prior to the enactment of the Job Creation Law known as operational license – *Izin Operasi*). A holder of a business license (*Perizinan Berusaha*) must (i) provide electric power according to the prevailing quality and reliability standards set forth by the Government, (ii) provide high levels of service to the public and its consumers, (iii) comply with electricity safety regulations, and (iv) prioritize domestic products and labor for use in its business. Notwithstanding the foregoing, given the issuance of the Job Creation Law, certain licensing procedure may vary subject to issuance of the implementing regulations by the Indonesian government.

Companies wishing to sell their electricity must enter into a power purchase agreement with PLN. Pursuant to Regulation of Minister of Energy and Mineral Resources No. 17 of 2014 on the Purchase of Electricity from Geothermal Power Plant and Geothermal Steam Used in Geothermal Power Plant, PLN must : (i) purchase electricity from geothermal power generators holding a business license (*Perizinan Berusaha*) (previously known as IUPTL) which use geothermal energy from geothermal business licenses, concessions, and contracts; or (ii) purchase geothermal steam from geothermal business licenses, concessions, and contracts for its geothermal power plants, as specified in the regulation.

The current applicable geothermal electricity sales price is regulated under Minister of Energy and Mineral Resources Regulation No. 50 of 2017, as amended by (i) the Minister of Energy and Mineral Resources No. 53 of 2018 on Amendment to Regulation of the Minister of Energy and Mineral Resources No. 50 of 2017 regarding the Utilization of Renewable Energy Source for Electricity Supply and (ii) the Minister of Energy and Mineral Resources No. 4 of 2020 on Second Amendment to Regulation of the Minister of Energy and Mineral Resources No. 50 of 2017 regarding the Utilization of Renewable Energy Source for Electricity Supply (“Regulation 50/2017”), which also regulates the benchmark for determining the electricity purchase price by PLN for renewable energy. Regulation 50/2017 does not determine the exact electricity sales price and instead it refers to the primary cost of power generation by PLN at the local and national level (*Biaya Pokok Penyediaan Pembangkitan* or

“Power Generation BPP”). The Power Generation BPP used to determine the electricity sales price is the Power Generation BPP as determined by Minister of Energy and Mineral Resources in the previous year. Regulation 50/2017 stipulates the following electricity sales price for geothermal power plants:

- (9) in the event that the Power Generation BPP at the local electricity system is above the average national Power Generation BPP, the electricity sales price should be no higher than the Power Generation BPP at the local electricity system; or
- (10) in the event that the Power Generation BPP at the local electricity system in the Sumatera, Java and Bali or other local electricity system is equal to or below the average national Power Generation BPP, the electricity sales price may be agreed between PLN and the geothermal power plant developers.

The electricity sales price agreed between PLN and the geothermal power plant developers must be approved by the Minister of Energy and Mineral Resources.

Downstream

Under the Oil and Gas Law of 2001 and Downstream Regulation, downstream oil and gas business activities include processing, transportation, storage and trading:

Processing

Under the Oil and Gas Law of 2001, processing is defined as activities carried out to refine crude oil and/or natural gas, obtaining parts of oil and gas products and improving the quality and the added-value of crude oil and natural gas. Field processing is excluded from this definition by the Oil and Gas Law of 2001 as it is considered an aspect of exploration and exploitation activities. Pursuant to the Downstream Regulation, the processing of natural gas into LNG, LPG and/or gas to liquefied form is considered a downstream business activity if it is intended to obtain gain and/ or profit and is not the continuation of upstream business activities.

Transportation

Transportation covers the activities of transferring crude oil, natural gas, fuel oil, gas fuel and/or its processed products from a working area or from the storage and processing facilities, including the transportation of natural gas through transmission and distribution pipelines, for commercial purposes.

Storage

Storage covers the activities of receiving, collecting, stocking up and discharging of crude oil, natural gas, fuel oil, gas fuel and/or its processed for commercial purposes.

Trading

Trading covers the purchase, sales, exportation and importation of crude oil, natural gas, fuel oil, gas fuel and/its processed products, including trading of natural gas through pipelines.

Pursuant to the Downstream Regulation, trading business activities are divided into two types:

- *General trading (wholesale):* sales, purchase, export and import activities of crude oil, natural gas, fuel oil, gas fuel, other fuel and/or its processed products on a large scale, by

an entity that controls or owns storage facilities and holds a General Trading (Wholesale) Business License, which authorizes the holder to distribute the products to end consumers using a certain trademark used or owned by the holder; and

- *Limited trading (trading)*: sales, purchase, export and import activities of crude oil, natural gas, fuel oil, gas fuel, other fuel and/or processed products on a large scale, by an entity that does not control or own storage facilities and holds a Limited Trading Business License, which authorizes the holder only to distribute products to consumers/users that control/own port facilities and/or receiving terminals.

Licenses

Pursuant to the Oil and Gas Law of 2001 and the Downstream Regulation, in order to conduct oil and gas downstream business activities, a business entity must first obtain a business license from the Minister of Energy and Mineral Resources. A business license shall only be granted to a business entity that has complied with all applicable administrative and technical requirements.

In line with the four types of downstream business activities, there are four types of business licenses (each, a “Business License”):

- Processing Business License;
- Transportation Business License;
- Storage Business License; and
- Trading Business License, which is either a General Trading (Wholesale) Business License or a Limited Trading (Trading) Business License.

If a business entity conducts processing activities with transportation, storage and/or trading activities as a continuation of such processing activities, it only needs to obtain a Processing Business License. However, if transportation, storage and/or trading activities are conducted by a business entity other than as the continuation of any processing activities, it must obtain the respective Transportation, Storage or Trading Business Licenses separately.

The ultimate authority to grant Business Licenses belongs to the Minister of Energy and Mineral Resources, through the DGOG. However, under the Oil and Gas Law of 2001, if oil and gas downstream business activities relate to regional interests, the Minister of Energy and Mineral Resources may consult with the relevant regional government and issue a Business License upon its recommendation. In addition, as provided in the Downstream Regulation, the Minister of Energy and Mineral Resources may delegate its authority to grant a Business License for certain activities to regional governments, related government institution and/or the Investment Coordinating Board of the Republic of Indonesia (*Badan Koordinasi Penanaman Modal* or “BKPM”). The delegation of authority is undertaken for efficiency and cost reduction purposes. In ascertaining whether to delegate authority, the Minister of Energy and Mineral Resources assesses the capabilities of the relevant business entity as well as factors such as foreign ownership and whether investment facilities are utilized. Notwithstanding the foregoing, given the issuance of the Job Creation Law, certain licensing procedure may vary subject to issuance of the relevant implementing regulations by the Indonesian government.

PSO

Under the Oil and Gas Law of 2001, the Government is responsible for the distribution of oil and gas products within Indonesia. This obligation is commonly known as the public service obligation.

Prior to the enactment of the Oil and Gas Law of 2001, PERTAMINA was the sole entity allowed to conduct activities pursuant to the PSO. However, after the enactment of the Oil and Gas Law of 2001 and the passage of PR 43/2018 and partly revoked by Presidential Regulation No. 66 of 2018, a business entity can be assigned by the Government to conduct activities pursuant to the PSO by a direct appointment and/or through a selection process. In conducting the PSO, the relevant business entity is prohibited from exporting certain types of fuel oil products that are required to be supplied and distributed for PSO purposes. However, such business entity may import, subject to a recommendation from the Minister of Energy and Mineral Resources and approval from the Minister of Trade, such fuel oil products if the domestic production is not sufficient to fulfill the demand in Indonesia.

The assignment of the legal entity to supply certain types of oil to fulfill the domestic demand is further regulated under Regulation of BPH MIGAS No. 09 of 2015 on the Assignment of the Legal Entity to Supply and Distribute Certain Type of Oil Fuels and Type of Oil Fuels for Specific Assignment. Under this regulation, the assignment of the business entity can be conducted through:

Direct appointment and/or selection process

To be eligible for the direct appointment and/or the selection process for certain types of oil fuels, a business entity must meet the following criteria:

- it must have a General Trading (Wholesale) Business License (*Ijin Usaha Niaga Umum*);
- it must own the storage, and distribution facilities;
- it has operational buffer reserves of oil fuels; and
- it meets the administrative, technical, financial, commercial and other requirements, as stipulated by BPH MIGAS.

In addition to the above, a business entity must meet the following criteria for direct appointment for certain types of fuels:

- it must protect domestic refinery assets and plan for long-term development;
- it must guarantee domestic availability and supply of certain types of oil fuels;
- it must take measures to manage the short-supply of oil fuels;
- it must supply remote areas and areas without a working market mechanism; or
- if there is only one General Trading (Wholesale) Business License holder to conduct the supply and distribution of certain types of oil fuels in one commercial distribution area.

BPH MIGAS determines whether the above criteria are met.

Mandate

To be eligible for a mandate for supply and distribution of type of oil fuels for specific appointment, a business entity must meet the following criteria:

- it must have a General Trading (Wholesale) Business License (*Ijin Usaha Niaga Umum*);

- it must own oil fuels processing facilities;
- it must own oil fuels storage facilities;
- it must own oil fuels distribution facilities; and
- it meets the administrative, technical, financial, commercial and other requirements, as stipulated by BPH MIGAS.

If there are more than three eligible business entities for the mandate, BPH MIGAS will conduct a selection process. BPH MIGAS determines whether the above criteria are met.

The appointment of the PSO distributor will be set forth in a decree by BPH MIGAS, which will specify the following information: (i) identity of the appointed business entity; (ii) the rights and obligations of the appointed business entity; (iii) the term of appointment; (iv) the volume and type of fuel oil products to be distributed; (v) type and volume of distributor; (vi) the area designated; (vii) sanction in the form of assignment of oil fuels volume to other business entities; and (viii) force majeure conditions.

Based on PR 43/2018, the retail price of fuel (kerosene, gasoline (RON 88) and gas oil) is determined by the government by taking into consideration the national policies on energy and state budget, which may be increased or decreased as the case may be. Pursuant to PR 43/2018, the retail price, the base price and market-index price are to be determined by the Minister of Energy and Mineral Resources.

Pursuant to Decision of the Minister of Energy and Mineral Resources No. 149 K/12/MEM/2020 of 2020 on the Market Index Price of Oil Fuel, the Oil Fuel Market Index Price is determined by the Director General of Oil and Gas on behalf of the Minister of Energy and Mineral Resources on a monthly basis (with calculation starting from the 25th date of a month up to the 24th date of the following month). The Oil Fuel Market Index Price is determined as follows:

- (a) Oil Fuel Market Index Price used to calculate base price of Certain Types of Oil Fuel and Special Type of Oil Fuel Assignment is determined as follows:
 - for kerosene, based on the lower average Mean of Platts Singapore (“MOPS”) publication price or Argus for jet kerosene;
 - for gas oil, based on the lower average MOPS publication price or Argus for gas oil 0.25% sulfur; and
 - for gasoline (RON 88), based on the lower average MOPS publication price or Argus for Mogas 92 with the formula of 98.42% multiplied with MOPS or Argus for Mogas 92.
- (b) Oil Fuel Market Index Price for gas oil used to calculate the shortfall between Certain Types of Oil Fuel Market Index for gas oil and General Types of Oil Market Index for gas oil and Market Index Price for biofuels biodiesel, based on the lower average MOPS publication price or Argus for gas oil 0.25% sulfur.

Based on Minister of Energy and Mineral Resources Regulation No. 40 of 2018 on the Sixth Amendment of Regulation No. 39 of 2014 regarding the Calculation of Retail Selling Price of Oil

Fuels, the calculation period of the Oil Fuel Market Index Price for gas oil utilizes the average market index price and exchange rate of Rupiah against U.S. dollar with Bank Indonesia's buying rate for each three-month period, which begins on the 25th day of the prior three months and continues up to the 24th day of the latest month. The subsidy reimbursement amount for automotive diesel oil is subject to a fixed amount set by the Government. The subsidy reimbursement formula determined by the Government for kerosene distributed under the PSO mandate is based on MOPS's three-month average price for jet kerosene (which is the Oil Fuel Market Index Price for kerosene), less the regulated retail price.

For LPG in 3kg cylinders, pursuant to Decree of the Minister of Energy and Mineral Resources No. 61/K/12/MEM/2019 concerning the Benchmark Price of LPG in 3kg Cylinders for 2019 Annual Budget ("**MEMR Decree 61/2019**"), the subsidy reimbursement formula is based on the benchmark price in 3kg cylinders, which is determined by the market index price of LPG in 3kg cylinders (as stipulated by the Government) applicable in the relevant month, plus distribution (including handling) costs and margins less the regulated retail price. This benchmark price is determined by the following formula: 103.85% market price index of LPG in 3 kg cylinders (as stipulated by the Government) + US\$50.11/mt + Rp. 1,879.00/kg.

Pursuant to the Government's 2019 state budget, this benchmark price is used as the basis for calculating the benchmark price for each kilogram of LPG in 3 kg cylinders as it applies to an aggregate volume of 6,978,000 mt of LPG sold by us in Indonesia. This benchmark price may be re-evaluated by the Government at any time with consideration into the realization of factors that may affect the supply and distribution of LPG in 3kg cylinders.

Based on Decree of the Minister of Energy and Mineral Resources No. 62 K/10/MEM/2019 concerning the Basic Price Formula of Certain Types of Fuel and Specially Appointed Types of Fuel determines the basic price formula for certain types of fuel, namely kerosene and gas oil, and specially appointed types of fuel, namely gasoline (RON 88). The basic price formula of kerosene is the sum of 102.49% of the market index price of kerosene (as stipulated by the Government) plus Rp. 263 per liter. The basic price formula of gas oil is the sum of 95.00% of the market index price of gas oil (as stipulated by the Government) plus Rp. 802 per liter. The basic price formula of gasoline (RON 88) is the sum of 96.46% of the market index price of gasoline (RON 88) (as stipulated by the Government) plus Rp. 821 per liter. The basic price for kerosene, gas oil and gasoline (RON 88) may be re-evaluated by the Government at any time, depending on the supply and distribution of kerosene, gas oil and gasoline (RON 88).

Online Licensing Procedures for Export and Import

Types of Fuel

The export and import of oil, gas, and other fuels shall not only comply with the Oil and Gas Law of 2001 and Minister of Energy and Mineral Resources regulations, but also the Minister of Trade regulations, which includes, among others, Regulation of the Minister of Trade No. 21 of 2019 on Export and Import Provisions for Oil, Gas, and Other Fuels (which replaced Minister of Trade Regulation No. 3 of 2015 on Export and Import Provisions for Oil, Gas, and Other Fuels) that sets out online licensing procedures for the export and import of fuels, the types of fuel, and the qualified exporting and importing parties. Such parties can export three types of fuel (i.e. oil and gas, state-owned oil and gas, and other fuels) and import two types of fuel (i.e. oil and gas and other fuels).

Exporting and Importing Parties of Fuel

The parties who are permitted to export oil and gas and state-owned oil and gas are "Business Entities" (*Badan Usaha*) engaged in upstream or downstream activities and "Permanent

Establishments” (*Bentuk Usaha Tetap*) engaged in upstream activities. Such parties must register as oil and gas exporters and obtain the Minister of Trade’s approval to export. For the export of state-owned oil and gas, the Minister of Trade must also appoint the exporters. The parties who are permitted to export other fuels are “Business Entities” (*Badan Usaha*) engaged in activities involving other fuels. Such parties must register as oil and gas exporters and obtain the Minister of Trade’s approval to export.

The parties who are permitted to import oil and gas and other fuels are direct consumers of fuels. For oil and gas, parties who are permitted to import also include “Business Entities” (*Badan Usaha*) engaged in downstream activities. For other fuels, parties who are permitted to import also include “Business Entities” (*Badan Usaha*) engaged in activities involving other fuels. In all cases, these parties must obtain the Minister of Trade’s approval to import.

Licensing Procedures for Export and Import of Fuel

The procedures for obtaining the required approval to export fuels start with an electronic application on the Online Single Submission (“OSS”) system to obtain a Business Identity Number and business license. Thereafter, applicants submit an electronic application, Business Identity Number and business license through the Ministry of Trade’s electronic licensing system, <http://inatrade.kemendag.go.id> (“INATRADE”) to obtain an appointment. The issuance of the appointment takes five business days. The appointment is valid for three years. The applicants then submit their electronic application, export appointment, export realization report (if any), and fuels export recommendation from the Minister of Energy and Mineral Resources through INATRADE. The issuance of approval is in electronic form and takes five business days. Such approval is valid for the same time period as that of the fuels export recommendation.

The procedures for obtaining the required approval to import fuels start with an electronic application at the OSS to obtain a Business Identity Number. Thereafter, the applicants submit an electronic application, Business Identity Number, import realization report (if any), and fuels import recommendation from the Minister of Energy and Mineral Resources officials at the Ministry of Trade. The issuance of approval is in electronic form and takes three business days. The approval is valid for the same time period as that of the fuels import recommendation.

Indonesian Regulation of Offshore Borrowings

Pursuant to Presidential Decree No. 59 of 1972, dated October 12, 1972, as partly revoked by the Presidential Decree No. 15 of 1991 on Receipt of Offshore Loans and Issuance of Bank Guarantees for the Acceptance of Offshores Loans by State-Owned Banks and Regional Development Banks Stipulated as Foreign Exchange Banks (“PD 59/1972”), we are required to obtain approval from the Minister of Finance of Indonesia and report the particulars of our offshore commercial borrowings to the Minister of Finance of Indonesia and Bank Indonesia, on the acceptance, implementation, and repayment of principal and interest. The Minister of Finance Decree No. KEP-261/MK/IV/5/1973 dated May 3, 1973, as amended by the Minister of Finance Decree No. 417/KMK.013/1989 dated May 1, 1989 and partly revoked by the Minister of Finance Decree No. 279/KMK.01/1991 dated March 18, 1991, as the implementing regulation of this PD 59/1972, further sets forth the requirement to submit periodic reports to the Minister of Finance of Indonesia and Bank Indonesia on the effective date of the contract and each subsequent three-month period.

On December 31, 2014, Bank Indonesia enacted Bank Indonesia Regulation No. 16/22/PBI/2014 on the Reporting of Foreign Exchange Activities and of Reporting Application of Prudential Principles in relation to an Offshore Loan Management for Non-Bank Corporation, as partly revoked by Bank Indonesia Regulation No. 21/2/PBI/2019 on the Reporting of Foreign Exchange Traffic Activities

(“PBI 16/22/2014”). Under PBI 16/22/2014, any non-bank entity engaged in activities that cause a movement of (i) financial assets and liabilities between an Indonesian citizen and a non-citizen; or (ii) offshore financial assets and liabilities between Indonesian citizens, must submit a foreign exchange traffic report with respect to any foreign exchange activities to Bank Indonesia. Non-bank entities include state owned entities, regional government-owned enterprises, private enterprises and other entities that are not enterprises, whether in the form of legal entities or non-legal entities established by government or the public. The report must include, among other things, information relating to (i) the trading of goods, services or other transactions between an Indonesian citizen and a non-citizen; (ii) the entity’s position with respect to or changes in its offshore financial assets and/or liabilities; and/or (iii) any plans to incur offshore loans and/or its implementation. In addition, PBI 16/22/2014 requires any non-bank entity which applies prudential principles to submit reports which comprise (i) a report on the implementation of prudential principles (ii) a report on the implemental of prudential principles which has complied with an attestation procedure conducted by a public accountant; (iii) notification of compliance of credit ratings; and (iv) financial statements. Bank Indonesia requires reports to be submitted monthly through an online system by the 15th day of the following month. In the event that there is a correction that needs to be made, the correction must be submitted by no later than the 20th day of the reporting month through the online system. The report on the implementation of prudential principles is required to be submitted quarterly or on any other submission deadline set forth in PBI 16/22/2014.

The following regulations further describe the reporting obligations of PBI 16/22/2014:

- (a) under the Member of the Board of Governors of Bank Indonesia Regulation No. 21/4/PADG/2019 on the Reporting of the Activities of Foreign Exchange Flow in the — S-33 — Form of Foreign Debts and Risk Participation Transactions (“PADG 21/4”), an Offshore Loan (“OL”) is a loan from a resident to a non-resident in foreign currency and/or rupiah, including financing based on sharia principles, and a Risk Participation Transaction (“RPT”) is a risk-transfer transaction for an individual credit facility and/or other facilities based on a master risk participation transaction. Banks, non-bank financial institutions and non-financial institution entities must submit reports for all OLs or RPTs regardless of the transaction value. The reports could consist of any one of, or a combination of, the following: (a) a main data report of the OL or RPT, (b) a recapitulation data report of the OL or RPT that includes (i) the withdrawal or payment plan of the OL or RPT, (ii) the realization of withdrawals or payment of the OL or RPT and (iii) the position and change of OL or RPT or (c) a new plan or an amendment of the OL. The OL or RPT main data report, recapitulation data report, new plan or amendment report must be submitted to Bank Indonesia no later than the 15th day of the following month, and a monthly recapitulation data report must be submitted to Bank Indonesia by no later than the 15th day following the signing, issuance or acknowledgement of the OL or RPT;
- (b) under PADG 21/4, an Indonesian company that intends to obtain an offshore loan is required to submit a report to Bank Indonesia by no later than March 15 of each year in relation to such loan. In the event there is a change to the company’s plan to obtain an offshore loan, any amendment to such report must be submitted to Bank Indonesia by no later than June 15 of the year of such change;
- (c) under the Member of the Board of Governors of Bank Indonesia Regulation No. 21/7/PADG/2019 on the Reporting of Foreign-Exchange Activities by Non-Bank Institutions, which has been in effect since April 12, 2019, the type of reports required are as follows: (a) report of trading transactions involving goods, services and other transactions which are undertaken between residents and non-residents; (b) report of positions and changes of foreign financial assets; (c) report of positions and changes of

equity of non-residents and other related liabilities; (d) report of positions and changes of foreign derivative liabilities; (e) report of position of foreign commitments and contingencies; and (f) report of position of securities owned by custodian customers. The non-bank reporter (i.e. non-bank financial institutions, non-financial-institution enterprises and other institutions) is required to submit monthly reports with respect to the foreign exchange activities carried out by the non-bank reporter to Bank Indonesia by no later than the 15th day of the following months; and

- (d) under Bank Indonesia Circular Letter No. 17/3/DStA dated March 6, 2015, as amended by Bank Indonesia Circular No. 17/24/DStA dated October 12, 2015 on the Reporting Application of Prudential Principles in relation to an Offshore Loan Management for Non-Bank Corporation, a non-bank corporation must submit reports on the following: (i) a prudential principle report on quarterly basis; (ii) a prudential principle report that has been through attestation procedure no later than the end of June of each year; (iii) information on credit ratings on a monthly basis; and (iv) unaudited quarterly financial statements on a quarterly basis and audited annual financial statements (audited) that must be reported no later than the end of June of each year.

Any delay in submitting a foreign exchange report listed above may result in fines or administrative sanctions.

On May 14, 2014, Bank Indonesia enacted Bank Indonesia Regulation No. 16/10/PBI/2014 as amended by Bank Indonesia Regulation No. 17/23/PBI/2015 dated December 28, 2015 on the Receipt of Foreign Exchange Export Revenue and Withdrawal of Foreign Exchange Offshore Loan, as partly revoked by Bank Indonesia Regulation No. 21/14/PBI/2019 on Foreign Exchange Export Proceeds and Foreign Exchange Import Payments as amended by Regulation No. 22/21/PBI/2020 (“PBI 16/10/2014”), as implemented by, among others, Bank Indonesia Circular Letter No. 18/5/DStA dated April 6, 2016 on Withdrawal of Foreign Exchange Loan. Under PBI 16/10/2014, an Indonesian debtor is required to withdraw, through foreign exchange banks located in Indonesia, its foreign currency offshore loan (i) obtained under a non-revolving loan agreement that is not used for refinancing; (ii) resulted from the difference between the amount of a refinancing facility and the relevant refinanced existing loan; or (iii) incurred under debt securities (i.e. bonds, medium-term notes, floating rate notes, promissory notes and commercial papers). The Indonesian debtor must report such withdrawal, along with any relevant supporting documents, to Bank Indonesia at the latest on the 15th day of the following month. Late submission may be subject to fines.

PBI 16/10/2014 further stipulates that the accumulated amount of withdrawals for an offshore loan must be equal to the commitment amount of such offshore loan as stated under the relevant offshore loan agreement. If the difference between the accumulated amount of withdrawals and the commitment amount of the offshore loan exceeds Rp. 50 million (or its equivalent in foreign currencies), the Indonesian debtor must provide a written explanation for such difference and sufficient supporting documents to Bank Indonesia before the expiration of the term of the applicable loan. An Indonesian debtor must report the withdrawal of an offshore loan to Bank Indonesia monthly using the recapitulation data report as regulated under PADG 21/4. Failure to provide a written explanation will be deemed as a violation of PBI 16/10/2014. Any violation of PBI 16/10/2014 will subject Indonesian debtors to fines for each non-complying withdrawal.

On December 29, 2014, Bank Indonesia enacted Bank Indonesia Regulation No. 16/21/PBI/2014, as amended by Bank Indonesia Regulation No. 18/4/PBI/2016 dated April 21, 2016 on the Application of Prudential Principles in Management of Offshore Loan of Non-Bank Corporations (“PBI 16/21/2014”). PBI 16/21/2014 requires non-bank corporations that obtain offshore borrowings in foreign currency (other than for trade credit) to maintain the following (the “Prudential Principles”):

- (a) foreign currency exchange rate exposure must be hedged with a minimum hedging ratio equal to 25.0% of the difference between foreign currency assets and foreign currency liabilities;
- (b) the ratio of foreign exchange assets to foreign exchange liabilities must be at least 70.0% and at the end of each quarter, such non-bank corporation must have sufficient foreign currency assets to cover the foreign currency liabilities that will be due to subsequent three months; and
- (c) the non-bank corporation must have a credit rating of BB-or higher from a credit rating institution recognized by Bank Indonesia.

PBI 16/21/2014 also requires that such hedging transactions be conducted only with banks in Indonesia with effect from January 2017. In addition, the Issuer is specifically exempted from the minimum credit rating requirement.

The application of Prudential Principles does not apply to offshore loans in foreign currency that are in the form of trade credit, which refers to debt arising from credit that is granted by offshore suppliers over transactions relating to goods and/or services. Exemptions from the requirement to satisfy the minimum credit rating requirement apply for (i) the refinancing of offshore loans in foreign currency; (ii) offshore loans in foreign currency from (a) international bilateral/multilateral institutions; and (b) syndicated loans, with the contribution of international bilateral/multilateral institution exceeding 50.0%, in relation to financing for infrastructure projects; (iii) offshore loans in foreign currency in relation to government (central and regional) infrastructure project; (iv) offshore loans in foreign currency that are guaranteed by international bilateral/multilateral institution; (v) offshore loans in foreign currency that are in the form of trade credit; (vi) offshore loans in foreign currency that are in the form of other loans, which refer to any other loan than loan agreement, debt securities and trade credit that are, among others, payment of insurance claim and unpaid dividend; (vii) offshore loans in foreign currency of finance companies, provided that, when the OJK last determined the soundness level (tingkat kesehatan) of the relevant finance company, the finance company had a minimum soundness level and fulfilled the maximum gearing ratio requirement as regulated by OJK; and (viii) offshore loans in foreign currency incurred by Indonesian Export Financing Institution (Lembaga Pembiayaan Ekspor Indonesia or “LPEI”).

Under PBI 16/21/2014, non-bank corporations are required to report to Bank Indonesia with respect to their implementation of the Prudential Principles. Further, failure to comply on the fulfillment of the Prudential Principles will result in administrative sanctions in the form of a warning letter of which the relevant creditor(s) and certain government institutions will be notified. PBI 16/21/2014 became effective as of January 1, 2015.

Indonesian Regulations on Placement of Foreign Exchange Export Proceeds Deriving From Natural Resources

On January 10, 2019, the Government of Indonesia enacted Government Regulation No. 1 of 2019 on Foreign Exchange Export Proceeds from Natural Resources Business, Processing and/or

Management Activities (“GR 1/2019”). Furthermore, on January 18, 2019, Bank Indonesia issued Bank Indonesia Regulation No. 21/3/PBI/2019 on the Receipt of Foreign Exchange Export Proceeds from Natural Resources Business, Processing and/or Management Activities (“PBI 21/3/2019”), which has been revoked by Bank Indonesia Regulation No. 21/14/PBI/2019 on Foreign Exchange Export Proceeds and Foreign Exchange Import Payments, as amended by Regulation No. 22/21/PBI/2020 (“PBI 21/14/2019”), except for provisions on information submission and reporting in relation to export proceeds derived from transactions involving natural resources (Devisa Hasil Ekspor dari Barang Ekspor Sumber Daya Alam or the “DHE SDA”) under PBI 21/3/2019, which remain applicable for all DHE SDA that are received until December 31, 2020.

GR 1/2019 and PBI 21/14/2019 require that the DHE SDA is (i) deposited in a special account maintained in a Foreign Exchange Bank in Indonesia (as defined in GR 1/2019); and (ii) utilized only for specific purposes, which are for the payments of: (a) export duties and other levies that apply to exports; (b) loan repayments; (c) importation activities; (d) profits or dividends; and/or (e) other purposes as regulated under Article 8 of Law No. 25 of 2007 on Investment. The types of exported goods which fall under the scope of GR 1/2019 and PBI 21/14/2019 are set out and elaborated under Decree of the Minister of Finance No. 1523/KM.4/2019 on the Determination of Natural Resources Export Goods with the Obligation to Insert Foreign Exchange Export Proceeds into the Financial System of Indonesia. The utilization of the DHE SDA for the purposes aforementioned must be accompanied by supporting documents. In the event that an exporter makes the payments as described above through an escrow account, such exporter must open an escrow account in a Foreign Exchange Bank in Indonesia (as defined in GR 1/2019), if such account has not existed, or move such account onshore, if such account already exists. Under GR 1/2019, an “escrow account” is defined as an account opened to collect particular funds from which a withdrawal can only be made based on special requirements in accordance with a written agreement between a depositor and a party with an interest over such escrow account. The supervision of such escrow accounts is conducted by the OJK.

On July 1, 2019, the Minister of Finance of Indonesia enacted Regulation of the Minister of Finance Number 98/PMK.04/2019 of 2019 on Tariffs for Administrative Sanctions in the Form of Fines and Procedures for the Imposition, Collection and Payment of Administrative Sanctions in the Form of Fines for Violations of the Provisions on Foreign Exchange Export Proceeds from Natural Resources Business, Processing and/or Management Activities (“PMK 98/2019”). PMK 98/2019 sets out the following administrative sanctions: (i) in the case that an exporter fails to deposit the DHE SDA in a special account maintained in a Foreign Exchange Bank in Indonesia (as defined in PMK 98/2019), such an exporter will be imposed with fines in the amount of 0.5% of the value of the DHE SDA which has not been deposited in such special account; (ii) in the case that an Exporter utilizes the DHE SDA deposited in the special account for purposes other than for the payments of: (a) export duties and other levies that apply to exports; (b) loan repayments; (c) importation activities; (d) profits or dividends; and/or (e) other purposes as regulated under Article 8 of Law No. 25 of 2007 on Investment, such an exporter will be imposed with fines in the amount of 0.25% of the value of the DHE SDA utilized for such other purposes; and (iii) for an exporter who fails to set up an escrow account (which is an account used to make the payments described previously in point (ii)) or fails to move such account onshore, to a Foreign Exchange Bank in Indonesia (as defined in PMK 98/2019), such an exporter will be imposed with an administrative sanction in the form of a postponement of provision of export customs services.

Indonesian Regulation of Mandatory Use of Rupiah

On June 28, 2011, the Government of Indonesia enacted Law No. 7 of 2011 on Currency (the “Currency Law”). Article 21(1) of the Currency Law requires the use of the Rupiah in each transaction that is intended as a payment, for the settlement of other obligations that must be fulfilled with the use of money and/or in other financial transactions, where the transactions are conducted within Indonesia. Article 23 further prohibits any party from refusing to accept Rupiah as payment or in fulfilment of its

obligations and/or for other financial transactions in Indonesia except where there is doubt as to the authenticity of the Rupiah paid. Article 21(2) contains exceptions to the mandatory use of Rupiah for (i) specific transactions in the framework of implementing the state budget, (ii) grants to be given to or received from offshore sources, (iii) international trade transactions, (iv) foreign currency bank deposits and (v) international financing transactions. Article 23(2) contains an additional exemption from the mandatory use of Rupiah where payments or settlements of obligations in foreign currencies have been agreed in writing. Failure to comply with the above may result in an imprisonment of up to one year and fines of up to Rp. 200 million for any violation and, if the violation is committed by a company, the imprisonment term and fines will be increased by one-third.

Under Bank Indonesia Regulation No. 17/3/PBI/2015 dated March 31, 2015 on the Mandatory Use of Rupiah in the Territory of Indonesia and Bank Indonesia Circular Letter No. 17/11/DKSP dated June 1, 2015 governing the same ("PBI 17/3/2015"), each party is required to use Rupiah for cash and non-cash transactions conducted within the territory of Indonesia, including (i) each transaction which has the purpose of payment; (ii) settlement of other obligations which must be satisfied with money; and/or (iii) other financial transactions (including deposits in Rupiah in any amount and types of denomination from customers to banks). Subject to further requirements under PBI 17/3/2015, the mandatory use of Rupiah does not apply to (i) certain transactions relating to the implementation of state revenue and expenditure, which includes (a) payment of foreign debt; (b) payment of domestic debt in foreign currency; (c) foreign goods expenditure; (d) foreign capital expenditure; (e) state revenue originating from the sales of government bonds in region currency; and (f) other transactions in the context of implementing the state revenue and expenditure budget; (ii) the receipt or provision of grants either from or to an overseas source; (iii) international trade transactions, which includes (a) export and/or import of goods to or from outside Indonesian territory; and (b) activities relating to cross border trade in services; (iv) bank deposits denominated in foreign currencies; (v) international financing transactions; (vi) funds transfers in foreign currencies from individuals in Indonesia to parties who are overseas that are not intended for the payment or settlement of obligations incurred by transactions within the territory of the Republic of Indonesia; and (vii) transactions in foreign currency which are conducted in accordance with applicable laws, including, among others (a) a bank's business activities in foreign currency which is conducted based on applicable laws regarding conventional and sharia banks; (b) securities in foreign currency issued by the Indonesian government in primary or secondary market based on applicable laws; and (c) other transactions in foreign currency conducted based on applicable laws, including the law regarding Bank Indonesia, the law regarding investment and the law regarding LPEI.

PBI 17/3/2015 took effect from March 31, 2015, and the requirement to use Rupiah for non-cash transactions became effective from July 1, 2015. Written agreements which were signed prior to July 1, 2015 that contain provisions for the payment or settlement of obligations in foreign currency for non-cash transactions will remain effective until the expiry of such agreements. However, any extension and/or amendment of such agreements must comply with PBI 17/3/2015. A failure to comply with the mandatory use of Rupiah in cash transactions is subject to criminal sanctions in the form of fines and imprisonment. While a failure to comply with the mandatory use of Rupiah in non-cash transactions is subject to administrative sanctions in the form of (i) written warning; (ii) fines; and/or (iii) prohibition from undertaking payment activities. Bank Indonesia may also recommend to the relevant authority to revoke the business license or stop the business activities of the party which fails to comply with the mandatory use of Rupiah in non-cash transactions.

Under Bank Indonesia's Governor Letter No. 18/3/GBI-DKSP/Srt/B dated February 23, 2016 on the Exemption in the Implementation of the Obligation to Use Rupiah for Category 3 Transactions (the "Bank Indonesia Response Letter"), the Governor of Bank Indonesia has approved some exemptions, which can be described as follows:

- a. the exemptions are granted for a maximum period of 10 years starting from 30 days since the date of the Bank Indonesia Response Letter. Furthermore, the Ministry of Energy and

Mineral Resources may carry out an evaluation on the effectiveness of the implementation period for such category 3 transactions and coordinate any changes with Bank Indonesia. During this implementation period, Bank Indonesia will also supervise the preparedness of oil and natural gas operators in implementing the provisions on the obligation to use Rupiah, so that such provisions can be implemented effectively;

- b. certain transactions relating to the authority of other ministries will be removed from the list of category 3 transactions, namely service or vessel charter transactions to support the upstream as well as downstream oil and gas operations, service or lease of air transportation (charter flight) and freight forwarding service. Furthermore, Bank Indonesia will coordinate with the relevant ministry for such transaction; and
- c. the exemptions are granted on seven types of transactions that would qualify as an implementation of state revenues and expenditures budget which are submitted by the Ministry of Energy and Mineral Resources in letter No. 708/06/DMB/2016 dated January 19, 2016 on the Enforcement of Bank Indonesia Regulation No. 17/3/PBI/2015 on the Mandatory Use of Rupiah in the Territory of Indonesia. The seven types of exempted transactions include, among others, oil and gas trading (including LNG regasification activity), natural gas transportation fee, oil transportation by pipe and the procurement of goods or materials from a foreign country (for oil and gas downstream infrastructure).

Under the Bank Indonesia Response Letter, if a currency conversion is required to calculate the price of goods and services in Rupiah that were previously offered in foreign currency, business entities shall use the Jakarta Interbank Spot Dollar Rate, or JISDOR, as reference.

Based on the Bank Indonesia Response Letter, our sale of oil and gas products is included as one of the items that is exempted from the obligation to use and quote in Rupiah.

Indonesian Regulation of Bookkeeping Management in the English Language and US Dollar Currency

Under the Director General of Taxation Regulation No. PER-24/PJ/2020 of 2020 dated December 28, 2020 on the Procedures for the Application, Notification, Granting, Cancellation as well as Application and Re-Issuance of Permits for Management of Bookkeeping by Using the English Language and US Dollar Currency, certain taxpayers who are permitted to bookkeep using the English language and US Dollar currency include:

- a. Taxpayers who operate, in the context of Contract of Work (*Kontrak Karya*), based on contracts with the Government of the Republic of Indonesia as intended in the provisions of the laws and regulations concerning mining. These include taxpayers who operate in the context of Contract of Work and taxpayers who are holders of Production Special Mining Business License (*Izin Usaha Pertambangan Khusus Operasi Produksi*) which resulted from the conversion of Contract of Work or Contract of Work, under which an obligation to use the English language and US Dollar currency was contemplated thereunder;
- b. Taxpaying Contractors of Joint Operation Contract (*Kontrak Kerja Sama*) who operate based on the provisions of laws and regulations concerning natural oil and gas mining; and

- c. Taxpayers who are in joint operation (*Kerja Sama Operasi* or “KSO”) so long as required under its joint operation agreement/deed of establishment of KSO and all KSO members have obtained approval from the Minister of Finance to conduct bookkeeping using the English language and US Dollar currency.

The taxpayers which fulfill the above criteria must notify the Minister of Finance through the Head of Regional Office of Directorate General of Taxation in the working area where the taxpayer is registered or the unit determined by the Directorate General of Taxation electronically through its website or its other integrated system by no later than 3 (three) months (a) after the commencement of the accounting year in which the English language is used in bookkeeping; (b) starting from the date of establishment for taxpayers which the English language or US Dollar currency is used since the establishment; or (c) before the commencement of the accounting year in which the English language and US Dollar currency is used in bookkeeping.

Apart from the taxpayers as mentioned in letters a – c above, a taxpayer seeking exemption must obtain a written permit from the Minister of Finance in advance by sending an application to the Head of Regional Office of the Directorate General of Taxation in the working area where the taxpayer is registered or the unit determined by the Directorate General of Taxation electronically through its website or its other integrated system by no later than 3 (three) months (a) before the commencement of the accounting year in which the English language or US Dollar currency is used in bookkeeping or (b) starting from the date of establishment for new taxpayers.

Environmental Regulation

Environmental protection in Indonesia is governed by the Environmental Law. There are some implementing regulations in respect of the Environmental Law that have been issued, particularly with respect to AMDAL, i.e. (i) State Minister for Environmental Affairs Regulation No. 16 of 2012, which was enacted on October 10, 2012 (“Regulation 16”), which provides guideline on the arrangement for AMDAL documents; and (ii) Regulation No. 27. Regulation No. 27 was enacted on and has been into force as of February 23, 2012 and revokes the previous Government Regulation No. 27 of 1999 on AMDAL. As an implementing regulation in respect of Regulation No. 27, the Minister of Environment and Forestry enacted Minister of Environment and Forestry Regulation No. 23/MENLHK/SETJEN/KUM.1/7/2018 on the Criteria of the Change of Business and/or Activity and Procedures for the Amendment of Environment Permit, which has been in force since July 26, 2018 and Minister of Environment and Forestry Regulation No. P.38/MENLHK/SETJEN/KUM.1/7/2019 on Type of Business and/or Activities that Mandatory to Own Environmental Impact Analysis (“Regulation P.38”), which has been in force since September 5, 2019.

With the issuance of the Job Creation Law, there are significant changes pertaining to the requirement to obtain an environmental permit. However, the implementing regulations of Environmental Law have not been amended to accommodate the changes stipulated under the Job Creation Law. Therefore, the discussions herein are still based on the existing implementing regulations of Environmental Law as above.

Regulation P.38 stipulates, among other matters, that companies whose operations have an environmental or social impact must obtain and maintain an AMDAL document if it meets certain environmental thresholds. The AMDAL document consists of the terms of reference on environmental impact analysis (*Kerangka Acuan Analisis Dampak Lingkungan*), an environmental impact analysis (*Analisis Dampak Lingkungan*), an environmental management plan (*Rencana Pengelolaan Lingkungan*) and an environmental monitoring plan (*Rencana Pemantauan Lingkungan*). If a company has an environmental or social impact but does not reach the threshold where an AMDAL document is required, under Regulation 16, a UKL and a UPL must be prepared by the company. However, if the

activity does not need a AMDAL, a UKL or a UPL, then the company must execute a letter to commit to the management and supervision of the environment (*Surat Pernyataan Kesanggupan Pengelolaan dan Pemantauan Lingkungan Hidup*), as required under the Environmental Law and Regulation 16. Pursuant to the Environmental Law and Government Regulation No. 27 of 2012 on Environmental License, any company which obtains an AMDAL, a UKL or a UPL must also submit an application to obtain an environmental permit (*Izin Lingkungan*), which is issued by the Minister of Environment and Forestry, Governor, or mayor/regent (in accordance with their respective authorities). The granting of this permit is based on either (i) an environmental feasibility study carried out by an independent third party, which is approved by the AMDAL Assessment Commission (*Komisi Penilai Amdal*), the Minister of Environment and Forestry, the Governor or mayor/regent, as appropriate or (ii) a recommendation in a UKL and UPL issued by the appropriate government or regional government institution responsible for the environmental management and control of the applicable area.

The Environmental Law stipulates that within two years of October 3, 2009, all businesses that have business licenses, but do not have an AMDAL document or a UKL and a UPL, are obligated to either carry out and complete an environmental audit, if they need an AMDAL, or to prepare an environment management document, if they need a UKL and a UPL. Furthermore, the Environmental Law obliges businesses to integrate their current environmental management permits (for example, the Toxic and Hazardous Management Permit (*Izin Pengelolaan Limbah B3*), Waste Water Disposal to Sea Permit (*Izin Pembuangan Air Limbah Ke Laut*) and Waste Water Disposal to Water Resources Permit (*Izin Pembuangan Air Limbah Ke Sumber Air*)) issued by either the Minister of Environment and Forestry, governor or mayor/regent, into an environmental permit within a year of the enactment of the Environmental Law. The environmental permit is required for a business license to be obtained.

Based on the Environmental Law, remedial and preventative measures and sanctions (such as the obligation to rehabilitate the working areas, the imposition of substantial criminal penalties and fines and the cancellation of approvals) may also be imposed to remedy or prevent pollution caused by the operations of a company. The sanctions range from one to 15 years of imprisonment for company management and/or fines ranging from Rp. 500 million to Rp. 15 billion. A monetary penalty may be imposed in lieu of performance of an obligation to rehabilitate damaged areas.

The Environmental Law also requires licensing of all waste disposal, storage and handling activities. Waste disposal may only be conducted in specified locations determined by the Minister of Environment and Forestry. Waste water disposal is further regulated by Government Regulation No. 82 of 2001 on Water Quality Management and Water Pollution Control. This regulation requires responsible parties to submit reports regarding their disposal of waste water detailing their compliance with the relevant regulations. Such reports are to be submitted to the relevant mayor or regent, with a copy provided to the Minister of Environment and Forestry, on a quarterly basis.

Regulation No. 27 provides that activities that are subject to AMDAL or UKL and UPL will require an environmental permit. Regulation No. 27 also requires an application for an updated environmental permit to be submitted if there is any, among other things: (a) change of usage of the production machines that affect the environment; (b) increase in production capacity; (c) change in the facilities of the business and/or activity; and (d) change in the operational period of the business and/or activity. Regulation No. 27 further provides that all existing environmental documents/licenses issued prior to Regulation No. 27 remain valid and will be treated as the environmental permit.

Environmental permits are delegated to the OSS by virtue of the Government Regulation No. 24 of 2018 regarding Electronically Integrated Business Licensing Services (“GR 24/2018”) as further implemented by, among others:

- (i) the Minister of Environment and Forestry Regulation No. P.22/MENLHK/SETJEN/KUM.1/7/2018 regarding Norm, Standard, Procedure and Criteria of Electronically

Integrated Business Licensing Services in Ministry of Environment and Forestry (as amended by Regulation P.5/MENLHK/SETJEN/KUM.1/1/2020 of 2020);

- (ii) the Minister of Environment and Forestry Regulation No. P.26/MENLHK/SETJEN/KUM.1/7/2018 regarding the Guidelines on the Preparation and Assessment as well as Examination of Environmental Documents in the Implementation of the OSS System; and
- (iii) the Minister of Environment and Forestry Regulation No. 95/MENLHK/SETJEN/KUM.1/11/2018 on the Licensing of Hazardous and Toxic Waste Management Integrated with Environmental Permits through OSS.

Under GR 24/2018, a company will be able to apply for and obtain an environmental permit through the OSS without having a UKL-UPL and AMDAL. However, there is a commitment from the company to prepare and then submit the UKL-UPL and AMDAL after the environmental permit is issued. Failure to submit the UKL-UPL and AMDAL will result in the revocation of the environmental permit.

The activities of storing and collecting used lubricant oil is now refined under the Minister of Environment and Forestry Regulation No. P.12/MENLHK/SETJEN/PLB.3/5/2020 on the Storage of Hazardous and Toxic Waste, which was enacted on May 14, 2020. This regulation mandates that all parties producing Hazardous and Toxic Waste (Limbah Bahan Berbahaya dan Beracun, “B3 Waste”) must possess licenses for the storage of B3 Waste and specifies specific requirements and procedures that apply for the storage of B3 Waste are categorized based on areas, methods and period.

Other regulations, including Government Regulation No. 101 of 2014 on the Management of Hazardous and Toxic Waste Materials and Government Regulation No. 74 of 2001 on the Management of Hazardous or Toxic Materials relating to the management of certain materials and waste must be also observed. Flammable, poisonous or infectious waste are subject to these regulations unless the company can prove scientifically that it falls outside the categories set forth in such regulation. These regulations require a company that uses such materials or produces waste to obtain a license from the Minister of Environment and Forestry or other environmental governmental institutions in order to store, collect, utilize, process and/or stockpile such waste. If a company violates the regulations relating to such waste, this license may be revoked and the company may be required to cease operations.

Environmental Quality Standards (Baku Mutu Lingkungan)

The second category of environmental obligations of companies relates to the adherence by companies to the various environmental quality standards applicable to their respective industries or activities. These include, among other things, quality standards pertaining to emission, ambient air, nuisance, water, sea water, waste water and any other quality based on the continuing development of science and technology. Article 68 of the Environmental Law stipulates that all businesses and activities shall adhere to the prevailing regulations regarding quality standards. The national quality standard regarding the environment is governed by Government regulation or ministerial decree. Provincial and municipal governments are also authorized to issue a regional regulation on regional and municipal quality standards. It is therefore important for companies to also review the local regulations on quality standards. In most instances, the quality standards that have been established require companies to report the monitoring of air emissions to the relevant government authority. Technical guidelines have also been provided for implementing the specific standards and their monitoring obligations. Areas of regulation include: (i) quality standards for air emissions from immovable sources; (ii) quality standards for different categories of water; and (iii) quality standards for domestic waste water. One of the relevant regulations that relates to the environmental quality standards in the oil and gas industry is Regulation of the Minister of Environment and Forestry No. 19

of 2010 on Waste Water Quality Standard for the Business and/or Activities of Oil and Gas and Geothermal. Any waste water produced from oil and gas and geothermal activity shall be in compliance with the standards as set out in such regulation.

Sanctions for violating Environmental Quality Standards

Article 98 of the Environmental Law provides that any deliberate violation of the applicable quality standards of ambient air, water, sea water or other criterion or standards of environmental damage will be subject to criminal sanctions in the form of imprisonment (with a minimum period of three years and a maximum period of ten years) and a fine (with a minimum fine of Rp. 3 billion and a maximum fine of Rp. 10 billion). The amount of sanctions may be increased if the violation results in human injury or death.

Moreover, Article 99 of the Environmental Law provides that violation of applicable ambient air, water or sea water quality standards by way of omission is subject to criminal sanctions in the form of imprisonment (with a minimum period of one year and a maximum period of three years), and a fine (with minimum value of Rp. 1 billion and a maximum value of Rp. 3 billion). The amount of sanctions may be increased if the violation results in human injury or death.

In addition to the above, a PSC contractor is also subject to other regulations that relate to specific environmental damage, e.g. the BPMIGAS (now SKK Migas) guideline on oil spills (Guidelines No. 005 of 2011). This guideline sets out the obligations of a PSC company to take steps to: (i) prevent oil spills, for example, preparation of equipment and establishment of emergency response training programs; and (ii) respond to oil spills, for example, notification and search and rescue obligations.

In general, an entity held responsible for an oil spill under the prevailing laws and regulations may be subject to three types of liabilities: criminal liability, civil liability and administrative sanctions. The Environmental Law adopts the strict liability concept, in which a party will be strictly liable for losses resulting from the party's operations if such operation poses significant threats to the environment, uses hazardous and toxic substances and/or generates hazardous and toxic waste. Such strict liability directly and immediately arises upon the occurrence of the environmental pollution and/or damage. SKK Migas has established a specific task force that deals with oil spill occurrences.

A PSC contractor also has a general obligation to preserve the environment under a PSC, and to comply with specific obligations such as abandonment and site restoration obligations under SKK Migas Guidelines No. 40 of 2010, and environmental baseline assessment obligations under SKK Migas Guidelines No. 45 of 2011. Under the PSCs and SKK Migas Guidelines No. 40 of 2010, a PSC contractor must deposit funds into an abandonment and site restoration ("ASR") account once the production stage commences. The ASR account is a joint account of the contractor and SKK Migas. The ASR funds must then be used to comply with the ASR obligations under SKK Migas Guidelines No. 40 of 2010 once the oil and gas activities in the relevant working area have ended. A PSC contractor must comply with its EBA obligations under SKK Migas Guidelines No. 45 of 2011 from the commencement of its activities in its work area. However, for operations under PSCs which were signed before SKK Migas Guidelines No. 45/2011 came into effect, and in relation to which EBA obligations under SKK Migas Guidelines No. 45 of 2011 have not applied, but other environmental assessment obligations (for example, AMDAL obligations) have applied, the PSC contractor must submit the relevant environmental assessment reports to SKK Migas. SKK Migas will then, based on these documents, determine whether the contractor must comply with EBA obligations under SKK Migas Guidelines No. 45 of 2011.

Land Procurement

On December 16, 2011, Parliament passed the Bill on Land Procurement for Public Interest, which came into force on January 14, 2012 as Law No. 2 of 2012 on Land Procurement for Public Interest as

amended by the Job Creation Law (“Land Procurement Law”). On August 7, 2012, the implementing regulation of the Land Procurement Law, that is Presidential Regulation No. 71 of 2012 on Land Procurement Process for Public Interest Project (“PR 71/2012”) was issued. PR 71/2012 has been amended several times and was last amended by Presidential Regulation No. 148 of 2015 on the Fourth Amendment to PR 71/2012. The Land Procurement Law and PR 71/2012 introduce clear and expedited steps for the procurement of land for public interest. The Land Procurement Law and PR 71/2012 are expected to provide a more effective legal basis for public interest land procurement which, prior to the effectiveness of the Land Procurement Law, was regulated by the Presidential Regulation No. 36 of 2005 on Land Procurement for Public Interest, as amended by Presidential Regulation No. 65 of 2006. Under the Land Procurement Law, the term “public interest” is defined as the interest of the Indonesian people, nation and community that should be manifested by the Government and used optimally for the welfare of all of the people of Indonesia. The Land Procurement Law opens the possibility for state-owned enterprises which receive a special assignment from the Government to procure land for public interest projects using the procedures provided under the Land Procurement Law.

Under the Land Procurement Law, the Government and the regional government are given the task of ensuring the availability of land required for public interest. The Land Procurement Law also clearly stipulates that a party (the “Entitled Party”) who owns or otherwise controls the assessable land procurement objects, which are defined as land, space under and above the land, buildings, plants, any object related to the land or other object (“Land Procurement Objects”), is obliged to release its rights upon such Land Procurement Object for the purpose of land procurement in the public interest, following the provision of fair and reasonable compensation or a legally binding court decision. After such land is released, it becomes the property of the Government, the regional government or a state-owned enterprise, as the case may be.

The Land Procurement Law specifically stipulates that the development projects for public interest are, among others, as follows:

- (1) oil, gas and geothermal infrastructure; and
- (2) power plant, power transmission, switch yard, power network and distribution.

Initially, an entity that plans to procure land for the public interest must send a notification to the local society and have a public consultation with the parties related to the Land Procurement Objects, including any Entitled Party regarding the proposed development plan, until a consensus is reached. In the event that no consensus can be reached or if there is any objection to the proposed development plan, the Governor will establish a team to examine the reasons for the objections. Based on this, the Governor will decide whether the objections are valid. To the extent that such objections are denied, the Entitled Party may file a legal claim at the State Administrative Court, whose decision can thereafter be subject to final appeal at the Supreme Court. If by virtue of a legally binding court decision, the land has been approved to be procured for the public interest, then the National Land Agency shall appoint an independent appraisal team to determine the compensation value to be paid to the Entitled Party. To challenge the compensation value, the Entitled Party may file a legal claim at a District Court and, if necessary, the decision of the District Court can be filed for final appeal at the Supreme Court.

Maximum Period for Land Acquisition

If there are no objections or appeal requests, the land acquisition process will take around 309 working days. If there is an objection or appeal request, PR 71/2012 sets out a maximum of 455 working days from the date the Governor receives the land acquisition plan documents until the land certification or registration process. The land title itself is extinguished upon the granting of the

compensation or the deposit of the compensation in the court or upon completion of land title release. PR 71/2012 also allows the commencement of construction above the procured land after delivery of the procured land to the institution that needs the land.

Land Procurement Stage

Under the Land Procurement Law, land procurement can be divided into four stages: planning, preparation, execution and land delivery. PR 71/2012 specifically delegates the implementation of each stage above to relevant officials:

- Planning — The acquiring entity (for example, the Government institution or state-owned enterprise with special assignment from the Government) will be responsible for preparing the land acquisition plan documents, which must be submitted to the relevant Governor.
- Preparation — Preparation is conducted by the relevant Governor through a preparation team which consists of the relevant mayor or regent, relevant units in the province, the acquiring entity and other relevant institutions. The Governor is allowed to delegate these preparatory tasks and authority to the relevant mayor or regent.
- Execution — The execution of land acquisition falls within the authority of the Head of BPN (National Land Agency), which is implemented through the head of the BPN regional office or the head of the land office, which will act as the head of land acquisition (“Head of Land Acquisition”). The Head of Land Acquisition will form a land acquisition team and lead the negotiation with the affected landowners.
- Delivery — The delivery of the procured land to the acquiring entity will be conducted by the Head of Land Acquisition.

Land “Ownership” Evidence

In addition to the holder of land title and right to manage, the Land Procurement Law extends the type of parties who can receive compensation in a land acquisition process by including among others: (i) trustees of waqaf land; (ii) indigenous people (*masyarakat hukum adat*); (iii) people who own land that was formerly indigenous land (*bekas milik adat*); (iv) people who control state land in good faith (among others abandoned land and former western land title); (v) the holders of right to control the land (*pemegang dasar penguasaan atas tanah*); and (vi) owners of buildings, plants, and other materials related to the land. PR 71/2012 provides further details of the types of documents and conditions that prove the “ownership” or entitlement over the land. If there is no sufficient land entitlement evidence for people who own land that was formerly indigenous land and people who control state land in good faith, PR 71/2012 allows the person claiming to own the land to provide supporting evidence in the form of written statements from a minimum of two local people that have no family relationship (until the second degree with the person claiming to own the land) confirming that the person is the real owner or is a person who is entitled to the relevant land.

BUSINESS

Unless otherwise stated, the operational summaries and data in this section (including relating to our natural gas transmission and distribution, LNG production, upstream and downstream oil and gas businesses and strategies, proved plus probable oil and gas reserves, exploratory and development wells, oil and gas fields/blocks and upstream oil and gas production and distribution) exclude information concerning and data of PGN, our 56.96% subsidiary acquired in April 2018, which is listed on the Indonesia Stock Exchange under the ticker symbol “PGAS.”

You should read the following section in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Our Subsidiary, PGN; and the accompanying notes thereto included elsewhere in this Offering Memorandum.

Overview

We are a fully integrated national oil, gas and geothermal company, wholly owned by the Government and headquartered in Jakarta, Indonesia. We have an operating history of more than 60 years. We were established on December 10, 1957 and became an Indonesian limited liability company in 2003.

We are engaged in a broad spectrum of upstream and downstream oil, gas, geothermal, petrochemical and other energy operations. Our lines of business are organized into upstream and downstream sectors in accordance with Indonesian oil, gas and geothermal regulations. In the upstream sector, we engage in the exploration (the search for oil, gas and geothermal energy), development (the drilling and bringing into production of wells in addition to the discovery wells in a field) and production and supply of crude oil, natural gas and geothermal energy in Indonesia and internationally. In the downstream sector, we carry out refining, marketing, distribution and trading of crude oil, natural gas, refined fuel products and petrochemical and other non-fuel products such as green coke, including products for retail, industrial and aviation uses. We are also mandated by the Government to distribute subsidized fuel, LPG and CNG in Indonesia and to assist in its efforts to encourage the use of LPG as a substitute for kerosene in Indonesian households under the kerosene conversion program and to encourage the use of CNG as an alternative fuel.

As of September 30, 2020, our total net proved oil and gas reserves were an estimated 2,025.3 mmboe and our total net proved plus probable oil and gas reserves were an estimated 2,676.0 mmboe. We have the largest base of oil and gas “commercial reserves” in Indonesia as of September 30, 2020, based on Wood Mackenzie’s procedures for reserves categorization. We are also the largest exploration and production player in Indonesia, hold more total blocks and active blocks than any other entity in Indonesia, and have the largest net acreage of all oil and gas companies in Indonesia, according to Wood Mackenzie.

We are the largest oil and gas producer in Indonesia in terms of net working interest production, according to Wood Mackenzie, with 608 kboe/d in 2020. Our total average daily oil and gas production was 921.4 mboe/d in 2018 and 868.0 mboe/d in the nine months ended September 30, 2020. We also have significant geothermal resources and an extensive distribution network of gas pipelines. Our geothermal installed capacity was 1,383 MW as of September 30, 2020. We have a portfolio of six refineries with total refining capacity of 1,031.0 mbbls/d and significant downstream assets and infrastructure, including fuel stations, fuel terminals, LPG filling plants, aviation fuel depots, lube oil blending plants, tankers and CNG refueling stations.

For the years ended December 31, 2017, 2018 and 2019 and the nine months ended September 30, 2020, we had total sales and other operating revenue of US\$46,175.7 million, US\$58,111.2 million, US\$54,792.5 million, and US\$30,250.6 million, respectively. For the years ended December 31, 2017, 2018 and 2019 and the nine months ended September 30, 2020, we had profit/(loss) after the effect of merging entity's income adjustment of US\$2,710.2 million, US\$2,725.7 million, and US\$2,618.0 million, and a loss of US\$(698.0) million, respectively. For a detailed discussion of our results of operations for these periods, see "Management's Discussion and Analysis of Financial Condition and Results of Operations — Results of Operations."

Business Strengths

The Only Fully Integrated Indonesian Oil and Gas Company

We are the only fully integrated Indonesian oil and gas company, and we have a leading market position in both the Indonesian upstream and downstream markets, providing for full integration across the oil and gas value chain.

Leading upstream oil and gas player in Indonesia. We have the largest base of oil and gas "commercial reserves" in Indonesia, based on Wood Mackenzie's procedures for reserves categorization. As of September 30, 2020, our total net proved oil and gas reserves were an estimated 2,025.3 mmboe and our total net proved plus probable oil and gas reserves were an estimated 2,676.0 mmboe. We are the largest oil and gas producer in Indonesia in terms of net working interest production, according to Wood Mackenzie, with 608 kboe/d in 2019. Our total average daily oil and gas production was 900.8 mboe/d in 2019 and 868.0 mboe/d in the nine months ended September 30, 2020. We are also the largest exploration and production player in Indonesia, hold most blocks than any other entity in Indonesia, and have the largest net acreage of all oil and gas companies in Indonesia, according to Wood Mackenzie.

Dominant oil refining, marketing and trading company in Indonesia. Our comprehensive downstream portfolio significantly complements our upstream strengths. We are the dominant refining company in Indonesia, wholly owning and operating six of the nine active oil refineries in Indonesia. Our total production capacity of 1,035.0 kb/d in 2019 based on Wood Mackenzie data. We have extensive downstream infrastructure and an extensive distribution network in Indonesia, which are comprised of pipelines, fuel stations and depots, and shipping vessels. We have a close to a 100% market share for the retail sector. We also have 7,146 branded stations at the end of 2019 according to Wood Mackenzie. We also have a strong presence in the transportation, marketing and distribution markets in Indonesia.

Strategically Positioned in a Fast Growing Domestic Energy Market

Energy demand in Indonesia is projected to increase from 237 million mtoe in 2019 to 284 million mtoe by 2025, representing a CAGR of 3.1%, largely driven by the robust growth of the power sector, according to Wood Mackenzie. Indonesia is currently a net importer of crude oil and refined products, and to meet the escalating demand, based on current domestic output capacity, oil imports are expected to grow significantly. At the same time, the Government has stated its intention to decrease oil imports. We see this as a significant opportunity for growth, which we intend to meet by increasing our oil and gas production capabilities through upstream expansions and acquisitions as well as expanding our refining capacity through upgrades to existing refineries and constructing new refineries.

In particular, gas demand in Indonesia is expected to increase by 0.7 billion cubic feet per day ("bcfd") from 3.4 bcfd in 2019 to 4.1 bcfd in 2025. However, gas demand is expected to contract by

3% in 2020 compared to 2019 due to the COVID-19 pandemic but is expected to recover in 2021, with around 30% of Indonesia's gas demand being met by LNG by 2025, according to Wood Mackenzie. Gas production is forecast to decline from 1.1 Mboe/d in 2019 to 1.0 Mboe/d in 2025, according to Wood Mackenzie. West Java and North Sumatra are expected to continue to face supply constraints due to a decline in the existing piped gas supply into the markets, according to Wood Mackenzie. Several gas-fired power plant projects are also expected to be commissioned within the next five years, which we believe will provide strong growth on the demand side. This shortfall can be remedied by pipeline gas and LNG from Sumatra and Kalimantan, areas where we own large acreage and reserves, and where our sizable gas fields in South Sumatra (Pagar Dewa), West Java (Cirebon) and East Java (Cepu) are located. Several refinery projects, such as the RU IV Cilacap in end 2022 and RU V Balikpapan in end 2023, are also expected to be commissioned within the next five years which we believe will provide strong growth on the demand side that can be supplied by our LNG portfolio.

Indonesia's GDP (at 2010 constant prices) grew at a CAGR of 5.0% between 2012 to 2019 to reach US\$1.1 trillion in 2019, according to the World Bank. Indonesia is poised for robust long-term growth with its expanding working age population and relatively competitive cost environment for businesses, according to Wood Mackenzie. Wood Mackenzie expects Indonesia's GDP to grow from US\$1,205 billion (in 2010 dollars) in 2019 to US\$1,547 billion by 2025, a compounded annual growth rate ("CAGR") of 4.2%., supported by an increase of 13 million in population size from a population of 270 million in 2019. Currently, a large proportion of Indonesians reside in rural areas and remain unconnected to the power grid, according to Wood Mackenzie. Wood Mackenzie expects that as urbanization continues and power grid connectivity improves, demand for other solid fuels will decrease from 25% in 2019 to 21% by 2025, while Indonesian coal will grow from 29% of total energy demand in 2019 to 34% in 2025 driven by increasing supply and cost competitiveness.

Based on our presence across Indonesia and our reserves base, we are strategically positioned to meet expected growth in demand.

Sustained Growth from Significant Reserves, Extensive Downstream Infrastructure Network and Proven Operating Track Record

We have the largest base of oil and gas "commercial reserves" in Indonesia, based on Wood Mackenzie's procedures for reserves categorization. We had estimated total net proved oil and gas reserves of 2,025.3 mmboe and estimated total net proved plus probable oil and gas reserves of 2,799.8 mmboe, as of September 30, 2020. We make new reserve discoveries on an ongoing basis which we believe provides strong reserve replacement and that our portfolio not only provides for production longevity but also serves as a solid foundation for production growth. We expect that our production growth potential in Indonesia will be primarily driven by oil development projects in Cepu, Mahakam and Rokan, gas development projects in Mahakam, Sumatra and Java, strategic domestic acquisitions and enhanced oil recovery projects at existing mature oil fields. Internationally, we successfully completed the acquisition of 72.7% of the share capital of and at least 71.4% of the voting rights in Etablissements Maurel et Prom in February 2017 and through our majority shareholding, and we expect to leverage our international operations in 11 countries towards our aim of securing national energy. In addition, we have an estimated 1300 MW of proved plus probable geothermal reserves as of September 30, 2020, which we believe can drive significant increases in our geothermal production.

We have maintained our leading position in the oil refining, marketing and trading sectors in Indonesia, notwithstanding recent Government initiatives to liberalize the downstream sector, due to our extensive distribution network and supporting infrastructure. We believe that this gives us a substantial advantage over both our domestic and international competitors. For example, we are currently the largest refiner in Southeast Asia by refining capacity and we are the dominant refining company in Indonesia, wholly owning and operating six of the nine active oil refineries in Indonesia,

according to Wood Mackenzie. We intend to expand our refining design capacity to 2,000 mbbls/d by the end of 2030, a growth of approximately 94.0% from 2018, and to increase the number of fuel stations owned and operated by us.

We have over 60 years of operational history, and our management team and staff have a proven track record and extensive expertise in operational, engineering, technological, commercial, and financial matters. Our long operating history in the region has given us a level of institutional knowledge of and experience in the Indonesian market that is difficult for our competitors, international or domestic, to match. Our management has also gained significant expertise and knowledge through our 50-year history of strategic alliances and partnerships with major international oil and gas companies such as ExxonMobil, Shell and BP.

Robust Financial Profile

We have robust cash generating abilities, which have supported our operating margins and allowed us to achieve strong financial ratios. We have generated Adjusted EBITDA levels of over US\$5.0 billion (with Adjusted EBITDA of US\$5.2 billion in 2019) in each of the last three years, and our Adjusted EBITDA levels have generally been healthy despite recent volatility in oil and gas prices. Our stable and strong cash flows are based on long-term contracts for the sale of oil, gas and refined products as well as steam and electricity to a diverse group of domestic and multinational customers, including Mitsui Oil and Mitsubishi. For future offtake contracts, we expect to benefit from a strong and growing customer base for production from our substantial Java and Sumatra assets.

Strong Government Support

As a company wholly owned by the Government, we enjoy strong support from the Government, given the importance of our contribution to domestic revenues and our strategic position in the Indonesian oil and gas sector. We are designated as the Government's oil and gas holding company and the Government's 56.96% interest in PGN was transferred to us, making PGN our subsidiary in April 2018. The Government's policy of providing us with a right to request to take over any oil and gas block in Indonesia for which the cooperation contract has expired also allows us to significantly expand our portfolio of domestic upstream assets and to take on attractive new opportunities. We are also entitled to a transition period from oil and gas contractors whose cooperation contracts are scheduled to expire. For example, we were selected as the administrator of the Mahakam Block beginning early 2018 after the existing administrator's contract expired in December 2017. We have also been selected to manage eight oil and gas working areas where the cooperation contracts expired in 2018. We believe that our oil and gas PSCs with the Government in general have more favorable terms than PSCs signed by foreign or private domestic oil and gas companies. Under PEP's PSCs, our share of profits before tax is 67.2%, compared to 12% to 33% for oil and 28% to 37% for gas under a typical PSC. In addition, PHE and local-government enterprises may be nominated by the Government to receive a 10% working interest in PSCs after the first plan of development is approved by the Ministry of Energy and Mineral Resources as PHE is the subsidiary of a state-owned enterprise.

Business Strategy

Our goal is to become one of Asia's leading integrated energy companies that is globally competitive with major international energy companies and international and national oil companies. To achieve these goals, our development strategy is based on four parameters.

Safeguard Indonesia's Energy Future — We intend to meet Indonesia's increasing energy needs by becoming one of Asia's leading integrated energy companies

We aim to secure energy resources for Indonesia, to maintain a leading position in our existing core businesses, and to become a leading national oil company in Asia with a dominant position in Indonesia and a growing international footprint. To achieve this goal, we plan to cultivate a diverse portfolio of energy resources that can meet Indonesia's future energy needs.

In our upstream oil and gas business, we plan to pursue strategic acquisitions, joint ventures, major block development projects and other investments, including with respect to assets that are in production or advanced stages of development, which will expand our oil, gas and geothermal business, in Indonesia and internationally and develop our gas infrastructure in Sumatra and Java. See “Business — Pertamina Upstream Business — Upstream Strategy” and “Business — Pertamina Gas Business.” We also aim to maintain our existing leadership in our downstream businesses by diversifying and optimizing our refining capabilities, expanding our retail fuel station network and solidifying our market leadership in fuel, gas and petrochemical products distribution in Indonesia. See “Business — Pertamina Downstream Business — Downstream Strategy.”

In the long term, we aim to supplement our existing core businesses and become one of Asia's leading integrated energy companies by expanding our new and renewable energy business into biofuels, biorefineries, photovoltaic power plants, coal conversion and geothermal power strengthening our supply and distribution infrastructure and integrating technology into our business, such as cashless payment systems and digitalized predictive refinery maintenance.

Efficiency — We aim to increase our efficiency and optimize our business operations and technological capabilities

We aim for operational excellence in all of our business activities and intend to consistently achieve above-average efficiency metrics across our operational platform. To achieve this objective, we are focusing on our core businesses and restructuring non-core businesses, streamlining our business processes relating to sales of natural gas and LNG to ensure we obtain optimal pricing, optimizing our upstream assets portfolio and oil recovery activities. We launched the Breakthrough Project (“BTP 2017”) in 2017 with initiatives focused on improving efficiencies across all our business lines and improving the efficiency of our refineries. We are focused on employing enhanced oil recovery activities to increase efficiency and production from existing fields and reactivating idle fields. We aim to optimize our current producing assets and improve profitability. For more information, see “— Pertamina Upstream Business — Upstream Strategy” and “— Pertamina Downstream Business — Downstream Strategy.” We also have a Research and Technology Centre (“RTC”) to serve as an integrated research and development center and to enhance our technological capabilities across our business lines (see “— Research and Development”).

Corporate Governance and Culture — We place a high priority on having a strong corporate governance system and a results-driven culture

We place a high priority on corporate governance, professionalism, and transparency, and have developed codes of conduct and corporate policies and procedures that are in line with those of our international and public counterparts. For example, in 2017, Kementerian Badan Usaha Milik Negara (Indonesia's Ministry of State Owned Enterprises) recognized us as the best state-owned enterprise for corporate governance, our President Director Massa Manik was recognized as best chief operating officer in the visionary category and our various subsidiaries won awards in the categories of human resources, transformation, strategy development, financial performance. We were also named by BrandFinance in 2018 as one of the most valuable brands in Indonesia. In 2020, the Ministry of

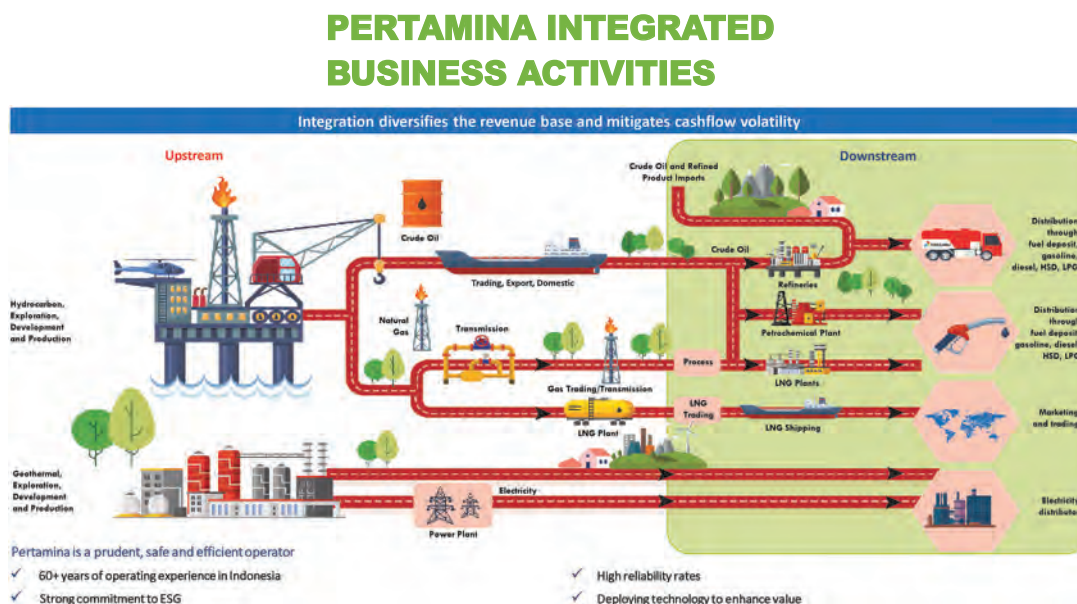
Environment and Forestry of Indonesia awarded us 16 Gold PROPER (Company Performance Rating Assessment Program in Environmental Management) awards and 64 Green PROPER awards. We have established a whistleblowing system and implemented ISO 37001 anti-bribery management system. We have won the Best State-owned Enterprise for Corporate Governance issued by Indonesia's Ministry of State Owned Enterprises in 2017, and are recognized as one of the most valuable brands in Indonesia by BrandFinance in 2018. In addition, our GCG Score Achievement (independently audited) increased steadily from 92% to 92.6% from 2017 to 2019, and we have won the Platinum Awards in Public Relations Indonesian Award for Corporate Communication in 2020. We aim to develop a strong, results-driven corporate culture that demands the highest performance by our management and employees alike. One of our key strategies for achieving this end is through our wide range of training and education programs for our employees. To further our efforts, we are also recruiting and developing high quality managerial and technical teams, with an emphasis on the development of leadership skills.

Positioning — We intend to become a model and a benchmark for other regional companies

We aim to become the preferred company of our customers, partners and potential employees. We also aim to remain one of the most highly regarded companies in Indonesia, setting a solid benchmark for Indonesian companies and other energy companies and oil and gas companies in Asia. By implementing international best practices, we believe that we can serve as a standard in terms of capabilities, technology, managerial processes, health, safety and environmental standards and good corporate governance.

Business Flow

The diagrams below illustrate the integration and flow of our business activities from upstream to downstream and across hydrocarbon and geothermal between our upstream, downstream and LNG operations.



We explore for, develop and produce crude oil, natural gas and geothermal energy from our upstream operations. The majority of the crude oil we produce is sent to our refineries to produce various refined products, including kerosene, gasoline, diesel and other products, some of which are sold as subsidized fuel under our PSO mandate. These products are sold through our marketing and trading division to industrial and retail customers. We trade or sell our crude oil that is of unsuitable standards for our refineries and import crude oil to meet any shortfall in the quantity or quality of

crude oil required by our refineries. Our crude oil and refined products are transported by our shipping division. Our shipping division also transports crude oil, petroleum and non-petroleum products for external customers.

Most of the natural gas we produce is sold directly to our customers using gas pipeline network that we operate and in which we own a significant interest. We also process some of our natural gas to create petrochemical products and LPG, which are sold through our marketing and trading division to retail or industrial customers. In addition to our natural gas production, we also operate facilities that refine LNG and a sea transport network for LNG export to customers in other countries.

The geothermal energy we produce in the form of steam is either sold directly to PLN or private third parties or transmitted to our power plants and used to generate electricity that is then sold to PLN.

Our integrated supply chain division coordinates the supply of feedstock from our production of crude oil and natural gas to our refineries or, in respect of crude oil of unsuitable quality, for export through our trading operations. Our trading operations also coordinate the supply of imported oil and gas to the extent our own production is insufficient to meet demand from our refineries. In addition, our integrated supply chain division coordinates the distribution of our refined products to our marketing and trading division, as well as the import of additional refined products to meet domestic demand. Our integrated supply chain division also gathers and analyzes oil and gas market information on an ongoing basis to support the prudent management of our inventories.

Pertamina Upstream Business

Overview

Our upstream business manages the exploration, development and production of crude oil and natural gas, and technology services as well as drilling services. Our portfolio consists of domestic and overseas assets. The various subsidiaries and joint ventures described below operate our upstream business, which is a business unit of our Company.

PHE, our wholly-owned subsidiary, manages the exploration, development and production of crude oil and natural gas in certain of our partially-owned assets, which includes 37 active domestic blocks in Indonesia, 11 non active blocks and two non active blocks overseas. In 2019, PHE's operations contributed 78,020.0 bbls/d and 802.9 mmcf/d to our total crude oil and natural gas production and in the nine months ended September 30, 2020, PHE's operations contributed 81,697 bbls/d and 785 mmcf/d to our total crude oil and natural gas production.

PEP, our wholly-owned subsidiary, manages the exploration, development and production of crude oil and natural gas from our wholly-owned oil and gas fields, which is comprised of five assets across Sumatra, Java, Kalimantan, Sulawesi and Papua (comprising of four TACs and 26 JOCs). In total, PEP's production fields have an aggregate working area of 113,629.8 km². In 2019, PEP's operations contributed 82,210.0 bbls/d and 958.8 mmcf/d to our total crude oil and natural gas production and in the nine months ended September 30, 2020, PEP's operations contributed 80,360 bbls/d and 855 mmcf/d to our total crude oil and natural gas production.

PEPC, our wholly-owned subsidiary, manages the exploration, development and production of crude oil and natural gas in our Cepu block in partnership with subsidiaries of ExxonMobil Corp. and Regional Owned Enterprises. The Cepu block contains one production field and two development projects in an aggregate working area of 919.2 km² across Bojonegoro and Tuban in East Java and

Blora in Central Java. In 2019, PEPC's operations contributed 102.42 bbls/d and 25.950 mmcf/d to our total crude oil and natural gas production and in the nine months ended September 30, 2020, PEPC's operations contributed 96,982 bbls/d and 23 mmcf/d to our total crude oil and natural gas production.

PT Pertamina EP Cepu ADK ("PEPC ADK"), our wholly-owned subsidiary, manages the exploration of crude oil and natural gas in our Alas Dara Kemuning ("ADK") block in Central Java. The ADK field has a working area of approximately 25.0 km².

PIEP manages 27 of our international oil and gas operating assets. These assets are in various stages of exploration, development and production, and are located in Algeria, Tanzania Gabon, Namibia, and Nigeria in Africa; Malaysia and Iraq in Asia; Canada, Venezuela and Columbia in the Americas; and France and Italy in Europe. In 2019, PIEP's operations contributed 104,110.0 bbls/d and 273.4 mmcf/d to our total crude oil and natural gas production and in the nine months ended September 30, 2019, PIEP's operations contributed 99,379 bbls/d and 255 mmcf/d to our total crude oil and natural gas production.

PT Pertamina Hulu Indonesia ("PHI"), our wholly-owned subsidiary, is the holding company that manages the latest terminated working areas granted from the Government. PHI operated Mahakam, Sanga, East Kalimantan & Attaka and West Ganai Blocks. In 2019, PHI's operations contributed 51,400.0 bbls/d and 761.5 mmcf/d to our total crude oil and natural gas production and in the nine months ended September 30, 2020, PHI's operations contributed 52,148 bbls/d and 729 mmcf/d to our total crude oil and natural gas production.

PT Pertamina Geothermal Energy ("PGE"), our wholly-owned subsidiary, manages our geothermal operations. As of September 30, 2020, PGE managed 15 geothermal concessions in Indonesia, covering an area of 20,261 km². Of our 12 own-operated working areas, six were in the production stage and six were in the exploration or development stage. Of our five working areas jointly operated through JOCs, four were in the production stage and one was in the development stage. We have 1,383 MW of estimated proved and probable reserves plus contingent resources in our geothermal concessions (exclude working areas operated through JOCs). The total installed capacity of PGE-owned operations is 672 MW as of September 30, 2020, consisting of 235 MW in the Kamojang area, 120 MW in the Lahendong and Tompasso area, 220 MW in the Ulubelu area, 12 MW in the Sibayak area, 55 MW in Lumut Balai area, and 30 MW in the Karaha area. In 2019, our geothermal projects produced 32,517 mt of steam or 4,292 GWh in electricity equivalent and in the nine months ended September 30, 2020, our geothermal projects produced 26,614 mt of steam or 3,457 GWh in electricity equivalent.

PGE continues to undertake geothermal exploration and development activities in all managed areas, which are Seulawah, Sungai Penuh, Hululais, Lumut Balai, Gunung Lawu and Kotamobagu. See "— Geothermal" for more information on our geothermal operations.

Our upstream business also includes support businesses, including those operated by our wholly-owned subsidiaries, PT Pertamina Drilling Services Indonesia ("PDSI") and PT Elnusa Tbk ("Elnusa"). PDSI provides drilling services to support our oil and gas and geothermal development activities, while Elnusa provides integrated upstream oil and gas services and downstream oil and gas services.

Reserves

As of September 30, 2020, our total estimated net proved oil and gas reserves were 2,025.3 mmbbls, consisting of 1,027.6 mmbbls of oil and 5,780.6 bcf of gas, and our estimated total net proved plus probable oil and gas reserves were 2,676.0 mmbbls, consisting of 1,365.4 mmbbls of oil and 7,593.1 bcf of gas. In 2019, we had total average daily net oil and gas production of 894 mboe/d,

consisting of 410 mbbbls/d of oil and 2806 mmcf/d of gas and in the nine months ended September 30, 2020, we had total average daily net oil and gas production of 868 mboe/d, consisting of 410 mbbbls/d of oil and 2648 mmcf/d of gas.

See “— Reserves” and “— Production” for more information on our oil and gas reserves and production, respectively.

Upstream Strategy

In our upstream business, our strategy is to increase oil and gas production and reserves by improving our recovery from existing assets and continuing to pursue strategic acquisitions, joint ventures, major block development projects and other investments that will expand our oil and gas businesses in and outside Indonesia. We also aim to grow our upstream business by assuming sole or joint management of domestic oil and gas blocks as existing operating contracts expire. Selected recent examples of implementation of this strategy include the following:

- in February 2017, we acquired 72.7% of the share capital of and at least 71.4% of the voting rights in M&P, a French multinational oil and gas company listed on the Paris Stock Exchange with exploration and production assets in Africa, Europe and Latin America. M&P has total proved and probable oil and gas reserves of 231.6 mmboe as of December 31, 2018 and had crude oil and natural gas production of 21,263 boepd and 33.4MMCFD respectively as of June 30, 2020. The acquisition was completed in February 2017;
- the Government selected PHM, a subsidiary of PHI to become the operator of the Mahakam Block beginning January 2018 after the existing operator’s contract expired in December 2017. In addition, in 2017, PHE increased its stake in the Offshore North West Java block from 58.3% to 100.0% after the previous operator’s contract expired; PHE has transferred 10% of its stake in the Offshore North West Java Block to PT Migas Hulu Jabar ONWJ in 2018;
- the Government selected us as the operator of the Rokan Block in Sumatra for 20 years beginning in August 2021. In addition, the Government had also assigned us to manage eight oil and gas working areas where the cooperation contracts expired in 2018, including the Tuban Block, Ogan Komering Block, Sanga Block, South East Sumatera Block (SES), Tengah Block, North Sumatra Offshore Block, East Kalimantan Block and Attaka Block; and
- lastly, we acquired additional participating interests of 20 % in the Corridor, taking our total interests in these blocks to 30% as well as Rokan’s operatorship in August 2021.

We may also opportunistically pursue strategic alliances and joint ventures, because we believe that by developing oil and gas assets through strategic alliances with experienced international oil and gas companies, we can supplement and strengthen our technical and management capabilities.

We are focused on employing enhanced oil recovery activities to increase efficiency and production from existing fields and reactivating idle fields. We aim to optimize our current producing assets and improve profitability by increasing production volumes, reducing lifting and production costs, and optimizing operational processes.

Finally, in 2017, we established our RTC to centralize and integrate our research and development initiatives with the goals of improving production output and efficiency, formulating technological

strategies to meet our current and future needs, and enhancing our technological capabilities. In the upstream sector, the RTC focuses on five key areas of research and development, namely exploration, development, production, drilling and geothermal.

Oil and Gas

Our upstream oil and gas operations are conducted through our own operations as well as through joint operating arrangements. We have an interest in 45 domestic active blocks, 13 process relinquished blocks, and 27 blocks are located in Algeria, Iraq, Malaysia, Tanzania, Gabon, Nigeria, Canada, Colombia, Vietnam, Namibia, France, Italy and Venezuela, and are operated through partners or third parties via joint operating arrangements. We own-operate 30 of our blocks in Indonesia, while the remaining 15 of our blocks in Indonesia are operated through partners or third parties via joint operating arrangements.

Oil and Gas Reserves

As of September 30, 2020, our total estimated net proved oil and gas reserves were 2,025.3 mmbbl, consisting of 1,027.6 mmbbl of oil and 5,780.6 bcf of gas, and our estimated total net proved plus probable oil and gas reserves were 2,676.0 mmbbl, consisting of 1,365.4 mmbbl of oil and 7,593.1 bcf of gas.

Except where attributed to Wood Mackenzie, the information on our historical oil and gas reserves in this Offering Memorandum is based on our estimated “net reserves” and, as such, represents our aggregate share of the estimated crude oil and/or natural gas reserves in all blocks or fields or specified areas, attributable to our working interest in such areas, before deducting the share payable to the Government as owner of the reserves pursuant to the terms of the relevant production sharing arrangement, the cost recovery portion and any applicable taxes. “Proved reserves” represent those quantities of crude oil and/or natural gas which, by analysis of geological and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under current economic conditions, operating methods and Government regulations. “Proved developed reserves” are those crude oil and/or natural gas reserves that are expected to be recovered through existing wells with existing equipment and operating methods. “Proved undeveloped reserves” are those reserves that are expected to be recovered from new wells on undrilled acreage or from existing wells where a relatively major expenditure is required for recompletion. “Proved plus probable reserves” are proved reserves plus those reserves that are unproved reserves which analysis of geological and engineering data suggests are more likely than not to be recoverable.

The oil and gas reserves at our blocks and fields have been estimated by us on the basis of our oil and gas resource management system, which contains procedures for classifying and estimating reserves. Until December 31, 2018, the procedures for our oil and gas resource management system and the classifications of our reserves were consistent with PRMS 2007. PRMS 2007 was generally considered the oil and gas industry standard for reserve reporting until it was superseded by PRMS 2018 in 2018. Accordingly, in this Offering Memorandum, except where attributed to Wood Mackenzie, estimates of our oil and gas reserves as of December 31, 2018 and 2017 have been prepared in a manner consistent with PRMS 2007. Beginning in 2019, we began classifying and estimating our reserves in a manner consistent with PRMS 2018. Accordingly, in this Offering Memorandum, estimates of our oil and gas reserves as of December 31, 2019 and September 30, 2020 have been prepared in a manner consistent with PRMS 2018. The characteristics of the estimation uncertainty of natural reservoirs of oil and gas reserve may lead to changes in the estimated reserves due to the additional data obtained by us.

Investors should note that different reserves reporting systems employ different assumptions, and that our methodologies for classifying reserves and our reserves classifications vary in certain respects

from the methodologies and classifications used by oil and gas companies subject to the reporting obligations of the SEC. As a result, because of the impact of such assumptions or differences in the methodologies of resource management systems, identical raw data can produce varying estimates of reserves.

Estimates of reserves are largely dependent on the interpretation of data obtained from drilling, testing and production and may prove to be incorrect over time. Estimates of proved reserves that may be developed and produced in the future are frequently based upon volumetric calculations and by analogy to similar types of reservoirs, rather than upon actual production history. Subsequent evaluation of the same reservoirs based upon production history may result in revisions to the estimated proved or proved plus probable reserves. An estimate of reserves is based in part on a field's long-term development plan, and reserves are classified or adjusted and re-classified as contingent where a long-term development plan is not available or up-to-date, for example where a field is under evaluation for future investment and development. The estimation of reserves involves a significant degree of judgment by our management, engineers and technical personnel. Reserves estimates are subject to various uncertainties, including those relating to the physical characteristics of oil and gas fields, as well as changes in oil prices. These uncertainties are difficult to estimate and, as a result, actual production may be materially different from current estimates of reserves. No assurance can be given that the reserves presented in this Offering Memorandum will be recovered at the levels presented. See "Risk Factors — Risks Relating to Our Upstream Operations — Our crude oil, natural gas and geothermal reserve estimates are uncertain and may prove to be incorrect over time or may not accurately reflect actual reserve levels, or even if accurate, technical limitations may prevent us from retrieving these resources."

For instance, the definitions of "proved reserves" and "probable reserves" under our management system vary in certain respects from the definition of "proved oil and gas reserves" used by the SEC, which could cause our reported reserves numbers to be different than if measured based upon the SEC definition.

Rule 4-10(a)(22) of Regulation S-X under the Securities Act defines "proved oil and gas reserves" as follows:

Proved oil and gas reserves. Proved oil and gas reserves are those quantities of oil and gas, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible — from a given date forward, from known reservoirs, and under existing economic conditions, operating methods, and government regulations — prior to the time at which contracts providing the rights to operate expire, unless evidence indicates that renewal is reasonably certain, regardless of whether deterministic or probabilistic methods are used for the estimation. The project to extract the hydrocarbons must have commenced or the operator must be reasonably certain that it will commence the project within a reasonable time.

- a. The area of the reservoir considered as proved includes:
 - (i) the area identified by drilling and limited by fluid contacts, if any; and
 - (ii) adjacent undrilled portions of the reservoir that can, with reasonable certainty, be judged to be continuous with it and to contain economically producible oil or gas on the basis of available geoscience and engineering data.
- b. In the absence of data on fluid contacts, proved quantities in a reservoir are limited by the lowest known hydrocarbons as seen in a well penetration unless geoscience, engineering, or performance data and reliable technology establishes a lower contact with reasonable certainty.

- c. Where direct observations from well penetrations has defined a highest known oil elevation and the potential exists from an associated gas cap, proved oil reserves may be assigned in the structurally higher portions of the reservoir only if geoscience, engineering, or performance data and reliable technology establish the higher contact with reasonable certainty.
- d. Reserves which can be produced economically through application of improved recovery techniques (included, but not limited to, fluid injection) are included in the proved classification when:
 - (i) successful testing by a pilot project in an area of the reservoir with properties no more favorable than in the reservoir as a whole, the operation of an installed program in the reservoir or an analogous reservoir, or other evidence using reliable technology establishes the reasonable certainty of the engineering analysis on which the project or program was based; and
 - (ii) the project has been approved for development by all necessary parties and entities, including governmental entities.
- e. Existing economic conditions include prices and costs at which economic producibility from a reservoir is to be determined. The price shall be the average price during the 12-month period prior to the ending date of the period covered by the report, determined as an unweighted arithmetic average of the first-day-of-the-month price for each month within such period, unless prices are defined by contractual arrangements, excluding escalations based upon future conditions.

Rule 4-10(a)(18) of Regulation S-X under the Securities Act defines “probable reserves” as follows:

Probable reserves. Probable reserves are those additional reserves that are less certain to be recovered than proved reserves but which, together with proved reserves, are as likely as not to be recovered.

- a. When deterministic methods are used, it is as likely as not that actual remaining quantities recovered will exceed the sum of estimated proved plus probable reserves. When probabilistic methods are used, there should be at least a 50% probability that the actual quantities recovered will equal or exceed the proved plus probable reserves estimates.
- b. Probable reserves may be assigned to areas of a reservoir adjacent to the proved reserves where data control or interpretations of available data are less certain, even if the interpreted reservoir continuity of structure or productivity does not meet the reasonable certainty criterion. Probable reserves may be assigned to areas that are structurally higher than the proved area if these areas are in communication with the proved reservoir.
- c. Probable reserves estimates also include potential incremental quantities associated with a greater percentage recovery of the hydrocarbons in place than assumed for proved reserves.

In addition:

- (i) Proved plus probable and proved plus probable plus possible reserves estimates must be based on reasonable alternative technical and commercial interpretations within the reservoir or subject project that are clearly documented, including comparisons to results in successful similar projects.

- (ii) Where direct observation has defined a highest known oil elevation and the potential exists for an associated gas cap, proved oil reserves should be assigned in the structurally higher portions of the reservoir above the highest known oil elevation only if the higher contact can be established with reasonable certainty through reliable technology. Portions of the reservoir that do not meet this reasonable certainty criterion may be assigned as probable and possible oil or gas based on reservoir fluid properties and pressure gradient interpretations.

We are not a reporting company in the United States and so we are not required to report our reserves in accordance with SEC definitions. If we were to become a reporting company in the United States, then our proved and proved plus probable reserves would need to be adjusted to comply with the SEC's reporting standards and the adjustments could be material.

PRMS 2007 and 2018 define "proved reserves" as those quantities of petroleum, which, by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under defined economic conditions, operating methods, and government regulations. If deterministic methods are used, the term "reasonable certainty" is intended to express a high degree of confidence that the quantities will be recovered. If probabilistic methods are used, there should be at least a 90% probability that the quantities actually recovered will equal or exceed the estimate. "Probable reserves" are defined as those additional reserves which analysis of geoscience and engineering data indicate are less likely to be recovered than "proved reserves" but more certain to be recovered than possible reserves. It is equally likely that actual remaining quantities recovered will be greater than or less than the sum of the estimated proved plus probable reserves. In this context, when probabilistic methods are used, there should be at least a 50% probability that the actual quantities recovered will equal or exceed the sum of the estimated proved plus probable reserves.

We determine the oil and gas reserves for each block and field at the end of each year by taking the previous year's proved plus probable reserve determination (or initial estimate, as the case may be) and adding or subtracting any revisions of previous estimates, subtracting production for the year, then adding extensions and discoveries, acquisitions and divestments and any improved recovery for the year. To determine our total net proved plus probable consolidated oil and gas reserves at the end of each year, we total the oil and gas reserve values for each block as of the end of the year and add any additional reserves attributable to discovery and development and subtract total production for the year. To determine our total net proved consolidated oil and gas reserves at the end of each year, we subtract total probable reserves from the total proved plus probable reserves for the year. The following table sets forth our estimated aggregate net proved and probable reserves as at the dates indicated and the factors which, over the periods indicated, reduced or increased our estimated aggregate net proved and probable reserves.

	<u>Crude Oil</u> <u>(mmbbls)</u>	<u>Natural Gas</u> <u>(bcf)</u>	<u>Combined</u> <u>(mmboe)</u>
2020 (as of September 30, 2020)⁽¹⁾			
Total net proved plus probable reserves (as of January 1, 2020)	1,434.4	7,910.6	2,799.8
Revisions of previous estimates ⁽²⁾	(2.6)	(101.9)	(20.1)
Extensions and discoveries ⁽³⁾	34.5	330.1	91.5
Acquisitions and divestments	—	—	—
Production	(101.0)	(545.8)	(195.2)
Total net proved plus probable reserves (as of September 30, 2020)	<u>1,365.4</u>	<u>7,593.1</u>	<u>2,676.0</u>
Probable reserves	337.8	1,812.5	650.7
Total net proved reserves (as of September 30, 2020)	<u>1,027.6</u>	<u>5,780.6</u>	<u>2,025.3</u>
2019⁽¹⁾			
Total net proved plus probable reserves (as of January 1, 2019)	1,362.8	7,825.4	2,713.4
Revisions of previous estimates ⁽²⁾	7.8	(203.4)	(27.3)
Extensions and discoveries ⁽³⁾	189.0	793.4	325.9
Acquisitions and divestments	13.4	267.1	59.5
Production	(138.5)	(771.9)	(271.8)
Total net proved plus probable reserves (as of December 31, 2019)	<u>1,434.4</u>	<u>7,910.6</u>	<u>2,799.8</u>
Probable reserves	326.9	1,780.3	634.2
Total net proved reserves (as of December 31, 2019)	<u>1,107.5</u>	<u>6,130.3</u>	<u>2,165.6</u>
2018			
Total net proved plus probable reserves (as of January 1, 2018)	1,606.3	8,574.0	3,084.6
Revisions of previous estimates ⁽²⁾	(279.5)	(1,993.2)	(621.9)
Extensions and discoveries ⁽³⁾	46.0	164.6	74.4
Acquisitions and divestments	120.2	1,909.1	449.7
Production	(130.3)	(829.2)	(273.4)
Total net proved plus probable reserves (as of December 31, 2018)	<u>1,362.8</u>	<u>7,825.4</u>	<u>2,713.4</u>
Probable reserves	290.7	1,628.0	571.7
Total net proved reserves (as of December 31, 2018)	<u>1,072.0</u>	<u>6,197.4</u>	<u>2,141.7</u>
2017⁽¹⁾			
Total net proved plus probable reserves (as of January 1, 2017)	1,719.1	9,452.0	3,350.6
Revisions of previous estimates ⁽²⁾	(287.7)	(962.9)	(455.5)
Extensions and discoveries ⁽³⁾	157.3	277.6	205.2
Acquisitions and divestments	128.8	431.0	203.2
Production	(111.2)	(623.8)	(218.8)
Total net proved plus probable reserves (as of December 31, 2017)	<u>1,606.3</u>	<u>8,574.0</u>	<u>3,084.6</u>
Probable reserves	356.6	1,655.0	641.6
Total net proved reserves (as of December 31, 2017)	<u>1,249.7</u>	<u>6,919.0</u>	<u>2,443.0</u>

Notes:

(1) Beginning in 2019, we began classifying and estimating our reserves in a manner consistent with PRMS 2018. Accordingly, estimates of our oil and gas reserves as of December 31, 2019 and September 30, 2020 have been prepared in a manner

consistent with PRMS 2018. Estimates of our oil and gas reserves as of December 31, 2018 and 2017 have been prepared in a manner consistent with PRMS 2007. Investors should note that different reserves reporting systems employ different assumptions, and that our methodologies for classifying reserves and our reserves classifications vary in certain respects from the methodologies and classifications used by oil and gas companies subject to the reporting obligations of the SEC. As a result, because of the impact of such assumptions or differences in the methodologies of resource management systems, identical raw data can produce varying estimates of reserves.

- (2) Revisions of previous estimates represent changes over the course of the periods indicated in previous estimates of reserves, either up or down, resulting from new information normally obtained from development drilling and production activities.
- (3) Extensions and discoveries represent additions to the proved plus probable reserves that result from (i) extensions of previously discovered fields demonstrated to exist subsequent to the original discovery, and (ii) the discovery of reserves in new fields or new reservoirs in old fields, in each case over the course of the periods indicated.

The following table sets forth our estimated net proved and probable reserves by region as of September 30, 2020.

	<u>Crude Oil</u> <u>(mmbbls)</u>	<u>Natural Gas</u> <u>(bcf)</u>	<u>Combined</u> <u>(mmboe)</u>
Sumatra	208.4	1,946.3	544.3
Java	631.5	2,897.0	1,131.6
East Indonesia (Kalimantan, Sulawesi and Papua)	151.9	2,200.7	531.7
Overseas	373.5	549.1	468.3
Total	<u>1,365.4</u>	<u>7,593.1</u>	<u>2,676.0</u>

As of September 30, 2020, our net proved plus probable reserves have an estimated average life of 9.7 years and our net proved reserves have an estimated average life of 7.3 years. For more information about reserves estimates, see “Presentation of Financial and Other Data — Oil and Gas Reserves.”

Oil and Gas Exploration and Development

We are involved in the exploration for and development of oil and gas assets onshore and in shallow-and deep-water environments. Our exploration operations include aerial surveys, geological and geophysical studies (such as seismic surveys), drilling of exploration wells, core testing and well logging. Seismic surveys involve recording and measuring the rate of transmission of shock waves through the earth with a seismograph. Upon striking rock formations, the waves are reflected back to the seismograph. The time lapse is a measure of the depth of the rock formation. The rate at which waves are transmitted varies with the media through which they pass. Seismic surveys can provide either three-dimensional (“3D”) or two-dimensional (“2D”) results, with 3D surveys generally giving a more detailed picture and 2D surveys being able to cover a wider area. The majority of our seismic surveys are 2D surveys, which we use for exploration and development of our onshore fields. We tend to use 3D surveys for our offshore fields or onshore producing fields.

We analyze the seismic data produced from our exploration activities to understand the underground strata in a given field and to form a view as to whether further exploration activity in that field is warranted. The actual existence of any oil or gas must be confirmed, usually by drilling and exploration well. If the exploration well confirms discovery (i.e., is “successful”), we may then drill delineation wells to obtain more detailed data on the reservoir formation. Once the presence of oil or gas in commercially recoverable quantities is proved, or the delineation wells are “successful,” development wells may be drilled to prepare for production. A field is considered to be developed when it has a well which is capable of producing oil or gas in paying quantities. We may also restore or increase production in producing wells and abandoned wells (wells which are no longer in use).

Through our exploration operations, we seek to carefully select candidates with the highest probability of success in order to manage our exploration and development costs. In 2019, our exploration drilling activities resulted in 15 wells consisting of 9 wells at PEP, 4 wells at PHE, and 2 wells at PIEP. In 2019, our total 2D Seismic realization was 4,775 km consisting of 484 km at PEP and 4,291 km at PHE, and our total 3D Seismic realization was 645 km² consisting of 469 km² at PEP and 176 km² at PHE. In the years ended December 31, 2017, 2018 and 2019 and the nine-month period ended September 30, 2020, our success rates for our exploration well drilling were 42.9%, 62.9%, 71.4% and 42.8%, respectively.

The following table sets forth the number of exploratory and development wells completed by us on our properties as at the dates indicated.

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
Gross exploratory wells drilled ⁽¹⁾	20	13	14	9	7
Crude oil	1	2	3	1	—
Natural gas	1	2	3	1	1
Crude oil and natural gas	10	5	4	4	2
Dry ⁽²⁾	8	4	4	3	4
Gross development wells drilled ⁽¹⁾	91	171	225	223	190
Crude oil	64	74	53	99	62
Natural gas	2	53	38	79	38
Crude oil and natural gas	25	34	113	45	41
Dry ⁽²⁾	0	0	21	0	0

Notes:

(1) “Gross” wells refer to all exploratory or development wells, as the case may be, without deducting interests held by others.

(2) “Dry” wells are exploratory or development wells, as the case may be, incapable of producing oil or gas in sufficient quantities to justify completion of exploration as an oil or gas well.

The following table sets forth the number of exploratory and development wells completed by us on our properties by region as at the dates indicated.

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
Gross exploratory wells drilled ⁽¹⁾	20	13	14	9	7
Productive					
Sumatra	4	2	4	6	—
Java	4	4	3	1	1
East Indonesia (Kalimantan, Sulawesi and Papua)	4	3	1	2	2
Overseas	0	0	2	1	—
Dry ⁽²⁾					
Sumatra	5	2	2	2	1
Java	3	1	1	3	2
East Indonesia (Kalimantan, Sulawesi and Papua)	0	1	1	2	1
Overseas	0	0	—	0	—
Gross development wells drilled ⁽¹⁾	91	171	225	223	190
Sumatra	15	27	24	48	33
Java	16	26	22	11	22
East Indonesia (Kalimantan, Sulawesi and Papua)	43	98	154	139	122
Overseas	17	20	25	25	13

Notes:

(1) “Gross” wells refer to all exploratory or development wells, as the case may be, without deducting interests held by others.

(2) “Dry” wells are exploratory or development wells, as the case may be, incapable of producing oil or gas in sufficient quantities to justify completion of exploration as an oil or gas well.

Exploration and development plans. Currently, we have plans to continue exploration efforts in all of our existing blocks using 2D and 3D seismic surveys and drilling exploration wells and delineation wells in our existing blocks.

We have set a target to drill up to 233 development wells by the end of 2020. Our basic strategy of field development is to monetize oil and gas discoveries economically. We have a similar approach to our construction of facilities by maximizing the usage of readily available materials, equipment and personnel and using simple designs for our production operations.

Through PHE, we have entered into PSCs for the exploration and development of coal bed methane in domestic working areas with contract terms of 30 years having end dates beyond 2038. PHE relinquished and farm out for 10 contracts and focus on six own operated unconventional contracts. Finally, we have conducted studies, including field studies in Bengkulu, Palembang, Bangka Belitung and Salawati, to broaden our exploration activities beyond the earth's tertiary layer to its pre-tertiary layers.

Drilling operations. Our oil and gas exploration and development activities require extensive drilling expertise and support. Our wholly owned subsidiaries PDSI and Elnusa, provide land drilling services, integrated drilling project management and drilling tools to support our onshore drilling activities. In total, we have a fleet of 40 onshore drilling rigs located across Indonesia. Through PDSI and Elnusa, we are able to provide most of the drilling services needed for our onshore exploration and development activities. The remainder are provided by third-party contractors. Our aim is to expand our drilling operations to support third party and offshore operations in the future. We are currently in the process of investing in direct current electric drills, which are more efficient and environmentally friendly than mechanical drill.

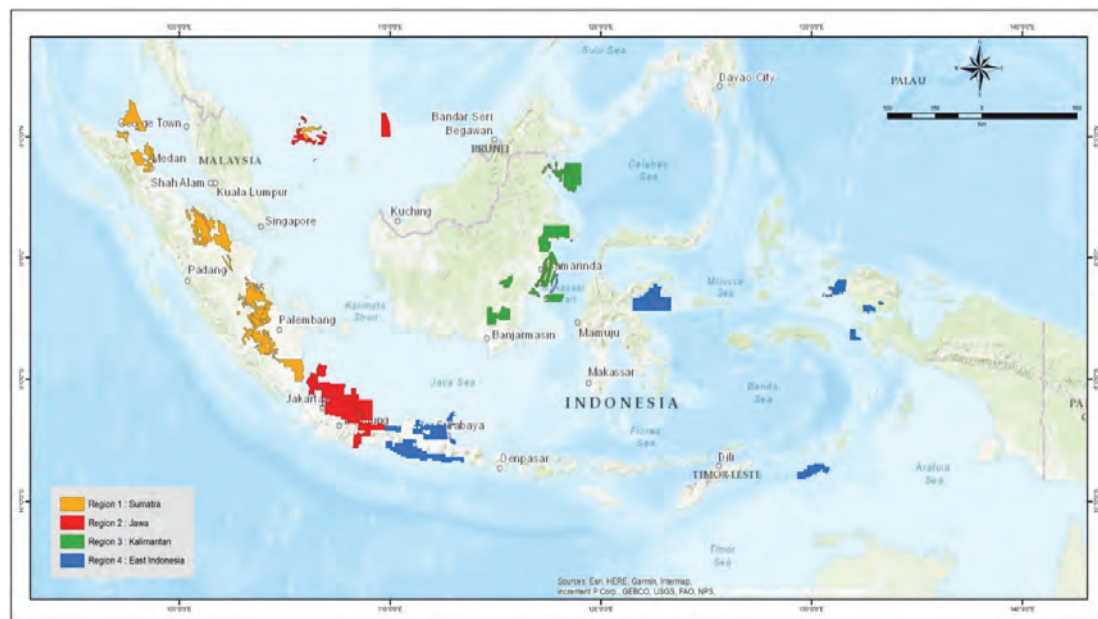
Oil recovery activities. We conduct secondary recovery activities to enhance our existing oil reserves. Our common method is water flooding, in which water is injected into a reservoir formation to displace residual oil. The water from injection wells physically sweeps the displaced oil to adjacent production wells. We use our own technology and operators to conduct the water flooding. We also reactivate idle fields, if feasible, to further enhance our existing oil reserves.

We are currently exploring the use of carbon dioxide and chemical injections as alternative methods of tertiary recovery to further enhance our existing oil reserves.

Description of material Indonesian properties. Our oil and gas activities in Indonesia are primarily carried out through various production sharing arrangements and cooperation contracts covering 72 active blocks, including PSCs, TACs/OCs, JOBs, IPs, PPIs and unitization with various partners for coal bed methane. Of our blocks in Indonesia, we have more than 6,307 wells currently in commercial production. See "Indonesian Regulatory Framework" for a discussion of certain of the terms and conditions of the production sharing arrangements and cooperation contracts under Indonesian law.

Other than our PEP block, our top four producing blocks are Cepu (managed by ExxonMobil Cepu Ltd.), Pertamina Hulu Mahakam (managed by Pertamina Hulu Mahakam), Offshore North West Java (managed by Pertamina Hulu Energi Offshore North West Java ("PHE ONWJ")), and OSES (managed by Pertamina Hulu Energi Offshore South East Sumatra ("PHE OSES")), based on combined oil and gas production in 2020. The top three fields with the largest oil reserves are the Banyu Urip field in the Cepu block, Offshore North East Java, and West Qurna 1. The three fields with the largest gas reserves are Mahakam, Senoro Toili and Offshore North East Java.

The following map illustrates our domestic upstream operations as of September 30, 2020.



The following tables set forth certain information regarding our material upstream operations as of September 30, 2020, other than PEPC ADK's Alas Dara Kemuning block, which is in the exploration stage.

PHE

Block	Working Interest (%)	Contract Term	Partners	Estimated Net Proved and Probable Reserves		Average Net Annual Production	
				Oil (mmbbbls)	Gas (bcf)	Oil (bbls/d)	Gas (mmcf/d)
Corridor	10.0	December 20, 2003 to December 20, 2023	Conoco Phillips (Grissik) LTD (54%) (operator), Talisman (36%)	0.9	155.2	622	93.0
CPP	50.0	August 9, 2002 to August 8, 2022	PT Bumi Siak Pusako (50.0%) (operator BOB Pertamina Bumi Siak Pusako)	7.7	—	4,590	—
Jabung	14.2	February 27, 1993 to February 26, 2023	Petrochina (Jabung) LTD (21.85%) (operator), Petronas (21.85%), PP Oil & GAS (30%), GPI Jabung 12%	8.1	55.2	2,351	39.8
Jambi Merang	100.0	February 10, 2019 to February 10, 2039		9.2	217.7	4,533	99.0
Offshore North West Java	90.0	January 19, 2017 to January 18, 2037	PT MUJ-BUMD (10.0%)	309.3	766.8	28,933	90.6
Offshore South East Sumatera	100.0	September 6, 2018 to September 5, 2038		74.8	96.3	25,533	83.5
Ogan Komering	100.0	May 19, 2018 to May 18, 2038		8.8	7.5	1,476.00	5.20
Senoro Toili	50.0	December 4, 1997 to December 3, 2027	PT Medco E&P Tomori Sulawesi (30.0%), Tomori E&P Ltd. (20.0%)	6.8	451.4	3,903	165.3
Tuban	100.0	May 19, 2018 to May 18, 2038		2.0	2.6	1,103	1.7
West Madura Offshore	80.0	May 7, 2011 to May 6, 2031	Kodeco Energy Co LTD (20.0%)	18.1	145.4	2,339	74.6

Block	Working Interest (%)	Contract Term	Partners	Estimated Net Proved and Probable Reserves		Average Net Annual Production	
				Oil (mmbbls)	Gas (bcf)	Oil (bbls/d)	Gas (mmcf/d)
Siak	100.0	May 28, 2014 to May 27, 2034	—	6.7	—	1,687	0
North Sumatera Offshore	100.0	October 16, 2018 to October 15, 2038	—	0.2	81.5	59	37.1
Simenggaris	37.5	February 24, 1998 to February 23, 2028	Medco Simenggaris Pty Ltd (41.5%), Salamander Energy Ltd (21%)	—	8.3	0	0.03
Kampar	100.0	January 1, 2016 to December 31, 2036	—	2.0	—	1,081	0
Kakap	10.0	March 22, 2005 to March 21, 2028	Star Energy (Kakap) Ltd (56.25%), Premier Oil Kakap BV (18.75%), and Singapore Petroleum Co. Ltd (15%)	0.9	16.5	158	3.1
Blok A (Natuna Sea)	11.5	October 16, 2009 to October 15, 2029	Premier Oil Natuna Sea Ltd (28.7%), Kufpec Indonesia (Natuna) B.V. (33.33%) and Natuna I B.V. (15%)	1.0	63.5	247	23.6
Randugunting	100.0	August 9, 2007 to August 8, 2037	—	**	**	**	**
Abar	100.0	May 22, 2015 to May 21, 2045	—	**	**	**	**
Anggursi	100.0	May 22, 2015 to May 21, 2045	—	**	**	**	**
Nunukan	83.7	December 12, 2004 to December 11, 2034	PHE NE 83.77%, BPRL 16.23%	**	**	**	**
Ambalat	33.75	September 27, 1999 to September 26, 2029	Eni Ambalat Ltd (66.25%)	**	**	**	**
East Ambalat	100.0	May 25, 2016 to May 24, 2036	—	**	**	**	**
Maratua	100.0	February 28, 2018 to February 27, 2038	—	**	**	**	**
Bukat	33.75	February 24, 1998 to February 23, 2028	Eni Bukat Ltd (66.25%)	**	**	**	**
East Sepinggan	15.0	July 20, 2012 to July 20, 2042	Eni East Sepinggan Ltd (85%)	—	122.1	**	**
Babar Selaru	15.0	November 21, 2011 to November 20, 2041	Inpex Babar Selaru (85%)	**	**	**	**
Tanjung Enim	27.5	August 4, 2009 to August 3, 2039	PT Bukit Asam Metana Enim (27.5%), Dart Energy (Tanjung Enim) Pte Ltd (45%)	**	**	**	**
Muara Enim	60.0	November 30, 2009 to November 29, 2039	PT Trisula CBM Energy (40%)	**	**	**	**
Muara Enim I	65.0	December 3, 2010 to December 2, 2040	PT Indo Gas Methan (35%)	**	**	**	**
Muara Enim II	40.0	April 1, 2011 to March 31, 2041	PT Metana Enim Energi (30%) and Indo CBM Sumbagsel 2 Pte Ltd (30%)	**	**	**	**
Muara Enim III	40.0	April 1, 2011 to March 31, 2041	PT Metana Enim Energi (30%) and Indo CBM Sumbagsel 2 Pte Ltd (30%)	**	**	**	**
Sangatta I	52.0	November 13, 2008 to November 12, 2038	Sangatta West CBM Inc (48%)	**	**	**	**
Sangatta II	40.0	May 5, 2009 to May 4, 2039	PT Visi Multi Artha (60%)	**	**	**	**
MNK Sumbagut	100.0	May 15, 2013 to May 14, 2043	—	**	**	**	**
MNK Sakakemang	50.0	May 22, 2015 to May 21, 2045	Bukit Energy Resources Sakakemang Deep Pte Ltd (50%)	**	**	**	**

Block	Working Interest (%)	Contract Term	Partners	Estimated Net Proved and Probable Reserves		Average Net Annual Production	
				Oil (mmbbls)	Gas (bcf)	Oil (bbls/d)	Gas (mmcf/d)
Salawati	30.0	April 23, 2020 to April 22, 2040	Petrogas (Island) Ltd (70%)	3.6	—	359	1.0
Salawati Basin	30.0	October 25, 2020 to October 25, 2040	Petrogas Basin Ltd. 70%, PHE Salawati Basin 30%	0.6	5.6	672	2.8

Note:

** Not applicable; the block is in the development or exploration stage.

PT Pertamina Hulu Rokan

From August 2021 until August 2041, we will have a 100% working interest in the Rokan block which is currently managed until August 9, 2021 by PT Chevron Pacific Indonesia (previously PT Caltex Pacific Indonesia). As we will not take over the working interest of the Rokan block until August 8, 2021, no data for estimated net proved and probable reserves or average net annual production is currently available, nor has any such data been validated to us.

PEP

Region	Working Interest (%)	Contract Term	Estimated Net Proved and Probable Reserves		Average Net Annual Production	
			Oil (mmbbls)	Gas (bcf)	Oil (bbls/d)	Gas (mmcf/d)
Sumatra	100.0	September 2005 to September 2035	160.4	1,348.6	29,919.0	448.0
Java	100.0	September 2005 to September 2035	82.7	1,067.6	14,964.0	274.0
Eastern Indonesia (Kalimantan, Sulawesi and Papua)	100.0	September 2005 to September 2035	85.3	573.7	22,018.0	159.0

PEPC

Block	Working Interest (%)	Contract Term	Partners	Estimated Net Proved and Probable Reserves		Average Net Annual Production	
				Oil (mmbbls)	Gas (bcf)	Oil (bbls/d)	Gas (mmcf/d)
Cepu	45.0	September 17, 2005 to September 16, 2035	Ampolex (Cepu) Pte Ltd. (24.5%), ExxonMobil Cepu Limited (20.5%) (operator), PT Sarana Patra Hulu Cepu (1.1%), PT Petrogas Jatim Utama Cendana (2.2%), PT Asri Dharma Sejahtera (4.5%), PT Blora Patragas Hulu (2.2%)	144.6	808.2	96,981.0	23.1

Block/Field	Working Interest (%)	Contract Term	Partners	Estimated Net Proved and Probable Reserves		Average Net Annual Production	
				Oil (mmbbls)	Gas (bcf)	Oil (bbls/d)	Gas (mmcf/d)
Mahakam Block	90.0	January 1, 2018 to December 31 2037	PT Migas Mandiri Pratama Kutai Mahakam (10%)	24.6	763.7	29,561.0	606.0
Sanga Block	100.0	August 8, 2018 to August 7, 2038		15.0	89.3	12,663.0	76.7
East Kalimantan and Attaka Block	100.0	October 25, 2018 to October 24, 2038		16.0	186.5	9,905.0	45.9
West Ganai	30.0	January 26, 2020 to January 25, 2040	ENI 40%, Neptune Energy 30%	**	**	**	**

Description of International Oil and Gas Properties

Our oil and gas activities outside of Indonesia are primarily operated by our joint venture partners.

The following map illustrates our international upstream operations as of September 30, 2020.



The following tables set forth certain information regarding our upstream international operations as of September 30, 2020.

Block/Field	Working Interest (%)	Contract Term	Partners	Estimated Net Proved and Probable Reserves		Average Net Annual Production	
				Oil (mmbbls)	Gas (bcf)	Oil (bbls/d)	Gas (mmcf/d)
Algeria							
Block 405a, Menzel Lejmat North (MLN) Field	65.0	December 20, 2000 to December 19, 2025	Talisman (Algeria) B.V. (35.0%)	29.2	—	19,550	160.5
Block 405a, El Merk (EMK) Field (M&P)	16.9	July 2005 to July 2030	Talisman (Algeria) B.V. (9.1%), Sonatrach (37.7%), Anadarko Algeria Company LLC (18.1%), Eni Oil Algeria Ltd. (9.1%), Maersk Olie Algeriet AS (9.1%)	26.7	0	10,343	133.6
Block 405a, Ourhoud Field (M&P)	3.7	December 6, 1997 to December 5, 2022	Talisman (Algeria) B.V (1.9%), Sonatrach (37.1%), Anadarko Algeria Company LLC (10.2%), Eni (5.08%), Maersk Olie Algeriet AS (5.08%), Compania Española Petroleos SA (37.1%)	3.5	0	7,053	24.2
Gabon							
Ezanga	80.0	January 1, 2014 to December 31, 2034	The Gabonese Republic (12.5%), Tullow (7.5%)	119.6	*	17,500	**
Kari	100.0	October 5, 2007 to November 10, 2020		**	**	**	**
Nyanga-Mayombe	100.0	November 26, 2004 to February 2, 2022		**	**	**	**
Iraq							
Block West Qurna I	10.0	January 25, 2010 to January 24, 2045	ExxonMobil Iraq Limited (32.7%), Shell Iraq B.V. (19.6%), PetroChina International Iraq FZE (32.7%), Oil Exploration Company of the Iraqi Ministry of Oil (5.0%)	169.1	—	46,438.0*	
Malaysia							
Block H, Sabah	24.0	March 19, 2007 to March 18, 2045	PTTEP HK Offshore Limited (56.0%), Petronas (20%)	0.1	207.9	11,674	67.7
Block K, Sabah	24.0	January 27, 1999 to January 26, 2037	PTTEP HK Offshore Limited (56.0%), Petronas (20%)	22.2	18.8	6,617	10.6
Block SK 305, Sarawak (Relinquished)	30.0	June 16, 2003 to June 15, 2032	Petronas Carigali Sdn. Bhd. (40.0%) PetroVietnam (30.0%)	*	*		
Block SK309, Sarawak	25.5	January 27, 1999 to January 26, 2028	PTTEP HK Offshore Limited (59.5%), Petronas (15%)	2.7	81.5	1,427	43.0
Block SK311, Sarawak	25.5	January 27, 1999 to January 26, 2028	PTTEP HK Offshore Limited (59.5%), Petronas (15%)	7.2	29.4	3,630	14.1
Block SK314A, Sarawak	25.5	May 7, 2013 to May 6, 2040	PTTEP HK Offshore Limited (59.5%), Petronas (15%)	*	*	0	0
Vietnam							
Vietnam Blok 10 and 11.1 (Relinquished)	10.0	January 8, 2002 to January 7, 2032	PetroVietnam Exploration Production Corporation Ltd (40%), Petronas Carigali Sdn. Bhd. (40%) Quad Energy S.A. (10%)	*	*	*	*

				Estimated Net Proved and Probable Reserves		Average Net Annual Production	
Block/Field	Working Interest (%)	Contract Term	Partners	Oil (mmbbls)	Gas (bcf)	Oil (bbls/d)	Gas (mmcf/d)
Colombia							
Cor 15 (M&P)	20.0	June 1, 2017 to October 23, 2024		*	*	*	*
Namibia							
Petroleum Exploration License-44(M&P)	85.0	December 16, 2011 to 2022		*	*	*	*
Petroleum Exploration License-45 (PEL 45)(M&P)	85.0	December 16, 2011 to 2022					
Nigeria							
OML 4, 38, 41(M&P)	45.0	June 30, 1989—October 2038	Nigerian Petroleum Development Company Ltd (55.0%)	*	*	*	*
OPL 283(M&P)	40.0	October 2009—October 2028	Pillar Oil/OPGC (60.0%)	*	*	*	*
OML 53(M&P)	40.0	June 1997 to June 2027	National Nigerian Petroleum Corporation (60.0%)	*	*	*	*
OML 55(M&P)	22.5	June 1997 to June 2027	Belema Oil (*), National Nigerian Petroleum Corporation (*)	*	*	*	*
Tanzania							
Mnazi Bay(M&P)	48.0	October 26, 2006 to May 18, 2031	Wentworth (31.9%), TPDC (20.0%)	*	211.5	*	29.7
Bigwa-Rufiji/Mafia (M&P)	60.0		PetroQuest Intl Ltd., Hollick				
Canada							
Alberta(M&P)	25.0	*	Andora 50% (Operator), Deep Well O&G 25%	*	*	*	*
Gaspesie Peninsula (M&P)	50.0		Pieridae Energy 50% (Operator)				
Italy							
Fiume Tellaro(M&P)	100.0	2004 to February 2023	*	*	*	*	*
Venezuela							
Urdaneta West Field (M&P)	40.0	2006 to September 29, 2041	Petróleos de Venezuela, S.A. (60.0%)	*	*	*	*

Notes:

* Information not available.

** Not applicable; the block is in the development or exploration stage.

Upstream Oil and Gas Production

Our total average daily oil and gas production was 900.8 mboe/d in 2019 and 868.0 mboe/d in the nine months ended September 30, 2020.

The information on our oil and gas production presented and referred to as “production” in this Offering Memorandum is our “net production” and represents our share of the oil and/or gas production from a block or field, attributable to our working interest before deducting the share payable to the Government pursuant to the terms of the relevant production sharing arrangement or

cooperation contract and the cost recovery and any applicable taxes. Our lifting costs include our costs of acquisition of our partners' share of crude oil or gas under the relevant production sharing arrangements or cooperation contract which is based on the global price of crude oil and has risen over the past three years. The following table sets forth our average oil and gas production on a daily basis, our average realized sales prices per barrel of crude oil, average realized sales prices per thousand cubic feet of natural gas, lifting costs per barrel of crude oil and lifting costs per thousand cubic feet of natural gas produced for the period, indicated.

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
Sumatra					
Crude oil (mbbls/d)	54.3	67.2	53.6	79.0	52.4
Natural gas (mmcf/d)	883.3	922.8	831.7	945.0	784.3
Total (mboe/d)	206.8	226.5	197.1	242.1	187.7
Java					
Crude oil (mbbls/d)	159.8	146.7	163.1	155.5	165.2
Natural gas (mmcf/d)	616.1	628.1	501.9	571.0	472.9
Total (mboe/d)	266.2	175.6	249.7	254.1	246.8
East Indonesia (Kalimantan, Sulawesi and Papua)					
Crude oil (mbbls/d)	23.9	28.5	94.0	76.2	93.7
Natural gas (mmcf/d)	260.7	1,209.1	1209.3	1,026.5	1,135.4
Total (mboe/d)	68.9	237.2	302.7	253.4	289.7
International					
Crude oil (mbbls/d)	103.7	101.9	99.09	99.1	99.38
Natural gas (mmcf/d)	275.2	298.9	262.6	262.6	255.3
Total (mboe/d)	151.2	153.5	144.4	144.4	143.4
Total					
Crude oil (mbbls/d)	341.7	393.4	410.0	409.9	411.0
Natural gas (mmcf/d)	2,035.4	3,058.9	2,647.9	2,805.1	2,805.5
Total (mboe/d)	693.0	921.4	894.0	894.0	868.0
Average realized sales price of oil (US\$ per bbl)	51.2	70.6	67.0	65.2	41.3
Average realized sales price of gas (US\$ per mcf)	5.8	6.31	6.3	6.5	5.4
Lifting costs of oil and gas (US\$ per boe)	15.8	18.4	20.4	21.5	20.9

Upstream Oil and Gas Sales and Distribution

Crude Oil

Our policy is to maximize usage of our crude oil production as feedstock in our refineries. In 2017, 2018 and 2019 and in the nine months ended September 30, 2020, 70.1%, 80.5%, 78.0% and 74.5% of the crude oil we produced was used as feedstock in our refineries, respectively. A portion of the crude oil which we produce is not of suitable quality for our refineries and we trade such crude oil in exchange for crude oil of suitable quality or sell it on the spot market or through a term contract. For each of the years ended December 31, 2017, 2018 and 2019 and the nine-month period ended September 30, 2020, 9.6%, 1.7%, 11.0% and 11.9%, respectively, of our crude oil production was either traded or sold to third parties.

Gas

We sell the natural gas we produce under contractual arrangements which may be for periods of five to ten years or more than ten years. These arrangements typically take the form of binding memorandums of understanding or gas sales agreements that are entered into directly with the customers. The binding memorandums of understanding set forth the general terms of understanding pending definitive gas sales agreements to be agreed to between the parties. Our current customers for gas include power plants, industrial companies, refineries and fertilizer companies. We also occasionally enter into non-binding memorandums of understanding with potential customers prior to negotiating and entering into gas sales.

The following table sets forth our material gas sales agreements.

Block	Counterparty	Term	Pricing (US\$/mmbtu)	Total Quantity (bbtu)	Daily Quantity (bbtu/d)	Take-or- Pay %
Sumatra						
Jambi Merang	PLN	12 years from 2007	4.00 – 6.44 ⁽¹⁾	113.15	45	85
PEP ⁽²⁾	Asrigita Prasarana	20 years from 2004	6.39 ⁽³⁾	188,940	28.9	70

Notes:

(1) For the first 12 months and further escalated by 3% for every 12 months thereafter.

(2) PEP has also entered into a contract with PGN South Sumatra-West Java for a period of 20 years from 2006 to provide 1,006,050,003,000 bbbtu of natural gas at a price of US\$5.33/mmbtu.

Under our gas sales agreements, we are obligated to supply gas for the contracted quantity while offtakers are required to accept an agreed portion of the gas on a “take or pay” basis. This arrangement reduces our production risk exposure, by ensuring that a certain fixed portion of our production is sold under the gas sales agreement. The portion of gas subject to the “take or pay” arrangement is agreed on a case-by-case basis, but is generally around 80.0% of the contracted quantity of gas to be supplied. Given the increasing demand for energy in Indonesia, we do not anticipate any difficulty in disposing of any excess gas that is not subject to “take or pay” arrangements.

The price for gas under our gas sales agreements varies, but generally depends on the price of certain reference commodities such as high sulfur fuel oil and the price of methanol, as well as development costs and taxes. See “— Upstream Oil and Gas Production” for details of our average realized sales price of gas for the fiscal years ended December 31, 2019, 2018 and 2017 and for the periods ended September 30, 2019 and 2020.

In 2019, we delivered approximately 65% of the gas we sell annually to our customers through our gas facilities network (including PGN’s gas facilities network). See “Business — Pertamina Gas Business — Natural Gas Transmission and Distribution” for more information. Fees for the transmission of gas are generally included in the gas sales price.

PGN’s Upstream Business

In April 2018, the Issuer acquired the Government’s 56.96% interest in PGN to establish a state-owned oil and gas holding enterprise that combines our fully integrated oil, gas and geothermal operations with the natural gas distribution and transmission business of PGN. PGN, through its subsidiary PT Saka Energi Indonesia (“Saka”), is engaged in the exploration, development and production of natural gas and crude oil.

As of December 31, 2019, Saka holds interests in eleven oil and gas blocks in Indonesia, of which six are in the production stage and five are in the exploration phase.

Block	Ownership (%)	Status
Ketapang PSC	20	Production
South Sesulu PSC	100	Exploration
Bangkanai PSC	30	Production
West Bangkanai PSC	30	Exploration
Pangkajene PSC	100	Production
Muriah PSC	20	Production
Fasken	36	Production
Muara Bakau PSC	11.6	Production
Wokam II PSC	100	Exploration
Pekawai PSC	100	Exploration
West Yamdena PSC	100	Exploration

In 2018, Saka and its subsidiaries produced total lifting of 14.31 mmboe, comprising 7,840 bbls/d of lifting oil, 115 bbtu/d of gas, 95 mtpd of LPG and 60 bbtu/d of LNG. In 2019, Saka and its subsidiaries produced total lifting of 10.30 mmboe, comprising 4,818 bbls/d of lifting oil, 84 bbtu/d of gas, 68 mtpd of LPG and 47 bbtu/d of LNG.

In the nine months ended September 30, 2019 and 2020, Saka and its subsidiaries produced total lifting of 8.09 mmboe and 5.26 mmboe, respectively, comprising 1,449,360 bbls and 1,016,246 bbls of lifting oil, respectively, 23,261 bbtu and 16,673 bbtu of gas, respectively, 21,095 mt and 10,686 mt of LPG, respectively, and 13,457 bbtu and 7,200 bbtu of LNG, respectively. The following table sets forth select information regarding Saka's lifting and sales of oil, gas, LPG and LNG.

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
Crude oil (in bbls)	3,280,000	2,860,000	1,758,698	1,149,360	1,016,246
Natural gas (in mmbtu)	50,615,000	42,087,000	30,616,125	23,261,000	16,673,000
LPG (in mt)	54,803	34,640	24,835	21,095	10,686
LNG (in mmbtu)	11,729,000	21,999,000	17,252,144	13,457,000	7,200

PGN's exploration and production of oil and gas segment generated revenues of US\$585.5 million and US\$374.4 million, which accounted for 15.1% and 9.7% of PGN's net revenues in 2018 and 2019 respectively. Revenues were primarily driven by the Muara Bakau Block and the Pangkah Block.

For more information on PGN, see “— Pertamina Downstream Business — Pertamina Gas Business — Gas Transmission and Distribution Through PGN.”

Geothermal

Our geothermal operations primarily focus on the development of geothermal resources in our concessions. Our geothermal operations involve two types of contractual arrangements. Under our steam sales agreements, we develop and operate the steam fields and the power plant is developed and operated by other parties, such as PLN. Under our electricity sales agreements, we develop and operate both the steam field and the power plant and sell the electricity produced to PLN.

We manage our geothermal business through our own operations as well as jointly with other partners such as various affiliates of Star Energy. As of September 30, 2020, we had 14 geothermal

concessions in Indonesia, covering an area of 20,261 km². Of our eleven own-operated working areas, six were in the production stage and five were in the exploration or development stage. Of our five working areas jointly operated through JOCs, four were in the production stage and one was in the development stage.

We had a total current installed capacity for power generation in 14 geothermal working areas of 672 MW as of September 30, 2020. In line with the projected acceleration in growth of the geothermal industry in Indonesia, we also intend to increase our installed capacity for power generation to 883 MW in 2024.

Geothermal Reserves, Capacity and Other Operating Data

Our geothermal resources are located in the Sumatra, Java, Bali and Sulawesi geothermal regions in Indonesia.

Our estimated proved and probable geothermal reserves plus contingent resources were 1,550 MW, 1,520 MW, 1,430 MW and 1,383 MW as of December 31, 2017, 2018 and 2019 and September 30, 2020, respectively. Our estimates of our geothermal reserves are only based on our own-operated geothermal projects and do not include our jointly operated geothermal projects.

The following table sets forth certain key information relating to our own-operated geothermal areas as of September 30, 2020. We have a 100.0% working interest in each of the projects below, except for our Seulawah project, in which our working interest is 75.0%.

	Estimated Proved and Probable Reserves** (MW)	Current Installed Capacity (MW)	Capacity under Development (MW)
Sumatra			
Sibayak	40	12	—
Ulubelu	255	220	—
Lumut Balai	250	55	55
Sungai Penuh	40**	*	—
Hululais	293**	*	110
Seulawah	0	*	—
Java			
Kamojang	235	235	—
Karaha	50	30	—
Gunung Lawu	0	*	—
East Indonesia			
Lahendong & Tompasso	220	120	—
Kotamobagu	0	*	—
Total	1,383	672	165

Note:

* This geothermal area is in the exploration or development phase.

** Include Contingent Resources (C1 & C2).

The table below sets forth certain key information relating to our geothermal areas that are operated under JOCs that are operational as of September 30, 2020.

Jointly Operated Areas	Ownership (%)	Contractor(s)	Current Production Capacity (MW)	Share in Capacity (MW)/ Net Operating Income (%)
Cibeureum Parabakti, JOC Gunung Salak	100.0	UNOCAL Geothermal of Indonesia Ltd, Daya Bumi Salak Pratama Ltd	377	4.0
Darajat Jawa Barat, JOC Darajat	100.0	Chevron Darajat Limited, Texaco Darajat Limited, PT Darajat Geothermal Indonesia	271	2.7
Pengalengan, JOC Wayang Windu	100.0	Star Energy Geothermal Wayang Windu Limited	227	4.0
Sibuali-buali, JOC Sarulla	100.0	PT Medco Geopower Sarulla, Sarulla Operations Ltd, Sarulla Power Asset Ltd, Orsarulla Inc., Kyuden Sarulla Pte., Ltd.	330	4.0
Tabanan, JOC Bedugul	100.0	Bali Energy Limited	0	4.0

Geothermal Production

The following table sets forth our aggregate geothermal production for the periods indicated.

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
Total annual production					
Steam (mt)	28,798	31,086	32,733	24,583	26,614
(expressed in electricity equivalent) (GWh)	3,900	4,182	4,292	3,236	3,457
Average daily production					
Steam (mt)	78.9	85.2	89.7	90.0	97.1
(expressed in electricity equivalent) (GWh)	10.7	11.5	11.8	11.8	12.6

Geothermal Exploration and Development

To begin exploration and development in a concession, we carry out several tests and surveys followed by exploratory drilling, first to validate and then to quantify the size of the potential geothermal resource. Resource validation and exploratory drilling is a long process that requires substantial capital investment, as it may necessitate the drilling of shallow temperature-gradient wells, “slim holes,” exploration wells, and production-sized exploration wells. We do not expect to succeed in developing every resource that undergoes exploration activity and will cease exploration activities on potential geothermal resources that will not support commercial operations.

Geothermal Sales and Distribution

We sell all of the electricity generated by our geothermal operations to PLN via electricity sales contracts. PLN in turn sells the energy to third-party customers in Indonesia. Each electricity sales contract has a term of 30 years and is on a 90% take-or-pay basis. The base price for electricity from our Lumut Balai and Ulubelu plants is about US\$0.0753 per kWh. The base prices for electricity from our Lahendong, Karaha and Kamojang plants are about US\$0.1141 per kWh, US\$0.0825 per kWh and US\$0.094 per kWh respectively. We base our price increases over the life of the contract on the United States Producer Price Index generally.

Steam generated by our geothermal operations is sold through steam sales contracts to PLN or other private third parties (who use the steam to generate electricity which is in turn sold to PLN and ultimately to third-party customers in Indonesia). Each steam sales contract has a term of 30 years. The base price for steam from our Ulubelu plant is US\$0.0420 per kWh. The base price for steam from our Kamojang 1, 2, 3 and Lahendong 1, 2, 3, 4 plants is US\$0.0600 per kWh. The base price for steam from our Hululais plant is about US\$0.0696 and Sungai Penuh plant is about US\$0.0430 per kWh. The base price for steam from our Sibayak plant is between US\$0.0160 per kWh and US\$0.0280 per kWh. Under each of our steam sales contracts with PLN, we are able to escalate our prices for steam on a 2% per annum basis in general.

The base price for electricity from our JOC Sarulla plant is between US\$0.0316 and US\$0.0790 per kWh. The base price for steam from our JOC Gunung Salak plant is about US\$0.0372, while the electricity price is US\$0.0415 per kWh plus US\$0.0030 per kWh as fixed component. The base price for electricity from our JOC Wayang Windu plant is about US\$0.0479 per kWh plus US\$0.0326 per kWh as fixed component. The base price for electricity from our JOC Darajat Unit 1,2,3 plants are US\$0.0315, US\$0.0420 and US\$0.0423 per kWh respectively.

Our Seulawah, Gunung Lawu, Kotamobagu and Tabanan sites are still in the exploration stage.

Pertamina Downstream Business

Overview

Our downstream business includes several business lines: oil and gas refining, marketing, trading and shipping of crude oil, refined oil and gas products, distributing subsidized fuel products and operating certain LNG assets on the Government's behalf. We categorize our refined oil and gas products as (i) retail oil-based fuel, such as motor gasoline and diesel, (ii) special fuel products, such as aviation gasoline, (iii) non-fuel and petrochemical products, such as green coke and lube-base oil, and (iv) gas-based fuel, such as LPG.

We are the dominant refining company in Indonesia, wholly owning and operating six of the nine active oil refineries in Indonesia. Our total production capacity of 887.2 mmbbls/d in 2019 comprised nearly all of Indonesia's total refining capacity of 1,033.0 mmbbls/d, based on Wood Mackenzie data. We are also the largest oil and gas refiner in Southeast Asia region in terms of refining capacity, according to Wood Mackenzie. As of September 30, 2020, we had six refineries that have a total production capacity of approximately 1,033.0 mmbbls/d and an average NCI of 6.3. In addition, we hold a 60.23% total ownership interest in the PT Trans Pacific Petrochemical Indotama ("TPPI") petrochemical refinery.

Annual fuel production, comprised of retail oil-based fuel, special fuel products and gas-based fuel, reached 264.9 mmbbls and 260.9 mmbbls for the year ended December 31, 2018 and December 31, 2019, and 176.4 mmbbls for the nine-month period ended September 30, 2020. Non-fuel and petrochemical production reached 27.5 mmbbls and 26.2 mmbbls for the year ended December 31, 2018 and December 31, 2019, and 19.7 mmbbls for the nine-month period ended September 30, 2020. See "— Refining" for more information on our refining business.

We hold significant interests in the downstream infrastructure and distribution networks in Indonesia, which are comprised of pipelines, fuel stations and depots, and shipping vessels.

As of September 30, 2020, we owned 120 fuel terminals, 29 LPG terminals and depots, 5,890 Pertamina-branded retail fuel filling stations, (165 COCO, 247 CODO, 5,478 DODO), 669 fuel gas filling stations, 68 aviation fuel depots, 104 harbors and Terminal Khusus Untuk Kepentingan Sendiri and three lube oil blending plants and operated 366 tankers.

We believe that because of our extensive distribution infrastructure and assets in Indonesia, we have been granted the PSO mandate by the Government to produce, supply and distribute the majority of subsidized fuel in Indonesia. This PSO mandate requires us to distribute fuel at subsidized rates fixed by the Government. We are subsequently reimbursed by the Government for our costs in accordance with a prescribed formula. See “— PSO” for more information on our PSO mandate.

To optimize the margins from our refined products, we also further refine low sulfur waxy residual fuel oil and naphtha, which are intermediate products from the refining process.

Downstream Strategy

In our refinery operations, we aim to ensure that all of our refineries are competitive and operate efficiently and profitably. We intend to improve our operating efficiency and effectiveness by restructuring and enhancing our existing downstream operations, including our refineries. We plan on revitalizing our existing refineries, improving our refinery complexity index and developing new refineries. In each of the years ended December 31, 2017, 2018 and 2019 and for the nine months ended September 30, 2020, our actual capital expenditures for our downstream segment were US\$1,529.1 million, US\$1,135.6 million, US\$1,390.2 million, and US\$3,100 million, respectively.

Our current development strategy includes plans to develop our petrochemical business, to increase our crude oil throughput and achieve product quality levels that comply with EURO V specifications. We continue to execute our Refinery Development Master Plan (“RDMP”), launched in 2013, with the objective of meeting growing fuel demand in Indonesia with increased domestic production. Under the RDMP, we aim to comprehensively upgrade our refineries to significantly increase their production complexity, as well as improve their production capabilities for fuel products that comply with EURO V specifications. As part of RDMP, we completed RFCC Cilacap and the Cilacap Blue Sky Project and are in the process of implementing revitalization and upgrade of RU V Balikpapan and RU VI Balongan.

Due to the fuel business condition in Indonesia internally and externally that affects the supply and demand profile for fuel and petrochemical products, we re-evaluate our RDMP program, which is called RDMP rescaling. The objective of RDMP rescaling is to maintain our crude processing capacity based on existing design, except for RU V Balikpapan and RU VI Balongan, to fulfill the gap of fuel product supply and demand by maximizing gasoline and minimizing gasoil with specification equal to EURO V, optimizing capital expenditure, increasing refinery profitability, and improving Indonesia’s current account.

In 2019, we performed various optimizations of refining process and refinery performance efficiency sustainability to improve the performance of existing refineries. These initiatives were intended to maximize the refining of domestic crude oil, upgrade of refinery materials for crude refining flexibility, integrate a PLN refinery with RU IV Cilacap Power, optimize intermediate production at our refineries and initiate a trial of crude palm oil (CPO) co-processing in RU II, Dumai, RU III Plaju, and RU IV Cilacap.

In the long term, we also plan to invest in our new and renewable energy business. We are exploring new initiatives such as biofuel products, biorefineries, battery storage technology, solar photovoltaic power plants, coal to chemical or gas conversion systems and combined cycle geothermal technology.

In November 2019, we acquired a 51% interest in PT TPI, which owns a portfolio of petrochemical plants. This acquisition is intended to improve our operational flexibility by bringing ownership of refinery and petrochemical plant assets within our group and reduce our dependency on imported petrochemicals.

We also plan to opportunistically pursue strategic alliances and joint ventures, because we believe that by developing downstream facilities through strategic alliances, we can supplement and strengthen our technical and management capabilities. Towards these goals, we have formed a joint venture with PJSC Rosneft Oil Company to develop our GRR in Tuban, East Java. See “— Refining Facilities” for our expansion plans for our existing refineries and “— Planned Development of New Refineries” for a description of our planned new refineries.

We plan to maintain our leading position in marketing and trading oil and gas in Indonesia and under our PSO mandate. We plan to strengthen our dominant distribution operations and infrastructure and capture a substantial retail market share going forward by expanding our company-owned and company-operated fuel stations. We intend to further augment our position by exiting from non-strategic retail locations. We plan to capitalize on our long established brand name.

We intend to improve our LPG business by accelerating the conversion of kerosene to LPG and developing quality LPG service infrastructure. We intend to further streamline our distribution by obtaining more ships and building new LPG terminals (including refrigerated and pressurized terminals).

Finally, in 2017, we established our RTC to centralize and integrate our research and development initiatives. In the downstream sector, the RTC would focus on, among other things, developing technologies for biofuels, biomass gasification and renewable power sources.

Oil and Gas Refining

Process

Our refineries process crude oil to produce refined oil and gas products. Crude oil is generally sent through three separate process units. The first separates the crude oil through the application of heat and energy into chemical components a process called fractionation (such components are “fractions”). The second process unit processes the lower value fraction grades in order to create higher value refined products and the third process unit treats and blends the higher value fraction grades with lower value fraction grades to ensure that the end product meets the quality standards of our customers. The higher value fraction grades produced from the first process unit are aviation turbine fuel and gas oil. See “— Description of Existing Refineries” for a description of the secondary products that each of our refineries can produce through the secondary process.

Production

The crude oil we use as feedstock from our refineries is sourced from our own production or imported under term contracts or under spot contracts. See “— Integrated Supply Chain.” The natural gas we process in our refineries is sourced mostly from our own production.

The following table presents our total refinery capacity, intake and production for the periods indicated.

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
Capacity					
Refining capacity ⁽¹⁾ (mbbls/d)	1,031.0	1,031.0	1,033.0	1,033.0	1,033.0
Average NCI	5.7	6.0	6.3	6.4	6.3
Average utilization rate ⁽²⁾ (%)	79.0	83.1	94.5	81.6	79.5
Annual intake					
Produced crude oil (mmmbbls)	179.8	200.0	232.5	178.0	162.3
Imported crude oil (mmmbbls)	117.6	112.9	74.4	54.5	49.4
High octane motor gas import (mmmbbls)	—	0.4	—	—	—
Natural gas (mmboe)	1.6	1.7	1.7	1.2	1.2
Others (mmmbbls)	4.2	2.2	15.2	11.7	7.7
Annual production					
Fuel (mmmbbls)	262.8	264.9	261.0	195.1	176.4
Non-fuel and petrochemicals (mmboe)	29.0	27.5	26.2	20.7	19.7
Others (mmmbbls)	13.9	9.6	21.3	14.9	13.9
Average daily production					
Fuel (mbbls/d)	675.7	725.7	714.9	714.7	483.3
Non-fuel and petrochemicals (mboe/d)	78.6	75.3	71.8	75.9	54.1
Others (mmmbbls)	38.0	26.2	58.4	54.7	38.2

Notes:

(1) Based on design capacity.

(2) Based on processing capacity.

See “— Downstream Products” for more information on the products produced from our refineries.

Refining Facilities

We own and operate six refineries with total refining capacity of 1,033.0 mbbls/d and an average NCI of 6.3. In addition, we hold a 60.23% non-controlling ownership interest in the TPPI petrochemical refinery. Some of our refineries are operationally integrated with petrochemical refineries that produce non-fuel and petrochemical products. Our petrochemical refineries produce aromatic products and olefin products that are used as raw materials for textile, rubber, synthetics, plastics and other industries.

Our largest refinery is RU IV Cilacap, which is located in Central Java and has a refining capacity of 348 mbbls/d. Our second largest refinery is RU V Balikpapan, which is located in Kalimantan and has a refining capacity of 260 mbbls/d. Both refineries process crude oil.

In recent years, we have made significant capital investments in facility expansions and upgrades to improve product quality and increase production capacity and efficiency of our plants to meet evolving market demand and environmental requirements in Indonesia.

These capital expenditures were incurred primarily in connection with routine maintenance, facility expansions and upgrades of our refineries, and research and development in new processing

technologies. In addition, we have focused on enhancing our processing technologies, capabilities and methods. These efforts have enabled us to improve the quality of refined products at our refineries, particularly gasoline and diesel, and to increase the flexibility of our refineries in crude processing. We have increased the production capacity of our plants and modified the fuel-loading infrastructure to increase the speed of fuel fillings at our loading facilities. We have also maintained the efficiency and utilization rate of our refineries. In each of the three years ended December 31, 2017, 2018 and 2019 and in the nine-month period ended September 30, 2020, the average utilization rate of the primary processing capacity of our refineries was 79.0%, 83.1%, 94.5% and 79.5%, respectively. We also intend to continue to make capital investments in facility expansions and upgrades as described below.

The table below sets forth our refinery portfolio and planned key expansion and upgrading activities as of September 30, 2020.

Fuel

Refinery	Current Design Capacity (mbbls/d)	NCI	Key Expansion Plan and Upgrade Details and Target Completion Dates
RU II Dumai	170	7.6	● Improve product quality of diesel from EURO II standards equal to Euro V standards by installing new distillate hydrotreater ● Increase product quantity of gasoline by installing new residue catalytic cracking complex
RU III Plaju	120	3.0	● Improve energy efficiency and crude flexibility by installing new single tower of crude distillation unit ● Improve product quality of diesel from EURO II standards to Euro V standards by installing new distillate hydrotreater ● Convert Crude Palm Oil (“CPO”) into Green Diesel (HVO) / Green Jet Fuel (SPK) by installing standalone green refinery unit
RU IV Cilacap	348	6.8	● Improve product quality from EURO II standards to Euro V standards ● Improve petrochemical (benzene) to pharmaceutical ● Revamp existing distillate hydrotreater unit into green refinery unit to process CPO into Green Diesel (HVO) / Green Jet Fuel (SPK)
RU V Balikpapan	260	4.1	● Increase the flexibility of processing crude oil from 0.4% sulfur content to 2.0% by 2025 ● Increase the operational processing capacity up to 1.4 times from the existing capacity by 2023 ● Improve product quality from EURO II standards to Euro V standards
RU VI Balongan	125	11.5	● Improve the refinery’s NCI to 10 ● Increase the operational processing capacity up to 1.2 times from the existing capacity. ● Improve product quality from EURO II standards to Euro V standards
RU VII Kasim/Sorong	10	2.5	● Open access for crude oil receiving facilities ● Improve product quality of diesel from EURO II standards to Euro V standards by installing new distillate hydrotreater
Total	1,033.0	6.3	

Non-fuel Petrochemicals

Refinery	Non-fuel petrochemicals produced	Current design Capacity (Mtons/year)
RU IV Cilacap	Paraxylene	299,000
RU III Plaju	Polypropylene	45,000
RU II Dumai	Green coke	370,000
Total		714,000

Since late 2018, we have also been in coordination with the Ministry of Finance to assume partial ownership and management of PT Trans-Pacific Petrochemical Indotama and restart operations of a petrochemical refinery. As of December 31, 2019, we held a 59.38% total ownership interest in the PT Trans-Pacific Petrochemical Indotama (“TPPI”) petrochemical refinery.

Description of Existing Refineries

RU II Dumai

RU II Dumai is located in Sumatra and consists of a refinery unit at Dumai. The unit at RU II Dumai commenced operations in 1972 and has undergone periodic revamps and modifications. RU II Dumai is able to produce motor gasoline, kerosene, aviation turbine fuel, gas oil, naphtha, LPG, green coke, feedstock for lube base oil plants and low sulfur waxy residual fuel oil (“LSWR”) via its primary and secondary process units. RU II Dumai is comprised of a crude distillation unit (“CDU”), high vacuum unit (“HVU”), hydro-cracker units (“HCU”), delay coker units and platforming units.

As of September 30, 2020, RU II Dumai had an NCI of 7.6, its primary process units had a processing capacity of 170.0 mbbbls/d through its CDU and its secondary process units had a processing capacity of 63.0 mbbbls/d through its hydro-cracker unit, 15.0 mbbbls/d through its platforming units and 35.3 mbbbls/d through its delay coker unit.

RU II Dumai uses domestic crude oil as its raw material. The crude oil processed at RU II Dumai comes from our own production and from other oil and gas producers, such as Chevron, and is transported by pipelines and tankers. In 2018 and 2019, the average total output of RU II Dumai was 140.1 mbbbls/d and 143.9 mbbbls/d, and the total amount of green coke produced was 393,230.4 Mton and 390,262.0 Mton. For the nine months ended September 30, 2020, the average total output of RU II Dumai was 199.5 mbbbls/d, and the total amount of green coke produced was 278,687.4 Mton. In 2018, 2019 and the nine months ended September 30, 2020, the primary processing capacity utilization rate at RU II Dumai was 84.8%, 97.5% and 75.3%, respectively.

To increase the gasoline production, we intend to build a residue catalytic cracking unit. In addition, we also intend to install a new distillate hydrotreating unit to produce low-sulfur diesel, in order to comply with future government regulations.

RU III Plaju

RU III Plaju is located in Musi, Sumatra. It commenced operations in 1935 and underwent revamps and modifications in 1982 and 1994. RU III Plaju is able to produce motor gasoline, kerosene, aviation turbine fuel, aviation gas, gas oil, industrial fuel oil, naphtha, LPG, polypropylene, solvent and hydrocarbon refrigerants via its primary and secondary process units.

As of September 30, 2020, RU III Plaju had an NCI of 3.0, its primary process units had a processing capacity of 87.3 mbbbls/d and its secondary process units are comprised of a fluidized catalytic cracking unit (“FCCU”) with processing capacity of 18.3 mbbbls/d and a polypropylene unit with production capacity of 52,758.8 Mton per year. RU III Plaju is comprised of CDU, HVU, FCCU and polypropylene units.

RU III Plaju uses domestic crude oil as its raw material. Substantially all of the crude oil processed at RU III Plaju comes from our own production and from other oil and gas producers and is transported by pipelines and small tankers. In 2018 and 2019, the average total output of RU III Plaju was 98.9 mbbbls/d and 105.8 mbbbls/d and polypropylene production was 45,214.1 mt and 50,092.9 mt. In the nine months ended September 30, 2020, the average total output of RU III Plaju was 95.97 mbbbls/d and polypropylene production was 33,369.9 mt. In 2018, 2019 and the nine months ended September 30, 2020, the primary processing capacity utilization rate at RU III Plaju was 79.0%, 82.9% and 78.4%, respectively.

RU IV Cilacap

RU IV Cilacap consists of two refinery units located in Cilacap, Java. The refinery units at RU IV Cilacap commenced operations in 1976 and 1983 and both were revamped and modified in 1999. RU IV Cilacap is able to produce motor gasoline, kerosene, aviation turbine fuel, gas oil, industrial fuel, LSWR, naphtha, LPG, paraxylene, benzene, lube based oil mineral, solvent and asphalt via its primary and secondary process units. RU IV Cilacap is comprised of two fuel oil complex units, three lube oil plants, one asphalt unit and one paraxylene unit.

As of December 31, 2019 and September 30, 2020, RU IV Cilacap had an NCI of 7.4 and 6.8, its primary process units had a processing capacity of 118.0 mbbbls/d and 230.0 mbbbls/d and its secondary process units had a processing capacity of 65.1 mbbbls/d through its Light Naphtha Isomerization Unit. For petrochemical and lube base products, the unit had a production rate of 270 Mton of paraxylene per year, 120 Mton of benzene per year, 148 Mton of propylene per year and 428 Mton of lube base oil per year.

RU IV Cilacap uses imported light sweet and sour crude and domestic light sweet crude as its raw materials. In 2018, 2019 and the nine months ended on September 30, 2020, approximately 38.0%, 47.3% and 54.1% of the crude oil processed at RU IV Cilacap came from our own production and from other domestic oil and gas producers, and the balance was imported from Asia, West Africa and the Middle East by tankers. In 2018, 2019 and the nine months ended on September 30, 2020, the average total output of RU IV Cilacap was 294.9 mbbbls/d, 287.9 mbbbls/d, and 278.4 mbbbls/d, paraxylene production was 1,089.4 mbbbls, 1,282.7 mbbbls, and 1,168.1 mbbbls, asphalt production was 1,562.7 mbbbls, 1,005.9 mbbbls, and 410.5 mbbbls, and lube base oil production was 2,456.2 mbbbls, 2,331.9 mbbbls, and 1,691.6 mbbbls. In 2019 and the nine months ended September 30, 2020, the primary processing capacity utilization rate at RU IV Cilacap was 97.0% and 83.0%, respectively.

As part of our revitalization program, we are also making improvements to our residue fluid catalytic-cracking unit in RU IV Cilacap, in order to process LSWR into products, such as RON 92 gasoline, LPG and propylene. The currently targeted green diesel production capacity at this refinery after completion of phase 1 of the program is 3,000 bbl/day. We expect the phase 1 construction work to be completed in 2021.

RU V Balikpapan

RU V Balikpapan consists of two refinery units located in Balikpapan, Kalimantan. The refinery units at RU V Balikpapan commenced operations in 1922 and 1983 and the first unit was revamped/

modified in 1997. RU V Balikpapan is able to produce motor gasoline, kerosene, aviation turbine fuel, gas oil and LSWR via its primary process unit and naphtha, LPG, oil base mud and wax via its primary and secondary process units.

As of September 30, 2020, RU V Balikpapan had an NCI of 4.1, its primary process unit had a processing capacity of 236.8 mbbls/d and its secondary process units had a processing capacity of 52.3 mbbls/d for its HCU and 20.1 mbbls/d for its platforming unit. RU V Balikpapan is comprised of a CDU, HVU, HCU, Platforming and wax plant units.

RU V Balikpapan uses domestic and imported light sweet crude as its raw material. In 2019, more than half of the crude oil processed at RU V Balikpapan came from our own production and from other domestic oil and gas producers and was transported by pipelines and via tankers, while the balance was imported from Asia and West Africa and was transported by tankers. For the years ended December 31, 2018 and 2019 and the nine-month period ended September 30, 2020, the average total output of RU V Balikpapan was 241.2 mbbls/d, 236.0 mbbls/d, and 205.3 mbbls/d, respectively, and the primary processing capacity utilization rate at RU V Balikpapan was 90.3%, 94.2% and 89.2%, respectively.

We are performing an upgrade of RU V Balikpapan to increase the facility's flexibility to process crude oil with sulfur content ranging from 0.4% to 2.0%. We also plan to increase its fuel production and operational processing capacity to up to 1.4 times its existing capacity. We aim to improve its product quality from EURO II standards to EURO V standards. Stage 1 of RU V Balikpapan project is targeted for completion in 2023 with 21.29% in progress as of October 1, 2020.

RU VI Balongan

RU VI Balongan is located in Balongan, Java. RU VI Balongan commenced operations in 1994 and was revamped or modified in 2005. RU VI Balongan is able to produce motor gasoline, kerosene, gas oil, high octane motor gasoline and propylene via its primary and secondary process units.

As of September 30, 2020, RU VI Balongan had an NCI of 11.5, its primary process unit had a processing capacity of 125 mbbls/d and its secondary process units had a processing capacity of 74.7 mbbls/d for its RCC, 29.0 mbbls/d for its Platforming unit, and 23.0 mbbls/d for its Penex (Light Naphtha Isomerization) unit.

RU VI Balongan comprises a CDU, an atmospheric residual hydro-demetalizer, RCC, propylene recovery unit, propylene receiving units, a residue catalytic cracking off-gas propylene project and a LPG plant.

RU VI Balongan uses domestic crude and imported light sweet crude as its raw materials. In 2019, 96.5% of the crude oil processed at RU VI Balongan came from our own production and from other domestic oil and 100.0% was transported by tankers and pipelines.

For the years ended December 31, 2018 and 2019 and the nine-month period ended September 30, 2020, the average output of RU VI Balongan was 152.3 mbbls/d, 161.7 mbbls/d, and 136.9 mbbls/d, respectively, and the primary processing capacity utilization rate at RU VI Balongan was 85.9%, 97.5% and 85.6% respectively.

We also process LSWR, an intermediate product from our RU IV Cilacap refinery, and naphtha, an intermediate product from our RU II Dumai, RU III Plaju, RU IV Cilacap and RU V Balikpapan refineries, at RU VI Balongan. In 2019, we processed 11,063.1 mbbls of LSWR and 14,939.5 mbbls of naphtha at RU VI Balongan.

We are performing an upgrade of RU VI Balongan to increase its fuel production and operational processing capacity to up to 1.2 times its existing capacity and improve its product quality from EURO II standards to EURO V standards. The phase 1 feasibility study relating to the foregoing has been completed and we expect the EPC work phase 1 to be completed in 2022.

RU VII Kasim/Sorong

RU VII Kasim/Sorong is located in Sorong, Papua. RU VII Kasim/Sorong commenced operations in 1995. RU VII Kasim/Sorong is able to produce motor gasoline, kerosene, and gas oil via its primary and secondary process units. RU VII Kasim/Sorong uses domestic crude oil as its raw material. All of the crude oil processed at RU VII Kasim/Sorong is comprised of the Government's crude entitlement from other oil and gas producers and is transported by pipelines to our refinery.

As of September 30, 2020, RU VII Kasim/Sorong had an NCI of 2.5, its primary process unit had a processing capacity of 10.0 mbbbls/d its secondary process units had a processing capacity of 2.0 mbbbls/d for its platforming unit.

RU VII Kasim/Sorong is comprised of a CDU, a naphtha hydro treating unit and platforming unit.

As of September 30, 2020, we have completed the kick-off meeting for project management consultancy in relation to the prospective construction of open access infrastructure for crude oil receiving at RU VII Kasim. The objective of this project is to optimize the crude intake capacity. In addition, we also intend to install a new distillate hydrotreating unit to produce low-sulfur diesel, in order to comply with future government regulations.

Planned Development of New Refineries

We intend to construct a new refinery in Tuban, East Java with a primary processing capacity of 300.0 mbbbls/d with fully integrated petrochemical plants, through a joint venture with PJSC Rosneft Oil Company. The project is in the land acquisition phase, and the proposed site of the new refinery is pending Government approval.

We currently anticipate that our planned developments of new refineries in Bontang and Tuban will be eligible for favorable corporate income tax treatment under Regulation of the Minister of Finance Number 150/PMK.010/2018 on Provision of Corporate Income Tax Holiday Facility for investments in pioneer industries.

Downstream Products

Our downstream refined products are:

- Motor gasoline, which comprises transportation fuel marketed under our brands “Premium” (RON 88), “Pertalite” (RON 90), “Pertamax” (RON 92), “Pertamax Turbo” (Ron 98) and “Pertamax Racing” (RON 100);
- Automotive diesel oil, which we refer to as solar and biosolar fuel for common diesel oil and higher specification automotive diesel oil marketed under our brands “Dexlite” and “Pertamina Dex”;
- Industrial diesel, which consists of diesel oil and marine gas oil;

- Industrial and marine fuel oil;
- Kerosene;
- Aviation turbine fuel, marketed under our brands “Avtur”;
- Gas-based products, which comprise LPG, refrigerants and aerosol. Our LPG products are marketed under the name “Elpiji” in 3kg, 12kg, and 50kg packaging and skid tanks, “Bright Gas” in 3kg, 5.5kg, 12kg, and 220 grams packaging;
- Lube base oil, which we refer to as lubricants; and
- Petrochemicals and others, which comprise bitumen, polytam, solvent, green cokes, waxes, rubber processing oil (paraffinic oil), paraxylene, propylene, benzene and sulfur.

The table below sets forth production volume for our refined products for the periods presented.

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
	(in thousands of bbls)				
Motor gasoline	93,364.2	82,009.5	81,874.7	61,839.3	58,828.6
Kerosene	2,342.0	3,482.6	3286.6	2,589.8	2,097.1
Automotive diesel	132,845.1	139,612.8	134,485.6	100,849.0	91,613.4
Industrial diesel	464.4	449.8	619.8	379.2	391.8
Industrial fuel	10,898.2	13,087.70	10,692.2	7,478.3	4,983.5
Aviation turbine fuel	22,841.5	26,250.0	29,716.4	21,902.9	15,615.0
LPG	10,102.9	9,854.3	9,229.1	7,305.3	7,059.6
Refrigerants	6.1	8.1	5.9	5.1	4.6
Lube base oil	3,397.9	2,456.2	2331.9	1,869.2	1,691.6
Petrochemicals and others	30,910.2	24,709.07	35,925.28	26,544.6	24,921.30
Total	307,172.5	301,920.1	308,444.5	230,772.7	210,070.5

We also import refined products for distribution. In 2019, we imported 134.7 mmbbls of refined products under term supply contracts and spot contracts. Our major providers of refined products are Hin Leong (Pte) Ltd and Shell International Eastern Trading Company.

Pertamina Gas Business

Overview

Our gas business principally involves the following: (i) LNG production, transport and export, (ii) gas transmission and distribution through our gas pipeline network, (iii) gas trading, which we undertake in conjunction with our gas transmission and distribution business, (iv) CNG distribution and sale pursuant to a mandate from the Government which aims to promote the use of CNG by public and private transportation vehicles, with the goal of reducing domestic dependence on subsidized motor gasoline and automotive diesel oil (the “CNG mandate”), (v) manage Indonesia’s “City Gas” network, which is the country’s gas distribution network for household use, in 21 cities across Sumatra, Java, Kalimantan and Sulawesi, pursuant to an appointment from the Government.

In April 2018, we acquired PGN, which is a leading integrated natural gas utility in Indonesia, with a dominant position in the natural gas downstream business through the largest distribution and transmission pipeline network in Indonesia. In December 2018, we transferred Pertagas to PGN as described in further detail below.

Gas Transmission and Distribution Through PGN

Overview

In April 2018, the Issuer acquired the Government's 56.96% interest in PGN to establish a state-owned oil and gas holding enterprise that combines our fully integrated oil, gas and geothermal operations with the natural gas distribution and transmission business of PGN. PGN is a public company that is listed on the Indonesia Stock Exchange, under the ticker symbol "PGAS," and certain additional information regarding PGN, including its annual reports and financial statements, are publicly available. The Issuer is the largest shareholder of PGN.

PGN is a leading integrated natural gas utility in Indonesia, with a dominant position in the natural gas downstream business through the largest distribution and transmission pipeline network in Indonesia. PGN's core business is its gas distribution and transmission segments, through which it operates its downstream business. PGN's gas distribution and transmission segments accounted for 80.3%, 78.6%, 83.7% and 88.7% of its net revenues in 2017 and 2018, 2019 and the nine months ended September 30, 2020, respectively. PGN's gas distribution and transmission involves purchasing natural gas from upstream gas suppliers and reselling it to industrial, commercial and residential customers through its distribution infrastructure as well as transporting natural gas owned by third parties, through its high-pressure transmission pipelines from upstream suppliers for delivery directly to customers of the upstream suppliers.

PGN's distribution and transmission networks represented approximately 10,640 km of pipelines as of September 30, 2020 and the average volume of natural gas delivered through its distribution and transmission business, including TGI volume, was approximately 3,036 MMscfd in 2019. PGN's distribution network served 2,495 commercial, industrial and power customers and 491,282 households and small businesses in the nine months ended September 30, 2020. PGN's transmission network represented 5,073 km of pipelines as of September 30, 2020 and comprised its Wampu-Belawan, South Sumatra-West Java, Grissik-Duri, Grissik-Batam-Singapore, Kepodang-Tambak Lorok, and Pertagas transmission pipelines.

For the years ended December 31, 2017, 2018 and 2019 and the nine-month periods ended September 30, 2019 and September 30, 2020, PGN had net revenues of US\$3,570.6 million, US\$3,870.3 million, US\$3,848.7 million, US\$2,811.9 million, and US\$2,151.1 million, respectively. For the years ended December 31, 2017, 2018 and 2019 and for the nine-month periods ended September 30, 2019 and September 30, 2020, PGN had profit of US\$196.9 million, US\$304.9 million, US\$67.6 million, US\$129.1 million and US\$53.3 million, respectively.

PGN's Natural Gas Distribution and Transmission Business

PGN's distribution business involves purchasing natural gas from upstream gas suppliers and reselling it to industrial, commercial and residential customers through its distribution infrastructure. PGN's distribution business therefore comprises natural gas distributing and trading activities. PGN sources natural gas from gas fields located in Indonesia which are either directly connected to its distribution network or are connected to its distribution networks through off-take stations. This natural gas can be transported through its transmission network or other parties' open access

transmission networks under pressure ranging from 400 to 1,050 psi. PGN's distribution network is divided into three categories that operate under different pressure and are separated by pressure reduction stations. The first category comprises high-pressure pipelines that are used to distribute natural gas to power stations and certain other large industrial customers, the second category comprises medium-pressure pipelines that are used to distribute natural gas to industrial customers and the third category comprises low-pressure pipelines that are used to distribute natural gas to residential and small commercial customers.

PGN's transmission business currently comprises downstream activities such as transporting natural gas owned by third parties through its high-pressure transmission pipelines from upstream suppliers for delivery directly to customers of the upstream suppliers. PGN's transmission business covers areas in North Sumatra, South Sumatra, Jambi, Riau, Riau archipelago, Lampung, Banten and West Java and serves shippers and off-takers along its transmission pipeline. PGN generates revenues by charging a tariff to its customers who use its transmission pipeline to transport their natural gas. The tariff rate is determined by BPH Migas. The primary factors affecting revenues from our transmission business are tariff rate and quantity of natural gas transmitted. Transportation service contracts which govern transmission services have terms that generally range from ten to twenty years.

The following table shows PGN's distribution and transmission infrastructure as at the dates indicated:

	As of or for the Years Ended December 31,			As of or for the Nine- Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
Distribution Network length (km)	5,169	5,343	5,418	5,376	5,567
Average Distribution gas sales (MMscfd)	772	919 ⁽²⁾	951 ⁽²⁾	932 ⁽²⁾	812 ⁽²⁾
Transmission Network length (km)	2,284 ⁽¹⁾	2,350 ⁽¹⁾	2,352 ⁽¹⁾	2,352 ⁽¹⁾	2,352 ⁽¹⁾
Transmission volumes (MMscfd)	729	2,101	2,046	2,036 ⁽³⁾	1,951 ⁽³⁾

Notes:

(1) Excludes transmission network assets formerly owned by our Company (excluding PGN) and acquired from the Company by PGN in December 2018.

(2) Excludes Processing Gas Volume

(3) Includes TGI & Pertagas Volume

Natural Gas Distribution and Transmission Growth Strategy

We have expanded and plan to continue expanding our gas pipeline network to meet our growing demand and to better service our customers.

- *Grisik-Pusri pipeline.* In 2018, we completed construction of the Grisik-Pusri pipeline, which connects the ConocoPhillips Grisik Gas Plant in Musi Banyuasin Regency to the fertilizer factory PT Pupuk Sriwidjaja (Pusri) in Palembang. It is approximately 176 km long, with a capacity of 160 mmcf/d. The volume of gas supplied to Pusri is expected to be approximately 70 mmscfd in 2019.
- *Gresik-Semarang pipeline.* The Gresik-Semarang pipeline will connect gas sources in East Java to consumers in Gresik and Semarang. It is expected to be approximately 273.0 km long, with a capacity of 500.0 mmcf/d. It is expected to deliver gas from the JTB field in East Java. The pipeline is expected to be completed in the fourth quarter of 2019.

- *Duri-Dumai pipeline.* The Duri-Dumai pipeline will connect Duri to Dumai. The pipeline is expected to be approximately 67 km long, with a capacity of 268 mmcf/d. The pipeline was completed in April 2019.

LNG

Our LNG business comprises the ownership of a 70% share of the PT Badak NGL plant in Bontang, the operation of the Arun regasification plant in Aceh and FSRU in West Java and Lampung, the export and transport of LNG on behalf of the Government and the trading of Pertamina's LNG portfolio in the domestic and global market.

We were the operational asset manager of the Badak LNG plant from the late 1970s until 2017, though ownership of the assets has remained with the Government. In 2017, PT Badak NGL was appointed by the Minister of Finance as the Badak LNG plant's new operational asset manager. PT Badak NGL's appointment as operational asset manager of the Badak LNG plant expired at the end of 2018 and Pertamina is the current operational asset manager of the Badak LNG plant. The Badak plant's current feedstock is 700-800 mmscfd. The Badak plant has an installed capacity of 22.4 mtpa and a current production capacity of 4.3 mtpa.

We remain as the Government's designated seller for the export and transport of LNG produced at the Badak LNG plant in exchange for a marketing fee. Our LNG export customers are located in Japan, South Korea, China and Taiwan, and aggregate contracted and spot volume is approximately 8.5 mtpa. We have also been appointed by the Government to sell LNG from the Bontang LNG plant to domestic buyers to fulfill domestic demand, such as to FSRU PT Nusantara Regas, PT Perusahaan Listrik Negara (Persero), PT Perta Arun Gas and PT Pupuk Iskandar Muda. FSRU PT Nusantara Regas is located in West Java, which we operated as a joint venture with PGN, prior to our acquisition of PGN in April 2018, and which we now solely operate. The arrangement provides for an aggregate sale volume of 11.8 mt from the Bontang LNG plant to the West Java LNG FSRU between 2012 to 2022. The West Java LNG FSRU has a total capacity of 3.0 mtpa and commenced production in May 2012. Badak LNG fulfilled shipment commitment of 84.6 standard LNG cargoes or the equivalent of 121 shipments throughout 2020 successfully according to the 2020 Annual Delivery Program according to report of LNG Assets Management Team of 2020.

We also operate the Arun plant in Aceh, which is a former LNG liquefaction plant that we transformed into a receiving and regasification terminal and LNG storage facility after the Government ceased production of LNG at Arun in 2014 due to the depletion of the natural gas reserves. The Arun plant primarily regasifies LNG produced at our Badak LNG plant, and its receiving and regasification terminal has a capacity of 3.0 mtpa. We also built a gas pipeline between the Arun plant and the industrial area in Belawan, Medan in order to deliver gas from the regasification of LNG to industrial customers in the Arun area and the Belawan industrial area. As of December 31, 2019 and as of September 30, 2020, we delivered 43.8 million mmbtu and 19.47 million mmbtu, respectively, of the gas produced through the regasification plant at the Arun plant.

Through PHE, we own a 29% minority interest in PT Donggi-Senoro LNG ("DSLNG"). DSLNG operates the natural gas liquefaction facilities located in Luwuk, Central Sulawesi, Indonesia (the "DSLNG plant"). The DSLNG plant has access to approximately 3,700 bcf remaining gas reserves and has an installed capacity of approximately 2.2 mtpa and a current production capacity of 2.3 mtpa. The LNG from the DSLNG plant is exported to Japan and South Korea under three LNG sales contracts with Chubu Electric Power Co., Inc., Kyushu Electric Power Company, and Korea Gas Corporation. These LNG sales contracts are for an aggregate volume of 1.7 mtpa and are set to expire around 2027.

In order to fulfill domestic LNG demand and develop our international market portfolio, we have secured LNG by signing long-term LNG sale and purchase agreements with domestic and international

LNG producers. In addition, we are working to develop international markets by involving in the LNG supply for a project, preparing the Badak LNG plant as a LNG hub and also the domestic markets such as refineries, electricity producer and LNG retail market through the development of small-scale projects for commercial areas, hotels and apartments.

CNG

Our CNG business operations involve the distribution and sale of price-controlled CNG to users of public and private transportation vehicles in Indonesia through CNG refueling stations that we own and operate pursuant to our CNG mandate, as well as the production, distribution and sale of CNG to industrial customers.

Distribution and Sale of CNG under the CNG Mandate

Under our CNG mandate, we construct and operate CNG refueling stations, through which we distribute and sell CNG to users of public and private transportation vehicles under the product name, “EnvoGas.” A CNG distribution network comprises mother stations, filling stations that receive CNG from gas producers, daughter stations, filling stations that decant and distribute CNG received from mother stations, and online-gas refueling stations and mobile refueling stations, where CNG is stored and distributed to end-users. The CNG that we distribute is supplied by our upstream business, as well as from third-party domestic suppliers such as Chevron, PHE ONWJ, PHE WMO, PEP, which distributes CNG through pipelines owned and operated by PERTAGAS, and PGN, which we acquired in April 2018. Our first CNG refueling station was completed in December 2012 and our CNG distribution network is comprised of 59 CNG stations (including the Tambak Lorok and Bitung plants). The Government constructs and owns the CNG refueling stations and infrastructure, which we operate on behalf of the Government. Under our CNG mandate, the Government will eventually transfer ownership of the CNG infrastructure assets to Pertamina.

The price at which CNG is purchased and sold is fixed by the Government and we earn a margin from our distribution of CNG. For 2017 and 2018, the price set by the Government for CNG sold to us by our suppliers was US\$4.72/mmbtu, and the Government levied an additional toll fee to account for distribution and transportation costs. For 2017 and 2018, the price set by the Government for CNG sold by us to end-users through our CNG refueling stations was Rp. 3,100 per gasoline-equivalent liter in Jakarta, Bogor, Depok, Tangerang, and Bekasi area and Rp. 4,500 per gasoline-equivalent liter in other areas. As the price set by the Government for CNG sold to us is denominated in U.S. dollars while the price set by the Government for CNG sold by us is denominated in Rupiah, fluctuations in the exchange rate between the U.S. dollar and the Rupiah affect our profit margin from our CNG sales. In 2018, we made a net profit from our CNG sales, but there is no assurance that we will continue to make a profit from our CNG sales if the Rupiah continues to depreciate against the U.S. dollar.

We are currently the only company that has been granted a CNG mandate by the Government. Our first CNG refueling station was completed in December 2012 and our CNG distribution network is comprised of 52 CNG refueling stations (including the Tambak Lorok and Bitung plants) and seven mobile refueling units (“MRUs”). In April 2018, our CNG business further expanded when we acquired a 56.96% interest in PGN. As of September 30, 2020, our CNG distribution network comprised of 12 CNG refueling stations and 4 MRUs throughout Java and Sumatera.

Production and Distribution and Sale of CNG to Industrial Customers

We produce CNG for distribution and sale to industrial customers in Bitung, West Java, Indonesia. We are using gas produced from the Pondok Tengah field in the PEP block as a source of CNG for

distribution and sale to industrial customers. We are also exploring other ways to further expand our CNG business to new customers such as malls, restaurants, hotels and new customers in other industries.

Marketing and Trading

Our marketing and trading activities involve the distribution of fuel, non-fuel and petrochemical products (including LPG and other gas fuels) to both domestic and export markets. Since 2007, we have been appointed by the Government to assist in its efforts to encourage the use of LPG as a substitute for kerosene under the kerosene conversion program. See “— Distribution — Domestic Gas.” Our marketing and trading business is organized into three directorates: retail, corporate and logistics (covering shipping and integrated supply chain functions).

We are actively seeking to expand our marketing and trading business. Our key marketing and trading investment projects include:

- the construction and development of fuel terminals pursuant to a ministerial decree in several locations such as Jambi in Tegal, Central Java, Tanjung Batu in East Kalimantan, Maumere in East Nusa Tenggara, Biak in Papua, and in 11 other locations in eastern Indonesia, including Badas, Waingapu, Parepare, Merauke, Ternate, Wayame, Masohi, Bula, Dobo, Labuha, and Namlea. The projects are targeted for completion between 2020 and 2021;
- the replacement of the Cikampek-Plumpang pipeline, which is located between Marunda and Cilincing in North Jakarta. The project is targeted for completion in 2021;
- the development of CB II Lomanis Tasikmalaya, which is located between Lomanis in Central Java and Padalarang in West Java. The project is targeted for completion in 2019;
- the construction of Kertajati Airport at Majalengka in the West Java region, in order to provide aircraft refilling services at the West Java International Airport. The project is targeted for completion in 2019;
- the construction of pressurized LPG tanks at Arun, Aceh, and Pulau Layang in South Sumatera, Belawan in North Sumatera, Dumai, and Balongan in West Java. The projects are targeted for completion between 2019 and 2021;
- the construction and development of the LPG terminal in Eastern Indonesia, including Bima, Kupang, Jayapura, and Wayame. Pursuant to a ministerial decree we will construct and operate the oil fuel and LPG storage tanks in 14 locations in NTB, NTT, Sulawesi South, Maluku, North Maluku and Papua. Construction has commenced in Nusa Tenggara and Papua and targeted for completion between 2019 and 2020;
- the construction of a refrigerated LPG tank at Tj. Sekong in West Java to replace the STS. The project is targeted for completion by the end of 2019;
- the construction of a refrigerated LPG terminal in East Java. The project is targeted for completion in 2022;
- the construction of new ships, consisting of three mid-size LPG ships and three general purpose ships, which are targeted for delivery by 2020;

- the development of CB-III Lomanis Tasikmalaya, which is located between Lomanis in Central Java and Padalarang in West Java. The project is targeted for completion in 2021;
- the construction of Kertajati Airport at Majalengka in the West Java region, in order to provide aircraft refilling services at the West Java International Airport. The project is targeted for completion in 2020; and
- the construction of three general purpose ships, which are targeted for delivery by 2021.

In December 2013, we entered into a marketing and trading joint venture agreement with PTT Global Chemical Public Company Limited, Thailand's state-owned petrochemical company, to increase our sale and distribution of polymers in Indonesia. On June 23, 2014, Indo Thai Trading ("ITT") was founded as a joint venture between PT Pertamina Patra Niaga (51.0%) and PTT Global Chemical International Private Limited (49.0%). In July 2019, all shares of PTT Global Chemical Public Company Limited were acquired by PT Patra Trading so that as of July 31, 2019 all shares of ITT were 100% owned by us.

Distribution

The table below sets forth sales volume for our refined products for the periods presented.

	For the Years Ended December 31,			For the Nine-Month Periods Ended September 30,	
	2017	2018	2019	2019	2020
	(in million KL)				
Motor gasoline ⁽¹⁾	12.5	10.8	11.5	8.8	6.7
Kerosene ⁽¹⁾	0.6	0.6	0.5	0.4	0.4
Automotive diesel ⁽¹⁾	25.3	27.0	15.0	11.0	9.8
Industrial diesel	0.0	0.0	11.1	8.4	8.0
Industrial fuel	1.4	1.3	1.5	1.1	1.0
Aviation turbine fuel	5.8	6.3	5.8	4.2	2.0
LPG ⁽¹⁾	12.9	13.2	12.1	9.0	9.4
Refrigerants	0.0	0.0	0.0	0.0	0.0
Lube base oil	0.4	0.4	0.4	0.3	0.3
Petrochemicals and others	5.6	4.9	5.8	4.1	3.7
Total	<u>64.5</u>	<u>64.5</u>	<u>63.6</u>	<u>47.3</u>	<u>41.2</u>

Note:

(1) All sales of motor gasoline, kerosene, automotive diesel and LPG in 3kg cylinders are pursuant to our PSO mandate. Our LPG in 3kg cylinders sales were 6.3 mt, 6.5 mt, 6.8 mt, and 5.3 mt for the years ended December 31, 2017, 2018 and 2019 and the nine-month period ended September 30, 2020, respectively. We also sell LPG in 12kg and 50kg cylinders.

(2) Industrial diesel consists of gasoil group products except JBT product (PSO). Industrial fuel consists of gasoline group products, except premium and kerosene. Petrochemical and others are all product petrochemicals and intermediate.

The categories for the refined products we distribute are as follows.

Retail Fuel

Our retail fuel business consists of retail fuel sales to end-customers, most commonly through retail fuel filling stations. Our retail fuel sales consist of fuel sold under our PSO mandate (sold under the brand names "Premium" and "Solar/Biosolar") and non-PSO fuel (sold under the brand names "Premium," "Biosolar," "Pertalite," "Pertamax," "Pertamax Turbo," "Pertamax Racing," "Dexlite" and "Pertamina Dex." See "— PSO" for more information on our PSO mandate.

As of September 30, 2020, there were 30 Pertamina-branded retail fuel filling stations in Indonesia. seven of these retail fuel filling stations are owned and operated by us. The remaining 23 retail fuel filling stations are franchise operations, owned and operated by third parties and held for average periods of 20 to 30 years. These service stations are located across Indonesia and exclusively sell gasoline and diesel. All of our retail fuel filling stations share the same branding and are uniform to consumers. The third-party dealer pays an initial fee and additional fees on renewal to use our intellectual property rights, including our fuel station design and standard technical specifications, logo and standard operating procedure software management, for the duration of the arrangement. In 2019, we began rolling out cashless payment systems in our Pertamina-branded retail fuel filling stations. In 2020 Pertamina developed digital technology through MyPertamina, to make it easier for consumers to make cashless transactions. currently MyPertamina can be used at 5,523 gas stations with a total user of 7.3 million.

We are actively increasing the number of retail fuel filling stations owned and operated by us to secure our retail distribution network. We are also actively growing our network of Pertashops, which are smaller-scale Pertamina-branded retail fuel filling stations, to further expand our footprint across the archipelago. As of September 30, 2020, we operated 1088 Pertashops. In 2019, the One Village, One Outlet (“OVOO”) Program was launched to ensure the products of our distributor entities are present at every district all across Indonesia. As of September 30, 2020, we operated 1398 OVOOs. For rural areas and district regions not yet covered, we continue to increase the presence of distributor entities in the form of Pertashops. At the moment, the numbers of existing PSO LPG Bases have covered 99% of districts and 70% of sub-districts across Indonesia. We also intend to expand our retail fuel business overseas in the future and have established a representative office in East Timor.

Our market share in relation to subsidized fuel products was 99% for the nine-month period ended September 30, 2020 based on BPH MIGAS data, and we estimate our market share in relation to non-subsidized fuel products to be approximately 98%, in 2021. Our main competitors in the retail fuel sector are Shell, AKR, BP, Exxon, and Total and Vivo.

Industrial and Marine Fuel

Our industry and marine fuel business consists of sales of products such as motor gasoline, kerosene, high speed diesel, industrial diesel oil, industrial fuel oil, marine gas oil and marine fuel oil to commercial customers, whom we supply directly from our depots. Some of our main customers for industry and marine fuel products are PLN, the Indonesian National Armed Forces, the Indonesian National Police, and Contractor Cooperation Contract, in addition to the mining industry, the paper industry, the steel industry and various other industries.

We estimate our market share in relation to industrial and marine fuel to be approximately 76% as of September 30, 2020. Our main competitors in the industry and marine fuel sector are AKR, Exxon, Petro, Andalan, Energy Coal Prima, Shell, SADP, Cosmic, Inti and Jasatama.

Aviation Fuel

Our aviation fuel business consists of sales of products such as aviation gasoline and aviation turbine fuel to commercial customers. We supply jet fuel to domestic and foreign airlines at Indonesian airports under the “Avtur” and “Avgas” brands. We have supplied products to more than 100 customers, some of whom are commercial airlines, which represented the majority of our sales volume for aviation fuel in 2019 and 2020. We distribute aviation fuel through our 68 airport depots in Indonesia and we also supply airline customers through our partners in the Asia-Pacific, the Middle East and Europe.

Non-fuel, Petrochemical and Other Products

Our non-fuel petrochemical and other products include asphalt and bitumen, non-fuel special chemical and biofuel products (such as solvents, green coke, lube base oil, minarex and rubber processing oil) and petrochemical products (such as paraxylene, benzene, propylene and polypropylene (polytam), sulfur, solvent, rubber processing oil, smooth fluid, petroleum coke and agricultural chemicals). We are also exploring strategic collaborations with third-party suppliers for access to raw materials that can be processed into new and renewable energy products. We market our non-fuel and petrochemical products directly or indirectly through a network of sales personnel and agents dedicated to handling our non-fuel and petrochemical operations for industrial use.

In 2019, we successfully commercialized a new chemical product, the corrosion inhibitor, a new petrochemicals product, the Sodium Methoxide (SMO), used as a FAME production mixture material catalyst, and the Solvent 1630 product used as a mixture material for thinner, tire, and paint products.

We estimate our market share in relation to non-fuel and petrochemical products to be approximately 55% for bitumen and 31% for aromatic olefin as of September 30, 2020. With details Paraxylene market share of 38%, Benzene market share of 41%, Propylene market share of 43% and Polypropylene market share of 3% based on our marketing intelligence and central bureau of statistic. Our main competitors in the non-fuel and petrochemicals sector are Chandra Asri, Mitsubishi Chemical, Mitsubishi Corporation, BP, SCG Chemical, Petronas, Shell, Chevron and Esso, and certain other Middle Eastern and Indian producers especially for aromatic and olefin products such as Reliance, Essar Oil, OMPL India, ADNOC and TASWEEQ.

Lubricants

Our lubricant products include automotive engine oils (such as for passenger cars and heavy duty diesel), automotive gear oil, industrial and marine diesel engine oils, circulating oils, hydraulic oils, turbine oils, compressor oils and grease and are marketed under the names, Fastron, Prima XP, Enduro, Mesran, Meditrans and Turalik. We market lubricants directly or indirectly through a network of sales personnel and agents dedicated to our lubricant operations that span 24 countries. Our main customers for our industrial lubricant products are mining, power generating, oil and gas, manufacturing and cement companies.

We estimate our market share in relation to lubricants to be approximately 36% for market share retail and 50% for market share industry as of September 30, 2020 based on our marketing intelligence and central bureau of statistics. Our main competitors in the lubricants sector are Shell, Castrol, Yamalube, Idemitsu, ExxonMobil, BP and Repsol, internationally, and in Indonesia we also compete with Federal Oil, Top 1 and Evalube.

We also offer toll blending services in Singapore and Thailand. Toll blending is a specialty service through which we assist companies that require complex lubricant formulations, by mixing and processing the base ingredients for a fee and selling them the final product.

Domestic Gas

Our domestic gas based fuel marketing activities cover products such as LPG, natural gas fuels, refrigerants and aerosol. We sell LPG through agents in 3kg cylinders domestically to households pursuant to our PSO mandate, LPG in 12kg cylinders domestically to households and LPG in 50kg cylinders domestically to hotels and restaurants. We also sell LPG in bulk to end users in the industrial sector. See “— PSO” for more information on our PSO mandate. We sell our gas products under the brand names, Elpiji, Bright Gas, HAP Pertamina and Musicool.

In 2007, we were appointed by the Government to assist in its efforts to encourage the use of LPG as a substitute for kerosene in Indonesian households. See “— PSO.” Since the start of the kerosene conversion program in 2007, we have distributed 65.2 million LPG conversion packages, comprising a stove and a LPG regulator and cylinder. We have distributed a decreasing amount of kerosene in each successive year as a result of the introduction of the kerosene conversion program, as an increasing number of households convert to the use of LPG. We receive compensation from the Government under our PSO mandate for the distribution of subsidized LPG.

PSO

One of our key roles is to distribute subsidized fuel in Indonesia under our PSO mandate. Prior to the passage of the Oil and Gas Law of 2001, we were the sole distributor of subsidized fuel in Indonesia. After the passage of the Oil and Gas Law of 2001, our monopoly in the downstream sector was originally scheduled to end in November 2005, when private investors (including foreign companies) would be allowed to participate in processing, transporting, storing, distributing and selling refined fuel products. However, on November 15, 2005, the Government announced that our right to sell subsidized fuel had been extended to December 31, 2007 as private competitors, such as AKR and Petronas, did not have the required infrastructure to sell subsidized fuel outside of Java at that time.

Since 2008, the market for subsidized fuel has been opened to competition. Since October 1, 2005, domestic sales of refined products to industrial consumers have no longer been subsidized by the Government and are subject to competitive forces, while only sales of motor gasoline, automotive diesel oil and kerosene for household continue to be subsidized. BPH MIGAS runs an annual tender process and grants licenses for the right to sell subsidized fuel to oil companies, including us. We believe we are positioned favorably to continue to win the PSO mandate given our high market share and fully integrated operations in the downstream sector, particularly because any new company that wishes to distribute fuel is also required to develop retail stations in the underdeveloped areas outside of Java. We participate in an annual tender process for the PSO mandate and have been granted a PSO mandate in each of the last three years. Based on BPH MIGAS data and the amount of subsidized fuel distributed in Indonesia in 2019, we continue to retain 98.3% of the PSO market. We believe this is due to our extensive distribution network. We are also mandated by the Government to assist in its efforts to encourage the use of LPG as a substitute for kerosene in Indonesian households under the kerosene conversion program. We are the sole distributor of LPG in Indonesia.

Under the current PSO system, we first pay for the fuel at market rates, which are typically higher than subsidized rates, which we then distribute at lower regulated prices set by the Government for subsidized fuel products. Subsequently, we receive compensation from the Government through the Minister of Finance in accordance with regulations set by the Minister of Finance and approved by Parliament. The subsidy reimbursement amount for automotive diesel oil is subject to a fixed amount set by the Government. The subsidy reimbursement formula determined by the Government for kerosene distributed under the PSO mandate is based on MOPS’s three-month average price for jet kerosene (which is the Oil Fuel Market Index Price for kerosene), less the regulated retail price. Based on MEMR Decree 61/2019, the subsidy reimbursement formula for LPG in 3kg cylinders is based on the benchmark price for the LPG in 3kg cylinders, which is determined by the market index price of LPG in 3kg cylinders (as stipulated by the Government) applicable in the relevant month plus distribution (including handling) costs and margins, less the regulated retail price. The Government sets these compensation formulas annually in conjunction with the setting of the State Budget. The margin is intended to cover transportation and distribution costs. In setting the compensation formulas, the Government makes certain assumptions with respect to the price of crude oil and if the price of crude oil exceeds the price assumed or our transportation, distribution or other costs increase, we may not be able to recover the full costs of distributing subsidized oil products and LPG under the compensation formula and may incur losses as a result. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Factors Affecting Our Business and Results of

Operations — PSO Mandate” for more information with respect to the assumptions underlying the compensation formula.

In 2017, 2018, 2019 and 2020, we have received or expect to receive (as applicable) compensation from the Government under our PSO mandate as set forth in the table below.

	Compensation for Production and Distribution of Oil Products	Compensation for Production and Distribution of LPG
2017	Rp. 500.0 per liter for automotive diesel oil MOPS + 2.49% of MOPS + Rp. 263.0 per liter less the regulated retail price for kerosene	CP Aramco + US\$84.00 /mt + 3.64% CP Aramco + Rp. 1,950.0/kg less the regulated retail price
2018	Rp. 2,000.0 per liter for automotive diesel oil MOPS + 2.49% of MOPS + Rp. 263.0 per liter less the regulated retail price for kerosene	CP Aramco + US\$84.00 /mt + 3.64% CP Aramco + Rp. 1,950.0/kg less the regulated retail price
2019	Rp. 2,000.0 per liter for automotive diesel oil MOPS’s average price in the previous three-month period less the regulated retail price for kerosene	103.85% market index price of LPG in 3 kg cylinders (as stipulated by the Government) + US\$50.11/mt + Rp. 1,879.00/kg
2020	Rp. 1,000.0 per liter for automotive diesel oil MOPS’s average price in the previous three-month period less the regulated retail price for kerosene	103.85% market index price of LPG in 3 kg cylinders (as stipulated by the Government) + US\$50.11/mt + Rp. 1,879/kg
2021	Rp. 500.0 per liter for automotive diesel oil MOPS’s average price in the previous three-month period less the regulated retail price for kerosene	103.85% market index price of LPG in 3 kg cylinders (as stipulated by the Government) + US\$50.11/mt + Rp. 1,879/kg

We and the Government have a framework for subsidy reimbursements. The Government is required to pay us most of the subsidy reimbursements each month based on a submission by us made no later than 10 days after the end of the month. 95% of the subsidy reimbursement submission would typically be made by the Government in the next month from the date of submission of subsidy reimbursements. The remaining 5% of the subsidy reimbursement submission is accumulated and settled quarterly following an audit by the Government. In determining the subsidy reimbursement payable to us in any given month for the distribution of kerosene, the Government’s policy is to use MOPS from the month immediately prior to the month which the subsidy reimbursement claim relates to. See Management’s Discussion and Analysis of Financial Condition and Results of Operations — PSO Mandate.” Also see “Risk Factors — Risks Relating to Our Downstream Operations — We may not be able to pass on increases in costs of our raw materials for products distributed under our PSO or other mandates from the Government or where the prices of such products are fixed at the request of the Government.”

In 2017, 2018 and 2019, the subsidy reimbursement we received under the PSO mandate on an aggregate basis was sufficient to cover our costs of distribution of LPG in 3kg cylinders. Although crude oil prices had continued to rise and regulated retail sales prices under the PSO mandate continued to be insufficient to cover our costs of producing and distributing those PSO fuel products in

2017, 2018 and 2019, the subsidy reimbursements that we received for the distribution of LPG in 3kg cylinders under the compensation formula reduce the shortfall between the retail sales prices and our production and distribution costs for those products and to offset the losses that we incurred for the distribution of other oil products under the PSO mandate.

If crude oil prices exceed the ceiling price assumed by the Government or our transportation, distribution or other costs increase, we may not be able to recover the full costs of distributing subsidized fuel and LPG under the compensation formula and may incur losses as a result.

The Minister of Finance is expected to continue to meet its commitment on subsidy payments due to the national importance of our role in supplying and distributing fuel to Indonesia. In addition, the Government has budgeted Rp. 19.9 billion (US\$1.38 million) for fuel subsidies as reported in the State Budget for 2020.

Trading

Our trading activities include the importing of crude oil and oil products for feedstock at our refineries and for use as domestic fuel and the exporting of (i) the Government's share of crude oil produced; (ii) our crude oil and natural gas that are not used by our refineries; (iii) refined products produced by our refineries, such as LPG, LNG and lubricants and (iii) petrochemicals, such as asphalt and bitumen, paraffin wax, propylene, polypropylene and polyethylene. The types of crude oil that are exchanged include SLC, Minas, Ardjuna, Duri, Cinta, Widuri, BRC, Arun Condensate, and Badak among others. Meanwhile, exported non-fuel and petrochemicals include propylene, green coke, decant oil and others.

See “— Integrated Supply Chain” for more information on our import and export activities.

Shipping

As Indonesia is an archipelago, tankers are required to distribute oil products throughout the country. We have a fleet of vessels to transport oil and gas, and to distribute fuel, non-fuel and petrochemical products to domestic and international markets. The vessels operate across all six of our refinery units and 122 depots.

We operate more than 270 vessels for domestic cargo, of which 67 are owned by us and the rest are chartered. The oil tankers we operate range in size from 1,000 dead weight ton bulk lighters to 150,000 dead weight ton suezmax. We also operate several LPG tankers, including our very large gas carriers. Several oil tankers are chartered from PT Pertamina Trans Kontinental and our new shipping subsidiary, PT Pertamina International Shipping (“PIS”). PT Pertamina International Shipping focuses on non-domestic and import and export oil and gas transportation, and it continues to grow in size, as it owns various very large crude carriers, floating storage and offloading and medium range vessels, with approximately 508 thousand dwt in total. The tanker fleet effective carrying capacity, which reflects the maximum amount of cargo that can be carried, is approximately 99.51 million KL. The total cargo size of our fleet, which reflects the amount of cargo which can be shipped, is approximately 90.40 million KL per year and our average effective load factor is approximately 90.84%. We look at average effective load factor as a measure of the effective carrying capacity of the tanker fleet relative to its total cargo size.

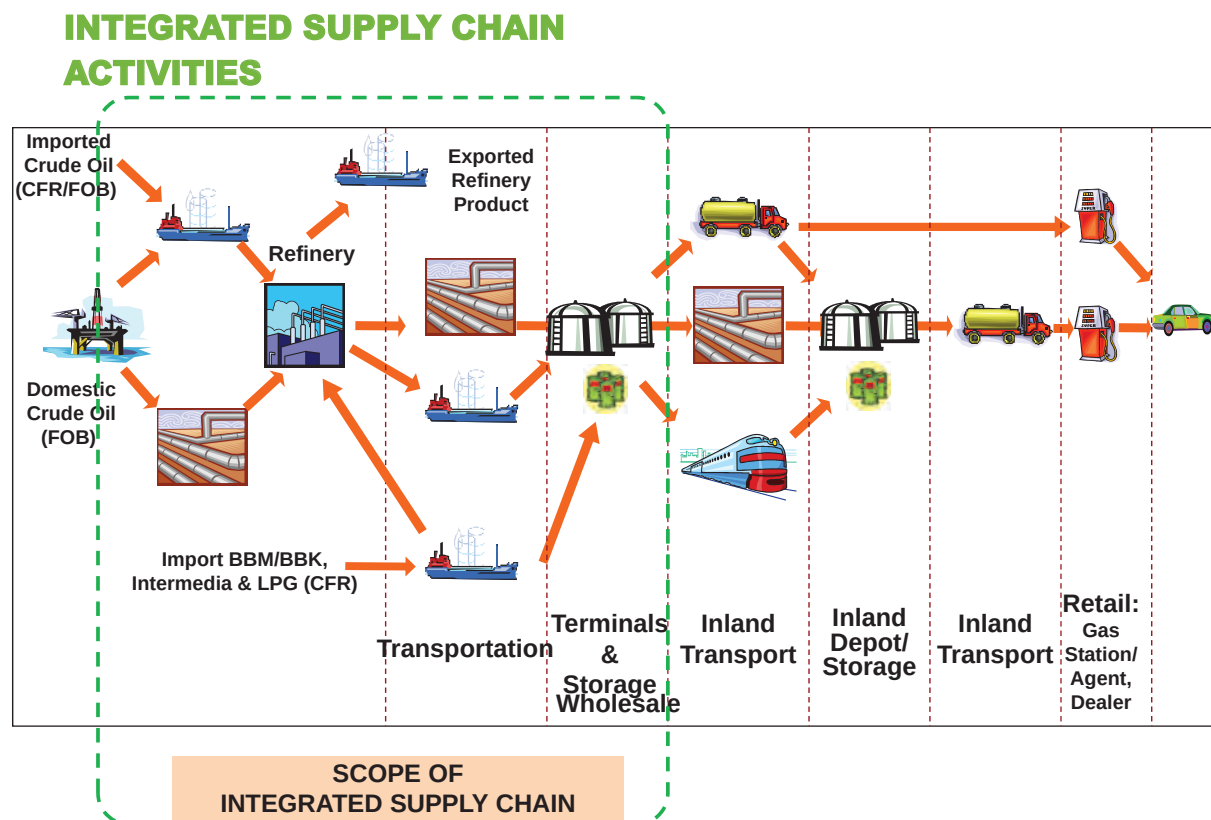
We intend to increase the percentage of the tankers we own from 25% to approximately 50% of our fleet, or 35% to approximately 60% of dead weight ton capacity, and to purchase approximately 52 new vessels by the end of 2026. We plan to retire 22 older vessels by the end of 2026. We also plan to optimize our utilization of tanker tonnage and capacity and to develop and diversify our shipping business beyond owning and chartering oil and LPG tankers, in order to support our supply chain.

We own and manage 104 ports, 166 piers, 13 single-point mooring locations, six ship-to-ship transfer locations, 11 conventional buoy mooring locations and two island berths.

From 2020 to 2026, PIS is planning to spend about US\$ 1.47 billion on newbuilding projects and secondhand purchases. PIS is targeting to achieve ownership of 25% of all our operated vessels by the end of 2026.

Integrated Supply Chain

The diagrams below illustrate the integration and flow between our upstream, downstream and LNG operations and the role which our integrated supply chain division plays in coordinating our upstream and downstream supply and distribution of feedstock and refined products.



We have an integrated supply chain division to optimize the use of our resources by coordinating our overall refining, marketing and trading activities which is consistent practice among other major integrated oil and gas companies.

Our integrated supply chain division ensures that our refineries have a reliable and consistent source of feedstock by, among other things, buying raw materials to meet their demands and selling any surplus materials they do not need. Our integrated supply chain division works with our marketing and trading division to ensure that our refineries are producing the products that are in demand and to coordinate our import and export requirements. Under Minister of Energy and Mineral Resources Regulation No. 42/2018, we have a right to purchase crude oil from each domestic PSC contractor before such production is exported, and our integrated supply chain division may exercise this right in order to meet our refineries' feedstock requirements. Our integrated supply chain division also gathers and analyzes oil and gas trading market information to ensure that we are able to make informed decisions in our downstream operations. In 2016, we established PT Pertamina International Shipping, which operates a free-on-board cargo transportation business and conducts boat chartering, floating storage offloading and internal cargo optimization functions.

In 2018, 2019 and the nine months ending on September 30, 2020, our integrated supply chain coordinated the supply of 208.9 mmbbls, 246.1 mmbbls, and 176.5 mmbbls of domestic crude oil and 123.0 mmbbls, 87.1 mmbbls, and 63.4 mmbbls of imported crude oil to our refineries and 12.5 mmbbls, 19.1 mmbbls, and 23.2 mmbbls of our export products and 221.3 mmbbls, 216.7 mmbbls, and 134.7 mmbbls of imported products to our marketing division. The value of the imported crude oil, was US\$1.2 billion, US\$5.7 billion and US\$2.9 billion respectively, the value of the imported products was US\$3.1 billion, US\$12.5 billion and US\$5.4 billion, respectively and the value of the products we exported (which comprises excess refinery products for which there is no domestic demand such as low sulfur waxy residue, naphtha and green coke) was US\$1.8 billion, US\$1.3 billion and US\$1.8 billion. Pricing for domestic crude oil is based on ICP and pricing for imported crude oil and the products which we produced is based on market pricing.

Pricing for domestic crude oil is based on ICP and pricing for imported crude oil and the products which we produced is based on market pricing.

Import of Crude Oil

Although our local crude oil production is significant, crude oil is imported for blending purposes due to different specifications of crude oil required by our refineries.

In the years ended December 31, 2017, 2018 and 2019 and the nine months ended September 30, 2020, we imported 117.2 mmbbls or 36.5%, 125.2 mmbbls or 37.5%, 88.1 mmbbls or 26.5%, and 60.5 mmbbls or 26.3%, respectively, of the crude feedstock to support our refineries and used domestic sources to provide the balance.

The amount of crude oil we import is dependent on the Government's crude entitlement, which is the amount of crude oil the Government is entitled to receive under production sharing arrangements and cooperation contracts with other oil and gas companies; and which we process on its behalf. Our allocation of crude oil from the Government has increased in line with the Government's policy of encouraging domestic crude oil and condensate lifting from domestic producers. In addition, the Government has issued a new regulation prioritizing the domestic crude oil and condensate entitlement sales. The imported crude oil purchase by us in 2019 decreased by 36% compared to the previous year. In total, the crude oil purchase by us in 2019 was valued at USD21.88 billion, 7% lower than the 2018 purchase value.

In 2017, our largest provider of imported crude oil was Saudi Arabia, from which we imported 32.2 mmbbls, or approximately 24% of our total imported crude oil, for our RU IV Cilacap refinery. We sourced approximately 67% of our total imported crude oil under the term supply contract with producers, equity holders, national and multinational oil companies and traders or term supply contracts and the balance under spot contracts.

In 2018, our largest provider of imported crude oil was Saudi Aramco, from which we imported 33.6 mmbbls, or approximately 27.4% of our total imported crude oil, for our RU IV Cilacap refinery. We sourced approximately 49% of our total imported crude oil under the term supply contract with producers, equity holders, national and multinational oil companies and traders or term supply contracts and the balance under spot contracts.

In 2019, our largest provider of imported crude oil was Saudi Aramco, from which we imported 35.7 mmbbls, or approximately 41% of our total imported crude oil, for our RU IV Cilacap refinery. We sourced approximately 53% of our total imported crude oil under the term supply contract with producers, equity holders, national and multinational oil companies and traders or term supply contracts and the balance under spot contracts.

In the nine-month period ended September 30, 2020, our largest provider of imported crude oil was Saudi Aramco, from whom we imported 23.6 mmbbls, or approximately 37%, of our total imported crude oil for the period, for our RU IV Cilacap refinery. We sourced approximately 46% of our total imported crude oil under the term supply contract with producers, equity holders, national and multinational oil companies and traders or term supply contracts and the balance under spot contracts.

Import of Fuel Products

Our integrated supply chain division coordinates the supply of refined fuel products from our refineries and through imports to our marketing and trading division. The products supplied from our own refineries include gasoline, kerosene, diesel, aviation fuels and LPG. The products we import include gasoline, automotive diesel, high sulfur diesel, aviation fuel and LPG.

As Indonesia's domestic fuel consumption exceeds domestic fuel production, fuel product imports are needed to meet local demand. In 2017, 2018, 2019 and the nine months ending on September 30, 2019 and September 30, 2020 our integrated supply chain coordinated the import of following refined fuel products:

	For the Years Ended December 31,			For the Nine Months Ended September 30,	
	2017	2018	2019	2019	2020
	(in mmbbls)			(in mmbbls)	
Motor gasoline	109.5	113.1	118.9	94.0	70.8
Automotive diesel oil (gas oil 0.25% sulfur)	13.3	15.2	0.8	0.8	0.3
Automotive diesel oil (gas oil 0.03% sulfur)	1.2	0.3	0.1	0.1	—
Marine fuel oil	0.5	0.2	0.3	0.3	0.0
Aviation turbine fuel	11.8	9.8	1.8	1.8	1.4
LPG	61.05	61.16	75.8	4.2	51.8

Other Businesses

We have subsidiaries and joint ventures through which we hold non-key, non-oil and gas assets and participate in non-core businesses such as domestic non-tanker shipping, a charter airline, insurance and hospital and property management services. Revenues generated from these and other businesses accounted for 2.0%, 1.7%, 1.8% and 2.1% of our total sales and other operating revenues in 2017, 2018, 2019 and the nine months ending on September 30, 2020, respectively.

Related Party Transactions

The Government is our sole shareholder and all our transactions with parties related to or owned by the Government constitute related party transactions. These transactions are described in the section titled "Relationship with the Government" included elsewhere in this Offering Memorandum. We sell fuel and other refined products to our related parties, including companies in which we hold a 20.0% to 50.0% interest who are our associates and certain entities with whom we share key management. Our related parties purchase fuel and other refined products from us on arm's-length terms based on market pricing for such fuel and refined products. As of December 31, 2019, trade and other receivables (including subsidy reimbursements due from the Government) owed by our related parties and trade and other payables owed by us to our related parties, including to the Government, comprised 12.5% and 5.2% of our total assets and total liabilities, respectively. As of September 30, 2020, trade and other receivables (including subsidy reimbursements due from the Government) owed by our related parties and trade and other payables owed by us to our related parties, including to the Government, comprised 9.1% and 4.9% of our total assets and total liabilities, respectively. In addition, we share common key management with certain of our related parties.

See Note 41 to our consolidated financial statements, included elsewhere in this Offering Memorandum for more information on our related party transactions.

Competition

We face competition from other oil and gas companies in all areas of our upstream, downstream and gas operations, including the acquisition of production sharing arrangements and cooperation contracts and for sales of oil and gas and refined petroleum products.

Upstream

Major competitors in our upstream oil and gas business in Indonesia and Southeast Asia include international oil and gas companies such as ExxonMobil, INPEX Corporation, Total, ConocoPhillips, BP and Chevron, many of which are large, well-established companies with greater capital resources and larger teams of operating staff than we have and some of which have been engaged in the oil and gas business for a longer period than us. Such companies may be able to offer more attractive terms when bidding for concessions for exploratory prospects and secondary operations, to pay more for productive natural gas and oil properties and exploratory prospects, and to define, evaluate, bid for and purchase a greater number of properties and prospects than our financial, technical or personnel resources permit.

Since the passage of the Oil and Gas Law of 2001, we have had to compete with other Indonesian and international oil and gas companies in tendering for new production sharing arrangements and cooperation contracts. Our ability to acquire production sharing arrangements and cooperation contracts and to acquire, discover, develop and produce reserves in the future will depend upon our ability to evaluate and select suitable properties and to consummate transactions in a highly competitive environment. However, given the importance of the oil and gas industry to the Indonesian economy, participation by Indonesian companies has been actively encouraged by the Government. For example, the Government has granted partial interests in production areas to regional entities. Being one of the few Indonesian companies involved in the oil and gas exploration and production industry and the only one that is wholly-state owned, we believe that we have certain advantages when seeking to expand our business in this sector, given the depth of our knowledge and experience of the exploration and production environment in Indonesia and our long-standing relationship with the Government.

We are the main player in the geothermal industry in Indonesia. Until 2011, we own-operated or joint-operated all geothermal plants in Indonesia. In 2011, we transferred our ownership interests in PT Geo Dipa Energi to the Government and now compete against it with respect to the allocation of geothermal working areas and projects. Other companies involved in the geothermal industry include PT Geo Dipa Energi, Star Energy, Sarulla Operations Ltd., PT Supreme Energy, PT SMGP and PT PLN, among others.

Downstream

We are currently the largest refiner in Southeast Asia by refining capacity and we are the dominant refining company in Indonesia, wholly owning and operating six of the nine active oil refineries in Indonesia, according to Wood Mackenzie. Our refining operations compete with other domestic and international suppliers for sales of refined petroleum products both inside of Indonesia and abroad. International suppliers include Petronas, PTT, Petron, ExxonMobil, Shell, Chevron, Singapore Refining Company and PetroVietnam.

According to Wood Mackenzie, we are the only company which has full value chain integration in the downstream marketing business.

Our retail fuel business primarily competes with Shell, AKR and Total, as well as independent operators in the commercial and retail markets, for the sale of refined petroleum products.

Market participants compete primarily on the basis of price, proximity to customers, brand name, quality, services offered and efficiency. Because margins on the sale of motor gasoline and automotive diesel oil are very low, competition has developed for higher margin products that can be sold at service stations, including high margin oil products such as lube and gasoline additives and non-oil goods and services. We cannot assure you that we will be able to maintain our leading market position in Indonesia or that our service stations will remain competitive in the retail petroleum industry.

Further, our role as the sole provider of fuel under the PSO mandate is now open to competition. Since 2008, BPH MIGAS has run a tender process for the PSO mandate and grants licenses to oil companies to sell subsidized fuel. In each of the last three years, AKR was also granted a PSO mandate by the Government. Based on the total amount of subsidized fuel distributed in Indonesia, we had 98.2% of the PSO market in each of 2017, 2018 and 2019. We believe this is due to our widespread distribution network, but we expect competition to intensify as our competitors build the necessary infrastructure. See “— PSO” for more information on our PSO mandate.

Our main competitors in the industry and marine fuel sector are Shell, Petronas, AKR and Petro Andalan, who are actively and aggressively building infrastructure across Indonesia for greater delivery capacity.

We are the market leader of the aviation fuel sector in Indonesia. In the past, we have been the sole provider of aviation fuel in Indonesia. The Government announced in March 2019 that it has granted a temporary permit to a private company to set up operations to sell jet fuel.

We are the market leader of the CNG sector in Indonesia and we do not currently have competitors in this sector.

In our petrochemicals segment, we compete domestically with Chandra Asri, Petronas, Shell, Chevron and Esso.

As we distribute lubricants both domestically and in over 24 countries and multiple regions around the globe, including Asia, Australia and the Middle East, we face competition in this sector from both local competitors such as Federal Oil, Top 1 and Evalube and international competitors such as Shell, Castrol, Yamalube, Idemitsu and Repsol.

Properties

In addition to the upstream and downstream oil and gas assets described above, our major properties include natural gas pipelines, land and buildings, machinery and equipment including tankers, oil terminals, gas service stations, gas separation plants and other fixed assets used for exploration and production of petroleum.

Our headquarters are located at Jl. Medan Merdeka Timur No. 1A, Jakarta.

Around 26% assets by area are not owned free and/or clear. “Free” means that we have all legal documents required to prove our title to a land asset. “Clear” means that we have physical control over

a land asset, i.e. there are no third parties either occupying the land or disputing our ownership of the land asset. Our non-free and non-clear assets as of each of December 31, 2019 and September 30, 2020 are valued at US\$112.2 million and US\$112.2 million, without taking into account any provision for impairment. See “Risk Factors — Risks Relating to Our Company — We do not have free and clear title to a significant portion of our land assets” for more information on this issue.

Research and Development

In July 2017, we established the RTC (Research and Technology Center) to manage research activities in Pertamina and address challenges in increasing technological capabilities in both downstream and upstream technologies. The RTC combines our previously-separate upstream and downstream research and development institutes and serves as an integrated research and development center that is expected to generate technology so as to improve production output and efficiency, formulate technological strategies to meet our current and future needs and to enhance our technological capabilities. We are also developing research related to new and renewable energy. RTC was then renamed to INV in 2020. We believe that the INV can develop a wide range of technological innovations, products or processes intended to address our future energy challenges.

In the upstream sector, the INV focuses on six areas of research and development which previously just had five areas (having added carbon capture and storage), namely exploration research, development research, production research, drilling and well construction research, geothermal research and carbon capture and storage research. Upstream technological development is mainly directed towards the discovery of new reserves that are increasingly difficult to come across and the production of unconventional oil and gas by developing technologies relating to enhanced oil recovery (surfactants, CO₂, polymers and chemicals), drilling for exploration and exploitation, unconventional petroleum (coal bed methane, shale gas and oil sand) and exploration into deep water and harsh environments.

In the downstream sector, the INV focuses on four areas of research and development, namely oil and gas research, process development research, materials and chemical research and petrochemical and petroleum non-fuel research. This research helps to develop new oil- and gas-based products.

In the New and Renewable Energy (“NRE”) sector, the INV focuses on four areas of research development, namely renewable energy development research, new energy development research, power development and storage management research and carbon capture and storage research. We prioritize research on biofuels, especially those based on agricultural products, algae wastes and biomass. Our other research relates to other NRE, such as solar and coal gasification, and the development of power storage and carbon capture technology.

The actual expenditures for research and development were US\$5.2 million for 2017, US\$4.2 million for 2018, US\$11.4 million for 2019 and US\$24.2 million for 2020.

Trademarks and Service Marks

We have trademarked certain of our product names to protect our various brands in both the domestic and international market. In relation to our retail fuel business, we have trademarks for our wholly-owned and run retail fuel products; for instance, “Pertalite,” for one of our value-added, non-PSO retail fuels, “Fastron,” “Prima XP,” for our lubricant products and “Musicool and “HAP Pertamina” for our gas products. The relevant Certificate of Trademark for several of our trademarks, including “Dexlite,” “Pertamax Turbo,” “Pertamina Racing,” and “Bright Gas” are pending. We have not had any significant disputes with respect to any of our trademarks or service marks. We currently hold several patents for our products or processes.

Insurance

We have comprehensive insurance policies that cover our business, our properties and litigation brought by third parties. We employ a risk management policy for purposes of analyzing the risks faced by our businesses in determining the appropriate insurance coverage. Our coverage includes onshore & offshore property insurance, marine hull & machinery insurance, land rigs insurance, cost of well control insurance, pipelines insurance, motor vehicle insurance, third party liability insurance, project insurance, directors & officers liability insurance, marine cargo insurance, refueling liability insurance and protection & indemnity insurance. We consider our insurance coverage to be in accordance with industry standards.

In respect of our exploration and production, refining, petrochemical production, and marketing and sales operations, we currently maintain insurance policies with a domestic Indonesian insurer, Tugu Group, in which we hold an interest through our subsidiary, PT Asuransi Tugu Pratama Indonesia and PT Asuransi Jasa Indonesia, in which a state-owned insurance Company.

See “Risk Factors — Risks Relating to Our Upstream Operations — Oil, gas and geothermal operations are subject to significant operating risks hazards, for which we may not be fully insured” for risks relating to our insurance.

Health and Safety

We are subject to various health and safety laws. We have extensive safety procedures designed to ensure the health and safety of our workers and assets, the public and the environment. A safety manual of detailed operating procedures is available at the operations level, with another, more specific, manual maintained by each of our operating subsidiaries, which together govern these safety procedures. Certain procedures must be approved by a safety officer in advance before they can be undertaken, and in the event of any accidents or fatalities, we have procedures in place to investigate such incidents and determine if compensation would be necessary.

Our Health, Safety, Security and Environment (“HSSE”) board committee is responsible for drafting our HSSE policies and procedures. Our Senior Vice President of HSSE Corporate is responsible for the overall implementation of the HSSE policy and the coordination of all HSSE activities throughout our Company. The Senior Vice President of HSSE Corporate reports directly to the President Director or Chief Executive Officer. Further, we have in-house HSSE teams present in each of our business units, subsidiaries and locations where we operate, to ensure that our HSSE policies are followed in each respective location. The HSSE teams in each location report either to the operational head or general manager of each location and for each directorate or subholding represented by the Vice President of HSSE, as applicable, who in turn coordinate with the Senior Vice President of HSSE Corporate.

To achieve HSSE Excellence, Pertamina has an eight point HSSE Policy signed by the President Director and contains commitments to implement HSSE in all operational aspects that employees, shareholders and other stakeholders must comply with and implement. In accordance with the HSSE Policy, the Company and its Subsidiaries are committed to carrying out operational activities in a safe, comfortable and environmentally friendly manner by applying high standards to the Company’s HSSE aspects, to minimize risks by preventing accidents, fires, and diseases. work, environmental pollution and security disturbances and other impacts due to failure of operations on the environment around the operation area. Pertamina has also adopted the ISO 45001 Occupational Health and Safety Management System as a management system standard in managing occupational health and safety aspects.

SUPREME (Sustainability Pertamina Expectations For HSSE Management Excellence) is a Pertamina HSSE Management System that aims to integrates best / world-class HSSE practices in a structured and systematic manner at the Corporate, Directorate, Operation Units and subsidiary levels of Pertamina, as well as ensuring that HSSE practices contribute to overall business sustainability, manage risks related to the business, and set and achieve business targets, HSSEs, and other Pertamina targets (key performance indicators, targets and/or other targets)

Pertamina has 12 Corporate Life Saving Rules (CLSR) where there are 12 areas / types of work that are statistically potential (contributory factors) to the occurrence of fatality incidents, and risk control efforts must be made to reduce the potential for fatality incidents, so that work can be carried out in a safe and secure manner.

It is our policy that in the event of any conflict between the progress of work and health or safety concerns, the health and safety of employees, equipment and third parties are paramount. We provide our employees with comprehensive training in safety related matters. Government officials make both scheduled and random checks at our operating facilities to ensure that safety procedures are being followed. We have also implemented a contractor safety management system (CSMS) to ensure accountability of our contractors and reduce the worksite incident and injury rates.

In responding to the COVID-19 pandemic, we continue to work with our business partners under strict implementation of health protocols for the protection of workers, customers, partners and suppliers. This is in accordance with the direction of the Minister of BUMN through letter No. S-36/MBU/05/2020 on May 15, 2020 regarding the anticipation of the BUMN New Normal Scenario.

During the COVID-19 pandemic, preventing the transmission of the corona virus was one of the priorities for HSSE policies. We provided supports and financial resources, commenced an initiative to provide COVID-19 referral hospitals, implemented “PERTAMINA Siaga COVID-19” followed by the formation of the COVID-19 Task Force in early March 2020, as the first in a state-owned enterprise (BUMN). In addition to the integrated handling of the COVID-19 pandemic, the COVID-19 Task Force also ensures business activities and services to customers and the public continue to run safely through the implementation of health protocols. The efforts made by the COVID-19 Task Force include testing, tracing, and treatment (3T). Testing, is done through a medical test method including a rapid test, and a polymer chain reaction (PCR) test including the PCR pool. We also opened communication channels through Call Center 135 for workers and families, for consultation or obtaining information about COVID-19. Call Center 135 also provides product delivery service for the public.

Employees

The following table provides a breakdown of our Company's (including PGN's) employees as of the dates indicated.

Unit	As of December 31,			As of
	2017	2018	2019	September 30,
				2020 ⁽¹⁾
Upstream	176	181	217	—
Downstream	8,926	9,099	10,915	5,709
Gas	145	—	—	—
Integrated supply chain	110	122	133	—
Administration (including top management, corporate secretary and human resources)	1,145	1,378	1,455	7,345
Finance, treasury and accounting	1,002	985	974	683
Company total	<u>11,504</u>	<u>11,765</u>	<u>13,674</u>	<u>13,827</u>
Subsidiaries total	<u>18,614</u>	<u>20,674</u>	<u>18,679</u>	<u>20,621</u>
Total (Company and subsidiaries)	<u>30,118</u>	<u>32,439</u>	<u>32,353</u>	<u>34,448</u>

Note:

(1) Excludes PGN.

In addition to our full-time employees, we also rely on outsourced labor. We hire outsourced labor through a labor service agreement with labor supply companies. Wages and benefits, terms of employment and dispute settlement mechanisms for outsourced employees are determined by agreement between the employees and the labor supply company, subject to labor regulations.

All full-time employees involved in oil and gas exploration and production are our employees or employees of our operating subsidiaries. Our upstream human resource management policies are subject to oversight by SKK MIGAS. SKK MIGAS reviews our upstream personnel plans to ensure that they remain in accordance with development plans for PSC.

A substantial number of our employees are unionized. 19 labor unions across the Company form a union federation called *Federasi Serikat Pekerja Pertamina Bersatu* (Federation of Pertamina United Labor Unions) which covers 10,001 members. Some of our employees, including all of our top leadership level management, are not members of labor unions. The Company's relationship with the unions have been amicable. Together, our Company and the union federation negotiate terms and conditions of employment and working relationship which are then formulated in *Perjanjian Kerja Bersama* (collective bargaining agreement) that is registered with the Ministry of Manpower of Indonesia. The most recent collective bargaining agreement was signed in April 2019 and is valid for two years, with a possible extension based on mutual agreement between both parties. We have not seen any strikes or other labor-related disruptions that have interrupted our operations. The nature of our relationship with our employees is harmonious. However, see "Risk Factors — Risks Relating to Indonesia — Labor activism, unrest and employment legislation may materially and adversely affect us."

Starting 2021 we are implementing Pertamina Industrial Peace Level assessment that aim for measuring standardized industrial relations, ensure the alignment of company policies with regulations and best practices, and gather valuable input for corporate policies. The assessment will be covering four aspects: opportunity & equality, protection & well-being, training & development, and industrial relations.

The total take-home pay of our employees includes base salary, allowances based on the location where the employee works, allowances for an employee's position and/or sales and income tax allowances. We further provide certain of our employees other cash allowances and incentives (including holiday allowances, annual leave allowances and our annual incentive plan), health benefits, leave benefits, retirement benefits (including severance bonuses, pension plans, saving plans, life assurance and mandatory government insurance) and facilities (including housing, club memberships and car and phone services).

In accordance with applicable Indonesian regulations, we currently participate in pension contribution plans organized by municipal and provincial governments, under which we contribute at an average rate of 10.0% of our employees' salaries, bonuses and certain allowances. The contributions vary from region to region. Other than the contributions, we have no other material obligation for the payment of pension benefits associated with these plans. We also provide retirement benefits based on the retirement base income and the respective employment period. Retirement benefits are provided from the fund on a monthly basis to the former employee on the basis of a contributory program. Contributions are made by us and the employee to the program during the employment period based on the rules of the retirement fund.

Other retirement benefits that an employee receives and that are funded by us include a post-employment benefit amount and health care benefits. Each employee also participates in a retirement training program shortly before retirement. In addition, to mitigate the risk of talent loss as a significant number of our mid- and senior-level managers are near retirement age, starting from 2018 we have launched the award winning leadership development program called Catalyser Program. This program launched in 2018 and brought Pertamina as the first Indonesian company that won the Gold Prize - for Excellence in Practice Award held by European Foundation of Management Development in 2020. This program is the largest leadership accelerator in South East Asia with cohort of 120 candidates each year preparing for Vice President & Senior Vice President positions by 2023. The challenge triggered by the retirement of nearly all Pertamina senior leaders in a 5-years period, with a leadership gap of 10 years' experience from internally promoted successors taken from the middle management ranks. Co-created with 4 prominent external partners and involving senior leaders and Human Capital team including Pertamina Corporate University, to design and deliver a complex and innovative program. The design provides in-depth leadership learning & personnel development for participants in program that blends international exposure, mindset change, self-directed career development, mentoring, and Action Learning Projects (ALP) in a two-years process. Validation of process measured at the beginning, middle, and end of the program. The program impact was assessed at 4 levels: concern at the national level, the strategic and organizational impact, the leadership capability impact, and the personal impact on participants. At the beginning of 2021 we've had 114 program graduates from Cohort 1, 121 participants of Cohort 2 in progress, and the Cohort 3 in the pipeline. We've successfully promote 80% of cohort 1 graduate by the end of 2020.

We also provide certain health care benefits to our employees and their families. Health care benefits include in-patient and out-patient treatments, glasses, and dental and periodic medical check-ups.

We have a number of training and education programs for our employees. We classify our training and education programs into three categories: generic training, technical training and overseas training. Generic training is available to all employees and ranges from leadership and managerial topics such as courses on good corporate governance and our executive development program to corporate culture. Technical training is specific to each department and includes courses for specialists within each department. Examples of technical courses which we run include courses on "Advanced Process Design" and "Logistics" in our refinery business unit and out general and human resources business unit respectively. Overseas training is available to all employees and is conducted on an ad hoc basis.

Environmental Matters

Our oil and gas exploration and production operations, petroleum and petrochemical products and other activities are subject to Indonesian laws and regulations governing the discharge of materials into the environment or otherwise relating to environmental protection. These laws include the New Environmental Law and other regulations relating to hazardous wastes, emissions and effluent waste water management. These laws and regulations may require the acquisition of a permit before drilling or refining commences, which may restrict the types, quantities and concentration of various substances that can be released into the environment in connection with drilling and production activities, limit or prohibit drilling activities on certain lands lying within wilderness, wetlands and other protected areas, require remedial measures to prevent pollution resulting from the former operations, such as plugging abandoned wells, and impose substantial penalties for pollution resulting from our oil, natural gas and petrochemical operations. We may also be required in certain situations to complete environmental impact analyses and to enter into various environmental management undertakings prior to carrying out exploration and development operations, production and refining activities. These environmental management activities are regulated by the Ministry of Energy and Mineral Resources and Ministry of Environment and Forestry.

The New Environmental Law introduced an environmental permit (*Izin Lingkungan*) and requires that all licenses regarding environmental management issued by the Government must be integrated with the environmental permit requirements within a year of the enactment of the law. On February 12, 2012, the Government enacted Regulation No. 27 which requires companies which are required to obtain an AMDAL approval or prepare a UKL and UPL to also be obliged to obtain the environmental permit in order to obtain a business license but all permits and licenses existing before implementation of Regulation No. 27 would be accepted as valid environmental permits. We have taken steps to improve our management of sludge and drilling waste in order to comply with the standards set by the New Environmental Law. See “Risk Factors — Risks Relating to Our Company — Our compliance with or breach of environmental regulations in Indonesia and in the countries in which we operate could materially or adversely affect our business, financial condition, results of operations and prospects.”

Under Indonesian environmental regulations, remedial and preventative measures, as well as sanctions (such as the imposition of substantial criminal penalties, fines and the cancellation of concessions) may be imposed in order to remedy or prevent pollution caused by operations. Such sanctions range from one to 15 years of imprisonment for any person who has caused environmental pollution or environmental damage, and fines ranging from between Rp. 500 million to Rp. 15 billion, subject to an additional penalty of one-third of the fine amount if the person directs a corporate entity to commit a breach of the New Environmental Law. The Ministry of Environment and Forestry also reserves the right to impose a monetary penalty in lieu of any rehabilitation obligations of a liable person.

The environmental management systems that apply to us are EMS ISO 14001 and Environmental Compliance Performance Evaluation Program (*Program Penilaian Peringkat Kinerja Perusahaan dalam Pengelolaan lingkungan*, or “PROPER”) administered by the Ministry of Environment and Forestry.

EMS ISO 14001 is a voluntary standard that requires organizations to put in place and implement a series of practices and procedures that, when taken together, result in an environmental management system. Approximately 80% of our fields, refineries, geothermal areas and marketing and trading centers meet EMS ISO 14001 standards and certifications.

The Ministry of Environment and Forestry in Indonesia rates companies in accordance with PROPER, which consists of a series of five ratings ranging from “gold” (the highest possible rating) to

“black” (the lowest possible rating). This rating program is conducted for every business and/or activity with potential to create pollution and/or environmental damage. Companies in Indonesia that are rated on the PROPER program are required to publicly disclose their level of compliance.

We have consistently implemented environmental excellence in the production and services process as well as implementing ethical and responsible business towards the community through the Program Social and Environmental Responsibility. In addition, in terms of environmental management, we have done more than is required under the regulations, through implementing an environmental management system, utilizing resources efficiently and implementing social responsibility properly. As a result, on December 31, 2019, 13 of our operations have a gold PROPER rating (indicating excellent compliance), 76 of our operations have a green PROPER rating (indicating that they exceeded the compliance level), and 88 of our operating units have a blue PROPER rating (indicating that they are fully compliant). In 2020, 16 of our operations have a gold PROPER rating, 64 of our operating units have a green PROPER rating, and 90 of our operating units have a blue PROPER rating.

Various environmental laws, rules and regulations may act to limit the rate of oil and natural gas production to levels below the rate that would otherwise exist. These laws and regulations may also restrict air emissions and discharges to surface and subsurface water resulting from the operation of natural gas processing plants, chemical plants, refineries, pipeline systems and other facilities that we own. In addition, our operations may be subject to laws and regulations relating to the generation, handling, storage, transportation, disposal and treatment of waste materials. The regulatory burden on the oil and gas industry increases the cost of doing business and consequently affects its profitability. Changes in environmental laws and regulations occur frequently, and any changes that result in more stringent and costly waste handling, disposal and clean-up requirements could have a significant impact on our operating costs, as well as the oil and gas industry in general.

The Government has imposed environmental regulations on oil and gas companies operating in Indonesia and in Indonesian waters. Operators are prohibited from allowing oil into the environment and must ensure that the area surrounding any onshore well is restored to its original state insofar as this is possible after the operator has ceased to operate on the site. An environmental impact study and a Government permit are required before any exploration work can commence. Under the Oil and Gas Law of 2001, SKK MIGAS has direct control over upstream operators to ensure that they meet Government regulations. We are required to provide a report containing an environmental impact analysis to the Indonesian environmental agency at least two times a year. For certain areas, we are currently in the process of installing additional equipment in our producing fields to comply with the New Environmental Law. For details of the risks that we face if this deadline is not extended, see “Risk Factors — Risks Relating to the Oil, Gas and Geothermal Industry — Our compliance with or breach of environmental regulations in Indonesia and in the countries in which we operate could materially adversely affect our business, financial condition, results of operations and prospects.”

Our management believes that we are in compliance with current applicable environmental laws and regulations in all material respects and that continued compliance with existing requirements will not have a material adverse impact on us. See “Risk Factors — Risks Relating to the Oil, Gas and Geothermal Industry — Our compliance with or breach of environmental regulations in Indonesia and in the countries in which we operate could materially and adversely affect our business, financial condition, results of operations and prospects.”

Sustainable Development

We have developed seven priorities focusing on sustainable development goals (SDGs) including good health and well-being, quality education, gender equality, peace, justice and strong institutions, climate actions, decent work and economic growth, affordable and clean energy. We have won the

2020 ASEAN Energy Award for ASEAN Energy Renewable Best Practice and the Global Corporate Sustainable Award for Great Practice Award Category by Alliance for Sustainable Development Goals (ASDGs) in 2020.

Legal Proceedings

We are involved in certain judicial and arbitral proceedings before Indonesian courts or arbitral bodies concerning matters arising in connection with the conduct of our business in the ordinary course.

In November 2020, the Supreme Court of Indonesia ruled against PGN and in favor of the Indonesian General of Tax (“DGT”) in respect of 18 of 24 total cases linked to disputed VAT amounts accrued in 2012 (in respect of natural gas sold by PGN) and 2013 (in respect of Rupiah-denominated components of PGN’s gas transmission revenue). The Supreme Court decision overturned decisions in PGN’s favour from the Tax Court. Of the total amounts of US\$218.5 million and US\$59.8 million in dispute for 2012 and 2013, respectively, the Supreme Court concluded that PGN is liable for unpaid VAT of US\$160.9 million and US\$44.7 million, respectively. The remaining amounts of US\$57.6 million and US\$15.1 million for 2012 and 2013, respectively, remain pending. As of 30 September 2020, management of PGN had recorded a provision for these tax disputes of US\$278.3 million as an adjusting subsequent event. However, management of PGN has not recorded any further provision for potential penalties in respect of the disputed VAT amounts and intends to apply to the Supreme Court for a second judicial review of its decision and to petition for dismissal of the proceeding. Management of PGN believes that the DGT’s claims are without merit.

In July 2019, we experienced a “well kick” in the Java Sea near Karawang (West Java) at an offshore platform operated by PHE ONWJ (as defined herein) where a reactivated well is being developed. Residents of nearby Banten Bay and Thousand Island have filed a class action lawsuit against us and PHE ONWJ in the Central Jakarta District Court for the impact of such oil spill. In August 2018, the court ruled against us and PHE ONWJ. We and PHE ONWJ have appealed the decision and the appeal is pending. An investigation by the Directorate of Special Crime and the West Java Regional Police is also pending.

Please see note 50h to our financial statements included elsewhere in this Offering Memorandum for details of additional notable legal cases involving our company.

Except as disclosed above, we believe, based on currently available information, that an adverse outcome in one or more of the pending legal proceedings that we are involved in would not, individually or in the aggregate, have a material adverse effect on our financial condition or operations.

MANAGEMENT

In accordance with Indonesian law, we have both a Board of Commissioners and a Board of Directors. The two boards are separate and no individual may serve as a member on both boards.

The rights and obligations of each member of the Board of Commissioners and Board of Directors are regulated by our articles of association and by the decisions of our shareholder in general meeting. Under our articles of association, the Board of Directors must consist of one or more members, one of which will be appointed as the President Director and the other one will be appointed as Vice President Director. Any of the President Director, the Vice President Director or one of the Directors (in the event the President Director and Vice President Director are unavailable, and as appointed in writing by the President Director) is entitled to act for and on behalf of our Company, provided that their actions have been approved in the meeting of Board of Directors. If there is no such written approval, the Director who has had the longest term of office may act on our behalf. The Board of Commissioners must consist of one or more Commissioners, one of which will be appointed as the President Commissioner.

Board of Commissioners

The principal function of the Board of Commissioners is to supervise the policy of the Board of Directors in connection with our business activities and to give advice to the Board of Directors in accordance with our articles of association, shareholder resolutions and prevailing rules and regulations.

Members of the Board of Commissioners are appointed and removed at a shareholder's general meeting shareholders and generally serve five-year terms. The Board of Commissioners comprises six members (excluding Mr. Budi Gunadi Sadikin, as explained below).

The following table sets forth certain information concerning the current members of the Board of Commissioners. The table below excludes Mr. Budi Gunadi Sadikin, our Vice President Commissioner as of the date of this Offering Memorandum, who has recently been appointed as the Minister of Health of Indonesia. Mr. Sadikin is expected to resign from our Board of Commissioners.

Name	Position	Age	Appointed Since
Basuki Tjahaja Purnama	President Commissioner and Independent Commissioner	54	December 2019
Condro Kirono	Commissioner	59	November 2019
Ego Syahrial	Commissioner	58	May 2018
Isa Rachmatarwata	Commissioner	54	December 2019
David Bingei	Independent Commissioner	52	April 2020
Alexander Lay	Independent Commissioner	47	May 2018

Basuki Tjahaja Purnama was appointed to our Board of Commissioners in December 2019 and is currently President Commissioner. Mr. Purnama previously held the position as director of PT. Nurindra Ekapersada from 1992 to 2005 and Assistant to President Director in the finance division of PT. Simaxindo Primadaya from 1994 to 1995. He also served as Regent of East Belitung from 2005 to 2006, a member of the People's Representative Council of the Republic of Indonesia from 2009 to 2012, Lieutenant Governor of Jakarta from 2012 to 2014 and the Governor of Jakarta from 2014 to 2017. He received his Bachelor of Science Degree in Geological Engineering from Trisakti University in 1989 and his Master's Degree from Prasetiya Mulya Business School.

Budi Gunadi Sadikin was appointed to our Board of Commissioners in December 2019 and is currently Vice President Commissioner. Currently, he also served as Minister of Health. Budi began

his career in 1988 as Information Systems Staff in IBM's Asia-Pacific Headquarters in Tokyo and later became Manager, Systems Integration & Professional Services in IBM in 1994. He was General Manager, Electronic Banking and Chief General Manager, Jakarta Region and Chief General Manager, Human Resources in Bank Bali from 1994 to 1999. He joined ABN AMRO Bank Indonesia from 1999 to 2004 and served as Senior Vice-President Director, Consumer and Commercial Banking, before he joined PT Bank Danamon Indonesia Tbk from 2004 to 2006 as EVP, Head of Consumer Banking. He was Director, Micro & Retail Banking from 2006 to 2013 and President Director from 2013 to 2016 in PT Bank Mandiri Tbk. He was Special Staff to the Minister of BUMN from 2016 to 2017 and President Director in PT Inalum (Persero). He received his Bachelor of Science Degree in Nuclear Physics from the Bandung Institute of Technology in 1988 and a certification as a Chartered Financial Consultant and Chartered Life Underwriter from the Singapore Insurance Institute in 2004.

Ego Syahril was appointed to our Board of Commissioners in May 2018. Currently, he also serves as Secretary of General of the Ministry of Energy and Mineral Resources. Mr. Syahril obtained a Master of Science degree, Doctor of Philosophy degree and Post-Doctoral degree (Research Associate) in Petroleum Engineering from Imperial College London and the University of London.

Condro Kirono was appointed to our Board of Commissioners in November 2019. Mr. Kirono served in the National Police of the Republic of Indonesia from 1984 to 2019 and was previously Head of the Traffic Corps from 2014 to 2016, Chief of Central Java Regional Police from 2016 to 2019 and Head of the National Police Security Maintenance Agency in 2019. He graduated from the Indonesian National Police Academy in 1984.

Isa Rachmatarwata was appointed to our Board of Commissioners in December 2019. Mr. Rachmatarwata started his career in the Ministry of Finance of the Republic of Indonesia in 1991 and eventually held the position of Director General of State Assets. He currently serves on the board of PT Telekomunikasi Indonesia (Persero) Tbk and The Islamic Development Bank. He received a Bachelor's Degree from the Faculty of Mathematics and Natural Sciences from Bandung Institute of Technology in 1990 and a Master of Mathematic Actuarial Science from the University of Waterloo in Canada in 1994.

David Bingei was appointed as an Independent Commissioner on our Board of Commissioners in April 2020. Before join Pertamina, he was Teaching Fellow in IPMI International Business School and Head of School Master of Finance in Binus Business School. He obtained CFA Level 1 from CFA Institute, CF of Institute Chartered Accountant from England and Wales, and Master of Science from London Business School.

Alexander Lay was appointed as an Independent Commissioner on our Board of Commissioners in May 2018. Prior the assignment, he was served as Special Staff in Law from Indonesia Cabinet Secretariat of Indonesia and Commissioner PT Asuransi Jasa Indonesia (Persero). Alexander obtained Bachelor in Petroleum Engineering from Bandung Technology Institute in 1997, Bachelor in Law from Atmajaya University in 2003, and Master of Laws from Sydney University in 2003.

Board of Directors

Members of the Board of Directors are elected for five-year terms at a shareholder's general meeting. The Board of Directors is comprised of a President Director and Chief Executive Officer and eight other Directors. The Board of Directors is responsible for the management of our business.

The following table sets forth certain information concerning the current members of the Board of Directors.

Name	Office/Division	Age	Appointed Since
Nicke Widyawati	President Director	53	August 2018
Emma Sri Martini	Finance Director	49	September 2018
Mulyono	Logistic and Infrastructure Director	52	December 2019
Iman Rachman	Strategy, Portfolio and New Venture Director	48	June 2020
Koeshartanto	Human Resources Director	60	August 2018
M. Haryo Yudianto	Business Support Director	51	April 2018

Nicke Widyawati was appointed as our President Director in August 2018. She graduated from Bandung Institute of Technology in Industrial Engineering in 1991 and obtained her Master of Business Law Degree from Padjajaran University in 2009. Nicke joined Pertamina in 2017 as Director of Human Capital/Acting President Director & CEO. Prior to that, Nicke served as the Director of Corporate Planning & Renewable Energy at PT PLN (Persero) and Director of Strategic Sourcing and Renewable Energy PT PLN (Persero).

Emma Sri Martini was appointed as Finance Director in November 2019. She previously served as President Director of Telkomsel in 2019 and held various other positions, including President Director of PT Sarana Multi Infrastruktur (Persero) from 2009 to 2019 and Director of Finance and Support of PT Perusahaan Pengelola Aset (Persero) from 2004 to 2009. She received a Bachelor's Degree in Information Technology from Bandung Institute of Technology in 1993 and a Master's Degree from Harvard Kennedy School Executive Education in 2011.

Mulyono was assigned as Logistic and Infrastructure Director in December 2019. Prior the assignment, he was served as Technical Expert and Strategic Advisor to Marketing Director, SVP Asset Strategic Planning and Optimization, and President Commissioner of PT Kilang Pertamina International. Mulyono obtained Master in Industrial Engineering Management from University of Indonesia and Graduate Certificate in Engineering Management from Queensland University of Technology, Australia in 2000, and Doctoral Degree in Marine Transportation System from Sepuluh November Technology Institute.

Iman Rachman was appointed as Strategy, Portfolio and New Venture Director in June 2020. Previously, he served as President Director of PT Perusahaan Pengelola Aset (Persero), Financial Director of PT Pelabuhan Indonesia II (Persero), and Director of Investment Banking PT Mandiri Sekuritas. He gained Bachelor of Economy from Padjajaran University in 1995 and Master of Business Administration in Finance from Leeds University Business School in 1997.

Koeshartanto was appointed as Human Resources Director in August 2018. He previously served as Human Resources & General Affairs Director at PT Jasa Marga (Persero) Tbk. He graduated with a Bachelor's Degree in Economics from Diponegoro University in 1985 and earned his Master of Business Administration Degree from IPMI Business School.

M. Haryo Yudianto was appointed as Business Support Director in June 2020. Previously, he was assigned as Asset Management Director of PT Pertamina (Persero) in April 2018. Prior to that, he served as President Director of PT Patra Jasa. He graduated with a Law Degree from the Islamic University of Indonesia and received his Master of Management Degree from the Veteran National Development University of Jakarta.

Senior Management

The following table sets forth certain information concerning our senior management.

Name	Office/Division	Age	Appointed Since
Nicke Widyawati	President Director	52	August 2018
Aji Prayudi	Chief Legal Counsel & Compliance	55	July 2018
Agus Murdiyanto	Chief Audit Executive	51	August 2020
Emma Sri Martini	Finance Director	49	September 2018
Mulyono	Logistic and Infrastructure Director	52	December 2019
Iman Rachman	Strategy, Portfolio and New Venture Director	48	June 2020
Koeshartanto	Human Resources Director	59	August 2018
M. Haryo Yunianto	Asset Management Director	50	April 2018

Nicke Widyawati. See “— Board of Directors.”

Aji Prayudi was appointed as our Chief Legal Counsel & Compliance in July 2018. He has 28 years of experience working in our legal department. He has held various positions with our Company, including Vice President of Legal & Relation at PT Pertamina EP from 2013 to 2014, Vice President of Legal Counsel Upstream & Gas at PT Pertamina (Persero) from 2014 to 2017 and Vice President of Relations at PT Pertamina Hulu Energi from 2017 to 2018. He achieved a Bachelor’s Degree in Civil Law from the University of Indonesia and obtained two Master’s Degrees in Management from Gadjahmada University, Yogyakarta and a Master of Law Degree from University of Indonesia, Jakarta.

Agus Murdiyanto was appointed as our Chief Audit Executive in August 2020. Prior join with Pertamina, he was the CEO of Arteron Global System Pte., Ltd (Indonesia Operation), CEO of PT Manggala Hardana Kapital, and Vice President Corporate Secretary / Investor Relations of PT Telekomunikasi Indonesia Tbk.

Emma Sri Martini. See “— Board of Directors.”

Mulyono See “— Board of Directors.”

Iman Rachman. See “— Board of Directors.”

Heru Setiawan. See “— Board of Directors.”

Koeshartanto. See “— Board of Directors.”

M. Haryo Yunianto. See “— Board of Directors.”

The Audit Committee

The Audit Committee is headed by a member of the Board of Commissioners, who must be an independent commissioner, and must include at least two other persons, who do not have to be members of the Board of Commissioners. The current Head of the Audit Committee is David Bingei. The other members of the Audit Committee are Alexander Lay, Wahyu Indra Pramugari, Widiarto Suwanto Sumitro, and Eddy Fritz Sinaga. The Audit Committee supports the Board of Commissioners as a consulting, controlling and initiating body in the areas of communicating with internal and external auditors,

supervising the independence and objectivity of the internal audit function, reviewing and assessing the independence of external auditors, reviewing and assessing financial reporting as well as assessing the adequacy and effectiveness of internal control systems.

The committee normally meets at least 12 times a year for the time necessary to fulfill its purpose or more frequently as circumstances dictate.

The Investment Committee

The Investment Committee is headed by a member of the Board of Commissioners and must include at least two other persons. The current Head of the Investment Committee is David Bingei. The other members are Isa Rachmatarwata, Yuni Rusdinar, Rizal Bambang Prasetyo, and Dini S. Purwono. The Risk Management Monitoring Committee proposes risk management guidelines to the Board of Commissioners and advises the Board of Commissioners on these matters.

The committee normally meets at least 12 times a year for the time necessary to fulfill its purpose or more frequently as circumstances dictate.

Compensation

Payment of compensation to the commissioners and directors is determined at the annual shareholder's general meeting. In 2019, total salaries paid to the commissioners and directors as a group was US\$49.9 million.

As of December 31, 2019 and September 30, 2020, we had employee benefits obligations of US\$2,014.9 million and US\$2,026.6 million, respectively, including pension and other post-employment benefits.

RELATIONSHIP WITH THE GOVERNMENT

Overview

We are a profit-based, state-owned limited liability company (*Persero*), created pursuant to the Oil and Gas Law of 2001 in conjunction with Government Regulation No. 31 of 2003 on the Transfer of Form of *Perusahaan Pertambangan Minyak dan Gas Bumi Negara (Pertamina)* to *Perusahaan Perseroan (Persero)* (“GR 31”). Our formal establishment was through Deed of Establishment No. 20, dated September 17, 2003, drawn up before Lenny Janis Ishak, SH, Notary in Jakarta. Our establishment by the Government was conducted by way of a contribution in kind of all the Government’s assets in PERTAMINA, including PERTAMINA’s assets in its subsidiaries and joint venture companies at the time of the enactment date of GR 31 but excluding PERTAMINA’s assets that had been transferred to BPMIGAS. One of the Government’s objectives in establishing us as a limited liability company was to contribute to the public welfare of Indonesia by enhancing domestic economic activity.

History

Prior to our current form, we operated in Indonesia for more than 55 years through our various legal predecessors. We were first established on December 10, 1957, under the name *Perusahaan Minyak Nasional* (“PT PERMINA”) pursuant to the Decree of Minister of Industry No. 3177/M and Decree of the Head of Staff of Army as the Central Commandant of War No. PRT/PM/017/1957, both dated October 15, 1957. This created the first national oil company of Indonesia.

In 1961, PT PERMINA was consolidated into a newly established company pursuant to Government Regulation No. 198 Year 1961, dated June 5, 1961, named *PN PERMINA (Perusahaan Negara Pertambangan Minyak Nasional)*. Further, in 1968, the Government established another new entity named *Perusahaan Negara Pertambangan Minyak dan Gas Bumi Nasional* (PN PERTAMINA), pursuant to Government Regulation No. 27 Year 1968, dated August 20, 1968, and consolidated both PN PERMINA as well as *Perusahaan Negara Pertambangan Minyak Indonesia* (“PN PERTAMIN”), which was another oil company established pursuant to Government Regulation No. 3 Year 1961, dated February 13, 1961. With the enactment of Law No. 8 Year 1971 regarding *Perusahaan Pertambangan Minyak dan Gas Bumi* (“Law No. 8/1971”), PN PERTAMINA was dissolved and all of its assets were contributed as the capital of the newly established company named PERTAMINA.

Within that period, the rights to explore and exploit crude oil and natural gas in Indonesia were delegated to us by the Government, as stipulated by Law No. 8/1971. As a representative of the Government, we acted as the sole holder of the mine concession right for all oil and gas areas under the jurisdiction of the Republic of Indonesia. In order to conduct the exploration and exploitation of oil and gas mining, we entered into contracts with third party contractors in the form of PSCs and other production sharing arrangements. Within this period, we also regulated all aspects of the oil and gas industry in Indonesia.

In 2001, the Oil and Gas Law of 2001 was enacted, terminating the exclusive rights held by PERTAMINA. Under the Oil and Gas Law of 2001, BPMIGAS (the predecessor to SKK MIGAS) and BPH MIGAS were established to regulate the upstream and downstream sectors of the Indonesian oil and gas industry. With the dissolution of PERTAMINA and the establishment of our Company in 2003, we became a state-owned limited liability company. Further, as a result, we restructured our business into upstream and downstream sectors operated through separate directorates and subsidiaries. See “Indonesian Regulatory Framework” for more information about the Indonesian oil and gas regulatory framework and “Corporate Structure” for more information on our subsidiaries.

Government as Shareholder

The Government owns 100% of our issued share capital. Our authorized share capital is Rp. 600,000 billion and our initial issued and paid up capital was Rp. 171,227,044 billion as reflected in our articles of association and pursuant to Minister of State-Owned Enterprises Decree No. S-217/MBU/04/2018 dated April 11, 2018 which was retrospectively applied to 2003.

As our sole shareholder, the Government is entitled to receive dividend payments from us on an interim or annual basis. In 2017, 2018 and 2019, we declared dividends of Rp. 12.1 trillion (US\$907.4 million), Rp. 8.57 trillion (US\$614.9 million) and Rp. 7.95 trillion (US\$552.7 million), respectively, to the Government. For 2021, the Government is targeting us to pay 30% or less of our projected profits to the Government in dividends. The Government is also entitled, in its capacity as our sole shareholder, to approve any significant acquisitions which we may propose in line with our business strategy. See “Risk Factors — Risks Relating to Our Company — We may not be able to consummate future acquisitions, joint ventures or investments. In addition, any acquisitions, joint ventures or investments which we are able to consummate could adversely affect us.”

As we are wholly owned by the Government, our commissioners and directors are appointed by the Government, through the Ministry of State-Owned Enterprises, based on merit.

In 2008, the Government approved our conversion to a non-listed public company, which requires, among other things, the submission of a registration statement to the Indonesian Capital Markets and Financial Institution Supervisory Board and a Government Regulation to enact the change of status. The decision to convert our Company to a non-listed public company is intended to improve our transparency and subject us to higher corporate governance standards.

Government as Regulator

The Government divides the oil and gas industry into upstream and downstream sectors. The upstream sector is controlled by SKK MIGAS (as successor to BPMIGAS), on behalf of the Government, as the holder of the exclusive mine concession rights in Indonesia. The downstream sector is regulated by BPH MIGAS, an independent governmental agency tasked with the supervision and regulation of downstream operations in Indonesia. The objective of BPH MIGAS is to ensure the availability and distribution of refined oil products throughout Indonesia and to promote gas utilization in the domestic market.

The DGOG is the regulator of general policies in relation to the upstream and downstream sectors. The DGOG is authorized to formulate the policies and regulations relating to oil and gas in Indonesia. In order to carry out its duties, the DGOG may, among other things, prepare and implement policies on oil and gas, specify the standards, norms, guidelines, criteria and procedures for the oil and gas industry; and provide technical and evaluation guidance to oil and gas companies.

The policies set forth by SKK MIGAS, BPH MIGAS, and the DGOG impact many of our business activities. Any changes in these policies could have a significant effect on our competitive position, operations and financial condition. See “Risk Factors — Risks Relating to the Oil, Gas and Geothermal Industry — Increased regulation by governments and governmental agencies may increase the cost of regulatory compliance and limit our access to new exploration properties” for information on the risks which we face in connection with such regulation. Also, see “Indonesian Regulatory Framework” for more information on the oil and gas industry in Indonesia.

Certain Government agencies have different supervisory roles in relation to our business activities. The DGOG, SKK MIGAS and BPH MIGAS are our main regulators. The DGOG creates policies and

regulations relating to health, safety and the environment, as well as issuing operating licenses. The Ministry of the Environment monitors the compliance of our business activities with the prevailing environmental laws and regulations. SKK MIGAS and BPH MIGAS regulate our upstream and downstream oil and gas businesses respectively. The Parliament reviews and approves the State Budget, which includes the subsidies to be paid to us pursuant to our PSO mandate. The Ministry of State-Owned Enterprises approves our annual budget, including the amount of our subsidies pursuant to our PSO mandate, at our shareholder's meetings and our long-term investments and funding plans. The Minister of Finance monitors our finances and provides offshore loans, grants and subsidies to us. The Minister of Finance and BAPPENAS approve investment projects which form part of the Government budget. See “— Government as Lender.”

The PSO mandate to distribute subsidized fuel in specified regions of Indonesia is granted by the Government on an annual basis. Our PSO mandate was renewed by the Government in 2014 for another year. Under our PSO mandate, we are obliged to distribute kerosene, automotive diesel oil and certain grades of motor gasoline within Indonesia. Pursuant to the PSO mandate, we are entitled to receive payment from the Government as a reimbursement of subsidized fuel price, pursuant to the prevailing laws and regulations. See “Management's Discussion and Analysis of Financial Condition and Results of Operations — Factors Affecting Our Business and Results of Operations — PSO Mandate” for details of our PSO compensation. The PSO mandate is not assignable. The PSO mandate is not exclusive; if there is scarcity of a PSO product within an area, BPH MIGAS can appoint other business entity to assist us to overcome the shortage.

Since 2007, we were assigned responsibility by the Government to distribute LPG in 3kg cylinders in connection with the kerosene conversion program. Under the terms of this assignment, we are entitled to receive compensation based on a reimbursement of costs and a profit margin from the Government. See “Management's Discussion and Analysis of Financial Condition and Results of Operations — Factors Affecting Our Business and Results of Operations — PSO Mandate” for details of our compensation for distribution of LPG on behalf of the Government.

We also consult with the Government on increases in the prices of the LPG in 12kg and 50kg cylinders that we market and distribute in Indonesia.

Our distribution and sale of CNG to public and private transportation vehicles is carried out pursuant to the CNG mandate by the Government. The price at which CNG is purchased and sold is fixed by the Government and we earn a fixed margin from our distribution of CNG. See “Business — Pertamina Gas Business — CNG” for details of our compensation for the distribution and sale of CNG.

The Government supervises the activities in relation to geothermal resources through the Directorate General of New Energy, Renewable Energy and Energy Conservation (a directorate under the Ministry of Energy and Mineral Resources), through the issuance of policies and regulations.

Government as Partner

We, through our direct and indirect subsidiaries, have entered into cooperation contracts with BPMIGAS (such contracts now assumed by SKK MIGAS), as the representative of the Government, to conduct oil and gas upstream activities over a designated block that spans much of Indonesia. The term of a cooperation contract is 30 years from its date. See “Business — Pertamina Upstream Business” for a description of our operations, including those under cooperation contracts.

Under the terms of the cooperation contract, SKK MIGAS is responsible for the supervision of the working area, while we are responsible for the operation of the working area. We contribute funding,

technical skill and expertise, as well as bear the risk of operations in the working area. For cooperation contracts entered into prior to the enactment of the Oil and Gas Law of 2001, approximately 33% of the crude oil and gas produced is allocated to SKK MIGAS and approximately 67% is allocated to us after cost recovery and we are compensated for DMO at the market rate. For cooperation contracts entered into after the enactment of the Oil and Gas Law of 2001, approximately 85% of the crude oil and gas produced is allocated to SKK MIGAS and approximately 15% of is allocated to us after cost recovery and tax and we are compensated for DMO at a reduced price which is less than the market rate and varies between cooperation contracts.

Pursuant to a letter dated February 1, 2005, BPMIGAS appointed us as its selling agent with respect to its crude oil entitlement under cooperation contracts and we are entitled to receive fees as compensation. Under this agreement, we are obligated to sell the entire portion of such crude oil and natural gas entitlement on its behalf and remit the proceeds to BPMIGAS (now SKK MIGAS).

Government as Lender

We have received financing from the Government in the form of a two-step loan from OECF. The Government originally lent to OECF an amount of ¥11,816.0 million (US\$104.9 million), pursuant to a loan agreement between the Government and OECF dated November 29, 1994. We, in turn, borrowed ¥1,172.9 million (US\$10.4 million) from OECF under a two-step loan agreement dated May 7, 2007 among us as borrower, the Government as co-obligor and OECF as lender. The proceeds of this loan were used to finance the construction of the Airport Fuel Filling Depot of Ngurah Rai International Airport in Bali. The two-step loan matures 30 years from November 29, 1994, the date of the loan agreement between the Government and OECF. There is no collateral given by our Company for the two-step loan, as the Government remains the primary obligor of the loan. The two-step loan bears interest at 3.1% per annum. Any late principal payments will be subject to a 2% per annum penalty.

We have also received financing from the Government in the form of a two-step loan from JICA. The Government obtained a loan of ¥26,966.0 million (US\$239.3 million) from JICA under which we were appointed as executing and implementing agency, pursuant to a loan agreement between the Government and JICA dated March 29, 2011. The loan is to be utilized for the implementation of the Lumut Balai geothermal power plant project. There is no collateral given by the Company for this two-step loan, as the Government remains the primary obligor of the loan. The two-step loan is available as two loan facilities, one of which is ¥25,834.0 million (US\$229.3 million) and is related to the construction of the project and bears interest at 0.6% per annum and the other facility is ¥1,132.0 million (US\$10.0 million) and is related to consultants for the project and bears interest at 0.02% per annum. Any late principal payments will be subject to a 2% per annum penalty.

In addition, we received financing from the Government in the form of a two-step loan from the Japan International Cooperation Agency, together with the IBRD. The Government obtained a loan of US\$300.0 million from IBRD under which we were appointed as executing agency, pursuant to two loan agreements, each between the Government and IBRD dated December 5, 2011. One loan amounted to US\$175.0 million and the other amounted to US\$125.0 million. The loans are to be utilized for the implementation of the Ulubelu and Lahendong geothermal clean energy investment project. There is no collateral given by the Company for this two-step loan, as the Government remains the primary obligor of the loan. Repayment of the principal will be on a semi-annual basis, commencing on October 10, 2020 until October 10, 2035 for the US\$175.0 million loan, and commencing on October 10, 2021 until April 10, 2051 for the US\$125.0 million loan. The interest rate from the World Bank is LIBOR plus 0.45% + 0.05% (bank charges) plus a variance spread per annum, and the interest rate from the Japan International Cooperation Agency is 0.25% + 0.25% per annum.

We received financing from the Government in the form of a two-step loan from the Japan Bank for International Cooperation (“JBIC”). On May 28, 2003, the Government obtained two loans

consisting of ¥44,702.0 million (US\$402.3 million) and ¥4,386.0 million (US\$39.5 million), with interest rates of 1.45% and 1.25% per annum respectively. The loans are to be utilized for the implementation of the development of a gas transmission and pipeline from South Sumatra to West Java and a distribution pipeline in West Java.

We received financing from the Government in the form of a second two-step loan from IBRD. On April 3, 2006, the Government obtained a loan of US\$80 million to finance a domestic gas market development project. The IBRD's interest rate to the Government is 1.00% per annum.

On September 15, 2000, PGN and the Government entered into a loan agreement, which provides for the Government's relending of EIB loan proceeds not exceeding €70.0 million (US\$81.0 million) to PGN as part of the financing of the gas transmission and distribution project phase II. The loans consist of €44.3 million (US\$51.3 million) and €10.3 million (US\$11.9 million), with interest rates of 4.9% and 5.3% respectively.

Government as Customer

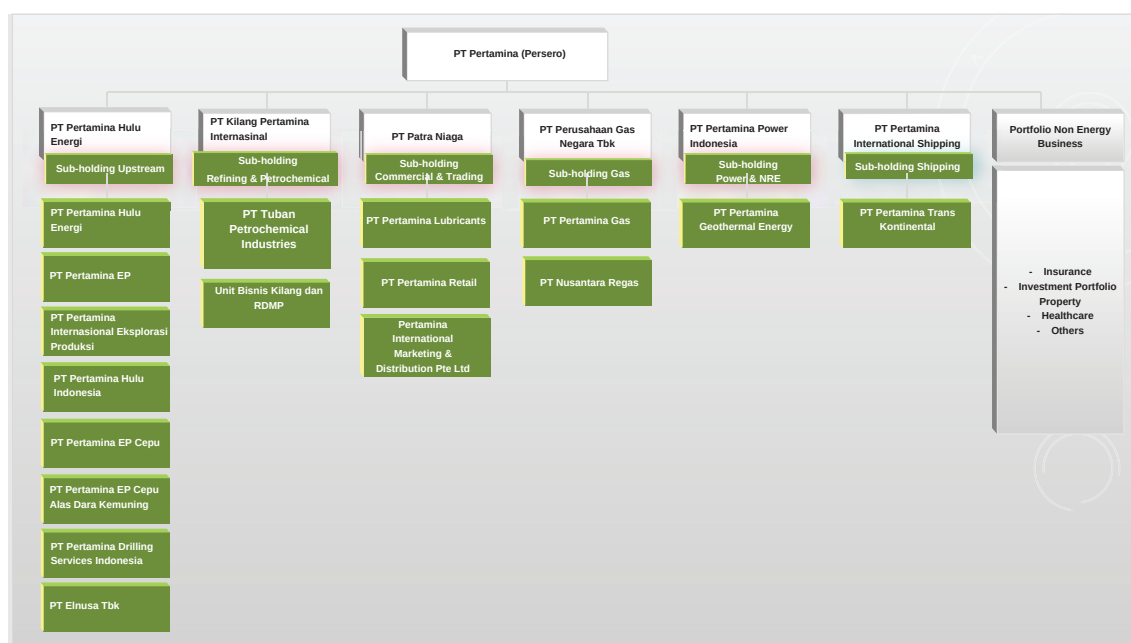
A number of other state-owned companies controlled by the Government (including PLN, PT Timah (Persero) Tbk, and Garuda) purchase fuel from us. Further, we supply our fuel to Government offices, such as the Indonesian police and the Indonesian Armed Forces. Our customers who are state-owned companies and Government offices purchase fuel from us on an arms'-length basis, based on market pricing for such fuel.

As of December 31, 2019, we had trade receivables of US\$3,511.8 million, 44.3% of which was owed to us by our related parties. Out of this amount, US\$420.5 million was owed to us by PT Perusahaan Listrik Negara (Persero) ("PLN") and its subsidiaries, our related party and a Government-owned electricity company, and US\$432.8 million was owed to us by the Indonesian Armed Forces and the Ministry of Defense. As of September 30, 2020, we had trade receivables of US\$3,405.9 million, 52.2% of which was owed to us by related parties. Out of this amount, US\$558.6 million was owed to us by the Indonesian Armed Forces, US\$555.0 million was owed to us by PT Garuda Indonesia (Persero) Tbk and US\$350.5 million was owed to us by PLN and its subsidiaries, our related party and a Government-owned electricity company. As of December 31, 2019 and September 30, 2020, we have made a provision for impairment of US\$69.1 million and US\$186.2 million against trade receivables owed to us by our related parties, respectively. See "Risk Factors — Risks Relating to Our Company — We are exposed to credit risk on our trade receivables," "Risk Factors — Risks Relating to Our Downstream Operations — We are dependent on certain key customers which are Government-owned entities and the loss of, or a significant reduction in, purchases by such customers could adversely affect our business. While we aim to diversify our sales to such customers beyond oil products and to increase our sales to non-Government-owned customers, there can be no assurance that we will be successful," and "Management's Discussion And Analysis of Financial Condition and Results of Operations — Market Risks — Credit Risk."

CORPORATE STRUCTURE

We have an operating history of more than 60 years and were established on December 10, 1957 under the name PT PERMINA. In 1961, we changed our name to PN PERMINA and, after our merger with PN PERTAMIN in 1968, became PN PERTAMINA. With the enactment of Law 8 of 1971, we became PERTAMINA. This name persisted until we changed our legal status to an Indonesian limited liability company under Deed of Establishment No. 20 dated September 17, 2003 drawn up before Lenny Janis Ishak, SH, Notary in Jakarta, which was approved by the Minister for Law & Human Rights under its Decision No. C-24025 HT.01.01.TH.2003 on October 9, 2003 and we became PT Pertamina (Persero).

The following chart sets forth our key operating companies by business segments.



This chart above does not describe all of our subsidiaries and associates. For a more complete discussion of our direct and indirect subsidiaries and affiliates, please refer to Note 1b of our consolidated financial statements for the years ended December 31, 2017, 2018 and 2019 and the nine months ended September 30, 2019 and 2020, included elsewhere in this offering memorandum. This chart does not describe our “virtual subholding” organizational structure, pursuant to which our various oil and gas businesses are classified into one of seven sub-holdings: upstream, refining and petrochemical, commercial and trading, power and NRE, shipping, and service and portfolio. The chart below sets forth this virtual. We are evaluating whether to formalize this “virtual subholding” organizational structure in the future. We believe that the virtual subholding structure presents the following advantages:

- Focused, lean, agile and efficient organization
- Corporate competitiveness through operational excellence and best-in-class capabilities
- Existing business development as well as new business opportunities
- Increased flexibility in partnership and funding

-
- Pertamina**
- SUB-HOLDINGS**
- UPSTREAM**
 - Pertamina Hulu Energi
 - Pertamina EP
 - Pertamina Hulu Indonesia
 - Pertamina EP Cepu
 - Pertamina (Sulawesi)
 - Celnusa
 - COMMERCIAL & TRADING**
 - Pertamina Bulk Trading
 - Pertamina Lube & Add
 - Pertamina Retail
 - Pertamina International Ltd
 - POWER & NRE**
 - Pertamina Power Indonesia
 - Pertamina Geothermal Energy
 - Service & Portfolio**
 - PTA RASIA
 - PTC
 - Pertamina
 - Pelita Air Service
 - tugu
 - REFINING & PETROCHEMICAL**
 - PT Kilang Pertamina Internasional
 - TPPI
 - GAS**
 - pgn
 - MUSWITA REGAS
 - Pertamina Gas
 - SHIPPING**
 - Pertamina International Shipping
 - Pertamina Transoceanic

We are required under the Oil and Gas Law of 2001 to operate the upstream and downstream sectors of our business through separate legal entities. Following the enactment of the Oil and Gas Law of 2001, we restructured our business and as a result, our upstream assets, operations and joint ventures, our downstream gas business and our supporting business units for our upstream and downstream operations and our non-core businesses are held and operated through subsidiaries of our Company. Our upstream business development unit, the majority of our downstream assets, operations and joint ventures and our LNG business continue to be held and operated through our Company.

Subsidiaries and Associates Business	Place of Incorporation	Interest (%)	Business
PT Pertamina EP	Indonesia	● The Issuer 99.99% ● Pertamina Pedeve Indonesia 0.01%	Management of upstream oil and gas business which includes exploration, exploitation, and sales of oil and gas produced from the exploitation activities.

Subsidiaries and Associates Business	Place of Incorporation	Interest (%)	Business
PT Pertamina Hulu Energi	Indonesia	● The Issuer 98.72% ● Pertamina Pedeve Indonesia 1.28%	Upstream oil and gas and energy business management both of which is conducted inside and outside the country. It also carries out related and/ or supporting business activities in the field of oil and gas.
PT Pertamina EP Cepu ⁽¹⁾	Indonesia	● The Issuer 99% ● Pertamina Pedeve Indonesia 1%	Upstream oil and gas business management, including exploration, exploitation and production in the Cepu block.
PT Pertamina EP Cepu ADK . .	Indonesia	● The Issuer 99% ● Pertamina Pedeve Indonesia 1%	Upstream business management, including exploration, exploitation and production in Block Cepu Alas Dara & Kemuning.
PT Pertamina Internasional Eksplorasi dan Produksi	Indonesia	● The Issuer 99.999997% ● Pertamina Pedeve Indonesia 0.000003%	Management of upstream operations in the field of oil, gas and energy which includes exploration and production activities conducted overseas.
PT Pertamina Hulu Rokan	Indonesia	● The Issuer 99.87% ● Pertamina Pedeve Indonesia 0.13%	Upstream business management, including exploration, exploitation and production in the Rokan block.
PT Pertamina Hulu Indonesia	Indonesia	● The Issuer 99.93% ● Pertamina Pedeve Indonesia 0.07%	Oil, natural gas and energy business, carrying out exploration and exploitation services as well as direct and indirect energy-related business activities. It has a participating equity interest in domestic operations and carries out services related to oil, natural gas and energy businesses and other business, which is directly or indirectly related to the businesses described above.

Subsidiaries and Associates Business	Place of Incorporation	Interest (%)	Business
PT Pertamina Geothermal Energy	Indonesia	● The Issuer 91.09% ● Pertamina Pedeve Indonesia 8.91%	Management and development of geothermal resources, which includes exploration and exploitation activities, the production of steam for electricity generation, consulting services, construction, operation and maintenance as well as technology development.
PT Pertamina Drilling Services Indonesia	Indonesia	● The Issuer 99.89% ● Pertamina Pedeve Indonesia 0.11%	Management and development of drilling services, including exploration and exploitation of oil and gas or geothermal resources.
PT Elnusa Tbk.	Indonesia	● The Issuer 41.10% ● DP Pertamina 14.90% ● Public 44.00%	The management of oil and gas services which include, among others, seismic, drilling and oil field management services.
PT Pertamina Gas	Indonesia	● The Issuer 48.99% ● PT Pertamina Dana Ventura 0.01% ● PGN 51%	Business management in the fields of commerce, transportation, distribution, processing and other business related to natural gas and its derivatives.
PT Perusahaan Gas Negara Tbk.	Indonesia	● The Issuer 56.964% ● Public 43.036% ● Republic of Indonesia 0%	Business management in the fields of commerce, transportation, distribution, processing and other business related to natural gas and its derivatives.
PT Pertamina Power Indonesia	Indonesia	● The Issuer 99.999031% ● Pertamina Pedeve Indonesia 0.000969%	Electricity generation, production, repair and trade of equipment for electricity generated from other energy sources such as natural gas hydro, geothermal, solar, and other resources.

Subsidiaries and Associates Business	Place of Incorporation	Interest (%)	Business
PT Pertamina Patra Niaga	Indonesia	● The Issuer 99.912% ● Pertamina Trans Kontinental 0.088%	Technology services, trade services for non-fuel and oil and gas mining industry.
PT Pertamina Retail	Indonesia	● The Issuer 99.9994% ● Pertamina Pedeve Indonesia 0.0006%	Retail gas station business management as well as trade and transportation services for certain fuel products.
PT Pertamina Lubricants	Indonesia	● The Issuer 99.95% ● Pertamina Pedeve Indonesia 0.05%	Management of production, trading, transportation, distribution, storage activities for lubricant and its derivatives.
PT Pertamina Trans Kontinental	Indonesia	● The Issuer 99.999% ● Pertamina Pedeve Indonesia 0.001%	Shipping operation services including supply vessels, tug boats, cargo vessels and agency.
PT Pertamina International Shipping	Indonesia	● The Issuer 99.95% ● Pertamina Pedeve Indonesia 0.05%	Business management in the field of shipping, with main business activity being the shipping of oil and gas commodities, and other supporting activities.
PT Kilang Pertamina Internasional	Indonesia	● The Issuer 99.90% ● Pertamina Pedeve Indonesia 0.10%	Management of refinery in oil, natural gas and new and renewable energy, domestic and overseas, comprising activities in production, refinery and trading.
PT Nusantara Regas	Indonesia	● The Issuer 82.78 (60% directly and the remainder through PGN's 40% stake)	Operation and development of floating storage facilities and regasification terminals ("FSRT"), including, purchase of LNG and marketing of FSRT facilities products and other related business activities to optimizing PT Nusantara Regas' value to its shareholders.

Note:

- (1) Under the Oil and Gas Law of 2001 and Upstream Regulation, our interests in any new oil and gas work areas are required to be held through separate legal entities and we established this subsidiary to hold our interest in the Cepu block which was acquired after the Oil and Gas Law of 2001 and Upstream Regulation came into force. We intend to establish new subsidiaries to hold interests in any new oil and gas work areas we acquire in the future.

We have certain other non-key subsidiaries and joint ventures through which we hold assets and participate in other non-core businesses. See “Business — Other Businesses.”

DESCRIPTION OF THE NOTES

1. General

- (a) The particular terms of any Notes sold will be described in an accompanying supplement to this Offering Memorandum (a **“Pricing Supplement”**). The terms and conditions set forth in this “Description of the Notes” will apply to each Note unless otherwise specified in the applicable Pricing Supplement and in such Note.
- (b) The Notes will be duly authorized issues of Notes of PT Pertamina (Persero) (the **“Company”**) (each Note a **“Note,”** and collectively, the **“Notes”**), and will be issued pursuant to an Indenture dated as of May 3, 2013, between the Company and The Bank of New York Mellon, as Trustee (the **“Trustee”**), as amended, supplemented and/or restated from time to time (the **“Indenture”**). The terms of the Notes will be subject to all the provisions contained in the Indenture and the conditions set out in the Notes (as modified and supplemented by the applicable Pricing Supplement, the **“Conditions”**). The Pricing Supplement for each Note will supplement the Conditions and may specify other terms and conditions, which shall, to the extent so specified or to the extent inconsistent with the Conditions, replace or modify the Conditions for the purposes of the Note. The holders of the Notes (the **“Holders”**) will be entitled to the benefits of, be bound by, and be deemed to have notice of, all of the provisions of the Indenture. A copy of the Indenture is on file and may be inspected at the Corporate Trust Office of the Trustee in New York City. All capitalized terms used in this “Description of the Notes” but not defined herein shall have the meanings assigned to them in the Indenture and in the Pricing Supplement.
- (c) The Notes will (i) be direct, unsecured and unsubordinated obligations of the Company; (ii) be senior in right of payment to any existing and future obligations of the Company expressly subordinated in right of payment to the Notes; (iii) rank at least pari passu in right of payment with all other unsecured and unsubordinated Debt of the Company (subject to any priority rights of such unsubordinated Debt pursuant to applicable law); and (iv) be effectively subordinated to its secured obligations and the obligations of its Subsidiaries.
- (d) Registered Notes will be issued in fully registered form, without coupons. Registered Notes may be issued in certificated form (the **“Certificated Securities”**), or may be represented by one or more registered global securities (each, a **“Registered Global Security”**) held by or on behalf of the Depositary. Certificated Securities will be available only in the limited circumstances set forth in the Indenture. The Registered Notes, and transfers thereof, will be registered as provided in Clause 2.6 of the Indenture. Any person in whose name a Registered Note is registered may (to the fullest extent permitted by applicable law) be treated at all times, by all persons and for all purposes as the absolute owner of such Registered Note regardless of any notice of ownership, theft, loss or any writing thereon.
- (e) Bearer Notes will be issued in bearer form, with Coupons (and, where appropriate, Talons) attached, except in the case of Zero Coupon Notes in which case references to interest (other than in relation to interest due after the Maturity Date), Coupons and Talons in the Conditions are not applicable. Installment Notes will be issued with one or more Receipts attached. Bearer Notes may be issued in definitive form, or may be represented by one or more global securities, which may be Temporary Global Notes held by or on behalf of the Depositary. Interests in Temporary Global Notes will be exchangeable for interests in a Permanent Global Note or Definitive Bearer Notes on or

after the Exchange Date (as defined below) upon certification as provided therein. Definitive Bearer Notes will be available only in the limited circumstances set forth in the Indenture. Any holder of any Bearer Note, Receipt, Coupon or Talon may (to the fullest extent permitted by applicable law) be treated at all times, by all persons and for all purposes as the absolute owner of such Bearer Note, Receipt, Coupon or Talon regardless of any notice of ownership, theft, loss or any writing thereon. Title to the Bearer Notes and any Coupon will pass by delivery.

2. Principal and Interest

The Company, for value received, will promise to pay to the Holder of a Note on the Maturity Date (or on such earlier date as the amount payable upon redemption under the Conditions may become repayable in accordance with the Conditions) the amount payable upon redemption to the Holder under the Conditions and (unless the Note does not bear interest under the Conditions) to pay to the Holder interest in respect of such Note from the Interest Commencement Date in arrears at the rates, in the amounts and on the dates for payment provided for in the Conditions together with such other sums and additional amounts (if any) as may be payable under the Conditions, in accordance with the Conditions.

2A. General

A Note may be a Fixed Rate Note, a Floating Rate Note, a Zero Coupon Note, an Index Linked Interest Note, an Index Linked Redemption Note, an Installment Note, a Dual Currency Note or a Partly Paid Note, a combination of any of the foregoing or any other kind of Note, depending upon the Interest and Redemption/Payment Basis shown in the Pricing Supplement. Details of such Interest, Redemption and/or Payment Basis not set out in this “Description of the Notes” will be set out in the Pricing Supplement.

2B. Interest and Calculations

- (a) **Interest on Fixed Rate Notes:** Each Fixed Rate Note will bear interest on its outstanding nominal amount from the Interest Commencement Date at the rate per annum (expressed as a percentage) equal to the Rate of Interest, such interest being payable in arrears on each Interest Payment Date. The amount of interest payable shall be determined in accordance with Condition 2B(h).
- (b) **Interest on Floating Rate Notes and Index Linked Interest Notes:**
 - (i) *Interest Payment Dates:* Each Floating Rate Note and Index Linked Interest Note will bear interest on its outstanding nominal amount from the Interest Commencement Date at the rate per annum (expressed as a percentage) equal to the Rate of Interest, such interest being payable in arrears on each Interest Payment Date. The amount of interest payable shall be determined in accordance with Condition 2B(h). Such Interest Payment Date(s) is either shown in the Pricing Supplement as Specified Interest Payment Dates or, if no Specified Interest Payment Date(s) is shown in the Pricing Supplement, Interest Payment Date shall mean each date which falls the number of months or other period shown in the Pricing Supplement as the Interest Period after the preceding Interest Payment Date or, in the case of the first Interest Payment Date, after the Interest Commencement Date.
 - (ii) *Business Day Convention:* If any date referred to in the Conditions that is specified to be subject to adjustment in accordance with a Business Day Convention would otherwise fall on a

day that is not a Business Day, then, if the Business Day Convention specified is (A) the Floating Rate Business Day Convention, such date shall be postponed to the next day that is a Business Day unless it would thereby fall into the next calendar month, in which event (x) such date shall be brought forward to the immediately preceding Business Day and (y) each subsequent such date shall be the last Business Day of the month in which such date would have fallen had it not been subject to adjustment, (B) the Following Business Day Convention, such date shall be postponed to the next day that is a Business Day, (C) the Modified Following Business Day Convention, such date shall be postponed to the next day that is a Business Day unless it would thereby fall into the next calendar month, in which event such date shall be brought forward to the immediately preceding Business Day or (D) the Preceding Business Day Convention, such date shall be brought forward to the immediately preceding Business Day.

- (iii) *Rate of Interest for Floating Rate Notes:* The Rate of Interest in respect of Floating Rate Notes for each Interest Accrual Period shall be determined in the manner specified in the Pricing Supplement and the provisions below relating to either ISDA Determination or Screen Rate Determination shall apply, depending upon which is specified in the Pricing Supplement.

(A) ISDA Determination for Floating Rate Notes

Where ISDA Determination is specified in the Pricing Supplement as the manner in which the Rate of Interest is to be determined, the Rate of Interest for each Interest Accrual Period shall be determined by the Calculation Agent as a rate equal to the relevant ISDA Rate. For the purposes of Condition 2B(b)(iii)(A), “**ISDA Rate**” for an Interest Accrual Period means a rate equal to the Floating Rate that would be determined by the Calculation Agent under a Swap Transaction under the terms of an agreement incorporating the ISDA Definitions and under which:

- (x) the Floating Rate Option is as specified in the Pricing Supplement;
- (y) the Designated Maturity is a period specified in the Pricing Supplement; and
- (z) the relevant Reset Date is the first day of that Interest Accrual Period unless otherwise specified in the Pricing Supplement.

For the purposes of Condition 2B(b)(iii)(A), “**Floating Rate**,” “**Calculation Agent**,” “**Floating Rate Option**,” “**Designated Maturity**,” “**Reset Date**” and “**Swap Transaction**” have the meanings given to those terms in the ISDA Definitions.

(B) Screen Rate Determination for Floating Rate Notes

- (x) Where Screen Rate Determination is specified in the Pricing Supplement as the manner in which the Rate of Interest is to be determined, the Rate of Interest for each Interest Accrual Period will, subject as provided below, be either:

- (1) the offered quotation; or
- (2) the arithmetic mean of the offered quotations,

(expressed as a percentage rate per annum) for the Reference Rate which appears or appear, as the case may be, on the Relevant Screen Page as at either 11.00 a.m. (London time in the case of LIBOR or Brussels time in the case of EURIBOR) on the Interest Determination Date in question as determined by the Calculation Agent. If five or more of such offered quotations are available on the Relevant Screen Page, the highest (or, if there is more than one such highest quotation, one only of such quotations) and the lowest (or, if there is more than one such lowest quotation, one only of such quotations) shall be disregarded by the Calculation Agent for the purpose of determining the arithmetic mean of such offered quotations.

If the Reference Rate from time to time in respect of Floating Rate Notes is specified in the Pricing Supplement as being other than LIBOR or EURIBOR, the Rate of Interest in respect of such Notes will be determined as provided in the Pricing Supplement.

- (y) if the Relevant Screen Page is not available or if, Condition 2B(b)(iii)(B)(x)(1) applies and no such offered quotation appears on the Relevant Screen Page or if Condition 2B(b)(iii)(B)(x)(2) above applies and fewer than three such offered quotations appear on the Relevant Screen Page in each case as at the time specified above, subject as provided below, the Calculation Agent shall request, if the Reference Rate is LIBOR, the principal London office of each of the Reference Banks or, if the Reference Rate is EURIBOR, the principal Euro-zone office of each of the Reference Banks, to provide the Calculation Agent with its offered quotation (expressed as a percentage rate per annum) for the Reference Rate if the Reference Rate is LIBOR, at approximately 11.00 a.m. (London time), or if the Reference Rate is EURIBOR, at approximately 11.00 a.m. (Brussels time) on the Interest Determination Date in question. If two or more of the Reference Banks provide the Calculation Agent with such offered quotations, the Rate of Interest for such Interest Accrual Period shall be the arithmetic mean of such offered quotations as determined by the Calculation Agent; and
- (z) if Condition 2B(b)(iii)(B)(y) above applies and the Calculation Agent determines that fewer than two Reference Banks are providing offered quotations, subject as provided below, the Rate of Interest shall be the arithmetic mean of the rates per annum (expressed as a percentage) as communicated to (and at the request of) the Calculation Agent by the Reference Banks or any two or more of them, at which such banks were offered, if the Reference Rate is LIBOR, at approximately 11.00 a.m. (London time) or, if the Reference Rate is EURIBOR, at approximately 11.00 a.m. (Brussels time) on the relevant Interest Determination Date, deposits in the Specified Currency for a period equal to that which would have been used for the Reference Rate by leading banks in, if the Reference Rate is LIBOR, the London inter-bank market or, if the Reference Rate is EURIBOR, the Euro-zone inter bank market, as the case may be, or, if fewer than two of the Reference Banks provide the Calculation Agent with such offered rates, the offered rate for deposits in the Specified Currency for a period equal to that which would have been used for the Reference Rate, or the arithmetic mean of the offered rates for deposits in the Specified Currency for a period equal to that which would have been used for the Reference Rate, at which, if the Reference Rate is LIBOR, at approximately 11.00 a.m. (London time) or, if the Reference Rate is EURIBOR, at approximately 11.00 a.m. (Brussels time), on the relevant Interest Determination Date, any one or more banks (which bank or banks is or are in the opinion of the Trustee and the Company suitable for such purpose) informs the Calculation Agent it is quoting to

leading banks in, if the Reference Rate is LIBOR, the London inter-bank market as at 11.00 a.m. (London time) or, if the Reference Rate is EURIBOR, the Euro-zone inter bank market as at 11.00 a.m. (Brussels time), as the case may be, provided that, if the Rate of Interest cannot be determined in accordance with the foregoing provisions of this Condition 2B(b)(iii)(B)(z), the Rate of Interest shall be determined as at the last preceding Interest Determination Date (though substituting, where a different Margin or Maximum or Minimum Rate of Interest is to be applied to the relevant Interest Accrual Period from that which applied to the last preceding Interest Accrual Period, the Margin or Maximum or Minimum Rate of Interest relating to the relevant Interest Accrual Period, in place of the Margin or Maximum or Minimum Rate of Interest relating to that last preceding Interest Accrual Period).

- (iv) *Rate of Interest for Index Linked Interest Notes:* The Rate of Interest in respect of Index Linked Interest Notes for each Interest Accrual Period shall be determined in the manner specified in the Pricing Supplement and interest will accrue by reference to an Index or Formula as specified in the Pricing Supplement.
- (c) **Zero Coupon Notes:** Where a Note, the Interest Basis of which is specified to be Zero Coupon, is repayable prior to the Maturity Date and is not paid when due, the amount due and payable prior to the Maturity Date shall be the Early Redemption Amount of such Note. As from the Maturity Date, the Rate of Interest for any overdue principal of such a Note shall be a rate per annum (expressed as a percentage) equal to the Amortization Yield (as described in Condition 8(b)(i)).
- (d) **Dual Currency Notes:** In the case of Dual Currency Notes, if the rate or amount of interest is to be determined by reference to a Rate of Exchange or a method of calculating Rate of Exchange, the rate or amount of interest payable shall be determined in the manner specified in the Pricing Supplement.
- (e) **Partly Paid Notes:** In the case of Partly Paid Notes (other than Partly Paid Notes which are Zero Coupon Notes), interest will accrue as aforesaid on the paid-up nominal amount of such Notes and otherwise as specified in the Pricing Supplement.
- (f) **Accrual of Interest:** Interest shall cease to accrue on each Note on the due date for redemption unless, upon due presentation, payment is improperly withheld or refused, in which event interest shall continue to accrue (both before and after judgment) at the Rate of Interest in the manner provided in this Condition 2B to the Relevant Date.
- (g) **Margin, Maximum/Minimum Rates of Interest, Installment Amounts and Redemption Amounts and Rounding:**
 - (i) If any Margin is specified in the Pricing Supplement (either (x) generally, or (y) in relation to one or more Interest Accrual Periods), an adjustment shall be made to all Rates of Interest, in the case of (x), or the Rates of Interest for the specified Interest Accrual Periods, in the case of (y), calculated in accordance with Condition 2B(b) above by adding (if a positive number) or subtracting the absolute value (if a negative number) of such Margin, subject always to Condition 2B(g)(ii).
 - (ii) If any Maximum or Minimum Rate of Interest, Installment Amount or Redemption Amount is specified in the Pricing Supplement, then any Rate of Interest, Installment Amount or Redemption Amount shall be subject to such maximum or minimum, as the case may be.

- (iii) For the purposes of any calculations required pursuant to the Conditions (unless otherwise specified), (x) all percentages resulting from such calculations shall be rounded, if necessary, to the nearest one hundred thousandth of a percentage point (with halves being rounded up), (y) all figures shall be rounded to seven significant figures (with halves being rounded up) and (z) all currency amounts that fall due and payable shall be rounded to the nearest unit of such currency (with halves being rounded up), save in the case of yen, which shall be rounded down to the nearest yen. For these purposes “**unit**” means the lowest amount of such currency that is available as legal tender in the country or countries of such currency.
- (h) **Calculations:** The amount of interest payable per Calculation Amount in respect of any Note for any Interest Accrual Period shall be equal to the product of the Rate of Interest, the Calculation Amount specified in the Pricing Supplement, and the Day Count Fraction for such Interest Accrual Period, unless an Interest Amount (or a formula for its calculation) is applicable to such Interest Accrual Period, in which case the amount of interest payable per Calculation Amount in respect of such Note for such Interest Accrual Period shall equal such Interest Amount (or be calculated in accordance with such formula). Where any Interest Period comprises two or more Interest Accrual Periods, the amount of interest payable per Calculation Amount in respect of such Interest Period shall be the sum of the Interest Amounts payable in respect of each of those Interest Accrual Periods. In respect of any other period for which interest is required to be calculated, the provisions above shall apply save that the Day Count Fraction shall be for the period for which interest is required to be calculated.
- (i) **Determination and Publication of Rates of Interest, Interest Amounts, Final Redemption Amounts, Early Redemption Amounts, Optional Redemption Amounts and Installment Amounts:** The Calculation Agent shall, as soon as practicable on each Interest Determination Date, or such other time on such date as the Calculation Agent may be required to calculate any rate or amount, obtain any quotation or make any determination or calculation, determine such rate and calculate the Interest Amounts for the relevant Interest Accrual Period, calculate the Final Redemption Amount, Early Redemption Amount, Optional Redemption Amount or Installment Amount, obtain such quotation or make such determination or calculation, as the case may be, and cause the Rate of Interest and the Interest Amounts for each Interest Accrual Period and the relevant Interest Payment Date and, if required to be calculated, the Final Redemption Amount, Early Redemption Amount, Optional Redemption Amount or any Installment Amount to be notified to the Trustee, the Company, each of the Paying Agents, the Holders, any other Calculation Agent appointed in respect of the Notes that is to make a further calculation upon receipt of such information and, if the Notes are listed on a stock exchange and the rules of such exchange or other relevant authority so require, such exchange or other relevant authority as soon as possible after their determination but in no event later than (i) the commencement of the relevant Interest Period, if determined prior to such time, in the case of notification to such exchange of a Rate of Interest and Interest Amount, or (ii) in all other cases, the fourth Business Day after such determination. Where any Interest Payment Date or Interest Period Date is subject to adjustment pursuant to Condition 2B(b)(ii), the Interest Amounts and the Interest Payment Date so published may subsequently be amended without notice in the event of an extension or shortening of the Interest Period. If the Notes become due and payable under Condition 7, the accrued interest and the Rate of Interest payable in respect of the Notes shall nevertheless continue to be calculated and notified as previously in accordance with this Condition 2B(i). The determination of any rate or amount, the obtaining of each quotation and the making of each determination or calculation by the Calculation Agent(s) shall (in the absence of manifest error) be final and binding upon all parties.

- (j) **Determination or Calculation by Trustee:** If the Calculation Agent does not at any time for any reason determine or calculate the Rate of Interest for an Interest Accrual Period or any Interest Amount, Installment Amount, Final Redemption Amount, Early Redemption Amount or Optional Redemption Amount, the Trustee shall do so (or shall appoint an agent on its behalf to do so) at the expense of the Issuer and such determination or calculation shall be deemed to have been made by the Calculation Agent. In doing so, the Trustee shall apply the foregoing provisions of this Condition 2B, with any necessary consequential amendments, to the extent that, in its opinion, it can do so, and, in all other respects it shall do so in such manner as it shall deem fair and reasonable in all the circumstances. If the Trustee appoints an agent to make such determination or calculation, the Trustee shall not be liable to monitor or supervise any such agent and shall not be liable for any determination or calculation made by any such agent.
- (k) **Definitions:** For the purposes of this “Description of the Notes,” unless the context otherwise requires, the following defined terms shall have the meanings set out below:

“Business Day” means:

- (i) in the case of a currency other than euro, a day (other than a Saturday or Sunday) on which commercial banks and foreign exchange markets settle payments in the principal financial center for such currency; and/or
- (ii) in the case of euro, a day on which the TARGET System is operating (a **“TARGET Business Day”**); and/or
- (iii) in the case of a currency and/or one or more Business Centers, a day (other than a Saturday or a Sunday) on which commercial banks and foreign exchange markets settle payments in such currency in the Business Center(s) or, if no currency is indicated, generally in each of the Business Centers.

“Day Count Fraction” means, in respect of the calculation of an amount of interest on any Note for any period of time (from and including the first day of such period to but excluding the last) (whether or not constituting an Interest Period or an Interest Accrual Period, the **“Calculation Period”**):

- (i) if **“Actual/Actual”** or **“Actual/Actual — ISDA”** is specified in the Pricing Supplement, the actual number of days in the Calculation Period divided by 365 (or, if any portion of that Calculation Period falls in a leap year, the sum of (A) the actual number of days in that portion of the Calculation Period falling in a leap year divided by 366 and (B) the actual number of days in that portion of the Calculation Period falling in a non leap year divided by 365)
- (ii) if **“Actual/365 (Fixed)”** is specified in the Pricing Supplement, the actual number of days in the Calculation Period divided by 365
- (iii) if **“Actual/360”** is specified in the Pricing Supplement, the actual number of days in the Calculation Period divided by 360
- (iv) if **“30/360,” “360/360”** or **“Bond Basis”** is specified in the Pricing Supplement, the number of days in the Calculation Period divided by 360, calculated on a formula basis as follows:

$$\text{Day Count Fraction} = \frac{[360 \times (Y_2 - Y_1)] + [30 \times M_2 - M_1] + (D_2 - D_1)}{360}$$

where:

- “Y1” = is the year, expressed as a number, in which the first day of the Calculation Period falls;
- “Y2” = is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;
- “M1” = is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;
- “M2” = is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;
- “D1” = is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case D1 will be 30; and
- “D2” = is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless such number would be 31 and D1 is greater than 29, in which case D2 will be 30.

- (v) if “**30E/360**” or “Eurobond Basis” is specified in the Pricing Supplement, the number of days in the Calculation Period divided by 360, calculated on a formula basis as follows:

$$\text{Day Count Fraction} = \frac{[360 \times (Y_2 - Y_1)] + [30 \times M_2 - M_1] + (D_2 - D_1)}{360}$$

where:

- “Y1” = is the year, expressed as a number, in which the first day of the Calculation Period falls;
- “Y2” = is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;
- “M1” = is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;
- “M2” = is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;
- “D1” = is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case D1 will be 30; and
- “D2” = is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless such number would be 31 and D1 is greater than 29, in which case D2 will be 30.

- (vi) if “**30E/360 (ISDA)**” is specified in the Pricing Supplement, the number of days in the Calculation Period divided by 360, calculated on a formula basis as follows:

$$\text{Day Count Fraction} = \frac{[360 \times (Y_2 - Y_1)] + [30 \times M_2 - M_1] + (D_2 - D_1)}{360}$$

where:

- “Y1” = is the year, expressed as a number, in which the first day of the Calculation Period falls;
- “Y2” = is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;
- “M1” = is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;
- “M2” = is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;
- “D1” = is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case D1 will be 30; and
- “D2” = is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless such number would be 31 and D1 is greater than 29, in which case D2 will be 30.

(vii) if “**Actual/Actual-ICMA**” is specified in the Pricing Supplement,

- (a) if the Calculation Period is equal to or shorter than the Determination Period during which it falls, the number of days in the Calculation Period divided by the product of (x) the number of days in such Determination Period and (y) the number of Determination Periods normally ending in any year; and
- (b) if the Calculation Period is longer than one Determination Period, the sum of:
 - (x) the number of days in such Calculation Period falling in the Determination Period in which it begins divided by the product of (1) the number of days in such Determination Period and (2) the number of Determination Periods normally ending in any year; and
 - (y) the number of days in such Calculation Period falling in the next Determination Period divided by the product of (1) the number of days in such Determination Period and (2) the number of Determination Periods normally ending in any year

where:

“**Determination Period**” means the period from and including a Determination Date in any year to but excluding the next Determination Date and

“**Determination Date**” means the date(s) specified as such in the Pricing Supplement or, if none is so specified, the Interest Payment Date(s).

“**Euro-zone**” means the region comprised of member states of the European Union that adopt the single currency in accordance with the Treaty establishing the European Community, as amended.

“Interest Accrual Period” means the period beginning on (and including) the Interest Commencement Date and ending on (but excluding) the first Interest Period Date and each successive period beginning on (and including) an Interest Period Date and ending on (but excluding) the next succeeding Interest Period Date.

“Interest Amount” means:

- (i) in respect of an Interest Accrual Period, the amount of interest payable per Calculation Amount for that Interest Accrual Period and which, in the case of Fixed Rate Notes, and unless otherwise specified in the Pricing Supplement, shall mean the Fixed Coupon Amount or Broken Amount specified in the Pricing Supplement as being payable on the Interest Payment Date ending the Interest Period of which such Interest Accrual Period forms part; and
- (ii) in respect of any other period, the amount of interest payable per Calculation Amount for that period.

“Interest Commencement Date” means the Issue Date or such other date as may be specified in, or determined in accordance with the provisions of, the Pricing Supplement.

“Interest Determination Date” means, with respect to a Rate of Interest and Interest Accrual Period, the date specified as such in the Pricing Supplement or, if none is so specified, (i) the first day of such Interest Accrual Period if the Specified Currency is Sterling or (ii) the day falling two Business Days in London for the Specified Currency prior to the first day of such Interest Accrual Period if the Specified Currency is neither Sterling nor euro or (iii) the day falling two TARGET Business Days prior to the first day of such Interest Accrual Period if the Specified Currency is euro.

“Interest Payment Date” means the date or dates specified as such in, or determined in accordance with the provisions of, the Pricing Supplement.

“Interest Period” means the period beginning on (and including) the Interest Commencement Date and ending on (but excluding) the first Interest Payment Date and each successive period beginning on (and including) an Interest Payment Date and ending on (but excluding) the next succeeding Interest Payment Date.

“Interest Period Date” means each Interest Payment Date unless otherwise specified in the Pricing Supplement.

“ISDA Definitions” means the 2006 ISDA Definitions, as published by the International Swaps and Derivatives Association, Inc., unless otherwise specified in the Pricing Supplement.

“Rate of Interest” means the rate or rates of interest payable from time to time in respect of the Note specified in the Pricing Supplement or calculated or determined in accordance with the Conditions and/or the provisions of the Pricing Supplement.

“Redemption Amount” means the Final Redemption Amount, Early Redemption Amount or Optional Redemption Amount, as the case may be, each as specified as such in, or determined in accordance with the provisions of, the Pricing Supplement.

“Redemption Date” means the Optional Redemption Date specified in the applicable Pricing Supplement or such other date set for redemption of the Notes pursuant to Condition 8.

“Reference Banks” means, in the case of a determination of LIBOR, the principal London office of four major banks in the London inter-bank market and, in the case of a determination of EURIBOR, the principal Euro-zone office of four major banks in the Euro-zone inter-bank market, in each case selected by the Calculation Agent or as specified in the Pricing Supplement.

“Reference Rate” means the rate specified as such in the Pricing Supplement.

“Relevant Screen Page” means such page, section, caption, column or other part of a particular information service as may be specified in the Pricing Supplement.

“Specified Currency” means the currency specified as such in the Pricing Supplement or, if none is specified, the currency in which the Notes are denominated.

“TARGET System” means the Trans-European Automated Real-Time Gross Settlement Express Transfer (known as TARGET2) System which was launched on November 19, 2007 or any successor thereto.

- (1) **Calculation Agent:** The Company shall procure that there shall at all times be one or more Calculation Agents if provision is made for them in the Pricing Supplement and for so long as any Note is Outstanding (as defined in the Indenture). Where more than one Calculation Agent is appointed in respect of the Notes, references in the Conditions to the Calculation Agent shall be construed as each Calculation Agent performing its respective duties under the Conditions. If the Calculation Agent is unable or unwilling to act as such or if the Calculation Agent fails duly to establish the Rate of Interest for an Interest Accrual Period or to calculate any Interest Amount, Installment Amount, Final Redemption Amount, Early Redemption Amount or Optional Redemption Amount, as the case may be, or to comply with any other requirement, the Company shall appoint a leading bank or financial institution engaged in the interbank market (or, if appropriate, money, swap or over-the-counter index options market) that is most closely connected with the calculation or determination to be made by the Calculation Agent (acting through its principal London office or any other office actively involved in such market) to act as such in its place. The Calculation Agent may at any time resign with respect to the Notes of one or more Series by giving not less than 60 days’ written notice of resignation to the Company, upon which the Company shall appoint a successor as aforesaid.

2C. Redenomination, Renominalization and Reconventioning

Where Redenomination, Renominalization and Reconventioning is specified in the Pricing Supplement as being Applicable in relation to Notes denominated in the currency of a member state which becomes or announces its intention to become a Participating Member State:

- (i) the Company may, without the consent of the Holders of the Notes, on giving not less than 30 days’ prior notice (**“Redenomination Notice”**) to the Holders of the Notes in accordance with Condition 13, the Trustee and the Paying Agents, with effect from (and including) the Redenomination Date, elect that the aggregate principal amount of each Holder’s holding of Notes shall be redenominated into Euro with an aggregate principal

amount equal to their aggregate principal amount in the Relevant Currency and the amount of such payment shall be rounded to the nearest Euro 0.01. The rate for the conversion of the Relevant Currency (as defined below) into Euro shall be the rate established by the Council of the European Union pursuant to Article 881(4) of the Treaty establishing the European Community (the “**Treaty**”) (including compliance with rules relating to roundings in accordance with applicable European Community regulations).

“**Participating Member State**” means a Member State of the European Communities which adopts the Euro as its lawful currency in accordance with the Treaty.

“**Redenomination Date**” means any Interest Payment Date falling on or after the date on which the country of the Relevant Currency becomes a Participating Member State, which is specified in the Redenomination Notice.

“**Relevant Currency**” means the currency of denomination of the Notes shown on such Notes and which is specified in the Pricing Supplement.

On or after the Redenomination Date, notwithstanding the other provisions of the Conditions, all payments in respect of the Notes will be made solely in Euro, including payments of interest in respect of a period before the Redenomination Date. Payments will be made in Euro by credit or transfer to a Euro account (or any other account to which Euro may be credited or transferred) specified by the payee. The Company shall appoint an exchange agent if necessary to comply with the procedures and requirements of the relevant clearing system and to give effect to this Condition 2C. None of the Company, the Trustee or any Paying Agent shall be liable to any Holder of Notes or other person for any commissions, costs, losses or expenses in relation to or resulting from the credit or transfer of Euro or any currency conversion or rounding effected in connection therewith;

- (i) provided that the Notes are represented by a Registered Global Security, the Company may, without the consent of the Holders of the Notes, on giving at least 30 days’ prior notice to the Holders of the Notes in accordance with Condition 13, the Trustee and the Paying Agents, with effect from the Redenomination Date or such later date as it may specify in that notice, procure that the denomination of the Notes shall be Euro 0.01 and integral multiples thereof;
- (ii) the Company may, without the consent of the Holders of the Notes, on giving at least 30 days’ prior notice to the Holders of the Notes in accordance with Condition 13, the Trustee and the Paying Agents, with effect from the Redenomination Date or such later Interest Payment Date as it may specify in that notice, elect to amend the conventions which apply in respect of the Notes.

In particular, the Company may procure that the definition of “Business Day” and “Financial Center” in Condition 2B shall be amended so as to be a day on which TARGET is operating, and that, if interest is required to be calculated for a period of less than one year, it will be calculated on the basis of the actual number of days elapsed divided by 365 (or, if any of the days elapsed fall in a leap year, the sum of (A) the number of those days falling in a leap year divided by 366 and (B) the number of those days falling in a non-leap year divided by 365) or on any other basis which is customary and which the Company deems appropriate.

3. Payments

- (a) **Registered Notes:** Principal of (and premium, if any, on) the Notes will be payable against surrender of such Notes at the Corporate Trust Office of the Trustee or, subject to applicable laws and regulations, at the specified office of the applicable Paying Agent in the Place of Payment, by check in the Specified Currency drawn on, or by transfer to an account in the Specified Currency maintained by the Holder with, a bank located in New York City (or, the Financial Center set out in the Pricing Supplement). Unless specified in the Pricing Supplement, payment of interest (including Additional Amounts (as defined below)) on Registered Notes will be made to the persons in whose name such Registered Notes are registered at the end of the Business Day (as defined below) preceding the date on which interest is to be paid (each, a “**Record Date**”), notwithstanding the cancellation of such Registered Notes upon any transfer or exchange thereof subsequent to the Record Date and prior to such Interest Payment Date; provided that if and to the extent the Company shall default in the payment of the interest due on such Interest Payment Date, such defaulted interest shall be paid to the persons in whose names such Registered Notes are registered as of a subsequent record date established by the Company by notice, as provided in Condition 13, by or on behalf of the Company to the Holders not less than 15 days preceding such subsequent record date, such record date to be not less than 10 days preceding the date of payment of such defaulted interest. Payment of interest on Certificated Securities will be made (i) by a check in the Specified Currency drawn on a bank in New York City (or, the Financial Center set out in the Pricing Supplement) mailed to the Holder at such Holder’s registered address or (ii) upon application by the Holder of at least the amount specified in the Pricing Supplement in principal amount of Certificated Securities to the Trustee not later than the relevant Record Date, by wire transfer in immediately available funds to an account maintained by the Holder with a bank in New York City (or, the Financial Center set out in the Pricing Supplement). Payment of interest on a Registered Global Security will be made (i) by a check in the Specified Currency drawn on a bank in New York City delivered to the Depositary at its registered address or (ii) by wire transfer in immediately available funds to an in the Specified Currency account maintained by the Depositary with a bank in New York City (or, the Financial Center set out in the Pricing Supplement).
- (b) **Bearer Notes:** Each Paying Agent acting through its specified office outside the United States, its territories and possessions will make payments of principal and interest in respect of Bearer Notes in accordance with the terms of the Indenture applicable to such Bearer Notes; provided, however, that:
- (i) if any Temporary Global Note, Permanent Global Note, Definitive Bearer Note, Receipt or Coupon is presented or surrendered for payment to any Paying Agent and such Paying Agent has delivered a replacement therefor or has been notified that the same has been replaced, such Paying Agent should promptly notify the Company of such presentation or surrender and shall not make payment against the same until it is so instructed by the Company and has received the amount to be so paid;
 - (ii) a Paying Agent should not be obliged (but shall be entitled) to make payments of principal or interest in respect of the Bearer Notes, if it is not able to establish that the Trustee has received (whether or not at the due time) the full amount of any payment due to it;
 - (iii) the relevant Paying Agent should cancel or procure the cancellation of each Temporary Global Note, Permanent Global Note, Definitive Bearer Note (together, in the case of early redemption, with such unmaturing Receipts or Coupons or unexchanged Talons as are attached to such Definitive Bearer Note at the time of such redemption), Receipt, Coupon or Talon, against surrender of which it has made full payment and should (if such Paying Agent is not the

Trustee) deliver or procure the delivery of each Temporary Global Note, Permanent Global Note, Definitive Bearer Note (together with, as aforesaid, such unmatured Receipts or Coupons or unexchanged Talons as are attached to or surrendered with the relevant Bearer Notes), Receipt, Coupon or Talon so cancelled by it to, or to the order of, the Trustee;

- (iv) in the case of payment of interest, principal or, as the case may be, any other amount against presentation of a Temporary Global Note, the relevant Paying Agent should note or procure that there is noted on the schedule thereto (or, in the absence of a schedule, on the face thereof) the amount of such payment and, in the case of payment of principal, the remaining principal amount of the relevant Bearer Note (which shall be the previous principal amount less the principal which has then been paid) and shall procure the signature of such notation on its behalf;
- (v) payments of principal and interest on Bearer Global Notes will be made in a manner specified in the relevant Bearer Global Notes against presentation or surrender, as the case may be, of such Bearer Global Note at the office of the relevant Paying Agent outside of the United States. A record of each payment of principal and any payment of interest will be made on each relevant Bearer Global Note by the relevant Paying Agent and such record will be prima facie evidence that the payment in question has been made absent manifest error; or
- (vi) if the relevant Pricing Supplement specifies that rules substantially in the same form as United States Treasury Regulation §1.163-5(c)(2)(i)(D) for purposes of Section 4701 of the United States Internal Revenue Code of 1986, as amended (the “**D Rules**”), are applicable and the form of Notes as being “**Temporary Global Note exchangeable for a Permanent Global Note**” or “**Temporary Global Note exchangeable for Definitive Notes**,” interest will only be paid on a Temporary Global Note upon certification in accordance with Schedule 2 of the Indenture. In addition, no payments will be made under the Temporary Global Note following the Exchange Date unless exchange for interests in the Permanent Global Note is improperly withheld or refused.

Payments of principal and interest on Definitive Bearer Notes will be made against presentation or surrender, as the case may be, of such Definitive Bearer Note at the office of the relevant Paying Agent outside of the United States. Payments of interest in respect of Definitive Bearer Notes will be made only against surrender of Coupons and payments of principal will be made only against surrender of Receipts, in each case, at the office of the relevant Paying Agent outside of the United States.

Notwithstanding the provisions of Condition 3, if payments of interest and/or principal on a Bearer Note will be made in U.S. Dollars, such payments may be made in the United States if:

- (1) the Company has appointed Paying Agents with specified offices outside the United States with the reasonable expectation that such Paying Agents would be able to make payment in U.S. Dollars at such specified offices outside the United States of the full amount of principal and interest on the Bearer Notes in the manner provided above when due;
- (2) payment of the full amount of such principal and interest at all such specified offices outside the United States is illegal or effectively precluded by exchange controls or other similar restrictions on the full payment or receipt of principal and interest in U.S. Dollars; and
- (3) such payment is then permitted under United States law without involving, in the opinion of the Company, adverse tax consequences to the Company.

A record of each payment of principal and any payment of interest will be made on each relevant Bearer Global Notes by the relevant Paying Agent and such record will be prima facie evidence that the payment in question has been made, absent manifest error.

No Paying Agent should exercise any Lien, right of set-off or similar claim against any person to whom it makes any payment under Condition 3 in respect thereof, nor shall any commission or expenses be charged by it to any such person in respect thereof.

If a Paying Agent makes any payment in accordance with Condition 3, it should notify the Trustee of the amount so paid by it, the serial number of the relevant Temporary Global Note, Permanent Global Note or Definitive Bearer Note against presentation or surrender of which payment of principal or interest was made and the number of Coupons by maturity against which payment of interest was made.

If at any time and for any reason a Paying Agent makes a partial payment in respect of a Temporary Global Note, Permanent Global Note, Definitive Bearer Note, Receipt or Coupon presented for payment to it, such Paying Agent should endorse thereon a statement indicating the amount and date of such payment.

- (c) Unless another Business Day Convention is specified in the Pricing Supplement in any case where the date of payment of the principal of, or interest (including Additional Amounts), on the Notes shall not be a Business Day, then payment of principal or interest (including Additional Amounts) need not be made on such date at the relevant place of payment but may be made on the next succeeding Business Day. Any payment made on a date other than the date on which such payment is due as set forth herein shall have the same force and effect as if made on the date on which such payment is due, and no interest shall accrue for the period after such date.
- (d) Interest in respect of any period of less than one year shall be calculated on the basis of the Day Count Fraction specified in the Pricing Supplement.
- (e) All monies paid by or on behalf of the Company to the Trustee or to any Paying Agent for payment of the principal of, or interest (including Additional Amounts) on, any Note and not applied but remaining unclaimed for two years after the date upon which such amount shall have become due and payable shall be repaid to or for the account of the Company by the Trustee or such Paying Agent, the receipt of such repayment to be confirmed promptly in writing by or on behalf of the Company. The Holder or Holders of such Note or Notes shall thereafter look only to the Company for the payment that such Holder may be entitled to collect, and all liability of the Trustee or such Paying Agent with respect to such monies shall thereupon cease.
- (f) If the Company at any time defaults in the payment of any principal of, or interest (including Additional Amounts) on, the Notes, the Company will pay interest on the amount in default (to the extent permitted by law in the case of interest on interest), calculated for each day until paid, at the rate per annum specified in the Pricing Supplement, together with Additional Amounts, if applicable.
- (g) All payments of principal of, and premium, if any, and interest on the Notes will be made net of any deduction or withholding required by fiscal laws or regulations, and no Additional Amounts shall be paid with respect to any such deduction or withholding except as provided in Condition 4.

4. Taxation; Additional Amounts

All payments of principal of, and premium, if any, and interest on the Notes will be made without withholding or deduction for, or on account of, any present or future Taxes imposed or levied by or within any jurisdiction in which the Company or the Surviving Person (as defined under Condition 6) is organized or resident for tax purposes (or any political subdivision or taxing authority thereof or therein) or through which payment is made on behalf of the Company or the Surviving Person (each, a “**Relevant Jurisdiction**”), unless such withholding or deduction is required by law or by regulation or governmental policy having the force of law. In such event, the Company or the Surviving Person, as the case may be, will make such deduction or withholding, make payment of the amount so withheld to the appropriate governmental authority and will pay such additional amounts (“**Additional Amounts**”) as will result in receipt by the Holder of such amounts as would have been received by such Holder had no such withholding or deduction been required, provided that no Additional Amounts will be payable with respect to:

- (1) any Tax that would not have been imposed, payable or due but for:
 - (a) the existence of any present or former connection between the Holder (or the beneficial owner of, or person ultimately entitled to receive the payment on such Notes or if the Holder is an estate, nominee, trust, partnership or corporation, between a fiduciary, settler, beneficiary, partner of, member or shareholder of, or possessor of power over the Holder) and the Relevant Jurisdiction (including being a citizen or resident or national of, or carrying on a business or maintaining a permanent establishment in (including through a branch, agency or otherwise), or being physically present in, the Relevant Jurisdiction) other than the mere holding of the Notes or enforcement of rights thereunder or the receipt of payments in respect thereof;
 - (b) the failure of the Holder or beneficial owner to comply with a timely request of the Company or the Surviving Person, as the case may be, or the Paying Agent addressed to the Holder to provide information concerning such Holder’s or beneficial owner’s nationality, residence, identity or connection with any Relevant Jurisdiction, if and to the extent that due and timely compliance with such request would have reduced or eliminated any withholding or deduction as to which Additional Amounts would have otherwise been payable to such Holder or beneficial owner;
 - (c) the presentation of Notes (where presentation is required) for payment more than 30 days after the date such payment was due and payable or was duly provided for, whichever is later; or
 - (d) the presentation of such Note (in cases in which presentation is required) for payment in the Relevant Jurisdiction, unless such Note could not have been presented for payment elsewhere;
- (2) any estate, inheritance, gift, sale, value added, use, excise, transfer, personal property or similar tax, assessment or other governmental charge;
- (3) any withholding or deduction in respect of any Tax where such withholding or deduction is imposed or levied on a payment to an individual and is required to be made pursuant to European Council Directive 2003/48/EC or any other Directive implementing the conclusions of the ECOFIN Council meeting of November 26-27, 2000 on the taxation of savings income or any law implementing or complying with, or introduced in order to conform to, such Directive;

- (4) any Tax which is payable otherwise than by deduction or withholding from payments of (or in respect of) principal of, premium, if any, or interest on the Notes;
- (5) any withholding or deduction by or on behalf of a Holder of Notes who would have been able to avoid such deduction or withholding by presenting the relevant Note to another Paying Agent;
- (6) any Tax which is imposed or required to be withheld under Sections 1471 to 1474 (or any successor provisions or amendments thereof) of the United States Internal Revenue Code of 1986, as amended, or pursuant to any agreements with the U.S. Internal Revenue Service or between the United States and the government of another country and any official pronouncements with respect thereto, or any law implementing an intergovernmental approach to such Sections; or
- (7) any combination of Taxes referred to in the preceding clauses (1), (2), (3), (4), (5) and (6).

In addition, Additional Amounts will not be payable to a Holder that is a fiduciary, partnership, limited liability company or person other than the sole beneficial owner of any payment to the extent that such payment would be required to be included in the income under the laws of a Relevant Jurisdiction, for tax purposes, of a beneficiary or settlor with respect to the fiduciary, or a member of that partnership or limited liability company or a beneficial owner who would not have been entitled to such Additional Amounts had that beneficiary, settlor, partner, member or beneficial owner been the Holder thereof.

The Company or Surviving Person, as the case may be, will make any required withholding or deduction and remit the full amount deducted or withheld to the relevant authority in accordance with applicable law. The Company will make reasonable efforts to obtain certified copies of tax receipts evidencing the payment of any taxes so deducted or withheld from the Relevant Jurisdiction imposing such Taxes. The Company will furnish to the Trustee, within 60 days after the date the payment of any taxes so deducted or withheld is due pursuant to applicable law, either certified copies of tax receipts evidencing such payment or, if such receipts are not obtainable, other evidence of such payments.

Whenever in the Indenture or in the Conditions there is mentioned, in any context, the payment of amounts based upon the principal amount of the Notes or of principal, interest or of any other amount payable under or with respect to any of the Notes, such mention shall be deemed to include mention of the payment of Additional Amounts to the extent that, in such context, Additional Amounts are, were or would be payable in respect thereof.

5. Certain Covenants

For the purposes of this “Description of the Notes,” the terms defined below have the following meanings:

“**Affiliate**” means, with respect to any Person, any other Person (i) directly or indirectly controlling, controlled by, or under direct or indirect common control with, such Person or (ii) who is a commissioner, director or officer of such Person or any Subsidiary of such Person or of any Person referred to in clause (i) of this definition. 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.

“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.

“Change of Control” means the occurrence of any event resulting in the government of the Republic of Indonesia ceasing to own and control (directly or indirectly or in combination) more than 50% of the Company’s issued and paid-up shares.

“Change of Control Triggering Event” means a Change of Control, provided that, in the event that the Notes are, on the Rating Date, rated Investment Grade by two or more Rating Agencies, a Change of Control Triggering Event shall mean the occurrence of both a Change Of Control and a Rating Decline. No Change of Control Triggering Event will be deemed to have occurred in connection with any particular Change of Control unless and until such Change of Control has actually been consummated.

“Clearstream” means Clearstream Banking, société anonyme, Luxembourg or any successor thereof.

“Debt” means, with respect to any Person as of any date of determination, without duplication, (i) all obligations, contingent or otherwise, of such Person for borrowed money, (ii) all obligations of such Person evidenced by bonds, notes or other similar instruments, (iii) all obligations of such Person in respect of letters of credit or other similar instruments, (iv) all obligations of such Person to pay the unpaid purchase price of any property or service, (v) all obligations secured by a Lien on any property or asset of such Person, whether or not such obligations are assumed by such Person and (vi) all obligations of others guaranteed by such Person to the extent of such guarantees and, for clauses (i) through (vi), which has a final maturity of one year or more. The amount of Debt of any Person as of any date of determination shall be the outstanding balance at such date of all unconditional obligations as described above, the maximum liability of such Person for any such contingent obligations at such date and, in the case of clause (vi), the lesser of the fair market value (as determined in good faith by the board of directors of such Person) at such date of the property or asset of such Person subject to a Lien securing the obligations of others and the amount of such obligations secured.

“Default” means any event that is, or after notice or passage of time or both would be, an Event of Default.

“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.

“DTC” means The Depository Trust Company and its successors.

“Euroclear” means Euroclear Bank SA/NV or any successor thereof.

“Fitch” means Fitch Ratings Ltd., and its successors.

“guarantee” means any obligation, contingent or otherwise, of any Person directly or indirectly guaranteeing any Debt or other obligation of any other Person and, without limiting the generality of the foregoing, any obligation, direct or indirect, contingent or otherwise, of such Person (1) to purchase or pay (or advance or supply funds for the purchase or payment of) such Debt or other

obligation of such other Person (whether arising by virtue of partnership arrangements, or by agreements to keep-well, to purchase assets, goods, securities or services, to take-or-pay, or to maintain financial statement conditions or otherwise) or (2) entered into for purposes of assuring in any other manner the obligee of such Debt or other obligation of the payment thereof or to protect such obligee against loss in respect thereof (in whole or in part); provided that the term “guarantee” will not include endorsements for collection or deposit in the ordinary course of business. The term “guarantee” used as a verb has a corresponding meaning.

“**IFAS**” means Indonesian Financial Accounting Standards.

“**Investment Grade**” means a 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 any of its successors or assigns or a 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 any of its successors or assigns or a 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 Fitch or any of its successors or assigns, or the equivalent ratings of any internationally recognized rating agency or agencies, as the case may be, which shall have been designated by the Company as having been substituted for S&P, Moody’s or Fitch or two or three of them, as the case may be.

“**Issue Date**” means the date of issuance of the relevant Note.

“**Lien**” means any mortgage, pledge, security interest, encumbrance, lien or charge of any kind (including, without limitation, any conditional sale or other title retention agreement or lease in the nature thereof or any agreement to create any mortgage, pledge, security interest, lien, charge, easement or encumbrance of any kind but excluding liens arising by operation of law).

“**Moody’s**” means Moody’s Investors Service, Inc., and its successors.

“**Offer to Purchase**” means an offer to purchase Notes by the Company from the Holders commenced by the Company mailing a notice by first class mail, postage prepaid, to the Trustee and each Holder at its last address appearing in the Note register stating:

- (a) the provision of the Indenture pursuant to which the offer is being made and that all Notes validly tendered will be accepted for payment on a pro rata basis;
- (b) the purchase price and the date of purchase (which will 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**”);
- (c) that any Note not tendered will continue to accrue interest pursuant to its terms;
- (d) that, unless the Company defaults in the payment of the purchase price, any Note accepted for payment pursuant to the Offer to Purchase will cease to accrue interest on and after the Offer to Purchase Payment Date;
- (e) that Holders electing to have a Note purchased pursuant to the Offer to Purchase will be required to surrender the Note, together with the form entitled “Option of the Holder to Elect Purchase” on the reverse side of the Note 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;

- (f) that Holders 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 Holder, the principal amount of Notes delivered for purchase and a statement that such Holder is withdrawing his election to have such Notes purchased;
- (g) that Holders whose Notes are being purchased only in part will be issued new Notes equal in principal amount to the unpurchased portion of the Notes surrendered; provided that each Note purchased and each new Note issued will be in a principal amount of US\$200,000 or integral multiples of US\$1,000 in excess thereof; and
- (h) the CUSIP number(s) and/or ISIN/Common code(s), as applicable, of the Notes.

One Business Day prior to the Offer to Purchase Payment Date, the Company will deposit with the Paying Agent money sufficient to pay the purchase price of all Notes or portions thereof to be accepted by the Company for payment on the Offer to Purchase Payment Date. On the Offer to Purchase Payment Date, the Company will (a) accept for payment on a pro rata basis Notes or portions thereof tendered pursuant to an Offer to Purchase; and (b) deliver, or cause to be delivered, to the Trustee all Notes or portions thereof so accepted together with an Officers' Certificate specifying the Notes or portions thereof accepted for payment by the Company. The Paying Agent will promptly mail to the Holders so accepted payment in an amount equal to the purchase price, and the Trustee will promptly authenticate and mail to such Holders a new Note equal in principal amount to any unpurchased portion of the Note surrendered; provided that each Note purchased and each new Note issued will be in a principal amount of US\$200,000 or integral multiples of US\$1,000 in excess thereof. The Company will publicly announce the results of an Offer to Purchase as soon as practicable after the Offer to Purchase Payment Date. The Company will comply with Rule 14e-1 under the Exchange Act and any other securities laws and regulations thereunder to the extent such laws and regulations are applicable, in the event that the Company is required to repurchase Notes pursuant to an Offer to Purchase.

The offer is required to contain or incorporate by reference information concerning the business of the Company and its Subsidiaries which the Company in good faith believes will assist such Holders to make an informed decision with respect to the Offer to Purchase, including a brief description of the events requiring the Company 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 such Holders to tender Notes pursuant to the Offer to Purchase. To the extent that the provisions of any securities laws or regulations conflict with the requirements of the relevant Offer to Purchase, the Company will comply with the applicable securities laws and regulations and shall not be deemed to have breached their obligations under the Notes or the Indenture by virtue of their compliance with such securities laws or regulations.

"Officer" means one of the executive officers or directors of the Company.

"Officers' Certificate" means a certificate signed by two Officers.

"Opinion of Counsel" means a written opinion from legal counsel which opinion is acceptable to the Trustee that meets the requirements of the Indenture; provided that legal counsel shall be entitled to rely on a certificate of the Company as to matters of fact.

"Person" means any individual, corporation, partnership, limited liability company, joint venture, trust, unincorporated organization or government or any agency or political subdivision thereof.

“Principal Property” means any asset or property of the Company or a Subsidiary whether at the date of initial issuance of the Notes owned or thereafter acquired (other than any such asset or property, or portion thereof, reasonably determined by the Company not to be of material importance to the total business conducted by the Company and its Subsidiaries, taken as a whole).

“Rating Agencies” means (i) S&P, (ii) Moody’s, (iii) Fitch and (iv) if one or more of S&P, Moody’s or Fitch shall not make a rating of the Notes publicly available, a United States nationally recognized securities rating agency or agencies, as the case may be, selected by the Company, which shall be substituted for S&P, Moody’s or Fitch or any combination thereof, as the case may be.

“Rating Category” means (i) with respect to S&P, any of the following categories: “BB,” “B,” “CCC,” “CC,” “C” and “D” (or equivalent successor categories); (ii) with respect to Moody’s, any of the following categories: “Ba,” “B,” “Caa,” “Ca,” “C” and “D” (or equivalent successor categories); (iii) with respect to Fitch, any of the following categories: “BB,” “B,” “CCC,” “CC,” “C,” or “D” (or equivalent successor categories); and (iv) the equivalent of any such category of S&P, Moody’s or Fitch used by another Rating Agency. In determining whether the rating of the Notes has decreased by one or more gradations, gradations within Rating Categories (“+” and “-” for S&P; “1,” “2” and “3” for Moody’s; “+” and “-” for Fitch; or the equivalent gradations for another Rating Agency) shall be taken into account (e.g., with respect to S&P, a decline in a rating from “BB+” to “BB,” as well as from “BB-” to “B+,” will constitute a decrease of one gradation).

“Rating Date” means, in connection with a Change of Control Triggering Event, that date which is 90 days prior to the earlier of (i) a Change of Control and (ii) a public notice of the occurrence of a Change of Control.

“Rating Decline” means, in connection with a Change of Control Triggering Event, the occurrence on, or within 90 days after, the date, or public notice of the occurrence of, a Change of Control (which period shall be extended (by no more than an additional three months after the consummation of the Change of Control) so long as the rating of the Notes is under publicly announced consideration for possible downgrade by any of the Rating Agencies) of the following event: the Notes are (a) on the Rating Date rated Investment Grade by at least two Rating Agencies and (b) cease to be rated Investment Grade by at least two of such Rating Agencies.

“S&P” means Standard & Poor’s Ratings Services, a division of the McGraw-Hill Companies, Inc., and its successors.

“Securities” means bonds, debentures, notes or other similar securities having an original maturity of more than one year from its date of issue which (1) are, or are issued with the intention on the part of the issuer thereof that they should be, quoted, listed or ordinarily dealt in or traded on any stock exchange, over-the-counter or other securities market, and (2) either (A) are by their terms payable, or confer a right to receive payment, in any currency other than Rupiah or (B) are denominated in Rupiah and more than 50% of the aggregate principal amount of the offering of such international investment securities is initially distributed outside Indonesia by or with the Company’s consent.

“Stated Maturity” means, (1) with respect to any Debt, the date specified in such debt security as the fixed date on which the final installment of principal of such Debt is due and payable as set forth in the documentation governing such Debt and (2) with respect to any scheduled installment of principal of or interest on any Debt, the date specified as the fixed date on which such installment is due and payable as set forth in the documentation governing such Debt.

“Subsidiary” means (i) any corporation or other entity of which securities or other ownership interests having ordinary voting power to elect a majority of the board of directors or other persons performing similar functions are at the time directly or indirectly owned by the Company or (ii) any subsidiary subject to consolidation with the Company’s financial statements under IFAS.

“Tax” shall mean any tax, duty, levy, impost, assessment or other governmental charge (including penalties, interest and any other liabilities related thereto).

“U.S. Government Obligations” means securities that are (1) direct obligations of the United States of America for the payment of which its full faith and credit is pledged or (2) obligations of a Person controlled or supervised by and acting as an agency or instrumentality of the United States of America the payment of which is unconditionally guaranteed as a full faith and credit obligation by the United States of America, which, in either case, are not callable or redeemable at the option of the issuer thereof at any time prior to the Stated Maturity of the Notes, and will also include a depository receipt issued by a bank or trust company as custodian with respect to any such U.S. Government Obligation or a specific payment of interest on or principal of any such U.S. Government Obligation held by such custodian for the account of the holder of a depository receipt; provided that (except as required by law) such custodian is not authorized to make any deduction from the amount payable to the holder of such depository receipt from any amount received by the custodian in respect of the U.S. Government Obligation or the specific payment of interest on or principal of the U.S. Government Obligation evidenced by such depository receipt.

“Wholly Owned” means, with respect to any Subsidiary of any Person, the ownership of all of the outstanding Capital Stock of such Subsidiary by such Person or one or more Wholly Owned Subsidiaries of such Person.

5A. Change of Control

Not later than 30 days following a Change of Control Triggering Event, the Company will make an Offer to Purchase all Outstanding Notes (a **“Change of Control Offer”**) at a purchase price equal to 101% of the principal amount thereof plus accrued and unpaid interest, if any, to the Offer to Purchase Payment Date.

The Company has agreed in the Indenture that it will timely repay all Debt or obtain consents as necessary under, or terminate, agreements or instruments that would otherwise prohibit a Change of Control Offer required to be made pursuant to the Indenture. Notwithstanding these agreements, it is important to note that if the Company is unable to repay (or cause to be repaid) all of the Debt, if any, that would prohibit the repurchase of the Notes or is unable to obtain the requisite consents of the holders of such Debt, or terminate any agreements or instruments that would otherwise prohibit a Change of Control Offer, the Company would continue to be prohibited from purchasing the Notes. In that case, the failure of the Company to purchase tendered Notes would constitute an Event of Default under the Indenture.

Certain of the events constituting a Change of Control Triggering Event under the Notes will also constitute an event of default under certain debt instruments of the Company and its Subsidiaries. Future Debt of the Company or its Subsidiaries may also (1) prohibit the Company from purchasing the Notes in the event of a Change of Control Triggering Event; (2) provide that a Change of Control Triggering Event is a default; or (3) require the repayment or repurchase of such Debt upon a Change of Control Triggering Event. Moreover, the exercise by the Holders of their right to require the Company to purchase the Notes could cause a default under other Debt,

even if the Change of Control Triggering Event itself does not, due to the financial effect of the purchase on the Company or its Subsidiaries. The ability of the Company to pay cash to Holders of the Notes following the occurrence of a Change of Control Triggering Event may be limited by the financial resources then available to the Company. There can be no assurance that sufficient funds will be available when necessary to make the required purchase of the Notes.

Except as described above with respect to a Change of Control Offer, the Indenture does not contain provisions that permit the Holders to require that the Company purchase or redeem the Notes in the event of a takeover, recapitalization or similar transaction.

5B. Negative Pledge

So long as any of the Notes are Outstanding, the Company will not create or permit to subsist, and the Company will ensure that none of its Subsidiaries that own a Principal Property (each, a “**Material Subsidiary**”) will create or permit to subsist, any Lien for the benefit of the holders of any Securities upon the whole or any part of its property or assets, present or future, to secure: (i) payment of any sum due in respect of any Securities; (ii) any payment under any guarantee of any Securities; or (iii) any indemnity or other like obligation in respect of any Securities, without in any such case (x) at the same time according to the Notes the same Liens as are granted to or are outstanding in respect of such Securities or (y) providing such other Lien for the Notes as may be approved by the holders of the Notes; provided, however, that the foregoing restriction shall not apply to:

- (a) any Lien existing at the time of acquisition of any property by the Company provided that such Lien was not created in contemplation of such acquisition or in connection therewith and the principal, capital or nominal amount of the indebtedness secured by such Lien outstanding at the time of such acquisition is not increased; or
- (b) any Lien arising out of the refinancing, extension or renewal, in whole or in part, of a Lien permitted under clause (a) above or any Securities secured by any Lien permitted by the preceding clause, to the extent of the amount of such Securities; provided that such Securities are not secured by any additional property or assets.

5C. Reports

For so long as any of the Notes remain Outstanding, the Company will file with the Trustee:

- (a) as soon as they are available, but in any event within 120 calendar days after the end of its fiscal year, copies of its financial statements (on a consolidated basis) in respect of such financial year (including a statement of income, balance sheet and cash flow statement) audited by a member firm of an internationally recognized firm of independent accountants;
- (b) as soon as they are available, but in any event within 60 calendar days after the end of each of its first, second and third fiscal quarters, copies of its financial statements (on a consolidated basis) in respect of such period (including a statement of income, balance sheet and cash flow statement) prepared on a basis consistent with its audited financial statements, together with a certificate signed by the Person then authorized to sign financial statements on behalf of it, to the effect that such financial statements are true in all material respects and present fairly its financial position as at the end of, and the results of its operations for, the relevant quarterly period; and

- (c) promptly and in any event within 15 days after it obtains actual knowledge of the occurrence thereof, written notice of the occurrence of any event or condition which constitutes an Event of Default and an Officer's Certificate setting forth the details thereof and the action it is taking or proposes to take with respect thereto.

Further, the Company has agreed that, for so long as any Notes are "restricted securities" within the meaning of Rule 144(a)(3) under the Securities Act, during any period in which the Company is neither subject to Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), nor exempt from reporting pursuant to Rule 12g3-2(b) thereunder, the Company will supply to (i) any Holder or beneficial owner of a Note or (ii) a prospective purchaser of a Note or a beneficial interest therein designated by such Holder or beneficial owner, the information specified in, and meeting the requirements of Rule 144A(d)(4) under the Securities Act upon the request of any Holder or beneficial owner of a Note.

5D. Use of Proceeds

The Company will not use the net proceeds from the sale of any Tranche of Notes, in any material amount, for any purpose other than for the purposes specified under the caption "Use of Proceeds" in the Offering Memorandum or as set forth in the applicable Pricing Supplement.

5E. Payment of Stamp Duties and Other Taxes

The Company will pay any present or future stamp, court or documentary duties or taxes, or any other excise or property taxes, charges or similar levies which arise under the laws of the Republic of Indonesia, or the United States or any political subdivision or taxing authority thereof respectively, from the execution, delivery, registration, enforcement, redemption or retirement of the Notes or any other document or instrument relating thereto.

5F. Listing of the Program

The Company shall make such filings, registrations or qualifications and take all other necessary action and will use its best efforts to obtain such consents, approvals and authorizations, if any, and satisfy all conditions that the SGX-ST may impose on the listing of the Program.

5G. No Payments for Consents

The Company will not, and will not permit any of its Subsidiaries to, directly or indirectly, pay or cause to be paid any consideration, whether by way of interest, fee or otherwise, to any Holder for or as an inducement to any consent, waiver or amendment of any of the terms or provisions of the Indenture or the Notes, unless such consideration is offered to be paid or is paid to all Holders that consent, waive or agree to amend such term or provision within the time period set forth in the solicitation documents relating to such consent, waiver or amendment.

6. Limitations on Consolidation, Merger and Sale of Assets

The Company will not consolidate with, merge with or into another Person, permit any Person to merge with or into it, or sell, convey, transfer, lease or otherwise dispose of all or substantially all of its properties and assets, computed on a consolidated basis with its Subsidiaries, (as an entirety or substantially an entirety in one transaction or a series of related transactions), unless:

- (1) the Company will be the continuing Person, or the Person (if other than it) formed by such consolidation or merger or that acquired or leased such property and assets (the

“**Surviving Person**”) will be a corporation organized and validly existing under the laws of the jurisdiction in which it is organized and will expressly assume, by a supplemental indenture to the Indenture, executed and delivered to the Trustee, all the obligations of the Company under the Indenture and the Notes, including the obligation to pay Additional Amounts, and the Indenture and the Notes will remain in full force and effect;

- (2) immediately after giving effect to such transaction, no Default or Event of Default will have occurred and be continuing; and
- (3) the Company delivers to the Trustee an Officers’ Certificate and an Opinion of Counsel, in each case stating that such consolidation, merger or transfer and the relevant supplemental indenture complies with this provision and that all conditions precedent provided for in the Indenture relating to such transaction have been complied with and that the relevant supplemental indenture is enforceable.

For purposes of this covenant, the conveyance, transfer or lease of all or substantially all of the property or assets of one or more Subsidiaries of the Company, which constitutes all or substantially all of the property or assets of the Company and its Subsidiaries on a consolidated basis, shall be deemed to be the transfer of all or substantially all of the property or assets of the Company.

Although there is a limited body of case law interpreting the phrase “substantially all,” there is no precise established definition of the phrase under applicable law. Accordingly, in certain circumstances there may be a degree of uncertainty as to whether a particular transaction would involve “all or substantially all” of the property or assets of a Person.

The foregoing provisions would not necessarily afford Holders protection in the event of highly-leveraged or other transactions involving the Company that may adversely affect Holders.

7. Events of Default

Each of the following is an “**Event of Default**”:

- (1) default in the payment of principal of (or premium, if any, on) the Notes when the same becomes due and payable at maturity, upon acceleration, redemption or otherwise;
- (2) default in the payment of interest on any Note when the same becomes due and payable, and such default continues for a period of 30 days;
- (3) default in the performance of or breaches of the provisions of the covenants described under Condition 6 or failure to make or consummate an Offer to Purchase in the manner described under Condition 5A (Change of Control);
- (4) default in the performance of or breaches of any other covenant or agreement in the Indenture or under the Notes (other than a default specified in clause (a), (b) or (c) above) and such default or breach continues for a period of 60 consecutive days after written notice by the Trustee or the Holders of 25% or more in aggregate principal amount of the outstanding Notes;
- (5) there occurs with respect to any Debt of the Company or any of its Material Subsidiaries having an outstanding principal amount of US\$50.0 million (or the Dollar Equivalent

thereof) or more in the aggregate for all such Debt of all such Persons, whether such Debt now exists or will hereafter be created, (A) an event of default that has caused the holder thereof to declare such Debt to be due and payable prior to its Stated Maturity or (B) the failure to make a payment of principal (subject to the applicable grace period in the relevant documents) of such Debt when the same becomes due;

- (6) one or more final judgments or orders for the payment of money are rendered against the Company or any of its Material Subsidiaries and are not paid or discharged, and there is a period of 60 consecutive days following entry of the final judgment or order that causes the aggregate amount for all such final judgments or orders outstanding and not paid or discharged against all such Persons to exceed US\$50.0 million (or the Dollar Equivalent thereof) during which a stay of enforcement, by reason of a pending appeal or otherwise, is not in effect;
- (7) an involuntary case or other proceeding is commenced against the Company or any Material Subsidiary with respect to it or its debts under any applicable bankruptcy, insolvency or other similar law now or hereafter in effect seeking the appointment of a receiver, liquidator, assignee, custodian, trustee, sequestrator or similar official of the Company or any Material Subsidiary or for any substantial part of the property and assets of the Company or any Material Subsidiary and such involuntary case or other proceeding remains undismissed and unstayed for a period of 60 consecutive days; or an order for relief is entered against the Company or any Material Subsidiary under any applicable bankruptcy, insolvency or other similar law as now or hereafter in effect; or
- (8) the Company or any Material Subsidiary (i) commences a voluntary case under any applicable bankruptcy, insolvency or other similar law now or hereafter in effect, or consents to the entry of an order for relief in an involuntary case under any such law, (ii) consents to the appointment of or taking possession by a receiver, liquidator, assignee, custodian, trustee, sequestrator or similar official of the Company or any Material Subsidiary or for all or substantially all of the property and assets of the Company or any Material Subsidiary or (iii) effects any general assignment for the benefit of creditors.

If an Event of Default (other than an Event of Default specified in Condition 7(7) or Condition 7(8) above) occurs and is continuing under the Indenture, the Trustee or the Holders of at least 25% in aggregate principal amount of the Notes, then Outstanding, by written notice to the Company (and to the Trustee if such notice is given by the Holders), may, and the Trustee at the written request of such Holders will, declare the principal of, premium, if any, and accrued and unpaid interest on the Notes to be immediately due and payable. Upon a declaration of acceleration, such principal of, premium, if any, and accrued and unpaid interest will be immediately due and payable. If an Event of Default specified in Condition 7(7) or Condition 7(8) above occurs, the principal of, premium, if any, and accrued and unpaid interest on the Notes then Outstanding will automatically become and be immediately due and payable without any declaration or other act on the part of the Trustee or any Holder.

The Holders of at least a majority in principal amount of the Outstanding Notes by written notice to the Company and the Trustee, may on behalf of all of the Holders waive all past defaults and rescind and annul a declaration of acceleration and its consequences with respect to the Notes if:

- (i) the Company pays or deposits with the Trustee a sum sufficient to pay all monies then due with respect to the Notes (other than amounts due solely because of such declaration of acceleration) and all other existing Events of Default have been cured or waived, and
- (ii) the rescission would not conflict with any judgment or decree of a court of competent jurisdiction.

Upon such waiver, the Default will cease to exist, and any Event of Default arising therefrom will be deemed to have been cured, but no such waiver will extend to any subsequent or other Default or impair any right consequent thereon.

The Holders of at least a majority in aggregate principal amount of the Outstanding Notes may direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or exercising any trust or power conferred on the Trustee. However, the Trustee may refuse to follow any direction that conflicts with law or the Indenture, that may involve the Trustee in personal liability, or that the Trustee determines in good faith may be unduly prejudicial to the rights of Holders not joining in the giving of such direction and may take any other action it deems proper that is not inconsistent with any such direction received from Holders.

A Holder may not pursue or institute any proceeding, judicial or otherwise, with respect to the Indenture or the Notes, or for the appointment of a receiver or trustee, or for any other remedy under the Indenture or the Notes, unless:

- (a) the Holder has previously given the Trustee written notice of a continuing Event of Default;
- (b) the Holders of at least 25% in aggregate principal amount of Outstanding Notes make a written request to the Trustee to pursue the remedy;
- (c) such Holder or Holders offer the Trustee indemnity and/or security and/or prefunding satisfactory to the Trustee against any costs, liability or expense to be incurred in compliance with such request;
- (d) the Trustee does not comply with the request within 60 days after receipt of the request and the offer of indemnity; and
- (e) during such 60-day period, the Holders of a majority in aggregate principal amount of the Outstanding Notes do not give the Trustee a direction that is inconsistent with the request.

However, such limitations do not apply to the right of any Holder of a Note to receive payment of the principal of, premium, if any, or interest, and Additional Amounts, if any, on, such Note or to bring suit for the enforcement of any such payment, on or after the due date expressed in the Notes, which right will not be impaired or affected without the consent of the Holder.

Officers of the Company must certify to the Trustee, on or before a date not more than 120 calendar days after the end of each fiscal year, that a review has been conducted of the activities of the Company and its Subsidiaries and the Company's performance under the Indenture and the Notes and that the Company has fulfilled all obligations thereunder, or, if there has been a default in the fulfillment of any such obligation, specifying each such default and the nature and status thereof. The Company will also be obligated to notify the Trustee in writing of any default or defaults in the performance of any covenants or agreements under the Indenture. See Condition 5C (Reports).

8. Redemption

- (a) Redemption by Installments and Final Redemption:
 - (i) Unless previously redeemed, purchased and cancelled each Note that provides for Installment Dates and Installment Amounts shall be partially redeemed on each

Installment Date at the related Installment Amount specified in the Pricing Supplement. The outstanding nominal amount of each such Note shall be reduced by the Installment Amount (or, if such Installment Amount is calculated by reference to a proportion of the nominal amount of such Note, such proportion) for all purposes with effect from the related Installment Date, unless payment of the Installment Amount is improperly withheld or refused, in which case, such amount shall remain outstanding until the Relevant Date relating to such Installment Amount.

- (ii) Unless previously redeemed, purchased and cancelled as provided below, each Note shall be finally redeemed on the Maturity Date specified in the Pricing Supplement at its Final Redemption Amount (which, unless otherwise provided in the Pricing Supplement, is its nominal amount) or, in the case of a Note falling within Condition 8(a)(i) above, its final installment Amount.

(b) Early Redemption:

(i) *Zero Coupon Notes:*

- (A) The Early Redemption Amount payable in respect of any Zero Coupon Note, the Early Redemption Amount of which is not linked to an index and/or a formula, upon redemption of such Note pursuant to Condition 8(c) or upon it becoming due and payable as provided in Condition 7 shall be the Amortized Face Amount (calculated as provided below) of such Note unless otherwise specified in the Pricing Supplement.
- (B) Subject to the provisions of Condition 8(b)(i)(C) below, the Amortized Face Amount of any such Note shall be the scheduled Final Redemption Amount of such Note on the Maturity Date discounted at a rate per annum (expressed as a percentage) equal to the Amortization Yield (which, if none is shown in the Pricing Supplement, shall be such rate as would produce an Amortized Face Amount equal to the issue price of the Notes if they were discounted back to their issue price on the Issue Date) compounded annually.
- (C) If the Early Redemption Amount payable in respect of any such Note upon its redemption pursuant to Condition 8(c) or upon it becoming due and payable as provided in Condition 7 is not paid when due, the Early Redemption Amount due and payable in respect of such Note shall be the Amortized Face Amount of such Note as defined in Condition 8(b)(i)(B) above, except that such Condition shall have effect as though the date on which the Note becomes due and payable were the Relevant Date. The calculation of the Amortized Face Amount in accordance with this Condition 8(b)(i)(C) shall continue to be made (both before and after judgment) until the Relevant Date, unless the Relevant Date falls on or after the Maturity Date, in which case the amount due and payable shall be the scheduled Final Redemption Amount of such Note on the Maturity Date together with any interest that may accrue in accordance with Condition 7.

Where such calculation is to be made for a period of less than one year, it shall be made on the basis of the Day Count Fraction shown in the Pricing Supplement.

- (ii) *Other Notes:* The Early Redemption Amount payable in respect of any Note (other than Notes described in (i) above), upon redemption of such Note pursuant to

Condition 8(c) or upon it becoming due and payable as provided in Condition 7, shall be the Final Redemption Amount unless otherwise specified in the Pricing Supplement.

(c) Redemption for Taxation Reasons:

The Notes may be redeemed, at the option of the Company or the Surviving Person, as the case may be, in whole but not in part, on any Interest Payment Date (if the Note is either a Floating Rate Note or an Index Linked Note) or at any time (if the Note is neither a Floating Rate Note nor an Index Linked Note), upon giving not less than 30 days' and not more than 60 days' notice to the Holders (which notice shall be irrevocable), at a redemption price equal to 100% of the principal amount thereof, together with accrued and unpaid interest (including any Additional Amounts), if any, to the date fixed by the Company or the Surviving Person, as the case may be, for redemption if, as a result of:

- (i) any change in, or amendment to, the laws (or any regulations or rulings promulgated thereunder) of a Relevant Jurisdiction affecting taxation; or
- (ii) any change in the existing official position regarding the application or interpretation of, or the stating of an official position regarding the application or interpretation of, such laws, regulations or rulings (including a holding, judgment or order by a court of competent jurisdiction),

which change or amendment becomes effective on or after (i) in the case of the Company, the Issue Date, or (ii) in the case of a Surviving Person, the date on which the Surviving Person assumes the obligations of the Company under the Indenture and the Notes, the Company or the Surviving Person, as the case may be, is, or on the next date of interest payment on the Notes would be, required to pay Additional Amounts with respect to any payment due or to become due under the Notes or the Indenture, and such requirement cannot be avoided by the taking of reasonable measures (including an appointment of a new paying agent) by the Company or the Surviving Person, as the case may be (provided that changing the jurisdiction of the Company or a Surviving Person, as the case may be, is not a reasonable measure for purposes of this section); provided that no such notice of redemption shall be given earlier than 90 days prior to the earliest date on which the Company or the Surviving Person, as the case may be, would be obligated to pay such Additional Amounts if a payment in respect of the Notes were then due; provided further that where any such requirement to pay Additional Amounts is due to taxes of the Republic of Indonesia (or any political subdivision or taxing authority thereof or therein), the Company or the Surviving Person shall be permitted to redeem the Notes in accordance with the provisions above only if the rate of withholding or deduction so required is in excess of 20.0% (the "**Minimum Withholding Level**"). No less than 15 days (or such period as may be agreed between the Company or the Surviving Person, as the case may be, and the Trustee) before giving such notice, the Company or the Surviving Person, as the case may be, shall give notice to the Principal Paying Agent and in the case of a redemption of Registered Notes, the Registrar (which notices shall be irrevocable and shall specify the date fixed for redemption).

Prior to the publication and mailing of any notice of redemption of the Notes pursuant to the foregoing, the Company or the Surviving Person, as the case may be, will deliver to the Trustee:

- (1) an Officers' Certificate stating that such change or amendment referred to in the prior paragraph has occurred, describing the facts related thereto and stating that such requirement cannot be avoided by the Company or the Surviving Person, as the case may be, by taking reasonable measures available to it;

- (2) an Opinion of Counsel or an opinion of a tax consultant of recognized standing with respect to such matter, or a copy of any judicial decision or regulatory determination or ruling, in each case to the effect that the requirement to pay such Additional Amounts results from such change or amendment referred to in the prior paragraph; and
- (3) in the case of a redemption where the Minimum Withholding Level has been exceeded, an Opinion of Counsel or an opinion of a tax consultant of recognized standing with respect to such matter that the Company or the Surviving Person, as the case may be, has or will become obliged to pay Additional Amounts exceeding the Minimum Withholding Level.

The Trustee shall accept such certificate and opinion as sufficient evidence of the satisfaction of the conditions precedent described above, in which event it shall be conclusive and binding on the Holders.

(d) Redemption at the Option of the Company:

If Call Option is specified in the Pricing Supplement, the Company or the Surviving Person, as the case may be, may, on giving not less than 20 nor more than 30 days' irrevocable notice to the Holders (or such other notice period as may be specified in the Pricing Supplement) redeem all or, if so provided, some of the Notes on any Optional Redemption Date. No less than 15 days (or such period as may be agreed between the Company or the Surviving Person, as the case may be, and the Trustee) before giving such notice, the Company or the Surviving Person, as the case may be, shall give notice to the Principal Paying Agent and in the case of a redemption of Registered Notes, the Registrar (which notices shall be irrevocable and shall specify the date fixed for redemption). Any such redemption of Notes shall be at their Optional Redemption Amount together with interest accrued to the date fixed for redemption. Any such redemption or exercise must relate to Notes of a nominal amount at least equal to the Minimum Redemption Amount to be redeemed specified in the Pricing Supplement and no greater than the Maximum Redemption Amount to be redeemed specified in the Pricing Supplement.

All Notes in respect of which any such notice is given shall be redeemed on the date specified in such notice in accordance with this Condition 8(d).

In the case of a partial redemption, the notice to Holders shall, in the case of Bearer Notes, also contain the certificate numbers of the Bearer Notes or, in the case of Registered Notes, specify the nominal amount of Registered Notes selected and the holder(s) of such Registered Notes, to be redeemed, which shall have been selected in such place as the Trustee may approve and in such manner as it deems appropriate, subject to compliance with any applicable laws and stock exchange or other relevant authority requirements.

(e) Redemption at the Option of Holders:

If Put Option is specified in the Pricing Supplement, the Company or the Surviving Person, as the case may be, shall, at the option of the holder of any such Note, upon the holder of such Note giving not less than 15 nor more than 30 days' notice to the Company (or such other notice period as may be specified in the Pricing Supplement) redeem such Note on the Optional Redemption Date(s) at its Optional Redemption Amount together with interest accrued to the date fixed for redemption.

To exercise such option the holder must deposit a duly completed option exercise notice in the form obtainable from any Paying Agent, the Registrar or any Transfer Agent (as

applicable) within the notice period with the Registrar or any Transfer Agent at its specified office, in the case of Definitive Notes together with the relevant Definitive Note representing such Note(s). No Note so deposited and option exercised may be withdrawn without the prior consent of the Company.

(f) Partly Paid Notes:

Partly Paid Notes will be redeemed, whether at maturity, early redemption or otherwise, in accordance with the provisions of this Condition 8 and the provisions specified in the Pricing Supplement.

9. Replacement, Exchange and Transfer of Notes

- (a) Upon the terms and subject to the conditions set forth in the Indenture, in case any Note shall become mutilated, defaced or be apparently destroyed, lost or stolen, the Company will execute, and upon the request of the Company, the Trustee or the Registrar, as applicable, shall authenticate and deliver, a new Note bearing a number not contemporaneously Outstanding, in exchange and substitution for the mutilated or defaced Note, or in lieu of and in substitution for the apparently destroyed, lost or stolen Note. In every case, the applicant for a substitute Note shall furnish to the Company and to the Trustee such security and/or indemnity as may be required by each of them to indemnify, defend and to save each of them and any agent of the Company or the Trustee harmless and, in every case of destruction, loss or theft, evidence to their satisfaction of the apparent destruction, loss or theft of such Note and of the ownership thereof. Upon the issuance of any substitute Note, the Holder of such Note, if so requested by the Company, shall pay a sum sufficient to cover any stamp duty, tax or other governmental charge that may be imposed in relation thereto and any other expenses (including the fees and expenses of the Trustee and counsel to the Trustee) connected with the preparation and issuance of the substitute Note.
- (b) Upon the terms and subject to the conditions set forth in the Indenture, and subject to Condition 9(e), a Definitive Note may be exchanged for an equal aggregate principal amount of Definitive Notes in different Specified Denominations by the Holder or Holders surrendering the Note or Notes for exchange at the Corporate Trust Office of the Trustee in The City of New York or at the office of a transfer agent, together with a written request for the exchange. Definitive Notes will only be issued in exchange for interests in a Registered Global Security pursuant to Clauses 2.6.6 through 2.6.10 of the Indenture. The exchange of the Notes will be made by the Trustee in The City of New York.
- (c) Upon the terms and subject to the conditions set forth in the Indenture, and subject to Condition 9(e), a Certificated Security may be transferred in whole or in a smaller Specified Denomination by the Holder or Holders surrendering the Certificated Security for transfer at the Corporate Trust Office of the Trustee in The City of New York or at the office of a Paying Agent accompanied by an executed instrument of transfer substantially as set forth in Exhibit K to the Indenture. The registration of transfer of the Notes will be made by the Trustee in The City of New York.
- (d) The costs and expenses of effecting any exchange, transfer or registration of transfer pursuant to this Condition 9 will be borne by the Company, except for the expenses of delivery (if any) not made by regular mail and the payment of a sum sufficient to cover any stamp duty, transfer tax or other governmental charge or insurance charge that may be imposed in relation thereto, which will be borne by the Holder.

- (e) The Trustee may decline to accept any request for an exchange or registration of transfer of any Registered Note during the period of 15 days preceding the due date for any payment of principal of or interest on the Registered Notes.

10. Trustee

For a description of the duties and the immunities and rights of the Trustee under the Indenture, reference is made to the Indenture, and the obligations of the Trustee to the Holder of a Note are subject to such immunities and rights.

Subject to the provisions of the Indenture, the Trustee will be under no obligation to exercise any of the rights or powers under the Indenture unless indemnity and/or security and/or prefunding satisfactory to the Trustee against any loss, liability or expense shall have been offered to the Trustee.

11. Paying Agents; Transfer Agents; Registrar

The Company has initially appointed the Paying Agents, transfer agents and registrar. The Company may at any time appoint additional or other Paying Agents, transfer agents and, with respect to Registered Notes, registrars and terminate the appointment of those or any Paying Agents, transfer agents and registrar, provided that while the Notes are Outstanding the Company will maintain in London and, with respect to Registered Notes, New York City (i) a Paying Agent, (ii) an office or agency where the Notes may be presented for exchange, transfer and registration of transfer as provided in the Indenture and (iii) with respect to Registered Notes, a registrar. In addition, if and for so long as the Notes are listed on the SGX-ST and the rules of such exchange so require, the Company will maintain a Paying Agent and Transfer Agent in Singapore. Notice of any such termination or appointment and of any change in the office through which any Paying Agent, transfer agent or registrar will act will be promptly given in the manner described in Condition 13.

12. Enforcement

Subject to Clause 4.6 of the Indenture, a Holder may not pursue or institute any proceeding, judicial or otherwise, with respect to the Indenture or the Notes, or for the appointment of a receiver or trustee, or for any other remedy under the Indenture or the Notes, unless:

- (a) the Holder has previously given the Trustee written notice of a continuing Event of Default;
- (b) the Holders of at least 25% in aggregate principal amount of Outstanding Notes make a written request to the Trustee to pursue the remedy;
- (c) such Holder or Holders offer the Trustee indemnity and/or security and/or prefunding satisfactory to the Trustee against any costs, liability or expense to be incurred in compliance with such request;
- (d) the Trustee does not comply with the request within 60 days after receipt of the request and the offer of indemnity; and
- (e) during such 60-day period, the Holders of a majority in aggregate principal amount of the Outstanding Notes do not give the Trustee a direction that is inconsistent with the request.

13. Notices

Notices by the Company will be in writing in the English language and will be mailed to Holders of Notes at their registered addresses and shall be deemed to have been given on the date of such mailing. So long as the Notes are listed on the SGX-ST and the rules of the exchange so require, notices to Holders will be valid if published in a daily 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. If publication is not practicable, the Company will have validly given notice if it gives notice in accordance with the rules of the SGX-ST.

14. Further Issues of Notes

The Company may, without the consent of the Holders, create and issue additional Notes with the same terms and conditions as the Notes (or that are the same except for the amount of the first interest payment and for the interest paid on the Notes prior to the issuance of the additional Notes). The Company may consolidate additional Registered Notes with the Outstanding Notes to form a single Series, provided that such additional Registered Notes will not have the same CUSIP number, ISIN number, Common Code or other identifying number as the Outstanding Notes unless the additional Notes are fungible with the Outstanding Notes for U.S. federal income tax purposes; provided further that in the case of Bearer Notes to which the D Rules apply that are initially represented by interests in a Temporary Global Note exchangeable for interest in a Permanent Global Note or Definitive Notes, such consolidation can only occur following the exchange of interests in the Temporary Global Note for interests in the Permanent Global Note or Definitive Notes upon certification of non-U.S. beneficial ownership.

15. No Sinking Fund

The Notes will not be subject to any sinking fund.

16. Authentication

A Note shall not become valid or obligatory until the certificate of authentication hereon shall have been duly signed by the Trustee or its agent.

17. Governing Law; Agent for Service; Submission to Jurisdiction; Waiver of Immunity

- (a) The Notes will be governed by and interpreted in accordance with the laws of the State of New York.
- (b) The Company hereby irrevocably submits to the non-exclusive jurisdiction of any New York State or United States Federal Court located in the Borough of Manhattan, The City of New York, over any suit, action or proceeding arising out of or relating to the Indenture or any Note. The Company hereby irrevocably waives, to the fullest extent permitted by law, any objection which it may now or hereafter have to the laying of venue of any such suit, action or proceeding brought in such courts and any claim that any such suit, action or proceeding brought in such courts has been brought in an inconvenient forum. To the extent that the Company has or hereafter may acquire any immunity from jurisdiction of any court or from any legal process with respect to itself or its property, the Company hereby irrevocably waives such immunity in respect of its obligations under the Indenture and any Note. The Company agrees that final judgment in any such suit,

action or proceeding brought in such a court shall be conclusive and binding on the Company and, to the extent permitted by applicable law, may be enforced in any court to the jurisdiction of which the Company, as the case may be, is subject by a suit upon such judgment or in any manner provided by law; provided that service of process is effected upon the Company, as the case may be, in the manner specified in the following paragraph or as otherwise permitted by law.

- (c) As long as any of the Notes remain outstanding, the Company shall at all times have an authorized agent in New York City upon whom process may be served in any legal action or proceeding arising out of or relating to this Indenture or any Note. Service of process upon such agent and written notice of such service mailed or delivered to the Company, as the case may be, shall to the fullest extent permitted by law be deemed in every respect effective service of process upon the Company in any such legal action or proceeding. The Company has appointed Corporation Service Company as its agent for such purpose, and covenants and agrees that service of process in any suit, action or proceeding may be made upon it at the office of such agent at 1180 Avenue of the Americas, Suite 210, New York, New York 10036 (or at such other address or at the office of such other authorized agent as the Company, as the case may be, may designate by written notice to the Trustee from time to time).
- (d) The Company will not bring any claim or otherwise initiate any legal action in any court or other tribunal in Indonesia against the Trustee, any Agents or any Holder of the Notes (in their capacity as a Holder of the Notes) on the basis that any offering of the Notes by the Company, the Indenture, any purchase agreements entered into by the Company in relation to the issue and sale of the Notes by the Issuer under the Indenture or any transaction contemplated thereby is or was invalid or illegal under any Indonesian law, regulation, court order or decree or was induced in any way by fraud, manipulation, legal manufacturing, fiction, fabrication or other deceptive means.

18. Purchases of Notes by the Company

The Company may at any time purchase or acquire any of the Notes in any manner and at any price. The Notes which are purchased or acquired by the Company may, at the Company's discretion, be held, resold or surrendered to the Trustee for cancellation.

19. Amendment, Supplement and Waiver

The Indenture permits, with certain exceptions as therein provided, the amendment thereof and the modification of the rights and obligations of the Company and the rights of the Holders under the Indenture and the Notes at any time by the Company and the Trustee with the consent of the Holders of a majority in aggregate principal amount of the Notes at the time Outstanding. The Indenture also contains provisions permitting the Holders of a majority in aggregate principal amount of the Notes at the time Outstanding, on behalf of the Holders of all Notes, to waive compliance by the Company with certain provisions of the Indenture and the Notes and certain past defaults under the Indenture and their consequences. Any such consent or waiver by or on behalf of the Holder of the Note shall be conclusive and binding upon such Holder and upon all future Holders of the Note and of any Note issued upon the registration of transfer hereof or in exchange herefor or in lieu hereof whether or not notation of such consent or waiver is made upon the Note. Subject to the foregoing, the Indenture and the Notes may be amended by the Company and the Trustee, without the consent of any Holder, for the purpose of, among other things, curing any ambiguity, omission, defect or inconsistency, adding guarantees with respect to the Notes or to secure the Notes or making any change that does not adversely affect the rights of any Holder of the Notes.

No reference herein to the Indenture and no provision of the Note or of this Indenture shall alter or impair the obligation of the Company, which is absolute and unconditional, to pay the principal of (and premium, if any) and interest and Additional Amount on the Note at the times, place, and rate, and in currency, herein prescribed.

20. Transfers

(a) Restricted Global Security

Unless otherwise specified in the applicable Pricing Supplement, if (1) the owner of a beneficial interest in a Restricted Global Security wishes to transfer such interest (or portion thereof) to a Non U.S. Person pursuant to Regulation S and (2) such Non U.S. Person wishes to hold its interest in the Note through a beneficial interest in the Unrestricted Global Security, (x) upon receipt by the Registrar, as Transfer Agent, of:

- (i) instructions from the Holder of the Restricted Global Security directing the Custodian and Registrar to credit or cause to be credited a beneficial interest in the Unrestricted Global Security equal to the principal amount of the beneficial interest in the Restricted Global Security to be transferred, and
- (ii) a certificate from the transferor as to compliance with Regulation S in form and substance required by the Indenture, and (y) subject to the rules and procedures of DTC and the common depositary for Euroclear and Clearstream, the Registrar, as Transfer Agent, shall instruct DTC to increase the Unrestricted Global Security and decrease the Restricted Global Security by such amount in accordance with the foregoing, and the Registrar, as Transfer Agent, shall instruct the common depositary for Euroclear and Clearstream, as the case may be, concurrently with such reduction, to increase the principal amount of the Unrestricted Global Security of the same Series by the aggregate principal amount of the beneficial interest in the Restricted Global Security to be so exchanged or transferred, and to credit or cause to be credited to the account of the person specified in such instructions a beneficial interest in such Unrestricted Global Security equal to the reduction in the principal amount of such Restricted Global Security.

(b) Unrestricted Global Security

Unless otherwise specified in the applicable Pricing Supplement, if the owner of an interest in a Unrestricted Global Security wishes to transfer such interest (or any portion thereof) to a QIB pursuant to Rule 144A prior to the expiration of the Distribution Compliance Period therefor, (x) upon receipt by the Registrar, as Transfer Agent, of:

- (i) instructions from the Holder of the Unrestricted Global Security directing the Custodian and Registrar to credit or cause to be credited a beneficial interest in the Restricted Global Security equal to the principal amount of the beneficial interest in the Unrestricted Global Security to be transferred, and
- (ii) a certificate from the transferor as to compliance with Rule 144A in form and substance required by the Indenture,

and (y) in accordance with the rules and procedures of DTC, the common depositary for Euroclear and Clearstream, the Registrar, as Transfer Agent, shall instruct DTC to increase the Restricted Global Security and decrease the Unrestricted Global Security by such

amount in accordance with the foregoing and the Registrar, as Transfer Agent, shall instruct the common depositary for Euroclear and Clearstream, or the custodian for DTC, as applicable, to reduce the principal amount of the Unrestricted Global Security by the aggregate principal amount of the beneficial interest in such Unrestricted Global Security or to be exchanged or transferred, and the Registrar, as Transfer Agent, shall instruct DTC, concurrently with such reduction, to increase the principal amount of such Restricted Global Security by the aggregate principal amount of the beneficial interest in such Unrestricted Global Security to be so exchanged or transferred, and to credit or cause to be credited to the account of the person specified in such instructions a beneficial interest in the Restricted Global Security equal to the reduction in the principal amount of such Unrestricted Global Security.

(c) Other Transfers or Exchanges

Any transfer of Restricted Global Securities not described above (other than a transfer of a beneficial interest in a Global Security that does not involve an exchange of such interest for a Certificated Security or a beneficial interest in another Global Security, which must be effected in accordance with applicable law and the rules and procedures of DTC, the common depositary for Euroclear and Clearstream, but is not subject to any procedure required by the Indenture) shall be made only upon receipt by the Registrar of such opinions of counsel, certificates and/or other information reasonably required by and satisfactory to it in order to ensure compliance with the Securities Act or in accordance with the above. Certificated Securities will not be exchangeable for Bearer Notes.

21. Defeasance

The Indenture provides that the Company will be deemed to have paid and will be discharged from any and all its obligations in respect of all outstanding Notes of any Series on the 183rd day after the deposit referred to below and payments of all amounts due to the Trustee, and the provisions of the Indenture will no longer be in effect with respect to the Notes (except for, among other matters, certain obligations to register the transfer or exchange of the Notes, to replace stolen, lost or mutilated Notes, to maintain paying agencies and to hold monies for payment in trust and to pay Additional Amounts) if, among other things:

- (a) the Company has irrevocably deposited with the Trustee (or other qualifying trustee), as trust funds, in trust solely for the benefit of the Holders, cash in U.S. legal tender or U.S. Government Obligations, or a combination thereof, in such amounts as is sufficient (without consideration of any reinvestment of interest), in the opinion of an internationally recognized firm of independent public accountants selected by the Company, to pay the principal of and interest on the Notes on the scheduled due dates or on the applicable redemption date, as the case may be, provided that the Trustee shall have received an irrevocable written order from the Company instructing the Trustee to apply such U.S. legal tender or the proceeds of such U.S. Government Obligations to said payments with respect to such Notes;
- (b) the Company has delivered to the Trustee an Opinion of Counsel in the United States of recognized standing acceptable to the Trustee, confirming that (A) the Company has received from, or there has been published by, the Internal Revenue Service a ruling or (B) since the date of the Indenture, there has been a change in the applicable U.S. federal income tax law, in either case to the effect that, and based thereon such Opinion of Counsel shall confirm that, the beneficial owners of Notes will not recognize income, gain or loss for U.S. federal income tax purposes as a result of such Legal Defeasance and will be subject to U.S. federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Legal Defeasance had not occurred;

- (c) the Company has delivered to the Trustee an Opinion of Counsel in the United States of recognized standing acceptable to the Trustee, to the effect that the creation of the defeasance trust does not violate the U.S. Investment Company Act of 1940, as amended, and after the passage of 183 days following the deposit, the trust fund will not be subject to the effect of Section 547 of the United States Bankruptcy Code or Section 15 of the New York Debtor and Creditor Law;
- (d) no Default or Event of Default shall have occurred and be continuing on the date of such deposit or during the period ending on the 183rd day after the date of such deposit (other than a Default or Event of Default resulting solely from the borrowing of funds to be applied to such deposit);
- (e) such defeasance shall not result in a breach or violation of or constitute a default under the Indenture or any other material agreement or instrument to which the Company or any of its Material Subsidiaries is a party or by which the Company or any of its Material Subsidiaries is bound (other than any such Default or default resulting solely from the borrowing of funds to be applied to such deposit); and
- (f) the Company has delivered to the Trustee an Officers' Certificate stating that the deposit was not made by the Company with the intent of preferring the Holders over any other creditors of the Company or with the intent of defeating, hindering, delaying or defrauding any other creditors of the Company or others.

FORMS OF THE NOTES

The Notes of each Series will be in bearer or registered form.

Unless otherwise provided with respect to a particular Series, Notes of each Series sold outside the United States in reliance on Regulation S will be represented by interests in a Temporary Global Note (as defined below), Permanent Global Note (as defined below) or by a global note in registered form, without interest coupons (an “Unrestricted Global Security”), which may be deposited with a common depositary for, and registered in the name of a nominee of, Euroclear and Clearstream. With respect to all offers or sales by a Dealer of an unsold allotment or subscription, beneficial interests in a Temporary Global Note or Bearer Notes issued in definitive form (“Definitive Bearer Note”) may not be offered or sold to, or for the account or benefit of, a U.S. person (unless pursuant to the Securities Act or an exemption therefrom) and may be held only through Euroclear and Clearstream, as the case may be. Temporary Global Notes, Permanent Global Notes and Unrestricted Global Securities will be exchangeable for Bearer Definitive Notes or Certificated Securities, as applicable, only in limited circumstances as more fully described in Global Clearance and Settlement Systems. Notes issued in bearer form are subject to U.S. tax law requirements and may not be offered, sold or delivered within the United States or its possessions or to United States persons (as defined in the Internal Revenue Code and the U.S. Treasury regulations thereunder).

Notes of each Series to be issued in registered form (“Registered Notes”) may only be offered and sold in the United States in private transactions: (i) to QIBs or (ii) to Institutional Accredited Investors who agree to purchase the Notes for their own account and not with a view to the distribution thereof. Registered Notes of each Series sold in private transactions to QIBs pursuant to Rule 144A will, unless specified in the applicable Pricing Supplement, be represented by a restricted global note in registered form, without coupons (a “Restricted Global Security”) deposited with a custodian for, and registered in the name of a nominee of, DTC.

Registered Notes of each Series sold to Institutional Accredited Investors will be in definitive form, registered in the name of the holder thereof (such Notes are defined as “4(2) Notes” in the Indenture). Notes in fully-registered certificated form evidencing all or part of a Series of Notes (each a “Certificated Security”) will, at the request of the holder (except to the extent otherwise indicated in the applicable Pricing Supplement), be issued in exchange for interests in an Unrestricted Global Security or a Restricted Global Security (each a “Registered Global Security”) upon compliance with the procedures for exchange as described in the Indenture.

Notes of each Series to be issued in bearer form (“Bearer Notes”) will be initially represented by either a temporary global Note (a “Temporary Global Note”) or a permanent global Note (a “Permanent Global Note” and together with a Temporary Global Note, a “Bearer Global Note”) that will be deposited on the issue date thereof with a common depositary on behalf of Euroclear and Clearstream or any other agreed clearance system compatible with Euroclear and Clearstream.

The relevant Pricing Supplement for any Bearer Notes will specify whether United States Treasury Regulation §1.163-5(c)(2)(i)(C) (or any successor rules that are applicable for purposes of Section 4701 of the Internal Revenue Code (the “C Rules”) or United States Treasury Regulation §1.163-5(c)(2)(i)(D) (or any successor rules that are applicable for purposes of Section 4701 of the Internal Revenue Code (the “D Rules”) are applicable in relation to the Notes or, if the Notes do not have a maturity of more than 365 days (including unilateral rights to rollover or extend), that neither the C Rules nor the D Rules are applicable.

Each Bearer Note, Receipt, Coupon and Talon will bear the following legend: “Any United States person (as defined in the Internal Revenue Code of the United States) who holds this obligation will be subject to limitations under the United States income tax laws, including the limitations provided in Sections 165(j) and 1287(a) of the Internal Revenue Code.”

Bearer Notes will be assigned a Common Code and relevant ISIN (as applicable). Registered Notes will be assigned (as applicable) a Common Code, ISIN and CUSIP number. If a further Series is issued in the case of a Temporary Global Note, the Trustee shall arrange that the Notes of such Series shall be assigned (as applicable) a CUSIP number, Common Code and a relevant ISIN that are different from the CUSIP number, Common Code and relevant ISIN, as the case may be, assigned to Notes of any other Series until such time as is required by applicable law. In the case of Bearer Notes to which the D Rules apply, a Temporary Global Note that is exchangeable for an interest in a Permanent Global Note or Definitive Notes must have a different Common Code, ISIN or other identifying number from the identifying number assigned to Notes of any other Series until the exchange of interests in the Temporary Global Note for interests in the Permanent Global Note or Definitive Notes upon certification of non-U.S. beneficial ownership. Additional Registered Notes must be issued with a different Common Code, ISIN, CUSIP or other identifying number from the identifying numbers assigned to Notes of any other Series unless the additional Registered Notes are fungible with such outstanding Series of Notes for U.S. federal income tax purposes. At the end of such period, the CUSIP number, Common Code and relevant ISIN, as the case may be, thereafter applicable to the Notes of the relevant Series will be notified by the Trustee to the Relevant Dealers.

Each Temporary Global Note will be exchangeable, free of charge to the Noteholder, on or after its Exchange Date:

- (a) if the relevant Pricing Supplement indicates that such Temporary Global Note is issued in compliance with the C Rules or in a transaction to which neither the C Rules nor D Rules are applicable (as to which, see “Plan of Distribution”), in whole, but not in part, for the Definitive Bearer Notes described below; and
- (b) if the relevant Pricing Supplement indicates that such Temporary Global Note is issued in compliance with the D Rules, in whole or in part upon certification as to non-U.S. beneficial ownership in the form set out in the Indenture for interests in a Permanent Global Note or, if so provided in the relevant Pricing Supplement, for Definitive Bearer Notes.

Each Permanent Global Note will be exchangeable, free of charge to the Noteholder, on or after its Exchange Date in whole but not in part for Definitive Bearer Notes:

- (a) if an Event of Default has occurred in respect of any Note of the relevant Series; or
- (b) if the Permanent Global Note is held on behalf of Euroclear or Clearstream, Luxembourg or an Alternative Clearing System and any such clearing system is closed for business for a continuous period of 14 days (other than by reason of holidays, statutory or otherwise) or announces an intention permanently to cease business or in fact does so.

In the event that a Bearer Global Note is exchanged for Definitive Bearer Notes, such Definitive Bearer Notes shall be issued in Specified Denomination(s) only. A holder of Notes with a principal amount of less than the minimum Specified Denomination will not receive a definitive Note in respect of such holding and would need to purchase a principal amount of Notes such that it holds an amount equal to one or more Specified Denominations.

“Exchange Date” means the day which is 40 days after the Issue Date.

All Notes will be issued pursuant to the Indenture.

No beneficial owner of an interest in a Registered Global Security will be able to exchange or transfer that interest, except in accordance with the applicable procedures of DTC, Euroclear and/or Clearstream, in each case, to the extent applicable.

So long as any Notes are listed on the SGX-ST and the rules of the SGX-ST so require, the Company shall appoint and maintain a paying agent in Singapore, where such Notes may be presented or surrendered for payment or redemption, in the event that the Global Security representing such Notes is exchanged for Definitive Notes. In addition, an announcement of such exchange will be made through the SGX-ST. Such announcement will include all material information with respect to the delivery of the Definitive Notes, including details of the paying agent in Singapore.

FORM OF PRICING SUPPLEMENT

Pricing Supplement dated [●]
PT PERTAMINA (PERSERO)

Issue of [Aggregate Nominal Amount of Series] [Title of Notes]
(the “Notes”)
under its U.S.\$20,000,000,000 Global Medium Term Note Program

This document constitutes the Pricing Supplement relating to the issue of Notes described herein.

Terms used herein shall be deemed to be defined as such for the purposes of the Conditions set forth in the Offering Memorandum dated [●], 2021 [and the supplemental [Offering Memorandum] dated [●]]. This Pricing Supplement contains the final terms of the Notes and must be read in conjunction with such Offering Memorandum [as so supplemented].

[The following alternative language applies if the first issue of a Series which is being increased was issued under Offering Memorandum with an earlier date.]

Terms used herein shall be deemed to be defined as such for the purposes of the Conditions (the “**Conditions**”) set forth in the Offering Memorandum dated [original date]. This Pricing Supplement contains the final terms of the Notes and must be read in conjunction with the Offering Memorandum dated [current date] [and the supplemental Offering Memorandum dated [●]], save in respect of the Conditions which are extracted from the Offering Memorandum dated [original date] and are attached hereto.]

[PROHIBITION OF SALES TO EEA RETAIL INVESTORS] — The Notes 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 (the “**EEA**”). 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 Directive 2014/65/EU (as amended, “**MiFID II**”); (ii) or a customer within the meaning of Directive (EU) 2016/97 (as amended, the “**Insurance Distribution Directive**”), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (iii) not a qualified investor as defined in Regulation (EU) 2017/1129 (as amended, the “**Prospectus Regulation**”). Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the “**PRIIPs Regulation**”) for offering or selling the Notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.]

[PROHIBITION OF SALES TO UK RETAIL INVESTORS] — The Notes 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 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 (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 (the “**EUWA**”); (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act 2000 (the “**FSMA**”) and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA; or (iii) not a qualified investor as defined in Article 2 of Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the EUWA. Consequently no

key information document required by Regulation (EU) No 1286/2014 as it forms part of domestic law by virtue of the EUWA (the “**UK PRIIPs Regulation**”) for offering or selling the Notes or otherwise making them available to retail investors in the UK has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.]

[MIFID II PRODUCT GOVERNANCE / PROFESSIONAL INVESTORS AND ECPS ONLY TARGET MARKET]— Solely for the purposes of [the/each] manufacturer’s product approval process, the target market assessment in respect of the Notes has led to the conclusion that: (i) the target market for the Notes is eligible counterparties and professional clients only, each as defined in [Directive 2014/65/EU (as amended, “**MiFID II**”)]**[MiFID II]** and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Notes (a “**distributor**”) should take into consideration the manufacturer[’s/s’] target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the manufacturer[’s/s’] target market assessment) and determining appropriate distribution channels.]

[UK MIFIR PRODUCT GOVERNANCE / PROFESSIONAL INVESTORS AND ECPS ONLY TARGET MARKET] — Solely for the purposes of [the/each] manufacturer’s product approval process, the target market assessment in respect of the Notes has led to the conclusion that: (i) the target market for the Notes is only eligible counterparties, as defined in the FCA Handbook Conduct of Business Sourcebook (“**COBS**”), and professional clients, as defined in Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 (“**UK MiFIR**”); and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Notes (a “**distributor**”) should take into consideration the manufacturer[’s/s’] target market assessment; however, a distributor subject to the FCA Handbook Product Intervention and Product Governance Sourcebook (the “**UK MiFIR Product Governance Rules**”) is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the manufacturer[’s/s’] target market assessment) and determining appropriate distribution channels.]

[Notification under Section 309B(1)(c) of the Securities and Futures Act (Chapter 289) of Singapore] — *[To insert notice if classification of the Notes is not “prescribed capital markets products”, pursuant to Section 309B of the SFA or 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)].*¹

[Where interest, discount income, prepayment fee, redemption premium or break cost is derived from any of the Notes by any person who is not resident in Singapore and who carries on any operations in Singapore through a permanent establishment in Singapore, the tax exemption available for qualifying debt securities (subject to certain conditions) under the Income Tax Act, Chapter 134 of Singapore (the “Income Tax Act”) shall not apply if such person acquires such Notes using the funds and profits of such person’s operations through a permanent establishment in Singapore. Any person whose interest, discount income, prepayment fee, redemption premium or break cost derived from the Notes is not exempt from tax (including for the reasons described above) shall include such income in a return of income made under the Income Tax Act.]

[Include whichever of the following apply or specify as “Not Applicable” (N/A). Note that the numbering should remain as set out below, even if “Not Applicable” is indicated for individual paragraphs or sub-paragraphs. Italics denote directions for completing the Pricing Supplement.]

¹ Relevant Dealer(s) to consider whether it / they have received the necessary product classification from the Issuer prior to the launch of the offer, pursuant to Section 309B of the SFA.

**Pricing Supplement dated [●]
PT PERTAMINA (PERSERO)**

[Notification under Section 309B(1)(c) of the Securities and Futures Act (Chapter 289) of Singapore — *[To insert notice if the classification of the Notes is not “prescribed capital markets products” pursuant to Section 309B of the SFA or 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).]* ‡

[Include whichever of the following apply or specify as “Not Applicable” (N/A). Note that the numbering should remain as set out below, even if “Not Applicable” is indicated for individual paragraphs or sub-paragraphs. Italics denote directions for completing the Pricing Supplement.]

1.	Issuer:	PT Pertamina (Persero)
2.	[(i)] Series Number:	[●]
	[(ii) Tranche]:	[●]
3.	Specified Currency or Currencies:	[●]
4.	Aggregate Nominal Amount:	[●]
5.	[(i)] Issue Price:	[●]% of the Aggregate Nominal Amount [plus accrued interest from <i>[insert date]</i> (in the case of fungible issues only, if applicable)]
	[(ii) Net proceeds:	[●] (Required only for listed issues)]
6.	(i) Specified Denominations:	[●]
	(ii) Calculation Amount:	[●]
7.	(i) Trade Date	[●] (<i>To be included for issuances clearing through the ICSDs</i>)
	(ii) Issue Date:	[●]
	(iii) Interest Commencement Date:	Specify/Issue date/Not Applicable]
8.	Maturity Date:	<i>[specify date or (for Floating Rate Notes) Interest Payment Date falling in or nearest to the relevant month and year]</i>
8A.	Relevant Date	“Relevant Date” in respect of any Note, Receipt or Coupon means the date on which payment in respect of it first becomes due or (if any amount of the money payable is improperly withheld or refused) the date on which payment in full of the amount outstanding is made or (if earlier) the date seven days after that on which notice is duly given to the Holders that, upon further presentation of the Note (or relative Certificate), Receipt or Coupon being made in accordance with the Conditions, such payment will be made, provided that payment is in fact made upon such presentation.

9. (i) Interest Basis: [[●]% Fixed Rate]
- [[specify reference rate] +1-[[●]% Floating Rate]*
- [Zero Coupon]
[Other (*specify*)]
(further particulars specified below)
- (ii) Default Rate: [[●] (*specify* /None]
10. Redemption/Payment Basis: [Redemption at par]
[Partly Paid]
[Installment]
[Other (*specify*)]
11. Change of Interest or Redemption/ Payment Basis: *[Specify details of any provision for convertibility of Notes into another interest or redemption/ payment basis]*
12. Put/Call Options: [Investor Put]
[Issuer Call]
[(further particulars specified below)]
13. Status of the Notes: Senior
14. Listing: [[●] (specify)/None]
15. Place of Payment: [Specify]
16. Method of distribution: [Syndicated/Non-syndicated]

PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE

17. **Fixed Rate Note Provisions** [Applicable/Not Applicable]
(If not applicable, delete the remaining subparagraphs of this paragraph)
- (i) Rate[(s)] of Interest: [●]% per annum [payable [annually/semi- annually/ quarterly/monthly] in arrears]
- (ii) Interest Payment Date(s): [●] in each year [adjusted in accordance with *[specify Business Day Convention and any applicable Business Center(s) for the definition of "Business Day"]*/not adjusted]
- (iii) Fixed Coupon Amount[(s)]: [●] per Calculation Amount
- (iv) Broken Amount(s): [●] per Calculation Amount, payable on the Interest Payment Date falling [in/on] [●]
- (v) Day Count Fraction: [30/360 / Actual/Actual (ICMA/ISDA) / other]

(vi)	[Determination Dates:	☐ in each year (<i>insert regular interest payment dates, ignoring issue date or maturity date in the case of a long or short first or last coupon. N.B. only relevant where Day Count Fraction is Actual/Actual (ICMA))</i>]
(vii)	Other terms relating to the method of calculating interest for Fixed Rate Notes:	[Not Applicable/ <i>give details</i>]
18.	Floating Rate Note Provisions	[Applicable/Not Applicable] (<i>If not applicable, delete the remaining subparagraphs of this paragraph.</i>)
(i)	Interest Period(s):	☐
(ii)	Specified Interest Payment Dates:	☐
(iii)	Interest Period Date:	☐ (<i>Not applicable unless different from Interest Payment Date</i>)
(iv)	Business Day Convention:	[Floating Rate Convention/Following Business Day Convention/ Modified Following Business Day Convention/ Preceding Business Day Convention/ other (<i>give details</i>)]
(v)	Business Center(s):	☐
(vi)	Manner in which the Rate(s) of Interest is/ are to be determined:	[Screen Rate Determination/ISDA Determination/ other (<i>give details</i>)]
(vii)	Party responsible for calculating the Rate(s) of Interest and Interest Amount(s) (if not the Calculation Agent):	☐
(viii)	Screen Rate Determination:	
	— Reference Rate:	☐
	— Interest Determination Date(s):	☐
	— Relevant Screen Page:	☐
(ix)	ISDA Determination:	
	— Floating Rate Option:	☐
	— Designated Maturity:	☐
	— Reset Date:	☐

(x)	Margin(s):	[+/-][●]% per annum
(xi)	Minimum Rate of Interest:	[●]% per annum
(xii)	Maximum Rate of Interest:	[●]% per annum
(xiii)	Day Count Fraction:	[●]
(xiv)	Fall back provisions, rounding provisions, denominator and any other terms relating to the method of calculating interest on Floating Rate Notes, if different from those set out in the Conditions:	[●]
19.	Zero Coupon Note Provisions	[Applicable/Not Applicable] <i>(If not applicable, delete the remaining subparagraphs of this paragraph)</i>
(i)	Amortization Yield:	[●]% per annum
(ii)	Any other formula/basis of determining amount payable:	[●]
20.	Index-Linked Interest Note Provisions	[Applicable/Not Applicable] <i>(If not applicable, delete the remaining subparagraphs of this paragraph)</i>
(i)	Index/Formula:	[give or annex details]
(ii)	Party responsible for calculating the Rate(s) of Interest and/or Interest Amount(s) (if not the Calculation Agent):	[●]
(iii)	Provisions for determining Rate of Interest and/or Interest Amount where calculation by reference to Index and/or Formula is impossible or impracticable or otherwise disrupted:	[●]
(iv)	Interest Periods:	[●]
(v)	Specified Interest Payment Dates:	[●]
(vi)	Business Day Convention:	[Floating Rate Convention/Following Business Day Convention/Modified Following Business Day Convention/Preceding Business Day Convention/ other <i>(give details)</i>]
(vii)	Business Center(s):	[●]

- (viii) Minimum Rate of Interest: [●]% per annum
- (ix) Maximum Rate of Interest: [●]% per annum
- (x) Day Count Fraction: [●]
21. **Dual Currency Note Provisions** [Applicable/Not Applicable]
(If not applicable, delete the remaining subparagraphs of this paragraph)
- (i) Rate of Exchange/method of calculating Rate of Exchange: [give details]
- (ii) Party, if any, responsible for calculating the Rate(s) of Interest and Interest Amount(s) (if not the Calculation Agent): [●]
- (iii) Provisions applicable where calculation by reference to Rate of Exchange impossible or impracticable: [●]
- (iv) Person at whose option Specified Currency(ies) is/are payable: [●]
22. **Default Rate** [●]% per annum

PROVISIONS RELATING TO REDEMPTION

23. **Call Option** [Applicable/Not Applicable]
(If not applicable, delete the remaining subparagraphs of this paragraph)
- (i) Optional Redemption Date(s): [●]
- (ii) Optional Redemption Amount(s) of each Note and specified denomination method, if any, of calculation of such amount(s): [●] per Calculation Amount
- (iii) If redeemable in part:
- (a) Minimum Redemption Amount: [●] per Calculation Amount
- (b) Maximum Redemption Amount: [●] per Calculation Amount
- (iv) Notice period: [●]
24. **Put Option** [Applicable/Not Applicable]
(If not applicable, delete the remaining subparagraphs of this paragraph)
- (i) Optional Redemption Date(s): [●]

- (ii) Optional Redemption Amount(s) of each Note and method, if any, of calculation of such amount(s): [●] per Calculation Amount
- (iii) Notice period: [●]
25. **Final Redemption Amount of each Note** [●] per Calculation Amount
26. **Early Redemption Amount**
- Early Redemption Amount(s) per Calculation Amount payable on redemption for taxation reasons or on event of default and/ or the method of calculating the same (if required or if different from that set out in the Conditions): [●]

GENERAL PROVISIONS APPLICABLE TO THE NOTES

27. (i) Form of Notes: [Bearer Notes:
- [Temporary Global Note exchangeable for a Permanent Global Note which is exchangeable for Definitive Notes in the limited circumstances specified in the Permanent Global Note]
- [Temporary Global Note exchangeable for Definitive Notes [●] on days' notice]
- [Permanent Global Note exchangeable for Definitive Notes in the limited circumstances specified in the Permanent Global Note]²
- (N.B. The exchange upon notice/at any time options should not be expressed to be applicable if the Specified Denomination of the Notes in paragraph 6 includes language substantially to the following effect: "EUR100,000 and integral multiples of EUR1,000 in excess thereof up to and including EUR199,000." In addition, the "limited circumstances specified in the Permanent Global Note" option may have to be amended to permit such Specified Denomination construction.*
- Furthermore, such Specified Denomination construction is not permitted in relation to any issue of Notes which is to be represented on issue by a Temporary Global Note exchangeable for Definitive Notes.)]*
- [Registered Notes]
- (ii) Applicable TEFRA exemption: [C Rules/ D Rules/ Not Applicable]³

² Cannot be used if D Rules apply.

³ Bearer Notes with a maturity of 365 days or more (including unilateral right to rollover or extend) must be issued using either C Rules or D Rules.

28. Talons for future Coupons or Receipts to be attached to Definitive Bearer Notes (and dates on which such Talons mature):	[Yes/No. If yes, give details]
29. Financial Center(s) or other special provisions relating to Payment Dates:	<i>[Note that this paragraph relates to the Payment Date and Place of Payment, and not interest period end dates, to which sub paragraphs 18 (v) and 19(vii) relate]</i>
30. Details relating to Partly Paid Notes: amount of each payment comprising the Issue Price and date on which each payment is to be made and consequences (if any) of failure to pay, including any right of the Issuer to forfeit the Notes and interest due on late payment:	[Not Applicable/give details]
31. Details relating to Installment Notes: amount of each installment, date on which each payment is to be made:	[Not Applicable/give details]
32. Redenomination, Renominalization and Reconventioning:	[Not Applicable/The provisions [in Condition 2C] [annexed to this Pricing Supplement] apply]
33. Consolidation provisions:	[Not Applicable/The provisions [In Condition] [●] [annexed to this Pricing Supplement] apply]
34. Use of Proceeds:	[Not Applicable/give details]
35. Other terms or special conditions:	[Not Applicable/give details]

DISTRIBUTION

36. (i) If syndicated, names of Managers:	[Not Applicable/give details]
(ii) Stabilizing Manager (if any):	[Not Applicable/give details]
37. If non-syndicated, name of Dealer:	[Not Applicable/give details]
38. Additional selling restrictions:	[Not Applicable/give details]
39. Prohibition of Sales to EEA Retail Investors:	[Not Applicable/give details]
40. Prohibition of Sales to UK Retail Investors:	[Not Applicable/give details]
41. Interests of [Managers][Dealers] involved in the issue / offer:	[Give details.]

OPERATIONAL INFORMATION

42. ISIN Code:	[●]
43. CUSIP:	[●]
44. Common Code:	[●]

45. Clearing system(s): [Not Applicable/*give name(s) and number(s)*]
46. Delivery: Delivery [against/free of] payment
47. Additional Paying Agent(s) (if any): [●]

[PURPOSE OF PRICING SUPPLEMENT

This Pricing Supplement comprises the final terms required for issue and admission to trading on the Singapore Exchange Securities Trading Limited of the Notes described herein pursuant to the U.S.\$20,000,000,000 Global Medium Term Note Program of the Issuer.]

RESPONSIBILITY

The Issuer accepts responsibility for the information contained in this Pricing Supplement.

Signed on behalf of PT Pertamina (Persero)

By: _____

Duly authorized

GLOBAL CLEARANCE AND SETTLEMENT SYSTEMS

The information set out below is subject to any change in or reinterpretation of the rules, regulations and procedures of DTC, Euroclear and Clearstream (together, the “Clearing Systems”) currently in effect. Investors wishing to use the facilities of any of the Clearing Systems are advised to confirm the continued applicability of the rules, regulations and procedures of the relevant Clearing System. Our Company, any Arranger, Dealer, Trustee, Agent and party to the Indenture will not have any responsibility or liability for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in the Notes held through the facilities of any Clearing System or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

The relevant Pricing Supplement will specify the Clearing System(s) applicable for each series.

DTC

DTC is a limited purpose trust company organized under the laws of the State of New York, a member of the United States Federal Reserve System, a “clearing corporation” within the meaning of the New York Uniform Commercial Code and a “clearing agency” registered pursuant to Section 17A of the United States Securities Exchange Act of 1934, as amended. DTC was created to hold securities for its participants and to facilitate the clearance and settlement of securities transactions among participants in such securities through electronic book-entry changes in accounts of the participants, thereby eliminating the need for physical movement of security certificates. Participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. DTC is owned by a number of its participants and by the New York Stock Exchange, Inc., the American Stock Exchange, Inc. and the National Association of Securities Dealers, Inc. Indirect access to DTC is available to others, such as banks, brokers, dealers and trust companies that clear through or maintain a custodial relationship with a DTC participant either directly or indirectly.

DTC will take any action permitted to be taken by the holder of a beneficial interest in a Global Security (including, without limitation, the presentation of a Global Security for exchange) only at the direction of one or more participants to whose account with DTC interests in such Registered Global Security are credited and only in respect of such portion of the aggregate principal amount of Notes in respect of which such participant or participants has or have given such direction. If an Event of Default under the Notes occurs, DTC will exchange the Global Security for Certificated Securities bearing the appropriate legend, which it will distribute to the relevant participants. DTC makes payments only in U.S. dollars.

Euroclear and Clearstream

Each of Euroclear and Clearstream holds securities for their account holders and facilitates the clearance and settlement of securities transactions by electronic book-entry transfer between their respective account holders, thereby eliminating the need for physical movements of certificates and any risks from lack of simultaneous transfers of securities.

Euroclear and Clearstream each provides various services including safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Euroclear and Clearstream each also deals with domestic securities markets in several countries through established depository and custodial relationships. Euroclear and Clearstream have established an electronic bridge between their two systems which enables their respective account holders to settle trades with each other.

Account holders in Euroclear and Clearstream are financial institutions throughout the world, including underwriters, securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. Indirect access to both Euroclear and Clearstream is available to other institutions that clear through or maintain a custodial relationship with an account holder of either system.

An account holder's contractual relations with either Euroclear or Clearstream are governed by the respective rules and operating procedures of Euroclear or Clearstream and any applicable laws.

Both Euroclear and Clearstream act under those rules and operating procedures only on behalf of their respective account holders, and have no record of or relationship with persons holding through their respective holders.

Book-Entry Ownership of Global Certificates

Registered Notes

The Company will make applications to Euroclear and/or Clearstream for acceptance in their respective book-entry systems in respect of each Tranche of Notes to be represented by an Unrestricted Global Security. Each Unrestricted Global Security will have an ISIN or Common Code, and will be subject to restrictions on transfer contained in a legend appearing on the front of such Note, as set out under "Transfer Restrictions."

The Company will make applications to DTC for acceptance in its book-entry settlement system of the Notes represented by a Restricted Global Security. Each Restricted Global Security will have a CUSIP number. Each Restricted Global Security will be subject to restrictions on transfer contained in a legend appearing on the front of such Note, as set out under "Transfer Restrictions."

The custodian with whom the Global Securities are deposited (the "Custodian") and DTC will electronically record the principal amount of the Notes represented by the Restricted Global Security held within the DTC system. Investors may hold their interests in the Unrestricted Global Security only through Clearstream or Euroclear. Investors may hold such interests in Restricted Global Securities directly through DTC if they are participants in such system, or indirectly through organizations that are participants in such system.

Payments of principal and interest in respect of Restricted Global Securities registered in the name of DTC's nominee, will be to or to the order of its nominee as the registered holder of such Restricted Global Security. The Company expects that the nominee will, upon receipt of any such payment, immediately credit DTC participants' accounts with any such payments denominated in U.S. dollars in amounts proportionate to their respective beneficial interests in the principal amount of the relevant Restricted Global Security as shown on the records of DTC or its nominee. In the case of any such payments which are denominated otherwise than in U.S. dollars payment of such amounts will be made to the Paying Agent on behalf of the nominee who will make payment of all or part of the amount to the beneficial holders of interests in such Restricted Global Securities directly, in the currency in which such payment was made and/or cause all or part of such payment to be converted into U.S. dollars and credited to the relevant participant's DTC account as aforesaid, in accordance with instructions received from DTC. The Company also expects that payments by DTC participants to owners of beneficial interests in such Restricted Global Securities held through such DTC participants will be governed by standing instructions and customary practices, 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 DTC participants. None of the Company, the Trustee nor

any agent will have any responsibility or liability for any aspect of the records relating to or payments made on account of ownership interests in the Restricted Global Securities or for maintaining, supervising or reviewing any records relating to such ownership interests.

Bearer Notes

Bearer Notes held outside the United States may be held in book-entry form through Clearstream or Euroclear. In respect of Bearer Notes, as may be specified in the applicable Pricing Supplement, a Temporary Global Note and/or a Permanent Global Note in bearer form without coupons will be deposited with a common depositary for Euroclear and Clearstream. Transfers of interests in a Temporary Global Note or a Permanent Global Note will be made in accordance with customary Euromarket practice.

Individual Certificated Securities

Registration of title to Notes in a name other than its nominee or a depositary for Euroclear and Clearstream or DTC will not be permitted unless (i) in the case of Restricted Securities, an event of default with respect to such Series has occurred and is continuing or DTC notifies us that it is no longer willing or able to discharge properly its responsibilities as depositary with respect to the Restricted Global Securities, 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 Company is unable to locate a qualified successor within 90 days of receiving notice of such ineligibility on the part of DTC, (ii) in the case of Unrestricted Global Securities deposited with a common depositary for Euroclear or Clearstream, Euroclear or Clearstream is closed for business for a continuous period of 14 days (other than by reason of holidays, statutory or otherwise) or announces an intention permanently to cease business or does in fact do so, (iii) the Trustee has instituted or has been directed to institute any judicial proceeding in a court to enforce the rights of Holders of the Notes under the Notes and the Trustee has been advised by counsel that in connection with such proceeding it is necessary or appropriate for the Trustee to obtain possession of the Notes. In such circumstances, the Company will cause sufficient individual Certificated Securities to be executed and delivered to the Registrar for completion, authentication and dispatch to the relevant Holder(s) of the Notes.

A person having an interest in a Global Security must provide the Registrar with:

- (a) written order containing instructions and such other information as the Company and the Registrar may require to complete, execute and deliver such individual Certificated Securities; and
- (b) in the case of a Restricted Global Security only, 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 resale pursuant to Rule 144A, a certification that the transfer is being made in compliance with the provisions of Rule 144A. Certificated Securities issued pursuant to this paragraph (b) shall bear the legends applicable to transfers pursuant to Rule 144A.

Transfers of Notes represented by Global Securities

Transfers of interests in Global Securities within DTC, Euroclear and Clearstream will be in accordance with the usual rules and operating procedures of the relevant system. The laws in some states in the United States require that certain persons take physical delivery of securities in definitive form. Consequently, the ability to transfer a beneficial interest in a Global Securities to such persons

may require that such interests be exchanged for Notes in definitive form. Because DTC can only act on behalf of participants in DTC, who in turn act on behalf of indirect participants, the ability of a person having an interest in a Global Security to pledge such interest to persons or entities that do not participate in the DTC system, or otherwise take actions in respect of such interest may require that such interests be exchanged for Certificated Securities. The ability of the holder of a beneficial interest in any Note represented by the Global Securities to resell, pledge or otherwise transfer such interest may also be impaired if the proposed transferee of such interest is not eligible to hold the same through a participant or indirect participant in DTC.

Beneficial interests in an Unrestricted Global Security may be held through Clearstream or Euroclear. Clearstream and Euroclear will operate with respect to the Notes in accordance with customary Euromarket practice.

Secondary Trading, Same-Day Settlement and Payment

All payments made by the Company with respect to Notes registered in the name of Cede & Co., as nominee for DTC, will be passed through to DTC in same-day funds. In relation to secondary market trading, since the purchaser determines the place of delivery, it is important to establish at the time of the trade where both the purchaser's and seller's accounts are located to ensure that settlement can be made on the desired value date.

Trading Within Same Clearing System

The following describes the transfer mechanisms between DTC, Euroclear and Clearstream. Holders should note that transfers of beneficial interests in the Restricted Global Security, or the Unrestricted Global Security is subject to limitations as set forth in "Transfer Restrictions."

Trading within DTC. If neither the seller, nor the purchaser of Notes represented by any Global Security holds or will receive (as the case may be) such Notes through a participant in DTC acting on behalf of Euroclear or Clearstream, the trade will settle in same-day funds and in accordance with DTC rules, regulations and procedures.

Trading within Euroclear or Clearstream. Transfers between account holders in Euroclear and Clearstream will be effected in the ordinary way in accordance with their respective rules and operating procedures.

Trading Between Clearing Systems

Trading between Euroclear or Clearstream seller and DTC purchaser involving only Global Securities. Due to time zone differences in their favor, Euroclear and Clearstream account holders may employ their customary procedures for transactions in which interests in a Global Security are to be transferred by Euroclear or Clearstream (as the case may be) to a participant in DTC. The seller will send instructions to Euroclear or Clearstream through a Euroclear or Clearstream account holder (as the case may be) at least one business day prior to settlement. In these cases, Euroclear or Clearstream will instruct its respective depository to deliver the interests in the Global Security to the participant's account against payment. Payment will include interest (if any) accrued on such interests in the Note from (and including) the immediately preceding date for the payment of interest to (and excluding) the settlement date. The payment will then be reflected in the account of the Euroclear or Clearstream account holder the following day, and receipt of cash proceeds in the Euroclear or Clearstream account holders' account would be back-valued to the value date (which would be the preceding day when settlement occurred in New York). Should the Euroclear or Clearstream account holder have a line of

credit in its respective Clearing System and elect to be in debit in anticipation of receipt of the sale proceeds in its account, the back-valuation will extinguish any overdraft charges incurred over that 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 account holder's account would be valued instead as of the actual settlement date.

Trading between DTC seller and Euroclear or Clearstream purchaser involving only Global Securities. When interests in a Global Security are to be transferred from the account of a DTC participant to the account of a Euroclear or Clearstream account holder, the purchaser will send instructions to Euroclear or Clearstream through a Euroclear or Clearstream account holder, as the case may be, at least one business day prior to settlement. Euroclear or Clearstream, as the case may be, will instruct its respective depository to receive such interests against payment. Payment will include interest (if any) accrued on such interest in the Global Security from (and including) the immediately preceding date for the payment of interest to (and excluding) the settlement date. Payment will then be made by the depository to the participant's account against delivery of the interests in the Note. After settlement has been completed, the interests will be credited to the respective Clearing System, and by the Clearing System, in accordance with its usual procedures, to the Euroclear or Clearstream account holder's account. The securities credit will appear the next day (Central European time) and the cash debit will be back-valued to, and any interest on the Note will accrue from, the value date (which would be the preceding day when settlement occurred in New York). If settlement is not completed on the intended value date (i.e., the trade fails), the Euroclear or Clearstream cash debit will be valued instead as of the actual settlement date.

Day traders that use Euroclear or Clearstream to purchase interests in an Unrestricted Global Security from participants for delivery to Euroclear or Clearstream account holders 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:

- (a) borrowing through Euroclear or Clearstream for one day (until the purchase side of the day trade is reflected in their Euroclear or Clearstream accounts) in accordance with the Clearing System's customary procedures;
- (b) borrowing the interests in the United States from a participant no later than one day prior to settlement, which would give the interests sufficient time to be reflected in their Euroclear or Clearstream account in order to settle the sale side of the trade; or
- (c) staggering the value date for the buy and sell sides of the trade so that the value date for the purchase from the participant is at least one day prior to the value date for the sale to the Euroclear or Clearstream account holder.

Euroclear or Clearstream account holders will need to make available to the respective Clearing System 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 such participants would for any settlement occurring within Euroclear or Clearstream. Under this approach, such participants may take on credit exposure to Euroclear or Clearstream until the interests in the Note are credited to their accounts one day later.

Alternatively, if Euroclear or Clearstream has extended a line of credit to a Euroclear or Clearstream account holder, as the case may be, such account holder may elect not to preposition funds and allow that credit line to be drawn upon to finance settlement. Under this procedure, Euroclear or Clearstream account holders purchasing interests in the Note held in DTC would incur overdraft charges for one day, assuming they cleared the overdraft when the interests in the Note were credited

to their accounts. However, any interest on the Note would accrue from the value date. Therefore, in many cases the investment income on the interests in the Note held in DTC earned during that one-day period may substantially reduce or offset the amount of such overdraft charges, although this result will depend on each account holder's particular cost of funds.

Since the settlement takes place during New York business hours, participants can employ their usual procedures for transferring interests in global Notes to the respective depositories of Euroclear or Clearstream for the benefit of Euroclear or Clearstream account holders. The sale proceeds will be available to the DTC seller on the settlement date. Thus, to the participants, a crossmarket transaction will settle no differently from a trade between participants.

Secondary trading in long-term notes and debentures of corporate issuers is generally settled in clearinghouse or next-day funds. In contrast, Notes held through participants or indirect participants will trade in DTC's Same-Day Funds Settlement System until the earliest of maturity or redemption, and secondary market trading activity in such Notes will therefore be required by DTC to settle in immediately available funds. No assurance can be given as to the effect, if any, of settlements in immediately available funds on trading activity in such Notes.

Although DTC, Clearstream and Euroclear have agreed to the foregoing procedures in order to facilitate transfers of beneficial interests in the Global Securities among participants and account holders of DTC, Clearstream and Euroclear, 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 Company, the Trustee, any agent, any Arranger or any Dealer will have the responsibility for the performance by DTC, Clearstream or Euroclear or their respective direct or indirect participants or account holders of their respective obligations under the rules and procedures governing their operations.

While a Restricted Global Security is lodged with DTC or its custodian, Notes represented by individual Certificated Securities will not be eligible for clearing or settlement through DTC, Clearstream or Euroclear.

TAXATION

Indonesian Taxation

The following is a summary of the principal Indonesian tax consequences relevant to prospective holders of the Notes based on Indonesian tax laws and their implementing regulations in force as of the date of this Offering Memorandum. The summary does not address any laws other than the tax laws of the Republic of Indonesia. Prospective investors in all jurisdictions are advised to consult their own tax advisors as to other tax consequences of the acquisition, ownership and disposition of the Notes.

General

Resident taxpayers, individual or corporate, are subject to income tax in Indonesia. Generally, an individual is considered to be a non-resident of Indonesia if the individual does not reside in Indonesia and does not intend to stay in Indonesia for more than 183 days within a 12-month period. A company will be considered a non-resident of Indonesia if the company is not established and not domiciled in Indonesia. In determining the residency and tax status of an individual or corporation, consideration will also be given to the provision of any applicable double tax treaty which Indonesia has concluded with other countries. In this section, both non-resident individuals and non-resident corporations will be referred to as “non-resident taxpayers.”

The Indonesian Directorate General of Tax (“DGT”) issued Regulation PER-43/PJ/ 2011, which clarifies how to determine tax residency. The regulation, which came into force on December 28, 2011, is the sole implementing regulation on tax residency.

Pursuant to Regulation PER-43/PJ/2011, an individual is a resident if: (a) he/she resides in Indonesia; (b) he/she is domiciled in Indonesia for more than 183 days within 12 months; or (c) in a given fiscal year, he/she stays in Indonesia and intends to reside in Indonesia. The intention provided in the latter will be indicated by the individual obtaining of a working visa or limited stay permit card (*KITAS*) or having a contract of employment, business, or activities that are performed in Indonesia for more than 183 days. Leasing a residence or moving his/her family members to Indonesia will also indicate his/her intention to be an Indonesian tax resident. Resident status would commence as of the date he receives or derives earnings exceeding the nontaxable income threshold. An individual is considered residing in Indonesia if he or she has a place of residence for permanent dwelling place or ordinary course of life or a place of habitual abode in Indonesia.

According to Regulation PER-43/PJ/2011, a legal entity is a resident taxpayer if it is an entity established in Indonesia or meets any of the following criteria:

- (a) it is domiciled in Indonesia;
- (b) its head office is in Indonesia;
- (c) its central administration/finance office is in Indonesia;
- (d) its controlling head office is in Indonesia;
- (e) its management resides or is domiciled in Indonesia; or
- (f) management meets in Indonesia to make a strategic decision.

Regulation PER-43/PJ/2011 stipulates that a foreign tax resident is an individual who does not reside in Indonesia and is located in Indonesia no more than 183 days within 12 months, or who is an Indonesian citizen who works abroad for more than 183 days within 12 months. That citizen will be treated as a domestic tax resident if he does not have or is unable to provide an official valid ID proving he is a tax resident abroad.

Regulation PER-43/PJ/2011 also stipulates that an entity that is not established or domiciled in Indonesia but conducts business or activities in Indonesia, whether through a permanent establishment or not, and that receives or derives earnings from Indonesia is a foreign tax resident but will be treated as a domestic corporate tax resident. Having its management domiciled in Indonesia would not cause that entity to have a permanent establishment in Indonesia as long as the management only performs daily functions and does not control the whole operation of the company or make strategic decisions.

Subject to the provisions of any applicable agreement for the avoidance of double taxation (“tax treaty”), non-resident taxpayers, which derive income sourced in Indonesia from, among other things, interest, royalties or dividends from Indonesia, are subject to a final withholding tax on that income at the rate of 20%, so long as the income is not effectively connected with a permanent establishment of such individuals or corporations in Indonesia. If the income is effectively connected with a permanent establishment in Indonesia, such income shall be regarded as income earned by the permanent establishment. Income earned by the permanent establishment is subject to the income tax rate applied to income earned by an Indonesian corporate tax resident, which is 25%, and a branch profit tax of 20% will be imposed on the net profit after income tax. Such branch profit tax may be reduced by an applicable tax treaty and/or waived if certain requirements are met.

Taxation on Interest

The statutory withholding tax rate on interest due by the Issuer to a non-resident taxpayer is 20%. The 20% rate could be reduced under an applicable tax treaty. For example, under the U.S.-Indonesia tax treaty, the rate is generally reduced to 10% where the interest is not effectively connected to a permanent establishment in Indonesia and the recipient is the beneficial owner of the interest. Application of the reduced withholding tax rate under a tax treaty to a non-resident taxpayer who resides in the tax treaty country is subject to satisfying the eligibility and reporting requirements for the relevant tax treaty and domestic tax regulations. See “— Anti-Avoidance Rule on the Tax Treaty and New CoD Requirements.”

Repayments of principal of the Notes by the Issuer are not subject to Indonesian tax. However, under Government Regulation No. 16 of 2009, as amended by Government Regulation No. 100 of 2013 (“Tax Regulation No. 16”), any amount due by the Issuer attributable to interest or premium or discount (which in general are also treated as interest) payable on the Notes will be subject to a final withholding tax in Indonesia.

Generally, a final tax rate of 15% would apply to interest paid to a resident taxpayer or permanent establishment (other than an Indonesian bank or foreign bank with a permanent establishment in Indonesia, in which case such entity is exempt from withholding tax). A special tax rate of 5% is available for interest received by a mutual fund until year 2020, provided that the fund is registered at the Indonesia Capital Market and Financial Institution Supervisory Board. From 2021 onward, the tax rate for interest received by a registered mutual fund will be 10%.

Taxation on Sale or Disposition of Notes

Pursuant to Tax Regulation No. 16, gain from disposal of Notes (the difference between the selling price above the acquisition price of the Notes, excluding accrued interest) is considered interest that is subject to a final withholding tax.

Gains from disposal of the Notes derived by a resident taxpayer, whether an individual or a corporation, or by a permanent establishment, is subject to final withholding tax at the rate of 15%.

Non-resident individuals and corporations other than permanent establishments in Indonesia may not be subject to Indonesian tax or withholding tax on any gain derived from the direct sale or disposal of Notes to a non-resident individual or corporation other than a permanent establishment in Indonesia depending on the relevant double-tax treaty.

However, non-resident individuals and corporations other than permanent establishments in Indonesia may be subject to a 20% Indonesian withholding tax on any gain derived from the sale or disposal of Notes to a resident taxpayer or permanent establishment in Indonesia, or where the transaction is conducted through a securities company, dealer or bank in Indonesia, as such gain would be characterized as interest under Indonesian law in these situations. However, if the non-resident investor is a tax resident of a country that has signed a tax treaty with Indonesia, a reduced withholding tax rate applicable to interest income may be available if the gain (or a portion thereof) is considered as interest for purposes of the relevant tax treaty. Further, a full relief from the imposition of such withholding tax may be available if the relevant treaty treats the income as gain that is taxable only by the country in which the investor is resident for tax purposes. Under the U.S. — Indonesia tax treaty, interest is generally taxed at a rate of 10%, and the term “interest” as used in the treaty includes any income that under Indonesian law is assimilated to income from money lent. Under such treaty, capital gains that are not governed by the interest article of the treaty are generally exempt from Indonesian tax (subject to exceptions applicable to permanent establishments and certain individuals). Any tax treaty relief applicable to a nonresident taxpayer who resides in a tax treaty country is also subject to satisfying the eligibility and reporting requirements for the relevant tax treaty and domestic tax regulations. See “— Anti-Avoidance Rule on the Tax Treaty and New CoD Requirements.”

Non-resident investors should consult their own tax advisors regarding the application of Indonesian withholding tax on any gain on the sale or disposal of Notes.

Anti-Avoidance Rule on the Tax Treaty and New CoD Requirements

Indonesia has concluded tax treaties with more than 60 countries including Australia, Belgium, Canada, France, Germany, Japan, the Netherlands, Singapore, Sweden, Switzerland, the United Kingdom and the United States of America. The relevant tax treaty may affect the definition of nonresident taxpayers.

Where a tax treaty exists and the eligibility requirements of that treaty are satisfied, a reduced rate of withholding tax may be applicable in the case of interest (or payments in the nature of interest, such as premium), royalty and dividends. This is also subject to there being no misuse of the tax treaties and the non-resident taxpayers meeting the administrative requirements under the Indonesian tax regulations. Some tax treaties also provide an exemption from Indonesian tax on any capital gains of non-resident taxpayers arising from alienation of certain properties in Indonesia.

To obtain the benefit of an applicable tax treaty, the non-resident taxpayer must be the beneficial owner of the income received from Indonesia and comply with the eligibility requirements of the tax treaty and the specific requirements in Indonesia. Please see below the specific requirements to obtain tax treaty benefits in Indonesia.

On November 21, 2018, the DGT issued Regulation No. PER-25/PJ/2018 on Procedures for Applying Double Tax Avoidance Agreements (“DGT-25”). DGT-25 revokes and replaces Regulation No. PER-10/PJ/2017 on Procedures for Applying Double Tax Avoidance Agreements. DGT-25 is effective from January 1, 2019.

Under DGT-10, in order for a non-resident recipient of the payment from Indonesia to be eligible for tax treaty benefit, it must:

- (a) not be an Indonesian tax resident;
- (b) be an individual or corporate tax resident of a treaty country;
- (c) not misuse the tax treaty; and
- (d) be the beneficial owner of the income as required in the tax treaty.

The administrative requirements to be fulfilled by the non-resident taxpayer in order to apply the tax treaty are in the new certificate of domicile (“CoD”) form, which must be:

- (a) in the form prescribed by the DGT;
- (b) filled in correctly, completely, and clearly by the non-resident;
- (c) signed by the non-resident income recipient or equivalent mark/stamp as normally used in its country;
- (d) certified by the competent tax authority of the treaty country of the non-resident or equivalent mark/stamp as normally used in its country;
- (e) completed with a statement that there is no misuse of tax treaty;
- (f) completed with a statement that the non-resident recipient is a beneficial owner, if required in the tax treaty; and
- (g) used for the period set out under the CoD.

DGT-25 stipulates that misuse of a tax treaty may occur in the case that:

- (a) a transaction that has no economic substance in the establishment or execution of transaction;
- (b) a transaction has a legal form which differs from its economic substance in the establishment or execution of transaction;
- (c) business activities are not managed by its own management and the management has no sufficient authority to carry out transactions;
- (d) has no sufficient and adequate assets to carry out business activities in the home country, other than the assets that generate income from Indonesia;
- (e) has no sufficient qualified employees to conduct its business operations; and
- (f) has no active business other than only receiving income in the form of dividend, interest and/or royalty originating from Indonesia.

Further, a misuse of the tax treaty may also occur if there are arrangements in the transaction, either directly or indirectly, which are intended to obtain benefits from the implementation of a double taxation convention, such as (a) reduction of tax; and/or (b) not being subject to taxes in any country or jurisdiction (double-non taxation), which is contrary to the intent and purpose of concluding a double taxation convention.

In addition, if the non-resident taxpayer receives income for which the relevant tax treaty stipulates a beneficial ownership requirement (for example interest, royalty and dividend income), the non-resident must satisfy the following beneficial ownership test:

- (a) if it is an individual, it does not act as an agent or a nominee; or
- (b) if it is an entity, it does not act as an agent, a nominee or a conduit company and:
 - (i) it has controlling or disposal rights over the fund, assets or the rights that generate the income from Indonesia;
 - (ii) no more than 50% of its total income (non-consolidated) is used to satisfy claims by another party in the form of interest, royalty, or other fees (excluding reasonable remuneration to employees, other expenses normally incurred in running the business, or dividend distributions to shareholders);
 - (iii) it bears the risk on its own assets, capital or liabilities; and
 - (iv) it has no written or unwritten contract that obliges it to transfer partially or entirely the income derived from Indonesia to another party.

If a particular transaction or structure is found to be misusing a tax treaty, the Indonesian payer of the income, who is obligated to withhold the tax, is not allowed to apply the benefits of the relevant tax treaty and must withhold tax which is payable in accordance with Indonesian tax regulations at the applicable rate (i.e. 20% rate). In addition, in the event that it is found that the legal form of a structure of a particular transaction is different from its economic substance, the Indonesian Tax Authority will apply the “substance over form” principle in imposing taxes in accordance with the economic substance of the transaction.

Stamp Duty

According to Law No. 10 of 2020 on Stamp Duty, a document that effects a sale of Indonesian notes is subject to stamp duty. Currently, the nominal amount of the Indonesian stamp duty is Rp. 10,000 regardless the transactions value. Generally, the stamp duty is due at the time the document is executed. The Stamp Duty Law further mandates that stamp duty should be affixed to all forms of documents; whether in hard copies or electronic forms. Stamp duty is payable by the party that benefits from the executed document unless both parties state otherwise.

Other Indonesian Taxes

There are no Indonesian estate, inheritance, succession, or gift taxes generally applicable to the acquisition, ownership or disposition of the Notes. There are no Indonesian issue, registration or similar taxes or duties payable by the Noteholders as a result of their holding of the Notes.

The above summary is not intended to constitute a complete analysis of all tax consequences relating to the ownership of the Notes. Prospective investors in the Notes should consult their own tax advisors concerning the tax consequences of their particular situations.

Certain United States Federal Income Tax Considerations

The following is a summary of certain material U.S. federal income tax consequences of the acquisition, ownership and disposition of Registered Notes by a U.S. Holder (as defined below). This summary does not address the material U.S. federal income tax consequences of every type of Note which may be issued under the Program, and the relevant Pricing Supplement may contain additional or modified disclosure concerning the material U.S. federal income tax consequences relevant to such type of Note as appropriate. This summary deals only with purchasers of Notes that are U.S. Holders and that will hold the Notes as capital assets. The discussion does not cover all aspects of U.S. federal income taxation that may be relevant to, or the actual tax effect that any of the matters described herein will have on, the acquisition, ownership or disposition of Notes by particular investors, and does not address the Medicare tax on certain unearned income, alternative minimum tax considerations, or state, local, foreign or other tax laws. This summary does not discuss all of the tax considerations that may be relevant to certain types of investors subject to special treatment under the U.S. federal income tax laws (such as financial institutions, insurance companies, investors subject to special tax accounting rules as a result of any item of gross income with respect to Notes being taken into account in an applicable financial statement, individual retirement accounts and other tax-deferred accounts, tax-exempt organizations, dealers in securities or currencies, investors that will hold the Notes as part of straddles, wash sales, hedging transactions or conversion transactions for U.S. federal income tax purposes, investors whose functional currency is not the U.S. dollar or persons holding Notes in connection with a trade or business conducted outside the United States). Moreover, the summary deals only with Notes with a term of 30 years or less and does not deal with Partly Paid Notes or Dual Currency Notes. The U.S. federal income tax consequences of owning such Notes will be discussed in the applicable Pricing Supplement.

As used herein, the term “U.S. Holder” means a beneficial owner of Notes that is, for U.S. federal income tax purposes, (i) an individual citizen or resident of the United States, (ii) a corporation, or other entity treated as a corporation, created or organized under the laws of the United States, any State thereof or the District of Columbia, (iii) an estate the income of which is subject to U.S. federal income tax without regard to its source or (iv) a trust if a court within the United States is able to exercise primary supervision over the administration of the trust and one or more U.S. persons have the authority to control all substantial decisions of the trust, or the trust has elected to be treated as a domestic trust for U.S. federal income tax purposes.

The U.S. federal income tax treatment of a partner in a partnership (including any entity treated as a partnership for U.S. federal income tax purposes) that holds Notes will depend on the status of the partner and the activities of the partnership. Prospective purchasers that are partnerships should consult their tax advisers concerning the U.S. federal income tax consequences to their partners of the acquisition, ownership and disposition of Notes by the partnership.

The summary is based on the tax laws of the United States including the Internal Revenue Code, its legislative history, existing and proposed regulations thereunder, published rulings and court decisions, as well as on the income tax treaty between the United States and Indonesia (the “Treaty”) all as of the date hereof and all subject to change at any time, possibly with retroactive effect.

Bearer Notes are not being offered to U.S. Holders, and this summary does not discuss Bearer Notes. A U.S. Holder who owns a Bearer Note may be subject to limitations under United States income tax laws, including the limitations provided in sections 165(j) and 1287(a) of the Internal Revenue Code.

The following summary does not discuss Notes that are characterized as contingent payment debt instruments for U.S. federal income tax purposes. In the event the Company issues contingent payment debt instruments the applicable Pricing Supplement will describe the material U.S. federal income tax consequences thereof.

THE SUMMARY OF U.S. FEDERAL INCOME TAX CONSEQUENCES SET OUT BELOW IS FOR GENERAL INFORMATION ONLY. PROSPECTIVE PURCHASERS SHOULD CONSULT THEIR TAX ADVISERS AS TO THE PARTICULAR TAX CONSEQUENCES TO THEM OF OWNING THE NOTES, INCLUDING THE APPLICABILITY AND EFFECT OF STATE, LOCAL, FOREIGN AND OTHER TAX LAWS AND POSSIBLE CHANGES IN TAX LAW.

U.S. Federal Income Tax Characterization of the Notes

The characterization of a Series or Tranche of Notes may be uncertain and will depend on the terms of those Notes. The determination of whether an obligation represents debt, equity, or some other instrument or interest is based on all the relevant facts and circumstances. There may be no statutory, judicial or administrative authority directly addressing the characterization of some of the types of Notes that are anticipated to be issued under the Program or of instruments similar to the Notes.

The following summary applies to Notes that are properly treated as debt for U.S. federal income tax purposes. No rulings will be sought from the U.S. Internal Revenue Service (“IRS”) regarding the characterization of any of the Notes issued hereunder for U.S. federal income tax purposes. Each holder should consult its own tax adviser about the proper characterization of the Notes for U.S. federal income tax purposes and consequences to the holder of acquiring, owning or disposing of the Notes. Possible alternative characterizations, if applicable, may be discussed in the relevant Pricing supplement or any Prospectus or series prospectus.

Payments of Interest

General

Interest on a Note that is “qualified stated interest” (defined below under “— Original Issue Discount — General”), will be taxable to a U.S. Holder as ordinary income at the time it is received or accrued, depending on the U.S. Holder’s method of accounting for U.S. federal income tax purposes. Interest paid by the Company on the Notes and original issue discount (“OID”), if any, accrued with respect to the Notes (as described below under “— Original Issue Discount”) generally will constitute income from sources outside the United States.

Effect of Indonesian Withholding Taxes

As discussed in “Taxation — Indonesian Taxation,” under current law payments of interest by the Company on the Notes to investors that are not resident in Indonesia are generally subject to a 20% Indonesian withholding tax. The rate of withholding tax applicable to U.S. Holders that are eligible for benefits under the Treaty is reduced to a maximum of 10%. The Company is liable subject to exceptions, for the payment of Additional Amounts (see Condition 4 of the “Description of the Notes — Taxation”) so that U.S. Holders generally should receive the same amounts they would have received had no Indonesian withholding taxes been imposed. For U.S. federal income tax purposes, U.S. Holders will be treated as having actually received the amount of any Indonesian taxes withheld by the Company with respect to a Note, which is includable in such U.S. Holder’s income at the time such amount is received or accrued in accordance with such U.S. Holder’s method of U.S. federal income tax accounting, and as then having actually paid over the withheld taxes to the Indonesian

taxing authorities. As a result of this rule, the amount of interest income included in gross income for U.S. federal income tax purposes by a U.S. Holder with respect to a payment of interest will be greater than the amount of cash actually received (or receivable) by the U.S. Holder from the Company with respect to the payment.

Subject to certain limitations, a U.S. Holder will generally be entitled to a credit against its U.S. federal income tax liability, or a deduction in computing its U.S. federal taxable income, for Indonesian income taxes withheld. U.S. Holders that are eligible for benefits under the Treaty will not be entitled to a foreign tax credit for the amount of any Indonesian taxes withheld in excess of the applicable maximum rate under the Treaty (generally 10%). See “Taxation — Indonesian Taxation — Anti-Avoidance Rule on the Tax Treaty and New CoD Requirements” for a discussion on how to obtain the rate of withholding tax under the Treaty. For purposes of the foreign tax credit limitation, foreign source income is classified as belonging to a specified “basket,” and the credit for foreign taxes on income in any basket is limited to U.S. federal income tax allocable to that income. Interest and OID (defined below) generally will constitute foreign source income in the “passive income” basket. In certain circumstances a U.S. Holder may be unable to claim foreign tax credits (and may instead be allowed deductions) for Indonesian taxes imposed on a payment of interest if the U.S. Holder has not met certain holding period requirements. If Notes are issued with OID, since a U.S. Holder may be required to include OID on the Notes in its gross income in advance of any withholding of Indonesian income taxes from payments attributable to the OID (which would generally occur when the Note is repaid or redeemed), a U.S. Holder may not be entitled to a credit or deduction for all of the Indonesian income taxes in the year the OID is included in the U.S. Holder’s gross income, and may be limited in its ability to credit or deduct in full the Indonesian taxes in the year those taxes are actually withheld by the Company. Prospective purchasers should consult their tax advisers concerning the foreign tax credit implications of the payment of these Indonesian taxes.

Original Issue Discount

General

The following is a summary of the principal U.S. federal income tax consequences of the ownership of Notes issued with OID.

A Note, other than a Note with a term of one year or less (a “Short-Term Note”), will be treated as issued with OID (a “Discount Note”) if the excess of the Note’s “stated redemption price at maturity” over its issue price is equal to or more than a *de minimis* amount (0.25% of the Note’s stated redemption price at maturity multiplied by the number of complete years to its maturity). A Note that provides for the payment of amounts other than qualified stated interest before maturity (an “installment obligation”) will be treated as a Discount Note if the excess of the Note’s stated redemption price at maturity over its issue price is equal to or greater than 0.25% of the Note’s stated redemption price at maturity multiplied by the weighted average maturity of the Note. A Note’s weighted average maturity is the sum of the following amounts determined for each payment on a Note (other than a payment of qualified stated interest): (i) the number of complete years from the issue date until the payment is made multiplied by (ii) a fraction, the numerator of which is the amount of the payment and the denominator of which is the Note’s stated redemption price at maturity. Generally, the issue price of a Note will be the first price at which a substantial amount of Notes included in the issue of which the Note is a part is sold to persons other than bond houses, brokers, or similar persons or organizations acting in the capacity of underwriters, placement agents, or wholesalers. The stated redemption price at maturity of a Note is the total of all payments provided by the Note that are not payments of “qualified stated interest.” A qualified stated interest payment is generally any one of a series of stated interest payments on a Note that are unconditionally payable in cash or in property (other than debt instruments of the issuer) at least annually during the entire term of the Note at a single fixed rate (with certain exceptions for different rates that take into account different

compounding periods), or a variable rate (in the circumstances described below under “Variable Interest Rate Notes”), applied to the outstanding principal amount of the Note. Solely for the purposes of determining whether a Note has OID, the Company will be deemed to exercise any unconditional call option that has the effect of decreasing the yield on the Note, and the U.S. Holder will be deemed to exercise any unconditional put option that has the effect of increasing the yield on the Note.

U.S. Holders of Discount Notes (regardless of their method of accounting for U.S. federal income tax purposes) must include OID in income calculated on a constant-yield method before the receipt of cash attributable to the income, and generally will have to include in income increasingly greater amounts of OID over the life of the Discount Notes. The amount of OID includible in income by a U.S. Holder of a Discount Note is the sum of the daily portions of OID with respect to the Discount Note for each day during the taxable year or portion of the taxable year on which the U.S. Holder holds the Discount Note. The daily portion is determined by allocating to each day in any “accrual period” a *pro rata* portion of the OID allocable to that accrual period. Accrual periods with respect to a Discount Note may be of any length selected by the U.S. Holder and may vary in length over the term of the Discount Note as long as (i) no accrual period is longer than one year and (ii) each scheduled payment of interest or principal on the Discount Note occurs on either the final or first day of an accrual period. The amount of OID allocable to an accrual period equals the excess of (a) the product of the Discount Note’s adjusted issue price at the beginning of the accrual period and the Discount Note’s yield to maturity (determined on the basis of compounding at the close of each accrual period and properly adjusted for the length of each accrual period) over (b) the sum of the payments of qualified stated interest on the Discount Note allocable to the accrual period. The “adjusted issue price” of a Discount Note at the beginning of any accrual period is the issue price of the Discount Note increased by (x) the amount of accrued OID for each prior accrual period and decreased by (y) the amount of any payments previously made on the Discount Note that were not qualified stated interest payments.

The amount of OID allocable to the final accrual period is equal to the difference between: (i) the amount payable at the maturity of a Note, other than any payment of qualified stated interest, and (ii) the Note’s adjusted issue price as of the beginning of the final accrual period.

Acquisition Premium

A U.S. Holder that purchases a Discount Note for an amount less than or equal to the sum of all amounts payable on the Discount Note after the purchase date, other than payments of qualified stated interest, but in excess of its adjusted issue price (any such excess being “acquisition premium”) and that does not make the election described below under “— Election to Treat All Interest as Original Issue Discount,” is permitted to reduce the daily portions of OID which must be included in income by a fraction, the numerator of which is the excess of the U.S. Holder’s adjusted basis in the Discount Note immediately after its purchase over the Discount Note’s adjusted issue price, and the denominator of which is the excess of the sum of all amounts payable on the Discount Note after the purchase date, other than payments of qualified stated interest, over the Discount Note’s adjusted issue price.

Short-Term Notes

In general, an individual or other cash basis U.S. Holder of a Short-Term Note is not required to accrue OID (as specially defined below for the purposes of this paragraph) for U.S. federal income tax purposes unless it elects to do so (but the U.S. Holder may be required to include any stated interest in income as the interest is received). Accrual basis U.S. Holders and certain other U.S. Holders are required to accrue OID on Short-Term Notes on a straight-line basis or, if the U.S. Holder so elects, under the constant-yield method (based on daily compounding). In the case of a U.S. Holder not required and not electing to include OID in income currently, any gain recognized on the sale or retirement of the Short-Term Note will be ordinary income to the extent of the OID accrued on a

straight-line basis (unless an election is made to accrue the OID under the constant-yield method) through the date of sale or retirement. U.S. Holders who are not required and do not elect to accrue OID on Short-Term Notes will be required to defer deductions for interest on borrowings allocable to Short-Term Notes in an amount not exceeding the deferred income until the deferred income is recognized.

For purposes of determining the amount of OID subject to these rules, all interest payments on a Short-Term Note are included in the Short-Term Note's stated redemption price at maturity. A U.S. Holder may elect to determine OID on a Short-Term Note as if the Short-Term Note had been originally issued to the U.S. Holder at the U.S. Holder's purchase price for the Short-Term Note. This election will apply to all obligations with a maturity of one year or less acquired by the U.S. Holder on or after the first day of the first taxable year to which the election applies, and may not be revoked without the consent of the IRS.

Market Discount

A Note, other than a Short-Term Note, generally will be treated as purchased at a market discount (a "Market Discount Note") if the Note's stated redemption price at maturity or, in the case of a Discount Note, the Discount Note's "revised issue price," exceeds the amount for which the U.S. Holder purchased the Note by at least 0.25% of the Note's stated redemption price at maturity or revised issue price, respectively, multiplied by the number of complete years to the Note's maturity (or, in the case of a Note that is an installment obligation, the Note's weighted average remaining maturity). If this excess is not sufficient to cause the Note to be a Market Discount Note, then the excess constitutes "*de minimis* market discount." For this purpose, the "revised issue price" of a Discount Note generally equals its issue price, increased by the amount of any OID that has accrued on the Note and decreased by the amount of any payments previously made on the Note that were not qualified stated interest payments.

Any gain recognized on the maturity or disposition of a Market Discount Note (including any payment on a Market Discount Note that is not qualified stated interest) will be treated as ordinary income to the extent the gain does not exceed the accrued market discount on the Note while held by such U.S. Holder. Alternatively, a U.S. Holder of a Market Discount Note may elect to include market discount in income currently over the life of the Note. This election will apply to all debt instruments with market discount acquired by the electing U.S. Holder on or after the first day of the first taxable year to which the election applies. This election may not be revoked without the consent of the IRS. A U.S. Holder of a Market Discount Note that does not elect to include market discount in income currently will generally be required to defer deductions for certain interest on borrowings incurred to purchase or carry a Market Discount Note, to the extent this excess interest expense does not exceed the portion of the market discount allocable to the days on which the Market Discount Note was held by the U.S. Holder.

Market discount will accrue on a straight-line basis unless the U.S. Holder elects to accrue the market discount on a constant-yield method. This election applies only to the Market Discount Note with respect to which it is made and may not be revoked without the consent of the IRS.

Variable Interest Rate Notes

It is expected that the Notes that provide for interest at variable rates ("Variable Interest Rate Notes") generally will bear interest at a "qualified floating rate" (defined below) and thus will be treated as "variable rate debt instruments" under U.S. Treasury Regulations governing accrual of OID. A Variable Interest Rate Note will qualify as a "variable rate debt instrument" if (a) its issue price does not exceed the total noncontingent principal payments due under the Variable Interest Rate Note by

more than a specified *de minimis* amount, (b) it provides for stated interest, paid or compounded at least annually, at (i) one or more qualified floating rates, (ii) a single fixed rate and one or more qualified floating rates, (iii) a single objective rate, or (iv) a single fixed rate and a single objective rate that is a qualified inverse floating rate, and (c) it does not provide for any principal payments that are contingent (other than as described in (a) above).

A “qualified floating rate” is any variable rate where variations in the value of the rate can reasonably be expected to measure contemporaneous variations in the cost of newly borrowed funds in the currency in which the Variable Interest Rate Note is denominated. A fixed multiple of a qualified floating rate will constitute a qualified floating rate only if the multiple is greater than 0.65 but not more than 1.35. A variable rate equal to the product of a qualified floating rate and a fixed multiple that is greater than 0.65 but not more than 1.35, increased or decreased by a fixed rate, will also constitute a qualified floating rate. In addition, two or more qualified floating rates that can reasonably be expected to have approximately the same values throughout the term of the Variable Interest Rate Note (e.g., two or more qualified floating rates with values within 25 basis points of each other as determined on the Variable Interest Rate Note’s issue date) will be treated as a single qualified floating rate. Notwithstanding the foregoing, a variable rate that would otherwise constitute a qualified floating rate but which is subject to one or more restrictions such as a maximum numerical limitation (i.e., a cap) or a minimum numerical limitation (i.e., a floor) may, under certain circumstances, fail to be treated as a qualified floating rate unless the cap or floor is fixed throughout the term of the Note.

An “objective rate” is a rate that is not itself a qualified floating rate but which is determined using a single fixed formula and that is based on objective financial or economic information (e.g., one or more qualified floating rates or the yield of actively traded personal property). A rate will not qualify as an objective rate if it is based on information that is within the control of the Company (or a related party) or that is unique to the circumstances of the Company (or a related party), such as dividends, profits or the value of the Company’s stock (although a rate does not fail to be an objective rate merely because it is based on the credit quality of the Company). Other variable interest rates may be treated as objective rates if so designated by the IRS in the future. Despite the foregoing, a variable rate of interest on a Variable Interest Rate Note will not constitute an objective rate if it is reasonably expected that the average value of the rate during the first half of the Variable Interest Rate Note’s term will be either significantly less than or significantly greater than the average value of the rate during the final half of the Variable Interest Rate Note’s term. A “qualified inverse floating rate” is any objective rate where the rate is equal to a fixed rate minus a qualified floating rate, as long as variations in the rate can reasonably be expected to inversely reflect contemporaneous variations in the qualified floating rate. If a Variable Interest Rate Note provides for stated interest at a fixed rate for an initial period of one year or less followed by a variable rate that is either a qualified floating rate or an objective rate for a subsequent period and if the variable rate on the Variable Interest Rate Note’s issue date is intended to approximate the fixed rate (i.e., the value of the variable rate on the issue date does not differ from the value of the fixed rate by more than 25 basis points), then the fixed rate and the variable rate together will constitute either a single qualified floating rate or objective rate, as the case may be.

A qualified floating rate or objective rate in effect at any time during the term of the instrument must be set at a “current value” of that rate. A “current value” of a rate is the value of the rate on any day that is no earlier than three months prior to the first day on which that value is in effect and no later than one year following that first day. If a Variable Interest Rate Note that provides for stated interest at either a single qualified floating rate or a single objective rate throughout the term thereof qualifies as a “variable rate debt instrument”, then any stated interest on the Note which is unconditionally payable in cash or property (other than debt instruments of the Issuer) at least annually will constitute qualified stated interest and will be taxed accordingly. Thus, a Variable Interest Rate Note that provides for stated interest at either a single qualified floating rate or a single objective rate throughout the term thereof and that qualifies as a “variable rate debt instrument” will generally not be

treated as having been issued with OID unless the Variable Interest Rate Note is issued at a “true” discount (i.e., at a price below the Note’s stated principal amount) in excess of a specified *de minimis* amount. OID on a Variable Interest Rate Note arising from “true” discount is allocated to an accrual period using the constant yield method described above by assuming that the variable rate is a fixed rate equal to (i) in the case of a qualified floating rate or qualified inverse floating rate, the value, as of the issue date, of the qualified floating rate or qualified inverse floating rate, or (ii) in the case of an objective rate (other than a qualified inverse floating rate), a fixed rate that reflects the yield that is reasonably expected for the Variable Interest Rate Note.

In general, any other Variable Interest Rate Note that qualifies as a “variable rate debt instrument” will be converted into an “equivalent” fixed rate debt instrument for purposes of determining the amount and accrual of OID and qualified stated interest on the Variable Interest Rate Note. Such a Variable Interest Rate Note must be converted into an “equivalent” fixed rate debt instrument by substituting any qualified floating rate or qualified inverse floating rate provided for under the terms of the Variable Interest Rate Note with a fixed rate equal to the value of the qualified floating rate or qualified inverse floating rate, as the case may be, as of the Variable Interest Rate Note’s issue date. Any objective rate (other than a qualified inverse floating rate) provided for under the terms of the Variable Interest Rate Note is converted into a fixed rate that reflects the yield that is reasonably expected for the Variable Interest Rate Note. In the case of a Variable Interest Rate Note that qualifies as a “variable rate debt instrument” and provides for stated interest at a fixed rate in addition to either one or more qualified floating rates or a qualified inverse floating rate, the fixed rate is initially converted into a qualified floating rate (or a qualified inverse floating rate, if the Variable Interest Rate Note provides for a qualified inverse floating rate). Under these circumstances, the qualified floating rate or qualified inverse floating rate that replaces the fixed rate must be such that the fair market value of the Variable Interest Rate Note as of the Variable Interest Rate Note’s issue date is approximately the same as the fair market value of an otherwise identical debt instrument that provides for either the qualified floating rate or qualified inverse floating rate rather than the fixed rate. Subsequent to converting the fixed rate into either a qualified floating rate or a qualified inverse floating rate, the Variable Interest Rate Note is converted into an “equivalent” fixed rate debt instrument in the manner described above.

Once the Variable Interest Rate Note that qualifies as a “variable rate debt instrument” is converted into an “equivalent” fixed rate debt instrument, pursuant to the foregoing rules, the amount of OID and qualified stated interest, if any, are determined for the “equivalent” fixed rate debt instrument by applying the general OID rules to the “equivalent” fixed rate debt instrument and a U.S. Holder of the Variable Interest Rate Note will account for the OID and qualified stated interest as if the U.S. Holder held the “equivalent” fixed rate debt instrument. In each accrual period, appropriate adjustments will be made to the amount of qualified stated interest and any OID assumed to have been accrued or paid with respect to the “equivalent” fixed rate debt instrument in the event these amounts differ from the actual amount of interest accrued or paid on the Variable Interest Rate Note during the accrual period.

There is some uncertainty as to the proper treatment of a replacement of LIBOR due to its discontinuation. Under proposed U.S. Treasury Regulations, certain rate replacements would not affect the treatment of Variable Interest Rate Notes that otherwise meet the requirements as “variable rate debt instruments,” provided that certain conditions set forth in the proposed U.S. Treasury Regulations are met. There is no assurance that the Variable Interest Rate Note of any series (assuming they otherwise meet the conditions to be treated as “variable rate debt instruments”) will meet these conditions or that the IRS will not challenge the treatment of such Notes as “variable rate debt instruments.”

If a Variable Interest Rate Note, such as a Note the payments on which are determined by reference to an index, does not qualify as a “variable rate debt instrument,” then the Variable Interest

Rate Note will be treated as a contingent payment debt obligation. The proper U.S. federal income tax treatment of Variable Interest Rate Notes that are treated as contingent payment debt obligations will be more fully described in the applicable Pricing Supplement.

Notes Purchased at a Premium

A U.S. Holder that purchases a Note for an amount in excess of its principal amount, or for a Discount Note, its stated redemption price at maturity, will generally have “amortizable bond premium” to the extent of such excess. If so, the U.S. Holder will not be required to include any OID in income. In addition, the U.S. Holder may elect to amortize such premium (or, if it results in a smaller amount, a premium computed using the amount payable by the Company on an earlier call date), in which case the amount required to be included in the U.S. Holder’s income each year with respect to qualified stated interest on the Note will be reduced by the amount of amortizable bond premium allocable (based on the Note’s yield to maturity) to that year. Any election to amortize bond premium will apply to all bonds (other than bonds the interest on which is excludable from gross income for U.S. federal income tax purposes) held by the U.S. Holder at the beginning of the first taxable year to which the election applies or thereafter acquired by the U.S. Holder, and is irrevocable without the consent of the IRS. See also “— Original Issue Discount — Election to Treat All Interest as Original Issue Discount.”

Election to Treat All Interest as Original Issue Discount

A U.S. Holder may elect to include in gross income all interest that accrues on a Note using the constant-yield method described above under “— Original Issue Discount — General,” with certain modifications. For purposes of this election, interest includes stated interest, acquisition discount, OID, *de minimis* OID, market discount, *de minimis* market discount and unstated interest, as adjusted by any amortizable bond premium (described above under “— Notes Purchased at a Premium”) or acquisition premium. This election will generally apply only to the Note with respect to which it is made and may not be revoked without the consent of the IRS. If the election to apply the constant-yield method to all interest on a Note is made with respect to a Market Discount Note, the electing U.S. Holder will be treated as having made the election discussed above under “— Market Discount” to include market discount in income currently over the life of all debt instruments with market discount held or thereafter acquired by the U.S. Holder on or after the first day of the first taxable year to which the election applies, and if the election to apply the constant yield method to all interest on a Note is made with respect to a Note purchased at a premium, the electing U.S. Holder will be treated as having made the election discussed above under “— Notes Purchased at a Premium” to amortize bond premium on all taxable bonds held or thereafter acquired by the U.S. Holder. U.S. Holders should consult their tax advisers concerning the propriety and consequences of this election.

Purchase, Sale and Retirement of Notes

A U.S. Holder’s adjusted tax basis in a Note will generally be its cost, increased by the amount of any OID or market discount included in the U.S. Holder’s income with respect to the Note and the amount, if any, of income attributable to *de minimis* OID and *de minimis* market discount included in the U.S. Holder’s income with respect to the Note, and reduced by (i) the amount of any payments that are not qualified stated interest payments, and (ii) the amount of any amortizable bond premium previously applied to reduce interest on the Note.

A U.S. Holder will generally recognize gain or loss on the sale or retirement of a Note equal to the difference between the amount realized on the sale or retirement and the tax basis of the Note. The amount realized does not include the amount attributable to accrued but unpaid interest, which will be taxable as interest income to the extent not previously included in income. Except to the extent

described above under “— Original Issue Discount — Market Discount” or “— Original Issue Discount — Short Term Notes” or attributable to changes in exchange rates (as discussed below), gain or loss recognized on the sale or retirement of a Note will be capital gain or loss and will be long-term capital gain or loss if the U.S. Holder’s holding period in the Notes exceeds one year.

Gain or loss realized by a U.S. Holder on the sale or retirement of a Note generally will be U.S. source. Therefore, a U.S. Holder may not be able to utilize foreign tax credits attributable to any Indonesian withholding tax imposed on the sale or disposition of a Note unless such holder has foreign source income in the same category from other sources. See “Taxation — Indonesian Taxation.” Prospective purchasers should consult their tax advisers as to the foreign tax implications of the sale or disposition of Notes.

Foreign Currency Notes

Interest

If an interest payment is denominated in, or determined by reference to, a foreign currency (for this purpose, meaning a non-U.S. dollar currency), the amount of income recognized by a cash basis U.S. Holder will generally be the U.S. dollar value of the interest payment, based on the exchange rate in effect on the date of receipt, regardless of whether the payment is in fact converted into U.S. dollars.

An accrual basis U.S. Holder may determine the amount of income recognized with respect to an interest payment denominated in, or determined by reference to, a foreign currency in accordance with either of two methods. Under the first method, the amount of income accrued will be based on the average exchange rate in effect during the interest accrual period (or, in the case of an accrual period that spans two taxable years of a U.S. Holder, the part of the period within the taxable year).

Under the second method, the U.S. Holder may elect to determine the amount of income accrued on the basis of the exchange rate in effect on the last day of the accrual period (or, in the case of an accrual period that spans two taxable years, the exchange rate in effect on the last day of the part of the period within the taxable year). Additionally, if a payment of interest is actually received within five business days of the last day of the accrual period, an electing accrual basis U.S. Holder may instead translate the accrued interest into U.S. dollars at the exchange rate in effect on the day of actual receipt. Any such election will apply to all debt instruments held by the U.S. Holder at the beginning of the first taxable year to which the election applies or thereafter acquired by the U.S. Holder, and will be irrevocable without the consent of the IRS.

Upon receipt of an interest payment (including a payment attributable to accrued but unpaid interest upon the sale or retirement of a Note) denominated in, or determined by reference to, a foreign currency, the U.S. Holder may recognize U.S. source exchange gain or loss (taxable as ordinary income or loss) equal to the difference between the amount received (translated into U.S. dollars at the spot rate on the date of receipt) and the U.S. dollar amount previously accrued, regardless of whether the payment is in fact converted into U.S. dollars.

OID

OID for each accrual period on a Discount Note that is denominated in, or determined by reference to, a foreign currency will be determined in the foreign currency and then translated into U.S. dollars in the same manner as stated interest accrued by an accrual basis U.S. Holder, as described above.

Upon receipt of an amount attributable to OID (whether in connection with a payment on the Note or a sale of the Note), a U.S. Holder may recognize U.S. source exchange gain or loss (taxable as

ordinary income or loss) equal to the difference between the amount received (translated into U.S. dollars at the spot rate on the date of receipt) and the amount previously accrued, regardless of whether the payment is in fact converted into U.S. dollars.

Market Discount

Market discount on a Note that is denominated in, or determined by reference to, a foreign currency will be accrued in the foreign currency. If the U.S. Holder elects to include market discount in income currently, the accrued market discount will be translated into U.S. dollars at the average exchange rate for the accrual period (or portion thereof within the U.S. Holder's taxable year). Upon the receipt of an amount attributable to accrued market discount, the U.S. Holder may recognize U.S. source exchange gain or loss (which will be taxable as ordinary income or loss) determined in the same manner as for accrued interest or OID. A U.S. Holder that does not elect to include market discount in income currently will recognize, upon the disposition or maturity of the Note, the U.S. dollar value of the amount accrued, calculated at the spot rate on that date, and no part of this accrued market discount will be treated as exchange gain or loss.

Bond Premium

Bond premium (including acquisition premium) on a Note that is denominated in, or determined by reference to, a foreign currency, will be computed in units of the foreign currency, and any such bond premium that is taken into account currently will reduce interest income in units of the foreign currency. On the date bond premium offsets interest income, a U.S. Holder may recognize U.S. source exchange gain or loss (taxable as ordinary income or loss) measured by the difference between the spot rate in effect on that date and on the date the Notes were acquired by the U.S. Holder. A U.S. Holder that does not elect to take bond premium (other than acquisition premium) into account currently will recognize a capital loss to the extent of the bond premium when the Note matures.

Sale or Retirement

As discussed above under "Purchase, Sale and Retirement of Notes," a U.S. Holder will generally recognize gain or loss on the sale or retirement of a Note equal to the difference between the amount realized on the sale or retirement and its tax basis in the Note. A U.S. Holder's tax basis in a Note that is denominated in a foreign currency will be determined by reference to the U.S. dollar cost of the Note. The U.S. dollar cost of a Note purchased with foreign currency will generally be the U.S. dollar value of the purchase price on the date of purchase or, in the case of Notes traded on an established securities market, as defined in the applicable U.S. Treasury Regulations, that are purchased by a cash basis U.S. Holder (or an accrual basis U.S. Holder that so elects) on the settlement date for the purchase.

The amount realized on a sale or retirement of a Note for an amount in foreign currency will be the U.S. dollar value of this amount on the date of sale or retirement or, in the case of Notes traded on an established securities market, as defined in the applicable U.S. Treasury Regulations, sold by a cash basis U.S. Holder (or an accrual basis U.S. Holder that so elects) on the settlement date for the sale. Such an election by an accrual basis U.S. Holder must be applied consistently from year to year and cannot be revoked without the consent of the IRS.

A U.S. Holder will recognize U.S. source exchange gain or loss (taxable as ordinary income or loss) on the sale or retirement of a Note equal to the difference, if any, between the U.S. dollar values of the principal amount (which is generally considered to equal the purchase price, adjusted for previously amortized bond premium or previously accrued market discount) of the Note on (i) the date

of sale or retirement and (ii) the date on which the U.S. Holder acquired the Note. Any such exchange gain or loss will be realized only to the extent of total gain or loss realized on the sale or retirement of the Note.

Backup Withholding and Information Reporting

In general, payments of interest and accruals of OID on, and the proceeds of a sale, redemption or other disposition of, the Notes, payable to a U.S. Holder by a U.S. paying agent or other U.S. intermediary will be reported to the IRS and to the U.S. Holder to the extent required under applicable regulations. Backup withholding will apply to these payments, including payments of OID, if the U.S. Holder fails to provide an accurate taxpayer identification number or certification of exempt status or if the U.S. Holder had been notified that it is subject to backup withholding because of a failure to report all interest and dividends required to be shown on its U.S. federal income tax returns. Certain U.S. Holders are not subject to backup withholding. The amount of any backup withholding from a payment to a U.S. Holder will be allowed as a credit against such U.S. Holder's U.S. federal income tax liability and may entitle such U.S. Holder to a refund, provided that the required information is timely furnished to the IRS and certain other requirements are met. U.S. Holders should consult their tax advisers as to their qualification for exemption from backup withholding and the procedure for obtaining an exemption.

Certain U.S. Holders who are individuals (or certain entities) may be required to report information relating to an interest in the Notes, subject to certain exceptions (including an exception for Notes held in accounts maintained with non-U.S. financial institutions). U.S. Holders who fail to report required information could become subject to substantial penalties. U.S. Holders should consult their tax advisers regarding the effect, if any, of this requirement on their ownership and disposition of the Notes.

Reportable Transactions

U.S. Treasury Regulations require a U.S. taxpayer that participates in a "reportable transaction" to disclose this participation to the IRS. The scope and application of these rules is not entirely clear. A U.S. Holder may be required to treat a foreign currency exchange loss from the Notes as a reportable transaction if the loss exceeds a certain threshold in a single taxable year, if the U.S. Holder is an individual or trust, or higher amounts for other non-individual U.S. Holders. In the event the acquisition, ownership or disposition of Notes constitutes participation in a "reportable transaction" for purposes of these rules, a U.S. Holder will be required to disclose its investment by filing Form 8886 with the IRS. A certain penalty is generally imposed on any taxpayer that fails to timely file an information return with the IRS with respect to a transaction resulting in a loss that is treated as a reportable transaction.

PLAN OF DISTRIBUTION

Summary of the Program Agreement

Subject to the terms and conditions contained in an amended and restated program agreement dated October 19, 2018, as amended by an amendment agreement dated July 23, 2019 and a second amendment agreement dated February 3, 2021, and further amended and supplemented from time to time (the “Program Agreement”), between the Company, the Arrangers and the Dealers, the Notes may be offered on a continuous basis by the Company to the Dealers. The Notes may be resold at prevailing market prices, or at prices related thereto, at the time of such resale, as determined by the Relevant Dealer(s). The Notes may also be sold by the Company through the Dealers, acting as agents of the Company. The Program Agreement also provides for Notes to be issued in syndicated Tranches that are jointly and severally underwritten by two or more Dealers.

The Company will pay the Relevant Dealer a commission as agreed between them in respect of Notes subscribed by it. The Company has agreed to reimburse each of the Arrangers for certain of its expenses incurred in connection with the establishment of the Program and the Dealers for certain of their activities in connection with the Program.

The Company has agreed to indemnify the Dealers against certain liabilities in connection with the offer and sale of the Notes. The Program Agreement entitles the Dealers to terminate any agreement that they make to subscribe Notes in certain circumstances prior to payment for such Notes being made to the Company.

Other Relationships

The Dealers and their affiliates may, from time to time, engage in transactions with and perform services for the Company, its subsidiaries and to affiliates in the ordinary course of their business for which they may receive customary fees and reimbursement of expenses. It is expected that the Dealers 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.

In addition, in the ordinary course of their various business activities, the Dealers and their respective affiliates may make or hold (on their own account, on behalf of clients or in their capacity of investment advisers) a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments and enter into other transactions, including credit derivatives (such as asset swaps, repackaging and credit default swaps) in relation thereto. Such transactions, investments and securities activities may involve securities and instruments of the Company or its subsidiaries, jointly controlled entities or associated entities, including Notes offered hereby, may be entered into at the same time or proximate to offers and sales of Notes or at other times in the secondary market and may be carried out with counterparties that are also purchasers, holders or sellers of Notes. The Dealers or their respective affiliates may purchase Notes and be allocated Notes for asset management and/or proprietary purposes and not with a view to distribution. The Dealers and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments. In addition, one of the Dealers, Mandiri Securities Pte. Ltd., is an entity that is, with us, under common control by the Government.

In connection with the offering of any Notes, each Dealer and/or its affiliate(s) may act as an investor for its own account and may take up Notes 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 related investments and may offer or sell such securities or other investments otherwise than in connection with the offering. Accordingly, references herein to Notes being offered should be read as including any offering of Notes to the Dealers 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.

Selling Restrictions

General

The Notes have not been and will not be registered under the laws of any jurisdiction, nor has any other action been taken, nor will any action be taken, by the Company, the Dealers or any other person that would permit a public offering of the Notes or the possession, circulation or distribution of this Offering Memorandum or any supplement hereto or thereto, or any other offering material relating to the Company or the Notes, in any country or jurisdiction where action for any such purpose may be required. The offer and sale of Notes, and the delivery of this Offering Memorandum, are restricted by law in certain jurisdictions and Notes may not be offered or sold, and this Offering Memorandum may not be distributed, in any jurisdiction under circumstances where such offer, sale or distribution would be prohibited or restricted by law.

Without limiting the foregoing, prospective purchasers of Notes should be aware of the following restrictions:

European Economic Area

Prohibition of Sales to EEA Retail Investors

Unless the relevant Pricing Supplement in respect of any Notes specifies the “Prohibition of Sales to EEA Retail Investors” as “Not Applicable,” each Dealer (severally, and not jointly) has represented, warranted and agreed that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Notes which are the subject of the offering contemplated by this Offering Memorandum as completed by the Pricing Supplement in relation thereto to any retail investor in the European Economic Area. For the purposes of this provision:

- (a) the expression “retail investor” means a person who is one (or more) of the following:
 - (i) a retail client as defined in point (11) of Article 4(1) of MiFID II;
 - (ii) a customer within the meaning of the Insurance Distribution Directive, where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; and
 - (iii) not a qualified investor as defined in the Prospectus Regulation; and
- (b) the expression an “offer” includes the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe the Notes.

If the Pricing Supplement in respect of any Notes specifies “Prohibition of Sales to EEA Retail Investors” as “Not Applicable,” each Dealer has represented and agreed, in relation to each Member

State of the European Economic Area that it has not made and will not make an offer of Notes which are the subject of the offering contemplated by this Offering Memorandum as completed by the relevant Pricing Supplement in relation thereto to the public in that Member State, except that it may make an offer of such Notes to the public in that Member State:

- (a) if the relevant Pricing Supplement in relation to the Notes specify that an offer of those Notes may be made other than pursuant to Article 1(4) of the Prospectus Regulation in that Member State (a “Non-exempt Offer”), following the date of publication of a prospectus in relation to such Notes which has been approved by the competent authority in that Member State or, where appropriate, approved in another Member State and notified to the competent authority in that Member State, provided that any such prospectus has subsequently been completed by the relevant Pricing Supplement contemplating such Non-exempt Offer, in accordance with the Prospectus Regulation, in the period beginning and ending on the dates specified in such prospectus or the relevant Pricing Supplement, as applicable, and the Issuer has consented in writing to its use for the purpose of that Non-exempt Offer;
- (b) at any time to any legal entity which is a qualified investor as defined in the Prospectus Regulation;
- (c) at any time to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Regulation) subject to obtaining the prior consent of the relevant Dealer or Dealers nominated by the Issuer for any such offer; or
- (d) at any time in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of Notes referred to in (b) to (d) above shall require the Issuer or any Dealer to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purposes of this provision, the expression an “offer of Notes to the public” in relation to any Notes in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes and the expression “Prospectus Regulation” means Regulation (EU) 2017/1129, as amended.

United Kingdom

Prohibition of sales to UK Retail Investors: Unless the Pricing Supplement in respect of any Notes specifies “Prohibition of Sales to UK Retail Investors” as “Not Applicable”, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Notes which are the subject of the offering contemplated by this Offering Memorandum as completed by the Pricing Supplement in relation thereto to any retail investor in the United Kingdom. For the purposes of this provision:

- (a) the expression “retail investor” means a person who is one (or more) of the following:
 - (i) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the EUWA; or

- (ii) a customer within the meaning of the provisions of the FSMA and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA; or
 - (iii) not a qualified investor as defined in Article 2 of the UK Prospectus Regulation; and
- (b) the expression an “offer” includes the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes.

If the Pricing Supplement respect of any Notes specifies “Prohibition of Sales to UK Retail Investors” as “Not Applicable”, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not made and will not make an offer of Notes which are the subject of the offering contemplated by this Offering Memorandum as completed by the relevant Pricing Supplement in relation thereto to the public in the United Kingdom except that it may make an offer of such Notes to the public in the United Kingdom:

- (A) if the pricing supplement in relation to the Notes specify that an offer of those Notes may be made other than pursuant to section 86 of the FSMA (a “Public Offer”), following the date of publication of a prospectus in relation to such Notes which either (i) has been approved by the Financial Conduct Authority, or (ii) is to be treated as if it had been approved by the Financial Conduct Authority in accordance with the transitional provision in Regulation 74 of the Prospectus (Amendment etc.) (EU Exit) Regulations 2019, provided that any such prospectus has subsequently been completed by the relevant Pricing Supplement contemplating such Public Offer, in the period beginning and ending on the dates specified in such prospectus or the relevant Pricing Supplement, as applicable, and the Issuer has consented in writing to its use for the purpose of that Public Offer;
- (B) at any time to any legal entity which is a qualified investor as defined in Article 2 of Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the EUWA;
- (C) at any time to fewer than 150 natural or legal persons (other than qualified investors as defined in Article 2 of Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the EUWA) in the United Kingdom subject to obtaining the prior consent of the relevant Dealer or Dealers nominated by the Issuer for any such offer; or
- (D) at any time in any other circumstances falling within section 86 of the FSMA,

provided that no such offer of Notes referred to in (B) to (D) above shall require the Issuer or any Dealer to publish a prospectus pursuant to section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation.

For the purposes of this provision, the expression “an offer of Notes to the public” in relation to any Notes means the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes and the expression “UK Prospectus Regulation” means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the EUWA.

Each Dealer has represented, warranted and agreed that:

- (a) in relation to any Notes which have a maturity of less than one year, (1) it is a person whose ordinary activities involve it in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of its business and (2) it has not offered or sold and will not offer or sell any Notes other than to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or as agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses where the issue of the Notes would otherwise constitute a contravention of Section 19 of the FSMA by the Issuer;
- (b) 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 Notes in circumstances in which Section 21(1) of the FSMA does not apply to the Issuer or the Guarantor; and
- (c) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to such Notes in, from or otherwise involving the United Kingdom.

Hong Kong

Each Dealer has represented and agreed that (1) it has not offered or sold and will not offer or sell in Hong Kong, by means of any document, any Notes other than (i) to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong (the “Securities and Futures Ordinance”) and any rules made under that Ordinance, except for Notes which are a “structured product” as defined in the Securities and Futures Ordinance or any rules made under the Ordinance; 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 or which do not constitute an offer to the public within the meaning of that Ordinance; and (2) 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 Notes, which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to Notes which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

Italy

Each Dealer has represented and agreed that the offer of the Notes has not been registered with the Italian Securities and Exchange Commission (Commissione Nazionale per le Società e la Borsa, the “CONSOB”) pursuant to Italian securities legislation and, accordingly, each Dealer has represented and agreed that no Notes may be offered, sold or distributed, to the public in the Republic of Italy (“Italy”) nor may copies of this Offering Memorandum or of any other document relating to the Notes be distributed in Italy, except:

- (a) to qualified investors (*investitori qualificati*), as defined pursuant to Article 2 of the Prospectus Regulation and any application provision of Legislative Decree No. 58 of February 24, 1998, as amended (the Financial Services Act) and the CONSOB regulations; or

- (b) in other circumstances which are exempted from the rules on public offerings pursuant to Article 1 of the Prospectus Regulation, Article 34-ter of CONSOB Regulation No. 11971 of May 14, 1999, as amended from time to time, and the applicable Italian laws.

Moreover, and subject to the foregoing, each Dealer has represented and agreed that any offer, sale or delivery of the Notes or distribution of copies of this Offering Memorandum or any other document relating to the Notes in Italy under (a) or (b) above must be:

- (1) made by an investment firm, bank or financial intermediary permitted to conduct such activities in the Republic of Italy in accordance with the Financial Services Act, CONSOB Regulation No. 20307 of February 15, 2018 and Legislative Decree No. 385 of September 1, 1993, as amended from time to time (the “Banking Act”); and
- (2) in compliance with any other applicable laws and regulations or requirement imposed by CONSOB, the Bank of Italy (including the reporting requirements, where applicable, pursuant to Article 129 of the Banking Act and the implementing guidelines of the Bank of Italy, as amended from time to time) and/or any other Italian authority.

Any investor purchasing the Notes in the offering is solely responsible for ensuring that any offer or resale of the Notes it purchased in the offering occurs in compliance with applicable Italian laws and regulations.

Switzerland

Each Dealer has acknowledged and agreed that the Notes may not be publicly offered, sold, or advertised, directly or indirectly, in, into or from Switzerland, and will not be listed on SIX Swiss Exchange (“SIX”) or on any other exchange or regulated trading facility in Switzerland. This Offering Memorandum has been prepared without regard to the disclosure standards for issuance prospectuses under article 652a or article 1156 of the Swiss Code of Obligations, or the disclosure standards for listing prospectuses under article 27 et seq. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland, or the rules related to prospectuses under Swiss Federal Act on Collective Investment Schemes. Neither this Offering Memorandum nor any other offering or marketing material relating to the Notes or the offering of the Notes under the Program may be publicly distributed or otherwise made publicly available in Switzerland.

Each Dealer has further acknowledged and agreed that neither this Offering Memorandum nor any other offering or marketing material relating to the offering of the Notes under the Program, the Issuer or the Notes have been or will be filed with or approved by any Swiss regulatory authority. In particular, this Offering Memorandum will not be filed with, and the offer of Notes will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA (“FINMA”). Acquirers of the Notes will not benefit from protection or supervision by FINMA.

Indonesia

Each Dealer has represented and agreed that the Notes may not be offered or sold in Indonesia or to any Indonesian nationals, citizens, corporations or residents, including by way of invitation, offering or advertisement, and this Offering Memorandum and any other offering material relating to the Notes may not be distributed in Indonesia or to any Indonesian nationals, citizens, corporations or residents.

Singapore

Each Dealer has acknowledged that this Offering Memorandum has not been nor will be registered as a prospectus with the Monetary Authority of Singapore (the “MAS”). Accordingly, each Dealer has

represented, warranted and agreed that it has not offered or sold any Notes or caused such Notes to be made the subject of an invitation for subscription or purchase and will not offer or sell such Notes or cause the Notes 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 Memorandum or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of such Notes, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor (as defined in Section 4A of the SFA) under Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA and (where applicable) Regulation 3 of the Securities and Futures (Classes of Investors) Regulations 2018, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Note:

This Offering Memorandum has not been nor will be registered as a prospectus with the MAS. Accordingly, this Offering Memorandum and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Notes may not be circulated or distributed, nor may the Notes be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor (as defined in Section 4A of the SFA) under Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA and (where applicable) Regulation 3 of the Securities and Futures (Classes of Investors) Regulations 2018, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the Notes are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- (a) 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
- (b) 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,

the securities or securities-based derivatives contracts (each 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 six months after that corporation or that trust has acquired the Notes pursuant to an offer made under Section 275 of the SFA, except:

- (1) to an institutional investor or to a relevant person, or to any person from an offer referred to in Section 275(1A) or 276(4)(i)(B) of the SFA;
- (2) where no consideration is or will be given for the transfer;
- (3) where the transfer is by operation of law;
- (4) as specified in Section 276(7) of the SFA; or

- (5) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

Any reference to the SFA is a reference to the Securities and Futures Act, Chapter 289 of Singapore and a reference to any term as defined in the SFA or any provision in the SFA is a reference to that term as modified or amended from time to time by such of its subsidiary legislation as may be applicable at the relevant time.

United States

The Notes have not been and will not be registered under the Securities Act and, subject to certain exceptions, may not be offered or sold within the United States. Each Dealer has agreed, and each further Dealer appointed under the Program will be required to agree, that it will not offer or sell any Notes within the United States, except as permitted by the Program Agreement.

Bearer Notes are subject to U.S. tax law requirements and may not be offered, sold or delivered within the United States or its possessions or to a United States person, except in certain transactions permitted by U.S. tax regulations. Terms used in this paragraph have the meanings given to them by the Internal Revenue Code and regulations thereunder.

The Notes are being offered and sold outside the United States in reliance on Regulation S. The Program Agreement provides that the Dealers may directly or through their respective U.S. broker-dealer affiliates arrange for the offer and resale of Notes within the United States only to qualified institutional buyers in reliance on Rule 144A.

In addition, until 40 days after the commencement of the offering of any identifiable Tranche of Notes, an offer or sale of Notes within the United States by any Dealer (whether or not participating in the offering of such Tranche of Notes) may violate the registration requirements of the Securities Act if such offer or sale is made otherwise than in accordance with Rule 144A.

This Offering Memorandum has been prepared by the Company for use in connection with the offer and sale of the Notes outside the United States and for the resale of the Notes in the United States. The Company and the Dealers reserve the right to reject any offer to purchase the Notes, in whole or in part, for any reason. This Offering Memorandum does not constitute an offer to any person in the United States or to any U.S. person, other than any qualified institutional buyer within the meaning of Rule 144A to whom an offer has been made directly by one of the Dealers or its U.S. broker dealer affiliate. Distribution of this Offering Memorandum by any non-U.S. person outside the United States or by any qualified institutional buyer in the United States to any U.S. person or to any other person within the United States, other than any qualified institutional buyer and those persons, if any, retained to advise such non U.S. person or qualified institutional buyer with respect thereto, is unauthorized and any disclosure without the prior written consent of the Company of any of its contents to any such U.S. person or other person within the United States, other than any qualified institutional buyer and those persons, if any, retained to advise such non-U.S. person or qualified institutional buyer, is prohibited.

Japan

The Notes 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 “FIEA”) and each Dealer has represented and agreed that it has not directly or indirectly offered or sold and will not offer or sell any Notes, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (as defined under Item 5,

Paragraph 1, Article 6 of the Foreign Exchange and Foreign Trade Act (Act No. 228 of 1949, as amended)), or to others for re offering or resale, directly or indirectly, in Japan or to, or for the benefit of, a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEA and any other applicable laws, regulations and ministerial guidelines of Japan.

Malaysia

This Offering Memorandum has not been and will not be registered as a prospectus with the Securities Commission of Malaysia under the Malaysian Capital Markets and Services Act 2007 (“CMSA”). Accordingly, this Offering Memorandum or any other document or material in connection therewith will not be circulated or distributed, nor will any invitation, offer or sale, directly or indirectly, be made in Malaysia with respect to offer or sale of Notes, other in circumstances falling within any one of the categories specified in Schedules 6, 7, 8 and 9 of the CMSA, subject to any law, order, regulation or official directive of Central Bank of Malaysia, Securities Commission of Malaysia and/or any other regulatory authority from time to time. Any invitation or offer of Notes in Malaysia shall only be binding upon obtaining the approval of the Securities Commission of Malaysia for the invitation or offer in respect of the Notes. Such approval shall not however, be taken to indicate that the Securities Commission of Malaysia recommends the purchase or subscription of the Notes. In addition, residents of Malaysia may be required to obtain relevant regulatory approvals including approval from the Controller of Foreign Exchange to purchase the Notes. It is the responsibility of such residents to obtain such regulatory approvals and none of the Dealers is responsible for any invitation, offer, sale or purchase of the Notes as aforesaid without the necessary approvals being in place.

General

Each Dealer has agreed or will agree that it will (to the best of its knowledge and belief) comply with all applicable securities laws and regulations in force in any jurisdiction in which it purchases, offers, sells or delivers Notes or possesses or distributes this Offering Memorandum and will obtain any consent, approval or permission required by it for the purchase, offer, sale or delivery by it of Notes under the laws and regulations in force in any jurisdiction to which it is subject or in which it makes such purchases, offers, sales or deliveries and neither the Company nor any other Dealer shall have any responsibility therefor.

Neither the Company nor any of the Dealers represents that Notes may at any time lawfully be sold in compliance with any applicable registration or other requirements in any jurisdiction, or pursuant to any exemption available thereunder, or assumes any responsibility for facilitating such sale.

With regard to each Tranche, the Relevant Dealer(s) will be required to comply with such other additional restrictions as the Company and the Relevant Dealer(s) shall agree and as shall be set forth in the applicable Pricing Supplement.

Purchasers of Notes sold by the Dealers may be required to pay stamp taxes and other charges in accordance with the laws and practices of the country of purchase in addition to the offering price and accrued interest, if any.

Each Series or Tranche of Notes is a new issue of securities with no established trading market. Any one or more of the Dealers may make a market in the Notes, but are not obliged to do so and may discontinue any market-marking, if commenced, at any time without notice. No assurance can be given as to the liquidity of the trading markets for the Notes.

Stabilization

In connection with the issue of Notes in any Series or Tranche under the Program, the Relevant Dealer or Relevant Dealers (if any) named as the Stabilizing Manager(s) (or persons acting on behalf of any Stabilizing Manager(s)) in the applicable Pricing Supplement may over-allot Notes or effect transactions with a view to supporting the market price of the Notes in such a Series at a level higher than that which might otherwise prevail. However, there is no assurance that the Stabilizing Manager (or persons acting on behalf of a Stabilizing Manager) will undertake stabilization action. Any stabilization will be conducted in accordance with all applicable laws and regulations.

TRANSFER RESTRICTIONS

As a result of the following restrictions, purchasers of Notes in the United States are advised to consult legal counsel prior to making any offer, resale, pledge or transfer of Notes.

Each prospective purchaser of Notes that have a legend regarding restrictions on transferability by accepting delivery of this Offering Memorandum, will be deemed to have represented and agreed that this Offering Memorandum is personal to such offeree and does not constitute an offer to any other person or to the public generally to subscribe for or otherwise acquire Notes. Distribution of this Offering Memorandum, or disclosure of any of its contents to any person other than such offeree and those persons, if any, retained to advise such offeree with respect thereto is unauthorized, and any disclosure of any of its contents, without the prior written consent of the Company, is prohibited.

The Notes have not been and will not be registered under the Securities Act or any state securities laws in the United States, and may not be offered or sold in the United States except pursuant to an effective registration statement or in accordance with an applicable exemption from the registration requirements of the Securities Act. Accordingly, the Notes are being offered and sold in the United States only to persons reasonably believed to be QIBs pursuant to Rule 144A. The international offering is being made outside the United States to non-U.S. persons in offshore transactions pursuant to Regulation S.

Sales within the United States

Each purchaser of Notes within the United States pursuant to Rule 144A by accepting this Offering Memorandum will be deemed to have represented, agreed and acknowledged as follows:

- It is (a) a QIB, (b) acquiring such Notes for its own account or for the account of a QIB and (c) aware, and each beneficial owner of such Notes has been advised, that the sale of such Notes to it is being made in reliance on Rule 144A.
- The Notes have not been and will not be registered under the Securities Act and may not be offered, sold, pledged or otherwise transferred except (a) in accordance with Rule 144A to a person that it 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 or (c) pursuant to an exemption from registration under the Securities Act provided by Rule 144 thereunder (if available), in each case in accordance with any applicable securities laws of any state of the United States.
- Such Notes, for compliance with applicable law, will bear a legend to the following effect:

“THIS NOTE (OR ITS PREDECESSOR) HAS NOT BEEN AND WILL NOT BE REGISTERED UNDER, AND WAS ORIGINALLY ISSUED IN A TRANSACTION EXEMPT FROM REGISTRATION UNDER, THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”) AND APPLICABLE SECURITIES LAWS OF THE STATES AND OTHER JURISDICTIONS OF THE UNITED STATES, AND MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR AN APPLICABLE EXEMPTION THEREFROM. EACH PURCHASER OF THIS NOTE IS HEREBY NOTIFIED THAT THE SELLER OF THIS NOTE MAY BE RELYING ON THE EXEMPTION FROM THE PROVISIONS OF SECTION 5 OF THE SECURITIES ACT PROVIDED BY RULE 144A THEREUNDER. TERMS USED HEREIN HAVE THE MEANINGS GIVEN THEM IN REGULATION S UNDER THE SECURITIES ACT.

THE HOLDER OF THIS NOTE BY ITS ACCEPTANCE HEREOF, REPRESENTS AND AGREES FOR THE BENEFIT OF THE COMPANY AND THE DEALERS THAT (A) IT AND ANY ACCOUNT FOR WHICH IT IS ACTING IS A “QUALIFIED INSTITUTIONAL BUYER” (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT) AND THAT IT EXERCISES SOLE INVESTMENT DISCRETION WITH RESPECT TO EACH SUCH ACCOUNT, (B) THIS NOTE MAY BE RESOLD, PLEDGED OR OTHERWISE TRANSFERRED ONLY (1) IN THE UNITED STATES TO A PERSON WHOM THE SELLER REASONABLY BELIEVES IS A “QUALIFIED INSTITUTIONAL BUYER” (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT) IN A TRANSACTION MEETING THE REQUIREMENTS OF SUCH RULE 144A, (2) OUTSIDE THE UNITED STATES IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH RULE 903 OR RULE 904 OF REGULATION S UNDER THE SECURITIES ACT, (3) PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT PROVIDED BY RULE 144 THEREUNDER (IF AVAILABLE) OR (4) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT, AND IN EACH OF SUCH CASES IN ACCORDANCE WITH ANY APPLICABLE SECURITIES LAWS OF ANY STATE OR OTHER JURISDICTION OF THE UNITED STATES, AND (C) THE HOLDER WILL, AND EACH SUBSEQUENT HOLDER IS REQUIRED TO, NOTIFY ANY PURCHASER OF THIS NOTE FROM IT OF THE TRANSFER RESTRICTIONS REFERRED TO IN (B) ABOVE.

[FOR THE PURPOSES OF APPLYING THE ORIGINAL ISSUE DISCOUNT RULES UNDER THE INTERNAL REVENUE CODE OF 1986, AS AMENDED, (1) THE ISSUE DATE OF THIS NOTE IS _____; (2) THE ISSUE PRICE OF THIS NOTE IS _____; (3) THE YIELD TO MATURITY IS _____ % (COMPOUNDED SEMIANNUALLY); AND (4) THIS NOTE IS BEING ISSUED WITH ORIGINAL ISSUE DISCOUNT IN THE AMOUNT OF [U.S.\$] _____ PER U.S.\$1,000 PRINCIPAL AMOUNT.]

- It understands that the Company, the Registrar, the Arrangers, the Dealers and their affiliates, and others will rely upon the truth and accuracy of the foregoing acknowledgements, representations and agreements. If it is acquiring any Notes 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 the foregoing acknowledgements, representations and agreements on behalf of each such account.
- It understands that the Notes offered in reliance on Rule 144A will be represented by the Restricted Global Security. Before any interest in the Restricted Global Security may be offered, sold, pledged or otherwise transferred to a person who takes delivery in the form of an interest in the Unrestricted Global Security, it will be required to provide the Registrar with a written certification (in the form provided in the Indenture) as to compliance with applicable securities laws.

Each Certificated Security that is offered and sold in the United States to an Institutional Accredited Investor pursuant to Section 4(a)(2) of the Securities Act or in a transaction otherwise exempt from registration under the Securities Act will bear a legend to the following effect, in addition to such other legends as may be necessary or appropriate for compliance with applicable law:

“THIS NOTE (OR ITS PREDECESSOR) HAS NOT BEEN AND WILL NOT BE REGISTERED UNDER, AND WAS ORIGINALLY ISSUED IN A TRANSACTION EXEMPT FROM REGISTRATION UNDER, THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”) AND UNDER APPLICABLE SECURITIES LAWS OF THE STATES AND OTHER JURISDICTIONS OF THE UNITED STATES, AND MAY NOT BE OFFERED, RESOLD, PLEDGED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR AN APPLICABLE EXEMPTION THEREFROM. EACH PURCHASER OF THIS NOTE ACKNOWLEDGES FOR THE BENEFIT OF THE COMPANY AND THE DEALERS THE

RESTRICTIONS ON THE TRANSFER OF THIS NOTE SET FORTH BELOW AND AGREES THAT IT SHALL TRANSFER THIS NOTE ONLY AS PROVIDED IN THE INDENTURE ENTERED INTO BY THE COMPANY AND THE TRUSTEE AS OF MAY 3, 2013. THE PURCHASER REPRESENTS THAT IT IS AN INSTITUTIONAL “ACCREDITED INVESTOR” (WITHIN THE MEANING OF RULE 501(A)(1), (2), (3) OR (7) UNDER THE SECURITIES ACT) AND IT IS ACQUIRING THIS NOTE FOR INVESTMENT PURPOSES ONLY AND NOT WITH A VIEW TO ANY RESALE OR DISTRIBUTION HEREOF, SUBJECT TO ITS ABILITY TO RESELL THIS NOTE PURSUANT TO RULE 144A OR REGULATION S UNDER THE SECURITIES ACT OR AS OTHERWISE PROVIDED BELOW AND SUBJECT IN ANY CASE TO ANY REQUIREMENT OF LAW THAT THE DISPOSITION OF THE PROPERTY OF ANY PURCHASER SHALL AT ALL TIMES BE AND REMAIN WITHIN ITS CONTROL.

THE HOLDER OF THIS NOTE BY ITS ACCEPTANCE HEREOF AGREES TO OFFER, RESELL OR OTHERWISE TRANSFER SUCH NOTE, PRIOR TO THE DATE (THE “RESALE RESTRICTION TERMINATION DATE”) WHICH IS ONE YEAR AFTER THE LATER OF THE ORIGINAL ISSUE DATE HEREOF AND THE LAST DATE ON WHICH THE COMPANY WAS THE OWNER OF THIS NOTE (OR ANY PREDECESSOR OF SUCH NOTE), ONLY (A) IN THE UNITED STATES TO A PERSON WHOM IT REASONABLY BELIEVES IS A “QUALIFIED INSTITUTIONAL BUYER” (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT) THAT PURCHASES FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER IN A TRANSACTION MEETING THE REQUIREMENTS OF SUCH RULE 144A, (B) INSIDE THE UNITED STATES TO AN INSTITUTIONAL “ACCREDITED INVESTOR” (WITHIN THE MEANING OF RULE 501 (A)(1), (2), (3) or (7) UNDER THE SECURITIES ACT) THAT IS ACQUIRING THE NOTE FOR ITS OWN ACCOUNT, OR FOR THE ACCOUNT OF SUCH AN INSTITUTIONAL “ACCREDITED INVESTOR,” IN EACH CASE IN A MINIMUM PRINCIPAL AMOUNT OF THE NOTES OF US\$250,000 AND MULTIPLES OF US\$1,000 IN EXCESS THEREOF FOR INVESTMENT PURPOSES ONLY AND NOT WITH A VIEW TO, OR FOR OFFER OR RESALE IN CONNECTION WITH, ANY DISTRIBUTION IN VIOLATION OF THE SECURITIES ACT, (C) OUTSIDE THE UNITED STATES IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH RULE 903 OR RULE 904 OF REGULATION S UNDER THE SECURITIES ACT, (D) PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT PROVIDED BY RULE 144 THEREUNDER (IF AVAILABLE), (E) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR (F) PURSUANT TO ANOTHER AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT, SUBJECT TO THE COMPANY’S RIGHT PRIOR TO ANY SUCH OFFER, SALE OR TRANSFER PURSUANT TO CLAUSES (B), (D) OR (F) TO REQUIRE THE DELIVERY OF AN OPINION OF COUNSEL, CERTIFICATION AND/OR OTHER INFORMATION SATISFACTORY TO THE COMPANY, AND IN EACH OF THE FOREGOING CASES, A CERTIFICATE OF TRANSFER IN THE FORM APPEARING ON THE OTHER SIDE OF THIS NOTE IS COMPLETED AND DELIVERED BY THE TRANSFEROR TO THE TRUSTEE AND, IN EACH OF THE FOREGOING CASES, NOT IN VIOLATION OF ANY APPLICABLE STATE SECURITIES LAWS. THIS LEGEND WILL BE REMOVED UPON THE REQUEST OF THE HOLDER AFTER THE RESALE RESTRICTION TERMINATION DATE. THE HOLDER WILL, AND EACH SUBSEQUENT HOLDER IS REQUIRED TO, NOTIFY ANY PURCHASER OF THIS NOTE FROM IT OF THE TRANSFER RESTRICTIONS REFERRED TO IN THIS PARAGRAPH.

IF REQUESTED BY THE COMPANY OR A DEALER, THE PURCHASER AGREES TO PROVIDE THE INFORMATION NECESSARY TO DETERMINE WHETHER THE TRANSFER OF THIS NOTE IS PERMISSIBLE UNDER THE SECURITIES ACT. THIS NOTE AND RELATED DOCUMENTATION MAY BE AMENDED OR SUPPLEMENTED FROM TIME TO TIME TO MODIFY THE RESTRICTIONS ON AND PROCEDURES FOR REALES AND OTHER TRANSFERS OF THIS NOTE TO REFLECT ANY CHANGE IN APPLICABLE LAW OR REGULATION (OR THE INTERPRETATION THEREOF) OR IN PRACTICES RELATING TO THE REALES OR TRANSFERS OF RESTRICTED SECURITIES GENERALLY. BY THE

ACCEPTANCE OF THIS NOTE, THE HOLDER HEREOF SHALL BE DEEMED TO HAVE AGREED TO ANY SUCH AMENDMENT OR SUPPLEMENT.

[FOR THE PURPOSES OF APPLYING THE ORIGINAL ISSUE DISCOUNT RULES UNDER THE INTERNAL REVENUE CODE OF 1986, AS AMENDED, (1) THE ISSUE DATE OF THIS NOTE IS ; (2) THE ISSUE PRICE OF THIS NOTE IS ; (3) THE YIELD TO MATURITY IS % (COMPOUNDED SEMIANNUALLY); AND (4) THIS NOTE IS BEING ISSUED WITH ORIGINAL ISSUE DISCOUNT IN THE AMOUNT OF [U.S.\$] PER U.S.\$1,000 PRINCIPAL AMOUNT.]

IN CONNECTION WITH ANY TRANSFER, THE HOLDER WILL DELIVER TO THE REGISTRAR AND TRANSFER AGENT SUCH CERTIFICATES AND OTHER INFORMATION AS SUCH TRANSFER AGENT MAY REASONABLY REQUIRE TO CONFIRM THAT THE TRANSFER COMPLIES WITH THE FOREGOING RESTRICTIONS.”

Each purchaser of Certificated Securities will be required to deliver to the Company and the Registrar an investment representation letter substantially in the form prescribed in the Indenture. The Certificated Securities in definitive form will be subject to the transfer restrictions set forth in the above legend, such letter and in the Indenture. Inquiries concerning transfers of Notes should be made to any Dealer.

Sales outside the United States

Regulation S prohibits purchasers of the Notes under Regulation S from offering, selling or delivering the Notes within the United States or to or for the account or benefit of U.S. persons until the expiration of the period ending 40 days after the later of the commencement of the offering of the Notes and the date the Notes were originally issued (the “Distribution Compliance Period”).

Each purchaser of the Notes outside the United States pursuant to Regulation S by accepting delivery of this Offering Memorandum and the Notes will be deemed to have represented, agreed and acknowledged that it is, or at the time Notes are purchased will be, the beneficial owner of such Notes and (a) it is located outside the United States and is not a U.S. person (as defined under Regulation S and the Internal Revenue Code) and (b) it is not an affiliate of the Company or a person acting on behalf of such an affiliate.

Each purchaser of the Notes outside the United States pursuant to Regulation S and each subsequent purchaser of such Notes in resales prior to the expiration of the Distribution Compliance Period by accepting delivery of this Offering Memorandum and the Notes, will be deemed to have represented, agreed and acknowledged that:

- a. It is, or at the time the Notes are purchased will be, the beneficial owner of such Notes and (A) it is not a U.S. person and it is located outside the United States (within the meaning of Regulation S) and (B) it is not an affiliate of the Company or a person acting on behalf of such an affiliate.
- b. It understands that such Notes have not been and will not be registered under the Securities Act and that, prior to the expiration of the Distribution Compliance Period, it will not offer, sell, pledge or otherwise transfer such Notes except (A) in accordance with Rule 144A under the Securities Act to a person that it and any person acting on its behalf reasonably believe is a QIB purchasing for its own account or the account of a QIB or (B) in an offshore transaction in accordance with Rule 903 or Rule 904 of Regulation S, in each case in accordance with any applicable securities laws of any State of the United States.

- c. The Company, the Registrar, the Dealers and their affiliates, and others will rely upon the truth and accuracy of the foregoing acknowledgements, representations and agreements and, if any such acknowledgements, representations or agreements deemed to have been made by virtue of its purchase of the Notes are no longer accurate, it agrees to promptly notify us.
- d. It understands that Registered Notes offered in reliance on Regulation S will be represented by an Unrestricted Global Security, which will, unless otherwise agreed by us in accordance with applicable law, bear a legend substantially to the following effect:

“THIS NOTE (OR ITS PREDECESSOR) HAS NOT BEEN AND WILL NOT BE REGISTERED UNDER, AND WAS ORIGINALLY ISSUED IN A TRANSACTION EXEMPT FROM REGISTRATION UNDER, THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”) AND APPLICABLE SECURITIES LAWS OF THE STATES AND OTHER JURISDICTIONS OF THE UNITED STATES, AND MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR AN APPLICABLE EXEMPTION THEREFROM. TERMS USED HEREIN HAVE THE MEANINGS GIVEN THEM IN REGULATION S UNDER THE SECURITIES ACT.”

Bearer Notes will be issued in accordance with rules in substantially the same form as United States Treasury Regulations Section 1.163-5(c)(2)(i)(D) for purposes of Section 4701 of the Code (the “D Rules”), or in accordance with rules in substantially the same form as United States Treasury Regulations Section 1.163-5(c)(2)(i)(C) for purposes of Section 4701 of the Code (the “C Rules”) or not in accordance with the D Rules or the C Rules, as specified in the applicable Pricing Supplement.

In respect of Notes issued in accordance with the D Rules, each purchaser has represented and agreed that:

- a. except to the extent permitted under the D Rules, (x) it has not offered or sold, and during the restricted period will not offer or sell, Notes to a person who is within the United States or its possessions or to a United States person, and (y) such purchaser has not delivered and will not deliver within the United States or its possessions definitive Notes that are sold during the restricted period;
- b. it has and throughout the restricted period will have in effect procedures reasonably designed to ensure that its employees or agents who are directly engaged in selling Notes are aware that such Notes may not be offered or sold during the restricted period to a person who is within the United States or its possessions or to a United States person, except as permitted by the D Rules;
- c. if such purchaser is a United States person, it has represented that it is acquiring the Notes for purposes of resale in connection with their original issuance and if such purchaser retains Notes for its own account, it will only do so in accordance with the requirements of the D Rules;
- d. with respect to each affiliate that acquires Notes from such purchaser for the purposes of offering or selling such Notes during the restricted period, such purchaser either (x) repeats and confirms the agreements contained in sub-clauses (i), (ii) and (iii) on such affiliate’s behalf or (y) agrees that it will obtain from such affiliate for the benefit of the Issuer the agreements contained in sub-clauses (i), (ii) and (iii); and

- e. such purchaser will obtain for the benefit of the Company the representations and agreements contained in sub-clauses (i), (ii), (iii) and (iv) from any person other than its affiliate with whom it enters into a written contract, as defined in the D Rules, for the offer and sale during the restricted period of the Note.

Terms used in the above paragraph have the meanings given to them by the U.S. Internal Revenue Code of 1986, as amended, and regulations thereunder, including the D Rules. Notes issued pursuant to the D Rules and any Receipts, Coupons or Talons appertaining thereto will bear the following legend:

“ANY UNITED STATES PERSON WHO HOLDS THIS OBLIGATION WILL BE SUBJECT TO LIMITATIONS UNDER THE UNITED STATES INCOME TAX LAWS, INCLUDING THE LIMITATIONS PROVIDED IN SECTIONS 165(j) AND 1287(a) OF THE INTERNAL REVENUE CODE.”

In respect of Bearer Notes issued in accordance with the C Rules, Notes must be issued and delivered outside the United States and its possessions in connection with their original issuance. Each purchaser has represented and agreed that, in connection with the original issuance of Notes, it has not offered, sold or delivered and will not offer, sell or deliver, directly or indirectly, Notes issued in accordance with the C Rules within the United States or its possessions and it has not communicated, and will not communicate, directly or indirectly, with a prospective purchaser if such purchaser is within the United States or its possessions and will not otherwise involve its U.S. office in the offer or sale of Notes. Terms used in this paragraph have the meaning given to them by the U.S. Internal Revenue Code of 1986, as amended, and regulations thereunder, including the C Rules.

Prior to the expiration of the Distribution Compliance Period, before any interest in the Temporary Global Note or Permanent Global Note may be offered, sold, pledged or otherwise transferred to a person who takes delivery in the form of an interest in such Notes, it will be required to provide the Registrar with a written certification (in the form provided in the Indenture) as to compliance with the applicable securities laws.

General

Delivery of the Notes may be made against payment therefor on or about a date which will occur more than two business days after the date of pricing of the Notes which date may be specified in the Pricing Supplement. Pursuant to Rule 15c6-1 under 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 Notes on the date of pricing or the next succeeding business day will be required, by virtue of the fact that the Notes may initially settle on or about a date which will occur more than two business days after the date of pricing of the Notes to specify an alternate settlement cycle at the time of any such trade to prevent a failed settlement. Purchasers of Notes who wish to trade Notes on the date of pricing or the next succeeding business day should consult their own advisor.

UNITED STATES BENEFIT PLAN INVESTOR CONSIDERATIONS

The following is a summary of certain considerations associated with the purchase of the Notes by employee benefit plans that are subject to Title I of the U.S. Employee Retirement Income Security Act of 1974, as amended (“ERISA”), plans, individual retirement accounts (“IRAs”) and other arrangements that are subject to Section 4975 of the Internal Revenue Code or provisions under any other federal, state, local, non-U.S. or other laws or regulations that are similar to such provisions of ERISA or the Internal Revenue Code (collectively, “Similar Laws”), and entities whose underlying assets are considered to include “plan assets” (within the meaning of 29 C.F.R. Section 2510.3-101 (as modified by Section 3(42) of ERISA)) of any such plan, account or arrangement (collectively, “Plans”).

General Fiduciary Matters

ERISA and the Internal Revenue Code impose certain duties on Plans subject to Title I of ERISA or Section 4975 of the Internal Revenue Code (an “ERISA Plan”) and on persons who are fiduciaries with respect to ERISA Plans and prohibit certain transactions involving the assets of an ERISA Plan and its fiduciaries or other interested parties. Under ERISA and the Internal Revenue Code, any person who exercises any discretionary authority or control over the administration of such an ERISA Plan or the management or disposition of the assets of such an ERISA Plan, or who renders investment advice for a fee or other compensation to such an ERISA Plan, is generally considered to be a fiduciary of the ERISA Plan.

In considering an investment in the Notes with a portion of the assets of any Plan, a fiduciary should consult with its counsel in order to determine the suitability of the Notes for such Plan, including whether the investment is in accordance with the documents and instruments governing the Plan and the applicable provisions of ERISA, the Internal Revenue Code or any Similar Law and the need for, and the availability, if necessary, of any exemptive relief under any such laws or regulations. In addition, a fiduciary of a Plan should consult with its counsel in order to determine if the investment satisfies the fiduciary’s duties to the Plan including, without limitation, the prudence, diversification, delegation of control and prohibited transaction provisions of ERISA, the Internal Revenue Code and any other applicable Similar Laws.

Each Plan should consider the fact that none of us, the Arrangers, any of the Dealers or any of our or their respective affiliates (the “Transaction Parties”) is acting, or will act, as a fiduciary to any Plan with respect to the decision to purchase or hold the Notes. The Transaction Parties are not undertaking to provide impartial investment advice or advice based on any particular investment need, or to give advice in a fiduciary capacity, with respect to the decision to purchase or hold the Notes. All communications, correspondence and materials from the Transaction Parties with respect to the Notes are intended to be general in nature and are not directed at any specific purchaser of the Notes, and do not constitute advice regarding the advisability of investment in the Notes for any specific purchaser. The decision to purchase and hold the Notes solely by each prospective Plan purchaser on an arm’s length basis.

Prohibited Transaction Issues

Section 406 of ERISA and Section 4975 of the Internal Revenue Code prohibit ERISA Plans from engaging in specified transactions involving plan assets with persons or entities who are “parties in interest,” within the meaning of ERISA, or “disqualified persons,” within the meaning of Section 4975 of the Internal Revenue Code, unless an exemption is available. A party in interest or disqualified person who engaged in a non-exempt prohibited transaction may be subject to excise taxes and other penalties and liabilities under ERISA and the Internal Revenue Code. In addition, the fiduciary of the

ERISA Plan that engaged in such a non-exempt prohibited transaction may be subject to penalties and liabilities under ERISA and the Internal Revenue Code. The acquisition and/or holding of Notes by an ERISA Plan with respect to which a Transaction Party, an Arranger or the Trustee is considered a party in interest or disqualified person may constitute or result in a direct or indirect prohibited transaction under Section 406 of ERISA and/or Section 4975 of the Internal Revenue Code, unless the investment is acquired and is held in accordance with an applicable statutory, class or individual prohibited transaction exemption. In this regard, certain exemptions from the prohibited transaction rules could be applicable to the purchase and holding of Notes by an ERISA Plan, depending on the type and circumstances of the fiduciary making the decision to acquire such Notes and the relationship of the party in interest or disqualified person to the ERISA Plan. Included among these exemptions are Section 408(b)(17) of ERISA, Section 4975(d)(20) of the Internal Revenue Code or Prohibited Transaction Class Exemption (“PTCE”), 84- 14 respecting transactions determined by independent qualified professional asset managers, PTCE 90-1 respecting insurance company pooled separate accounts, PTCE 91-38 respecting bank collective investment funds, PTCE 95- 60 respecting life insurance company general accounts and PTCE 96- 23 respecting transactions determined by in-house asset managers (collectively, the “Class Exemptions”). However, there can be no assurance that all of the conditions of any of these statutory or Class Exemptions or any other exemption will be available with respect to any particular transaction involving the Notes.

Because of the foregoing, the notes should not be purchased or held by any person investing “plan assets” of any Plan, unless such purchase and holding (i) are entitled to exemption relief from the prohibited transaction provisions of ERISA and the Internal Revenue Code and are otherwise permissible under all applicable Similar Laws or (ii) would not otherwise constitute a non-exempt prohibited transaction under Section 406 of ERISA or Section 4975 of the Internal Revenue Code or any violation of applicable Similar Laws.

The foregoing discussion is general in nature and is not intended to be all inclusive. Due to the complexity of these rules and the penalties that may be imposed upon persons involved in non-exempt prohibited transactions, it is particularly important that fiduciaries, or other persons considering purchasing the Notes on behalf of, or with the assets of, any Plan, consult with their counsel regarding the potential applicability of ERISA, Section 4975 of the Internal Revenue Code and any Similar Laws to such investment and whether an exemption would be applicable to the purchase and holding of the Notes. The sale of a Note is in no respect a representation by any Transaction Party or any of their respective affiliates or representatives that such an investment meets all relevant legal requirements with respect to investments by any such Plan or that such investment is appropriate for any such Plan.

Representation

Accordingly, by acceptance of a Note, each purchaser and subsequent transferee thereof will be deemed to have represented and warranted that either (i) no portion of the assets used by such purchaser or transferee to acquire or hold the notes or an interest therein constitutes assets of any Plan or (ii) the purchase and holding of the notes or an interest therein by such purchaser or transferee will not constitute a non-exempt prohibited transaction under Section 406 of ERISA or Section 4975 of the Internal Revenue Code or a similar violation under any applicable Similar Laws.

None of the Transaction Parties or any other party to the transactions contemplated by this offering memorandum or any of their respective affiliates is acting, or will act, as a fiduciary to any Plan with respect to the decision to purchase or hold the Notes or is undertaking to provide impartial investment advice or give advice in a fiduciary capacity with respect to the decision to purchase or hold the Notes.

LEGAL MATTERS

Certain legal matters with respect to the Notes will be passed upon for us by Latham & Watkins LLP as to matters of New York law and U.S. federal securities law and by Ali Budiardjo, Nugroho, Reksodiputro as to matters of Indonesian law. Certain legal matters with respect to the Notes will be passed upon for the Arrangers and Dealers by Allen & Overy (Asia) Pte Ltd as to matters of New York law and U.S. federal securities law and by Ginting & Reksodiputro in association with Allen & Overy LLP as to matters of Indonesian law.

INDEPENDENT PUBLIC ACCOUNTANTS

Our consolidated financial statements as of December 31, 2019, 2018 and 2017 and for the years then ended have been audited and reviewed, respectively, by KAP Purwantono, Sungkoro & Surja (the Indonesian member firm of Ernst & Young Global Limited), independent public accountants, in accordance with Standards on Auditing established by the IICPA, as stated in their audit report appearing elsewhere in this Offering Memorandum.

Our unaudited interim consolidated financial statements as of September 30, 2020 and for the nine-month periods ended September 30, 2020 and 2019 have been reviewed by KAP Purwantono, Sungkoro & Surja (the Indonesian member firm of Ernst & Young Global Limited), independent public accountants, in accordance with SRE 2410, established by the IICPA, as stated in their review report appearing elsewhere in this Offering Memorandum (presented combined with the audit report mentioned above). A review conducted in accordance with SRE 2410 established by the IICPA is substantially less in scope than an audit conducted in accordance with Standards on Auditing established by the IICPA, and as stated in their review report appearing in this Offering Memorandum (presented combined with the audit report mentioned above), KAP Purwantono, Sungkoro & Surja (the Indonesian member firm of Ernst & Young Global Limited), independent public accountant, did not audit and do not express any opinion on such unaudited interim consolidated financial statements included elsewhere in this Offering Memorandum.

ENERGY INDUSTRY CONSULTANT

The information contained in the section “Industry Overview” in this Offering Memorandum, including all statistics and data therein, was prepared by Wood Mackenzie, independent energy industry consultants and experts in the energy industry, in the Wood Mackenzie Report. Wood Mackenzie has given and not withdrawn its written consent to the issue of this Offering Memorandum with the inclusion herein of their name and all references thereto and to the inclusion of the “Industry Overview” section in this Offering Memorandum, in the form and context in which it appears, and to act in such capacity in relation thereto. The “Industry Overview” section does not include all of the information that may be important for an investment decision.

SUMMARY OF CERTAIN SIGNIFICANT DIFFERENCES BETWEEN IFAS AND U.S. GAAP

Our consolidated financial statements included elsewhere in this Offering Memorandum have been prepared and presented in accordance with Indonesian Financial Accounting Standards (“IFAS”). Significant differences exist between IFAS and United States Generally Accepted Accounting Principles (“U.S. GAAP”), which might be material to the consolidated financial statements herein. The matters described below should not be expected to reveal all differences between IFAS and U.S. GAAP that are relevant to us.

Management has made no attempt to quantify the impact of those differences, nor has any attempt been made to identify all disclosure, presentation, or classification differences that would affect the manner in which transactions or events are presented in the consolidated financial statements. Had any such quantification or identification been undertaken by management, other potential significant accounting and disclosure differences may have come to its attention which are not summarized below. Accordingly, it should not be construed that the following summary of certain significant differences between IFAS and U.S. GAAP is complete.

Regulatory bodies that promulgate IFAS and U.S. GAAP have significant ongoing projects that could affect future comparisons such as this one. Further, no attempt has been made to identify future differences between IFAS and U.S. GAAP as a result of prescribed changes in accounting standards and regulations. Finally, no attempt has been made to identify all future differences between IFAS and U.S. GAAP that may affect the consolidated financial statements as a result of transactions or events that may occur in the future.

Management believes that the application of U.S. GAAP to the consolidated financial statements could have a material and significant impact upon the consolidated financial statements reported under IFAS. In making an investment decision, investors must rely upon their own examination of us, terms of the offering, and the consolidated financial statements. Potential investors should consult their own professional advisors for an understanding of the differences between IFAS and U.S. GAAP, and how those differences might affect the consolidated financial statements included herein.

Interim Financial Reporting

Under IFAS, each interim period is viewed as a discrete reporting period. A cost that does not meet the definition of an asset at the end of an interim period is not deferred, and a liability recognized at an interim reporting date must represent an existing obligation. Under U.S. GAAP, each interim period is viewed as an integral part of an annual period. As a result, certain costs that benefit more than one interim period may be allocated among those periods, resulting in deferral or accrual of certain costs.

Consolidation, Joint Venture Accounting, and Equity-Method Investment

IFAS provides a single control model for all entities, including structured entities. An investor controls an investee when it 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. Potential voting rights and the notion of “de facto control” are considered. U.S. GAAP provides for primarily two consolidation models (i.e. variable interest model and voting model). The variable interest model evaluates control based on determining which party has power and benefits, while the voting model evaluates control based on existing voting rights. All entities are first evaluated as potential variable interest entities (“VIEs”). If an entity is not a VIE, it is evaluated for control pursuant to the voting model. Potential voting rights are generally not included in either evaluation and the notion of “de factor control” is not considered.

Under IFAS, when relevant, preparation of consolidated financial statements is required in all cases, and that the “parent-only” financial statements (which are not required part of consolidated financial statements), if presented, can only be presented as supplementary information to the consolidated financial statements. Under U.S. GAAP, when relevant, preparation of consolidated financial statements is required, although certain industry-specific exceptions exist (e.g. investment companies).

Under IFAS, the financial statements of a parent and its consolidated subsidiaries are prepared as of the same date. When the parent and the subsidiary have different reporting period end dates, the subsidiary prepares (for consolidation purposes) additional financial statements as of the same date as those of the parent unless it is impracticable. If it is impracticable, when the difference in the reporting period end dates of the parent and subsidiary is three months or less, the financial statements of the subsidiary may be adjusted to reflect significant transactions and events, and it is not necessary to prepare additional financial statements as of the parent’s reporting date. Under U.S. GAAP, the reporting entity and the consolidated entities are permitted to have differences in year-ends of up to three months. The effects of significant events occurring between the reporting dates of the reporting entity and the controlled entities are disclosed in the financial statements.

Under IFAS, uniform accounting policies between parent and subsidiary are required. Under U.S. GAAP, uniform accounting policies between parent and subsidiary are not required.

Under IFAS, transactions that result in decreases in the ownership interest of any subsidiary without a loss of control are accounted for as equity transactions in the consolidated entity (i.e. no gain or loss is recognized). Under U.S. GAAP, transactions that result in decreases in the ownership interest of any subsidiary without a loss of control are accounted for as equity transactions in the consolidated entity only when: (i) the subsidiary is a business or non-profit activity (except in a conveyance of oil and gas mineral rights), or (i) the subsidiary is not a business or non-profit activity, but the substance of the transaction is not addressed directly by other accounting standard under U.S. GAAP.

Under IFAS, for certain transactions that result in a loss of control of a subsidiary, the accounting guidance is generally consistent with U.S. GAAP, except that the related guidance applies to all subsidiaries, including those that are not businesses or non-profit activities and those that involve conveyance of oil and gas mineral rights. In addition, the gain or loss resulting from the loss of control of a subsidiary that does not constitute a business in a transaction involving an associate or a joint venture that is accounted for using the equity method is recognized only to the extent of the unrelated investors’ interests in that associate or joint venture. Under U.S. GAAP, for certain transactions that result in a loss of control of a subsidiary, any retained non-controlling investment in the former subsidiary is remeasured to fair value on the date the control is lost, with the gain or loss included in income along with any gain or loss on the ownership interest sold. This accounting is limited only to the following transactions: (i) loss of control of a subsidiary that is a business or non-profit activity (except for a conveyance of oil and gas mineral rights), and (ii) loss of control of a subsidiary that is not a business or non-profit activity if the substance of the transaction is not addressed directly by other accounting standard under U.S. GAAP.

Under IFAS, for transactions that result in a loss of control of a group of assets that meet the definition of a business, any retained non-controlling investment in the former group of assets is remeasured to fair value on the date control is lost, with the gain or loss included in income along with any gain or loss on the ownership interest sold. Under U.S. GAAP, for certain transactions that result in a loss of control of a group of assets that meet the definition of a business or non-profit activity, any retained non-controlling investment in the former group of assets is remeasured to fair value on the date control is lost, with the gain or loss included in income along with any gain or loss on the ownership interest sold. However, this accounting does not apply to: (i) a conveyance of oil and gas

mineral rights, and (ii) a transfer of a good or service in a contract with a customer within the scope of Accounting Standard Codification 606, “Revenue from Contracts with Customers” (“ASC 606”).

Business Combinations

Under IFAS, non-controlling interest components that are present ownership interests and entitle their holders to a proportionate share of the acquiree’s net assets in the event of liquidation may be measured at: (i) fair value, including goodwill, or (ii) the non-controlling interest’s proportionate share of the fair value of the acquiree’s identifiable net assets, exclusive of goodwill. All other components of non-controlling interest are measured at fair value unless another measurement basis is required by IFRS. The choice is available on a transaction-by-transaction basis. Under U.S. GAAP, non-controlling interest is measured at fair value, including goodwill.

Under IFAS, there is no specific accounting standard that governs the accounting for combination of entities under common control. In practice, entities either follow an approach like U.S. GAAP (i.e. historical cost) as described below or apply the acquisition method (fair value) if there is substance to the transaction (policy election). U.S. GAAP requires that the receiving entity records the net assets at their carrying amounts in the accounts of the transferor (historical cost) in a combination of entities under common control.

Under IFAS, there is no specific accounting standard that governs pushdown accounting, and accordingly, it is unclear whether pushdown accounting is acceptable. Under U.S. GAAP, an acquired entity can choose to apply pushdown accounting in its separate financial statements when an acquirer obtains control of it or later; however, an entity’s election to apply pushdown accounting is irrevocable.

Under IFAS, an acquirer recognizes measurement-period adjustments pertained to a business combination on a retrospective basis, whereby the acquirer revises comparative information for any prior periods presented, including revisions for any effects on the prior-period income statement. Under U.S. GAAP, an acquirer recognizes measurement-period adjustments pertained to a business combination during the period in which it determines the amounts, including the effect on earnings of any amounts it would have recorded in previous periods if the accounting had been completed at the acquisition date.

Under IFAS, a business consists of inputs and processes applied to those inputs that have the ability to create outputs. Although businesses usually have outputs, outputs are not required for an integrated set to qualify as a business. The term “substantive process” is not defined in IFAS. An integrated set of activities and assets requires two essential elements (i.e. inputs and processes) applied to those inputs, which together are or will be used to create outputs. However, a business does not have to include all the inputs or processes that the seller used in operating that business if market participants are capable of to produce outputs, for example, by integrating the business with their own inputs and processes. Outputs are defined as the result of inputs and processes applied to those inputs that provide or have the ability to provide a return in the form of dividends, lower costs, or other economic benefits directly to investors or other owners, members, or participants. There is no threshold test under IFAS. Under U.S. GAAP, a business must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs. An output is the result of inputs and processes applied to those inputs that provide goods or services to customers, investment income (such as dividends or interest), or other revenues. That is, the focus is on revenue-generating activities, which more closely aligns the definition with the description of outputs in the new revenue guidance in ASC 606. An entity does not need to evaluate whether any missing elements could be replaced by a market participant. An entity must first evaluate whether substantially all the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar

identifiable assets. If that threshold is met, the set is not a business and does not require further evaluation. Gross assets acquired should exclude cash and cash equivalents, deferred tax assets, and any goodwill that would be created in a business combination from the recognition of deferred tax liabilities.

Inventory

Under IFAS, the use of the last-in-first-out (“LIFO”) method in determining the cost of inventory is not permitted and that same cost formula must be applied to all inventories similar in nature or use to the entity. Under U.S. GAAP, the use of the LIFO method in determining the cost of inventory is permitted; however, a consistent cost formula for all inventories similar in nature is not explicitly required.

Under IFAS, inventory is carried at the lower of cost or net realizable value, whereby net realizable value is defined as the estimated selling price less the estimated costs of completion and the estimated costs necessary to make the sale. Under U.S. GAAP, only inventory other than that accounted for under the LIFO or retail inventory method (“RIM”) is carried at the lower of cost and net realizable value.

Under IFAS, previously recognized impairment losses on inventories are reversed up to the amount of the original impairment loss when the reasons for the impairment no longer exist. Under U.S. GAAP, any write-down of inventory below cost creates a new cost basis that subsequently cannot be reversed.

Under IFAS, permanent markdowns affect the average gross margin used in applying the RIM. Reduction of the carrying cost of inventory to below the lower of cost and net realizable value is not allowed. Under U.S. GAAP, permanent markdowns do not affect the gross margins used in applying the RIM; rather, such markdowns reduce the carrying cost of inventory to net realizable value, less an allowance for an approximately normal profit margin, which may be less than both original cost and net realizable value.

Land Rights

In Indonesia, except for ownership rights granted to individuals, the title to land rests with the government. Land use is accomplished through land rights whereby the holder of the rights enjoys the full use of the land for a stated period, subject to extensions. Under IFAS, land rights are not depreciated unless management believes that it is highly unlikely that extensions of the land rights will not be granted by the government. The predominant practice is to capitalize (and not to amortize) the costs of acquired land rights, as entities generally believe that extensions of the land rights will be granted by the government. Other expenses associated with the acquisition of government permits to use the land, including legal fees, area survey and re-measurement fees, notary fees, and taxes, are capitalized and amortized over the period of the right to use the land. Under U.S. GAAP, the costs and other expenses associated with the acquisition of land rights are capitalized and amortized over the period of the right to use the land.

Long-Lived Assets

Under IFAS, revaluation of long-lived assets is a permitted accounting policy election for an entire class of assets, requiring revaluation to fair value on a regular basis. Under U.S. GAAP, revaluation of long-lived assets is not permitted.

Under IFAS, component depreciation of long-lived assets is required if components of an asset have differing patterns of benefit. Under U.S. GAAP, component depreciation of long-lived assets is permitted, but it is not common.

Under IFAS, eligible borrowing costs that are capitalized as part of a qualifying long-lived asset include exchange rate differences from foreign currency borrowings to the extent that they are regarded as an adjustment to interest costs. For borrowings associated with a specific qualifying asset, actual borrowing costs are capitalized offset by investment income earned on those borrowings. Under U.S. GAAP, eligible borrowing costs do not include exchange rate differences. Interest earned on the investment of borrowed funds generally cannot offset interest costs incurred during the period. For borrowings associated with a specific qualifying asset, borrowing costs equal to the weighted-average accumulated expenditures times the borrowing rate are capitalized.

Under IFAS, costs that represent a replacement of a previously identified component of an asset are capitalized if future economic benefits are probable and the costs can be reliably measured; otherwise, these costs are expensed as incurred. Under U.S. GAAP, multiple accounting models have evolved in practice for entities in the airline industry, including expense costs as incurred, capitalize costs and amortize through the date of the next overhaul, or follow the built-in overhaul approach (i.e., an approach with certain similarities to composite depreciation).

Under IFAS, investment property is separately defined as property held to earn rent or for capital appreciation (or both) and may include property held by lessees under a finance or operating lease. Investment property may be accounted for on a historical cost basis or on a fair value basis as an accounting policy election. Capitalized operating leases classified as investment property must be accounted for using the fair value model. Under U.S. GAAP, investment property is not separately defined and, therefore, is accounted for as held and used or held for sale.

Intangible Assets

Under IFAS, development costs are capitalized when technical and economic feasibility of a project can be demonstrated in accordance with specific criteria, including demonstrating technical feasibility, intent to complete the asset, and ability to sell the asset in the future. Although application of these principles may be largely consistent with those under U.S. GAAP, there is no separate guidance addressing computer software development costs. Under U.S. GAAP, development costs are expensed as incurred unless addressed by guidance in another accounting standard. Development costs related to computer software developed for external use are capitalized once technological feasibility is established in accordance with specific criteria. In the case of software developed for internal use, only those costs incurred during the application development stage may be capitalized.

Under IFAS, advertising and promotional costs are expensed as incurred. A prepayment may be recognized as an asset only when payment for the goods or services is made in advance of the entity having access to the goods or receiving the services. Under U.S. GAAP, advertising and promotional costs are either expensed as incurred or expensed when the advertising takes place for the first time (policy choice).

Under IFAS, revaluation to fair value of intangible assets other than goodwill is a permitted accounting policy election for a class of intangible assets. Because revaluation requires reference to an active market for the specific type of intangible, this is relatively uncommon in practice. Under U.S. GAAP, revaluation of intangible assets is not permitted.

Impairment of Long-Lived Assets, Goodwill, and Intangible Assets

Under IFAS, the one-step approach requires that an impairment loss calculation of long-lived assets, goodwill, or intangible assets be performed if impairment indicators exist. Under U.S. GAAP, the two-step approach requires that a recoverability test be performed first (the carrying amount of the asset is compared with the sum of future undiscounted cash flows using entity-specific assumptions generated through use and eventual disposition). If it is determined that the asset is not recoverable, an impairment loss calculation is required.

Under IFAS, an impairment loss is the amount by which the carrying amount of the asset exceeds its recoverable amount, which is the higher of: (i) fair value less costs to sell, and (ii) value in use (the present value of future cash flows in use, including disposal value). Under U.S. GAAP, an impairment loss is the amount by which the carrying amount of the asset exceeds its fair value using market participant assumptions.

Under IFAS, in assessing the impairment of goodwill, goodwill is allocated to a cash-generating unit ("CGU") or group of CGUs that represents the lowest level within the entity at which the goodwill is monitored for internal management purposes and cannot be larger than an operating segment (before aggregation). Further, the qualitative assessment is not permitted. The one-step approach requires that an impairment test be done at the CGU level by comparing the CGU's carrying amount (including goodwill) with its recoverable amount. The impairment loss on the CGU (the amount by which the CGU's carrying amount (including goodwill) exceeds its recoverable amount) is allocated first to reduce goodwill to zero, then, subject to certain limitations, the carrying amount of other assets in the CGU are reduced pro rata, based on the carrying amount of each asset. Under U.S. GAAP, in assessing the impairment of goodwill, goodwill is assigned to a reporting unit, which is defined as an operating segment or one level below an operating segment (component). Further, an entity has the option to qualitatively assess whether it is more-likely-than-not that the fair value of a reporting unit is less than its carrying amount. The entity performs a recoverability test under the two-step approach first at the reporting unit level (the carrying amount of the reporting unit is compared with the reporting unit's fair value). If the carrying amount of the reporting unit exceeds its fair value, the entity performs impairment testing. The impairment loss is determined as the amount by which the carrying amount of goodwill exceeds the implied fair value of the goodwill within its reporting unit.

Under IFAS, in assessing the impairment of indefinite-lived intangibles, qualitative assessment is not permitted. The one-step approach requires that an impairment test be done at the CGU level by comparing the CGU's carrying amount (including goodwill) with its recoverable amount. If the indefinite-lived intangible asset does not generate cash inflows that are largely independent of those from other assets or groups of assets, then the indefinite-lived intangible asset should be tested for impairment as part of the CGU to which it belongs unless certain conditions are met. Under U.S. GAAP, in determining the impairment of indefinite-lived intangibles, an entity has the option to qualitatively assess whether it is more-likely-than-not that an indefinite-lived intangible asset is impaired. If a quantitative test is performed, the quantitative impairment test for an indefinite-lived intangible asset requires a comparison of the fair value of the asset with its carrying amount. If the carrying amount of an intangible asset exceeds its fair value, the entity should recognize an impairment loss in an amount equal to that excess. Indefinite-lived intangible assets separately recognized should be assessed for impairment individually unless they operate in concert with other indefinite-lived intangible assets as a single asset (i.e. the indefinite-lived intangible assets are essentially inseparable). Indefinite-lived intangible assets may not be combined with other assets (e.g. finite-lived intangible assets or goodwill) for purposes of an impairment test.

Under IFAS, reversal of impairment loss previously recognized is prohibited for goodwill. Other assets must be reviewed at the end of each reporting period for reversal indicators. If appropriate, loss should be reversed up to the newly estimated recoverable amount, not to exceed the initial carrying

amount adjusted for depreciation. Under U.S. GAAP, reversal of impairment loss previously recognized is prohibited for all assets to be held and used.

Financial Instruments

Under IFAS, prior to 1 January 2020, accounting for financial instruments are prescribed in various standards such as:

- SFAS 50 — Financial Instruments: Presentation
- SFAS 55 — Financial Instruments: Recognition and Measurement
- SFAS 60 — Financial Instruments: Disclosures
- Interpretation of Financial Accounting Standards 26 — Reassessment of Embedded Derivatives
- IFAS 28 — Extinguishing Financial Liabilities — with Equity Instruments

SFAS 71 — Financial Instruments has replaced SFAS 55 for the financial year beginning on or after 1 January 2020. However, for some entities, SFAS 55 is remain relevant (for example insurers that apply the SFAS 62 — Insurance contracts). On transition to SFAS 71, entities may also continue to apply SFAS 55 hedge accounting. The objective of the new standards is to establish requirements for all aspects of accounting for financial instruments, including distinguishing debt from equity, netting, recognition, derecognition, measurement, hedge accounting and disclosure.

Following are comparison between IFAS and US GAAP, prior to 1 January 2020.

Under IFAS, compound (hybrid) financial instruments are required to be split into a debt component and an equity component and, if applicable, a derivative component. The derivative component is accounted for using fair value accounting. Under U.S. GAAP, compound (hybrid) financial instruments are not split into debt and equity components unless certain specific requirements are met, but they may be bifurcated into debt and derivative components, with the derivate component accounted for using fair value accounting.

Under IFAS, only objective evidence of one or more credit loss events can generally result in an impairment being recognized in the statement of comprehensive income for an available-for-sale (“AFS”) debt instrument. The impairment loss is measured as the difference between the debt instrument’s amortized cost basis and its fair value. Impairment losses for AFS debt instruments may be reversed through the statement of other comprehensive income if the fair value of the instrument increases in a subsequent period and the increase can be objectively related to an event occurring after the impairment loss was recognized. Under U.S. GAAP, declines in fair value below cost may result in an impairment loss being recognized in the income statement on an AFS debt instrument due solely to a change in interest rates (risk free or otherwise) if the entity has the intent to sell the debt instrument or it is more likely than not that it will be required to sell the debt instrument before its anticipated recovery. In this circumstance, the impairment loss is measured as the difference between the debt instrument’s amortized cost basis and its fair value. When a credit loss exits, but: (i) the entity does not intend to sell the debt instrument, or (ii) it is not more likely than not that the entity will be required to sell the debt instrument before the recovery of the remaining cost basis, the impairment is separated into the amount representing the credit loss and the amount related to all other factors. The amount of

the total impairment related to the credit loss is recognized in the income statement and the amount related to all other factors is recognized in other comprehensive income, net of applicable taxes. When an impairment loss is recognized in the income statement, a new cost basis in the instrument is established equal to the previous cost basis less the impairment recognized in earnings, and therefore, impairment losses recognized in the income statement cannot be reversed for any future recoveries.

Under IFAS, impairment of an AFS equity instrument is recognized in the statement of comprehensive income when there is objective evidence that the AFS equity instrument is impaired and the cost of the investment in the equity instrument may not be recovered. A significant or prolonged decline in the fair value of an equity instrument below its cost is considered objective evidence of an impairment. Under U.S. GAAP, impairment of an AFS equity instrument is recognized in the income statement if the equity instrument's fair value is not expected to recover sufficiently in the near term to allow a full recovery of the entity's cost basis. An entity must have the intent and ability to hold an impaired equity instrument until such near-term recovery; otherwise, an impairment loss must be recognized in the income statement.

Under IFAS, the impairment loss of a held-to-maturity ("HTM") instrument is measured as the difference between the carrying amount of the instrument and the present value of estimated future cash flows discounted at the instrument's initial effective interest rate. The carrying amount of the instrument is reduced either directly or through the use of an allowance account. The amount of impairment loss is recognized in the statement of comprehensive income. Under U.S. GAAP, the impairment loss of a HTM instrument is measured as the difference between its fair value and amortized cost basis. The amount of the total impairment related to the credit loss is recognized in the income statement, and the amount related to all other factors is recognized in other comprehensive income. The carrying amount of an HTM investment after recognition of an impairment is the fair value of the debt instrument at the date of the impairment. The new cost basis of the debt instrument is equal to the previous cost basis less the impairment recognized in the income statement. The impairment recognized in other comprehensive income is accredited to the carrying amount of the HTM instrument through other comprehensive income over its remaining life.

Under IFAS, the definition of a derivative does not include a requirement that a notional amount be indicated, nor is net settlement a requirement. Certain of the scope exceptions under IFAS differ from those under U.S. GAAP. Under U.S. GAAP, to meet the definition of a derivative, an instrument must: (i) have one or more underlyings, one or more notional amounts or payment provisions, or both, (ii) require no initial net investment (as defined), and (iii) be able to be settled net (as defined). Certain scope exceptions exist for instruments that would otherwise meet these criteria.

IFAS allows risks associated with only a portion of the instrument's cash flows or fair value (such as one or more selected contractual cash flows or portions of them or a percentage of the fair value) when hedging a risk component of a financial instrument, provided that effectiveness can be measured, that is, the portion is separately identifiable and reliably measurable. Under U.S. GAAP, the risk components that may be hedged are specifically defined by the literature, with no additional flexibility. Under U.S. GAAP, the shortcut method for interest rate swaps hedging recognized debt instruments is permitted. The long-haul method of assessing and measuring hedge effectiveness for a fair value hedge of the benchmark interest rate component of a fixed rate debt instrument requires that all contractual cash flows be considered in calculating the change in the hedged item's fair value even though only a component of the contractual coupon payment is the designated hedged item.

Under IFAS, the use of the shortcut method for interest rate swaps hedging recognized debt is not permitted. Assessment and measurement of hedge effectiveness considers only the change in fair value of the designated hedged portion of the instrument's cash flows, as long as the portion is separately identifiable and reliably measurable.

Under IFAS, the inclusion of an option's time value in assessing and measuring the hedge effectiveness is not permitted. Under U.S. GAAP, the inclusion of an option's time value in assessing and measuring the hedge effectiveness is permitted.

Under IFAS, derecognition of financial assets is based on a mixed model that considers transfer of risks and rewards and control. Transfer of control is considered only when the transfer of risks and rewards assessment is not conclusive. If the transferor has neither retained nor transferred substantially all of the risks and rewards, there is then an evaluation of the transfer of control. Control is considered to be surrendered if the transferee has the practical ability to unilaterally sell the transferred asset to a third party without restrictions. There is no legal isolation test required. The derecognition criteria may be applied to a portion of a financial asset if the cash flows are specifically identified or represent a pro rata share of the financial asset or a pro rata share of specifically identified cash flows. Under U.S. GAAP, derecognition of financial assets (i.e. sales treatment) occurs when effective control over the financial asset has been surrendered whereby: (i) the transferred financial assets are legally isolated from the transferor, (ii) each transferee (or, if the transferee is a securitization entity or an entity whose sole purpose is to facilitate an asset-backed financing, each holder of its beneficial interests) has the right to pledge or exchange the transferred financial assets (or beneficial interests), and (iii) the transferor does not maintain effective control over the transferred financial assets or beneficial interests (e.g. through a call option or repurchase agreement). The derecognition criteria may be applied to a portion of a financial asset only if it mirrors the characteristics of the initial entire financial asset.

IFAS requires the initial effective interest rate to be used throughout the life of the instrument for all financial assets and liabilities, except for certain reclassified financial assets, in which case the effect of increases in cash flows are recognized as prospective adjustments to the effective interest rate. U.S. GAAP requires the use of catch-up approach, retrospective method, or prospective method of calculating the interest for amortized cost-based assets, depending on the type of instrument.

Under IFAS, loans and receivables are carried at amortized cost unless classified into the "fair value through profit or loss" category or the "available for sale" category, both of which are carried at fair value on the statement of financial position. Under U.S. GAAP, unless the fair value option is elected, loans and receivables are classified as either: (i) held for investment, which are measured at amortized cost, or (ii) held for sale, which are measured at the lower of cost or fair value.

Under IFAS, the day one gains and losses on financial instruments are recognized only when their fair value is evidenced by a quoted price in an active market for an identical asset or liability (i.e. level or level 2 input) or based on a valuation technique that uses only data from observable markets. Under U.S. GAAP, entities are not precluded from recognizing day one gains and losses on financial instruments reported at fair value even when all inputs to the measurement model are not observable. Unlike IFAS, U.S. GAAP contains no specific requirements regarding the observability of inputs, thereby potentially allowing for the recognition of gains or losses at initial recognition of an asset or liability even when the fair value measurement is based on a valuation model with significant unobservable inputs (i.e. level 3 measurements).

Under IFAS, there is no practical expedient to assume that net asset value per share ("NAV") represents the fair value of certain alternative investments. Under U.S. GAAP, entities are provided a practical expedient to estimate the fair value of certain alternative investments (i.e. a limited partner interest in a Private Equity fund) using NAV or its equivalent.

Following are comparison between IFAS and US GAAP, effective from 1 January 2020.

Under IFAS, classification of certain instruments with characteristics of both debt and equity is largely based on the contractual obligation to deliver cash, assets or an entity's own shares. Contracts

that are indexed to, and potentially settled in, an entity's own stock are classified as equity if settled only by delivering a fixed number of shares for a fixed amount of cash. Under U.S. GAAP specifically identifies certain instruments with characteristics of both debt and equity that must be classified as liabilities. Certain other contracts that are indexed to, and potentially settled in, an entity's own stock may be classified as equity if they either (1) require physical settlement or net-share settlement or (2) give the issuer a choice of net-cash settlement or settlement in its own shares. Classification of certain instruments with characteristics of both debt and equity is largely based on the contractual obligation to deliver cash, assets or an entity's own shares. Contracts that are indexed to, and potentially settled in, an entity's own stock are classified as equity if settled only by delivering a fixed number of shares for a fixed amount of cash.

Under IFAS, compound (hybrid) financial instruments are required to be split into a debt and equity component or, if applicable, a derivative component. The derivative component is accounted for using fair value accounting. Under U.S. GAAP, compound (hybrid) financial instruments (e.g., convertible bonds) are not split into debt and equity components unless certain specific requirements are met, but they may be bifurcated into debt and derivative components, with the derivative component accounted for using fair value accounting.

Under IFAS, regardless of an instrument's legal form, its classification and measurement depend on its contractual cash flow (CCF) characteristics and the business model under which it is managed. The assessment of the CCF determines whether the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. Financial assets that pass the cash flow characteristics test are subsequently measured at amortized cost, FV-OCI or fair value, with changes in fair value recognized in profit or loss (FV-PL), based on the entity's business model for managing them, unless the fair value option is elected. Financial assets that fail the cash flow characteristics test are subsequently measured at FV-PL. Under U.S. GAAP, classification and measurement depend largely on the legal form of the instrument (i.e., whether the financial asset represents a security or a loan) and management's intent for the instrument. At acquisition, debt instruments that meet the definition of a security are classified in one of three categories and subsequently measured as follows: (i) held to maturity (HTM) - amortized cost; (ii) trading - fair value, with changes in fair value recognized in net income (FV-NI); (iii) available for sale (AFS) - fair value, with changes in fair value recognized in other comprehensive income (FV-OCI). Unless the fair value option is elected, loans and receivables are classified as either: (1) held for investment, and then measured at amortized cost, or (2) held for sale, and then measured at the lower of cost or fair value.

Under IFAS, equity investments are measured at FV-PL. An irrevocable FV-OCI election is available for non-derivative equity investments that are not held for trading. If the FV-OCI election is made, gains or losses recognized in OCI are not recycled (i.e., reclassified to profit or loss) upon derecognition of those investments. Under U.S. GAAP, equity investments are measured at FV-NI. A measurement alternative is available for equity investments that do not have readily determinable fair values and do not qualify for the net asset value (NAV) practical expedient under ASC 820. Under this alternative, investments may be measured at cost, less any impairment. If an entity identifies observable price changes in orderly transactions for the identical or a similar investment of the same issuer, it must measure its equity investment at fair value in accordance with ASC 820 as of the date that the observable transaction occurred.

Under IFAS, the calculation of the effective interest rate is generally based on the estimated cash flows (without considering credit losses) over the expected life of the financial asset. IFAS generally requires the original effective interest rate to be used throughout the life of the financial instrument. When estimated cash flows change, an entity follows an approach that is analogous to the catch-up method under U.S. GAAP. Under U.S. GAAP, the effective interest method is generally applied on the basis of contractual cash flows for financial assets. However, in some instances, estimated cash flows

are used. U.S. GAAP discusses three different approaches - catch-up, retrospective or prospective - to account for a change in estimated cash flows, depending on the type of instrument and the reason for the change.

Under IFAS, there is a single impairment model for all debt instruments not measured at FV-PL (i.e., measured at amortized cost or FV-OCI), including loans and debt securities. The guiding principle is to reflect the general pattern of deterioration or improvement in the credit quality of financial instruments. The amount of expected credit loss (ECL) recognized as a loss allowance depends on the extent of credit deterioration since initial recognition. Generally, there are two measurement bases: (i) in Stage 1, 12-month ECL, which applies to all items (on initial recognition and thereafter) as long as there is no significant deterioration in credit risk; and (ii) in Stages 2 and 3, lifetime ECL, which applies whenever there has been a significant increase in credit risk. In Stage 2, interest income is calculated on the asset's gross carrying amount. In Stage 3, a credit event has occurred, and interest income is calculated on the asset's amortized cost (i.e., net of the allowance). For financial assets that are debt instruments measured at FV-OCI, impairment gains and losses are recognized in profit or loss. However, the ECLs do not reduce the carrying amount of the financial assets in the statement of financial position, which remains at fair value. Instead, impairment gains and losses are accounted for as an adjustment to the revaluation reserve accumulated in OCI (the "accumulated impairment amount"), with a corresponding charge to profit or loss. When a debt instrument measured at FV-OCI is derecognized, IFAS requires the cumulative gains and losses previously recognized in OCI to be reclassified to profit or loss. If the amount of ECLs decreases, the accumulated impairment amount in OCI is reduced, with a corresponding adjustment to profit or loss.

Under U.S. GAAP, prior to the adoption of ASC 326, declines in fair value below cost may result in an impairment loss being recognized in the income statement on a debt instrument measured at FVOCI solely due to a change in interest rates if the entity has the intent to sell the debt instrument or it is more likely than not that it will be required to sell the debt instrument before its anticipated recovery. In this circumstance, the impairment loss is measured as the difference between the debt instrument's amortized cost basis and its fair value. When a credit loss exists, but (1) the entity does not intend to sell the debt instrument, or (2) it is not more likely than not that the entity will be required to sell the debt instrument before the recovery of the remaining cost basis, the impairment is separated into the amount representing the credit loss and the amount related to all other factors. The amount of the total impairment related to the credit loss is recognized in the income statement and the amount related to all other factors is recognized in OCI, net of applicable taxes. When an impairment loss is recognized in the income statement, a new cost basis in the instrument is established, which is the previous cost basis less the impairment recognized in earnings. As a result, impairment losses recognized in the income statement cannot be reversed for any future recoveries. After the adoption of ASC 326, for debt securities that are measured at FV-OCI, if the amortized cost of a debt security exceeds its fair value, the security is impaired. When an entity intends to sell an impaired debt security (or it is more likely than not that the entity will be required to sell the security before recovery of its amortized cost basis), the entire impairment (i.e., the difference between amortized cost and fair value) is recognized as a direct reduction in the security's amortized cost basis with the impairment loss reported in earnings. When an entity does not intend to sell an impaired debt security (and it is not more likely than not that the entity will be required to sell the security before recovery of its amortized cost basis), the entity must determine whether any impairment is attributable to credit-related factors. When evaluating an impairment, entities may not use the length of time a security has been in an unrealized loss position as a factor, either by itself or in combination with other factors, to conclude that a credit loss does not exist. This determination should be performed at the individual security level. Credit-related impairment is measured as the difference between the debt security's amortized cost basis and the present value of expected cash flows and is recognized as an allowance on the balance sheet with a corresponding adjustment to earnings. The allowance should not exceed the amount by which the amortized cost basis exceeds fair value. Both the allowance and the adjustment to net income can be adjusted if conditions change. Impairment that isn't credit-related is recognized in OCI.

Under IFAS, equity instruments are measured at FV-PL or FVOCI. That is, no measurement alternative is available. For equity instruments measured at FVOCI, gains and losses recognized in OCI are never reclassified to profit or loss. Therefore, there is no impairment recognized for these instruments. Under U.S. GAAP, equity investments are generally measured at FV-NI and therefore not reviewed for impairment. However, an equity investment without a readily determinable fair value for which the measurement alternative has been elected is qualitatively assessed for impairment at each reporting date. If a qualitative assessment indicates that the investment is impaired, the entity will have to estimate the investment's fair value in accordance with ASC 820 and, if the fair value is less than the investment's carrying value, recognize an impairment loss in net income equal to the difference between carrying value and fair value.

Under IFAS, as discussed above, there is a single impairment model for debt instruments not measured at FV-PL (i.e., measured at amortized cost or FV-OCI), including loans and debt securities. Refer to "Impairment recognition - debt instruments measured at FV-OCI" above for a discussion of this model. Write-downs (charge-offs) of loans and other receivables are recorded when the entity has no reasonable expectation of recovering all or a portion of the CCFs of the asset. IFAS does not provide guidance on accounting for subsequent recoveries. Under U.S.GAAP, prior to the adoption of ASC 326 The impairment model for loans and other receivables measured at amortized cost is an incurred loss model. Losses from uncollectible receivables are recognized when (1) it is probable that a loss has been incurred (i.e., when, based on current information and events, it is probable that a creditor will be unable to collect all amounts due according to the contractual terms of the receivable) and (2) the amount of the loss is reasonably estimable. The total allowance for credit losses should include amounts for financial assets that have been measured for impairment, whether individually under ASC 310-10 or collectively (in groups of receivables) under ASC 450-20. Changes in the allowance are recognized in earnings. Write-downs (charge-offs) of loans and other receivables are recorded when the asset is deemed uncollectible. Recoveries of loans and receivables previously written down are recorded when received. For HTM debt securities, the impairment analysis is the same as it is for debt securities measured at FV-OCI, except that an entity should not consider whether it intends to sell, or will more likely than not be required to sell, the debt security before the recovery of its amortized cost basis. This is because the entity has already asserted its intent and ability to hold an HTM debt security to maturity. When an investor does not expect to recover the entire amortized cost of the HTM debt security, the HTM debt security is written down to its fair value. The amount of the total impairment related to the credit loss is recognized in the income statement, and the amount related to all other factors is recognized in OCI. The carrying amount of an HTM debt security after the recognition of an impairment is the fair value of the debt instrument at the date of the impairment. The new cost basis of the debt instrument is equal to the previous cost basis less the impairment recognized in the income statement. The impairment recognized in OCI for an HTM debt security is accreted to the carrying amount of the HTM instrument over its remaining life. This accretion does not affect earnings. After the adoption of ASC 326, financial assets measured at amortized cost, including loans, receivables and HTM securities (including beneficial interests accounted for under ASC 325-40), follow the current expected credit loss (CECL) model. Under the CECL model, a lifetime expected credit loss is recorded upon initial recognition of assets in scope. The objective of the model is to recognize an allowance for credit losses that results in the financial statements reflecting the net amount expected to be collected. To determine the expected credit losses, entities must consider, among other things, available relevant information about the collectability of cash flows (including information about past events, current conditions and reasonable and supportable forecasts). An expected credit loss estimate requires entities to reflect the risk of loss, even when that risk is remote. This is accomplished by pooling assets with similar risk characteristics. As a result of using pool-based assumptions, an estimate of zero credit loss may be appropriate only in limited circumstances. Write-downs (charge-offs) of loans and other receivables are recorded when the entity deems all or a portion of a financial asset to be uncollectible. Additionally, when measuring the allowance for credit losses, entities should incorporate an estimate of expected recoveries.

Under IFAS, definition of a derivative does not include a requirement that a notional amount be indicated, nor is net settlement a requirement. Certain of the scope exceptions under IFAS differ from those under U.S. GAAP. Under U.S. GAAP, to meet the definition of a derivative, an instrument must (1) have one or more underlyings, and, one or more notional amounts or payment provisions or both, (2) require no initial net investment, as defined, and (3) be able to be settled net, as defined. Certain scope exceptions exist for instruments that would otherwise meet these criteria.

Under IFAS, hedging of risk components of both financial and nonfinancial items is allowed, provided that the risk component is separately identifiable and reliably measurable. Under U.S. GAAP, hedging of risk components of both financial and nonfinancial items is allowed if certain criteria are met. Under U.S. GAAP, entities can separately hedge the foreign exchange risk, credit risk or interest rate risk associated with a financial instrument. However, interest rate components that may be hedged are specifically defined by the literature as benchmark interest rates for fixed-rate financial instruments, and contractually specified interest rates for variable-rate financial instruments. If the hedged transaction is the forecasted purchase or sale of a nonfinancial asset, entities may separately hedge foreign exchange risk or any risk component that is contractually specified.

Under IFAS, to qualify for hedge accounting, there must be an economic relationship between the hedged item and the hedging instrument, the value changes resulting from that economic relationship cannot be dominated by credit risk, and the hedge ratio should generally be the same as the ratio management actually uses to hedge the quantity of the hedged item. Ongoing prospective assessments of effectiveness are required to be performed, at a minimum, at the time an entity prepares its annual or interim financial statements or upon a significant change in the circumstances affecting hedge effectiveness requirements, whichever occurs first. Ineffectiveness is measured and recognized through profit or loss each reporting period. For cash flow hedges and net investment hedges, the ineffectiveness recorded is limited to overhedges. The shortcut method for interest rate swaps hedging recognized debt instruments is not permitted. Under U.S. GAAP, To qualify for hedge accounting the relationship must be “highly effective.” Ongoing prospective and retrospective assessments of hedge effectiveness are required on a periodic basis (at least quarterly). There is no requirement to separately measure and recognize hedge ineffectiveness. For highly effective cash flow and net investment hedges, the entire change in the fair value of the hedging instrument included in the assessment of hedge effectiveness is recorded in OCI (for cash flow hedges) or the CTA section of OCI (for net investment hedges) and reclassified to earnings when the hedged item affects earnings (or when it becomes probable that the forecasted transaction being hedged in a cash flow hedge will not occur in the required time period). The shortcut method for interest rate swaps hedging recognized debt instruments is permitted.

Under IFAS, there is no guidance specifying where the change in fair value of the hedging instrument included in the assessment of hedge effectiveness should be presented in the income statement. Under U.S. GAAP, the entire change in fair value of the hedging instruments included in the assessment of hedge effectiveness is presented in the same income statement line item as the earnings effect of the hedged item.

Under IFAS, a hedging instrument’s time value and foreign currency basis spread can be excluded from the effectiveness assessment. The change in fair value of any excluded components is deferred in AOCI and reclassified based on the nature of the hedged item (i.e., transaction related or time-period related). Under U.S. GAAP, a hedging instrument’s time value and the foreign currency basis spread can be excluded from the effectiveness assessment. The initial value of the excluded component is recognized in earnings using a systematic and rational method over the life of the hedging instrument. Any difference between the change in fair value of the excluded components and the amounts recognized in earnings under the systematic and rational approach is deferred in OCI. Alternatively, an entity may make a policy election to record the changes in the fair value of components excluded from the assessment of hedge effectiveness immediately in earnings.

Under IFAS, derecognition of financial assets is based on a mixed model that considers both transfer of risks and rewards and control. Transfer of control is considered only when the transfer of risks and rewards assessment is not conclusive. If the transferor has neither retained nor transferred substantially all of the risks and rewards, there is then an evaluation of the transfer of control. Control is considered to be surrendered if the transferee has the practical ability to unilaterally sell the transferred asset to a third party without restrictions. There is no legal isolation test. The derecognition criteria may be applied to a portion of a financial asset if the cash flows are specifically identified or represent a pro rata share of the financial asset or a pro rata share of specifically identified cash flows.

Under, U.S. GAAP, derecognition of financial assets (i.e., sales treatment) occurs when effective control over the financial asset has been surrendered. That is, when all of the following conditions are met:

- The transferred financial assets are legally isolated from the transferor
- Each transferee (or, if the transferee is a securitization entity or an entity whose sole purpose is to facilitate an asset-backed financing, each holder of its beneficial interests), has the right to pledge or exchange the transferred financial assets (or beneficial interests)
- The transferor does not maintain effective control over the transferred financial assets or beneficial interests (e.g., through a call option or repurchase agreement)

The derecognition criteria may be applied to a portion of a financial asset only if it meets the definition of a participating interest.

Foreign Currency

Under IFAS, the functional currency must be maintained. However, local functional currency financial statement amounts not already measured at the current rate at the end of the reporting period (current and prior period) are indexed using a general price index (i.e. restated in terms of the measuring unit current at the date of the statement of financial position with the resultant effects recognized in income), and are then translated to the reporting currency at the current rate. Under U.S. GAAP, local functional currency financial statements are remeasured as if the functional currency was the reporting currency (e.g. United States (“US”) dollar in the case of a US parent) with resulting exchange differences recognized in income.

Under IFAS, the method of consolidation is not specified and, as a result, either the “direct” or the “step-by-step” method of consolidation is used. Under the “direct” method, each entity within the consolidated group is directly translated into the functional currency of the ultimate parent and then consolidated into the ultimate parent (i.e. the reporting entity) without regard to any intermediate parent. The choice of consolidation method used could affect the cumulative translation adjustments deferred within equity at intermediate levels, and therefore, the recycling of such exchange rate differences upon disposal of an intermediate foreign operation. Under U.S. GAAP, a “bottom-up” approach is required to reflect the appropriate foreign currency effects and hedges in place. As such, an entity should be consolidated by the enterprise that controls the entity. Therefore, the “step-by-step” method of consolidation is used, whereby each entity is consolidated into its immediate parent until the ultimate parent has consolidated the financial statements of all the entities below it.

Leases

Prior to 1 January 2020, under *SFAS 30 — Leases*, a lease is classified as a finance lease if it transfers substantially all risks and rewards incidental to ownership otherwise it will be classified as

operating lease (off balance sheet) by a lessee. Effective on 1 January 2020, the new lease standard, *SFAS 73 — Leases* requires the lessee to recognize almost all lease contracts on the balance sheet; the only optional exemptions are for certain short-term leases and leases of low-value assets. For lessees that have entered into contracts classified as operating leases under existing accounting standard, this could have a huge impact on the financial statements.

Following are comparison between IFAS and US GAAP, prior to 1 January 2020.

Under IFAS, the land and building elements of the lease are considered separately when evaluating all indicators unless the amount that would initially be recognized for the land element is immaterial, in which case they would be treated as a single unit for purposes of lease classification. There is no 25% test to determine whether to consider the land and building separately when evaluating certain indicators. Under U.S. GAAP, a lease of land and buildings that transfers ownership to the lessee or contains a bargain purchase option would be classified as a capital lease by the lessee, regardless of the relative value of the land. If the fair value of the land at inception represents less than 25% of the total fair value of the lease, the lessee accounts for the land and building elements as a single unit for purposes of evaluating the 75% and 90% tests noted above; otherwise, the lessee must consider the land and building elements separately for purposes of evaluating other lease classification criteria (i.e. only the building is subject to the 75% and 90% tests in this case).

Under IFAS, when the leaseback is an operating leaseback (non-real estate) in a sale-and-leaseback type of lease, gain or loss is recognized immediately, subject to adjustment if the sales price differs from fair value. Under U.S. GAAP, when the leaseback is an operating leaseback (non-real estate) in a sale-and-leaseback type of lease, if the seller-lessee retains only a minor portion of the remaining use of the leased asset through the sale-leaseback, the sale and leaseback are accounted for as separate transactions based on their respective terms (unless rentals are unreasonable in relation to market conditions). If a seller-lessee retains more than a minor part of the remaining use of the leased asset but less than substantially all of it, and the profit on the sale exceeds the present value of the minimum lease payments due under the operating leaseback, that excess is recognized as profit at the date of sale. All other profit is deferred and generally amortized over the lease term.

Under IFAS, when the leaseback is a capital leaseback in a sale-and-leaseback type of lease, gain or loss is deferred and amortized over the lease term. Under U.S. GAAP, when the leaseback is a capital leaseback in a sale-and-leaseback type of lease, the seller-lessee is presumed to have retained substantially all the remaining use of the leased asset when the leaseback is classified as a capital lease. In such cases, the profit on sale is deferred.

Under IFAS, there is no specific accounting standard that governs the sale-and-leaseback of real estate. Under U.S. GAAP, if real estate is involved, while the above-mentioned model generally applies, the specialized rules also must be applied. Those rules are very restrictive with respect to the seller's continuing involvement, and they may not allow for recognition of the sale.

Following are comparison between IFAS and US GAAP, effective from 1 January 2020.

Under IFAS, lessees may elect, on a lease-by-lease basis, not to recognize leases when the value of the underlying asset is low (e.g., US\$5,000 or less when new). Under US GAAP, there is no recognition exemption for leases based on the value of the underlying asset.

Under IFAS, changes in variable lease payments index or rate result in a remeasurement lease liability whenever there is a cash flows (i.e., when the adjustment lease payments takes effect). Under US GAAP, changes in variable lease payments based on an index or rate result in a remeasurement of the lease liability when the lease liability is remeasured for another reason (e.g., a change in the lease term).

Under IFAS, lessees determine the discount rate at lease commencement, but lessors determine the rate implicit in the lease at the lease inception date. Under US GAAP, lessees and lessors determine the discount rate at the lease commencement date.

Under IFAS, when determining lessee's incremental borrowing rate, SFAS 73 does not address whether a lessee may consider the effect of lease term options (e.g., purchase and renewal options) that are not included in the lease term. Under US GAAP, A lessee may consider the effect of lease term options (e.g., purchase and renewal options) that are not included in the lease term.

Under IFAS, Initial Direct Costs (IDCs) are incremental costs of obtaining a lease that would not have been incurred if the lease had not been obtained. IDCs incurred by a manufacturer or dealer lessor in connection with a finance lease are expensed. Under US GAAP, IDCs are incremental costs that would not have been incurred if the lease had not been obtained. Lessors expense IDCs for sales-type leases if the fair value of the underlying asset is different from the carrying amount of the underlying asset at lease commencement.

Under IFAS, all recognized leases are accounted for similarly to finance leases under ASC 842. Under US GAAP, recognized leases are classified as either finance or operating. Lessees classify leases at the lease commencement date.

Under IFAS, a lease does not qualify as a short-term lease if it includes a purchase option, regardless of whether the lessee is reasonably certain to exercise the option. A change in the terms of a short-term lease creates a new lease. If that new lease has a lease term greater than 12 months, it cannot qualify as a short-term lease. Under US GAAP, a lease does not qualify as a short-term lease if it includes a purchase option that is reasonably certain to be exercised. A lease no longer qualifies as a short-term lease when there is a change in a lessee's assessment of either of the following: (i) the lease term so that, after the change, the remaining lease term extends more than 12 months from the end of the previously determined lease term, or (ii) whether the lessee is reasonably certain to exercise an option to purchase the underlying asset.

Under IFAS, lessees may allocate variable consideration not dependent on an index or rate entirely to a non-lease component of a contract. Under US GAAP, lessees allocate variable consideration not dependent on an index or rate (e.g., performance- or usage-based payments) to the lease and non-lease components of a contract.

Under IFAS, a lessee applies the depreciation requirements in SFAS 16 in depreciating right-of-use assets, which requires that each item of PP&E with a cost that is significant in relation to the total cost of the item be separately depreciated (i.e., a component approach). Under US GAAP, component depreciation is permitted, but not common.

Under IFAS, to determine whether the transfer of an asset is accounted for as a sale and purchase, a seller-lessee and a buyer-lessor apply the requirements for determining when a performance obligation is satisfied in SFAS 71. The seller-lessee recognizes only the amount of any gain or loss, adjusted for off-market terms, that relates to the rights transferred to the buyer-lessor. Under US GAAP, to determine whether an asset transfer is a sale and purchase, a seller-lessee and a buyer-lessor consider the following: (i) whether the transfer meets sale criteria under ASC 606 (however, certain fair value repurchase options would not result in a failed sale) and (ii) whether the leaseback would be classified as a sales-type lease by the buyer-lessor or a finance lease by the seller-lessee (i.e., a sale and purchase does not occur when the leaseback is classified as a sales-type lease by the buyer-lessor or as a finance lease by the seller-lessee). The seller-lessee recognizes any gain or loss, adjusted for off-market terms, immediately.

Under IFAS, transition guidance primarily addresses lessees' leases previously classified as operating leases under SFAS 73, Leases. Under US GAAP, specific transition guidance is provided for all leases depending on the lease classification before and after application of ASC 842.

Income Taxes

Under IFAS, tax basis is generally the amount deductible or taxable for tax purposes. The way management intends to settle or recover the carrying amount affects the determination of tax basis. Under U.S. GAAP, tax basis is a question of fact under the tax law. For most assets and liabilities, there is no dispute on this amount; however, when uncertainty exists, it is determined in accordance with Accounting Standard Codification 740-10-25, "Income Taxes".

IFAS requires taxes paid on intercompany profits to be recognized as incurred and requires the recognition of deferred taxes on temporary differences between the tax bases of assets transferred between entities/tax jurisdictions that remain within the consolidated group. U.S. GAAP requires taxes paid on intercompany profits to be deferred and prohibits the recognition of deferred taxes for the increases in the tax bases due to the intercompany sale or transfer of inventory. The income tax effects of the intercompany sale or transfer of inventory is recognized when the inventory is sold to a party outside of the consolidated group. Entities are required to recognize the income tax effects of intercompany sales and transfers of assets other than inventory in the period in which the transfer occurs.

Under IFAS, there is no specific accounting standard that governs the accounting for uncertain tax positions. Indonesian Statement of Financial Accounting Standards 46, "Income Taxes", indicates that tax assets and liabilities should be measured at the amount expected to be paid based on enacted or substantively enacted tax legislation. Some adopt a "one-step" approach that recognizes all uncertain tax positions at an expected value. Others adopt a "two-step" approach that recognizes only those uncertain tax positions that are considered more-likely-than-not to result in a cash outflow. Practice varies regarding the consideration of detection risk in the analysis. Under U.S. GAAP, a two-step process is required when assessing uncertain tax positions, separating recognition from measurement. A benefit is recognized when it is more-likely-than-not to be sustained based on the technical merits of the position. Detection risk is precluded from being considered in the analysis. The amount of benefit to be recognized is based on the largest amount of tax benefit that is greater than 50% likely of being realized upon ultimate settlement. The unit of account for uncertain tax positions is based on the level at which an entity prepares and supports the amounts claimed in the tax return and considers the approach the entity anticipates the taxation authority will take in an examination.

Under IFAS, deferred tax effects arising from the initial recognition of an asset or liability are not recognized when: (i) the amounts did not arise from a business combination, and (ii) upon occurrence, the transaction affects neither accounting nor taxable profit (e.g. acquisition of non-deductible assets). Under U.S. GAAP, there is no exemption for non-recognition of deferred tax effects for certain assets or liabilities.

Under IFAS, deferred tax assets are recognized only to the extent that it is probable (more-likely-than-not) that they will be realized. Under U.S. GAAP, deferred tax assets are recognized in full (except for certain outside basis differences), but the valuation allowance reduces them to the amount that is more-likely-than-not to be realized.

Under IFAS, enacted or "substantively enacted" tax rates as of the date of the statement of financial position must be used in calculating deferred tax asset or liability. Under U.S. GAAP, enacted tax rates as of the date of the statement of financial position must be used in calculating deferred tax asset or liability.

Under IFAS, recognition of deferred tax liabilities from investments in subsidiaries or joint ventures (often referred to as outside basis differences) is not required if the reporting entity has control over the timing of the reversal of the temporary difference, and it is probable (more-likely-than-not) that the difference will not reverse in the foreseeable future. Under U.S. GAAP, recognition of deferred tax liabilities from investments in subsidiaries or joint ventures (often referred to as outside basis differences) is not required for investment in a foreign subsidiary or foreign corporate joint venture that is essentially permanent in duration unless it becomes apparent that the difference will reverse in the foreseeable future.

Provisions and Contingencies

Under IFAS, a loss must be “probable” (in which “probable” is interpreted as “more-likely-than-not”) to be recognized. “More-likely-than-not” refers to a probability of greater than 50%. Under U.S. GAAP, a loss must be “probable” (in which “probable” is interpreted as “likely”) to be recognized. While U.S. GAAP does not ascribe a percentage to “probable”, it is intended to denote a high likelihood (e.g. 70% or more).

Under IFAS, provisions should be recorded at the estimated amount to settle or transfer the obligation taking into consideration the time value of money. The discount rate to be used should be “a pre-tax rate (or rates) that reflects (or reflect) current market assessments of the time value of money and the risks specific to the liability.” Under U.S. GAAP, provisions may be discounted only when the amount of the liability and the timing of the payments are fixed or reliably determinable, or when the obligation is a fair value obligation (e.g. an asset retirement obligation). The discount rate to be used is dependent upon the nature of the provision, and may vary from that used under IFAS. However, when a provision is measured at fair value, the time value of money and the risks specific to the liability should be considered.

Under IFAS, the best estimate of obligation should be accrued. For a large population of items being measured (such a warranty costs), the best estimate is typically expected value, although the midpoint in the range may also be used when any point in a continuous range is as likely as another. The best estimate for a single obligation may be the most likely outcome, although other possible outcomes should still be considered. Under U.S. GAAP, the most likely outcome within the range should be accrued. When no one outcome is more likely than the others, the minimum amount in the range of outcomes should be accrued.

Under IFAS, once management has “demonstrably committed” (i.e. a legal or constructive obligation has been incurred) to a detailed exit plan, the general provisions under Indonesian Statement of Financial Accounting Standards 57, “Provisions, Contingent Liabilities, and Contingent Assets” apply. Costs typically are recognized earlier than under U.S. GAAP because IFAS focuses on the exit plan as a whole rather than the individual cost components of the exit plan. Under U.S. GAAP, once management has committed to a detailed exit plan, each type of cost is examined to determine when recognized. Involuntary employee termination costs under a one-time benefit arrangement are recognized over future service period, or immediately if there is no future service required. Other exit costs are expensed when incurred.

Revenue Recognition

Following are comparison between IFAS and US GAAP, prior to 1 January 2020.

Under IFAS, revenue is defined as the gross inflow of economic benefits during the period arising during the ordinary activities of an entity when those inflows result in increases in equity, other than

increases relating to contributions from equity participants. Under this principle, revenue from sale of goods is recognized only when: (i) risks and rewards of ownership have been transferred, (ii) the seller retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold, revenues can be measured reliably, (iv) it is probable that the economic benefits will flow to the seller, and (v) the costs incurred or to be incurred in respect of the transaction can be measured reliably; while revenue from rendering of services may be recognized in accordance with long-term contract accounting whenever revenues, costs, and the stage of completion can be measured reliably and it is probable that economic benefits will flow to the seller. Under U.S. GAAP, ASC 606 governs the accounting for revenue and is broadly applicable to all revenue transactions with customers (with some limited scope exceptions, for example: insurance contracts, financial instruments, leases). ASC 606 also specifies the accounting for costs an entity incurs to obtain and fulfill a contract to provide goods and services to customers and provide a model for the measurement and recognition of gains and losses on the sale of certain non-financial assets, such as property and equipment, including real estate. The core principle of ASC 606 is that an entity will recognize revenue to depict the transfer of promised goods or services to customers at an amount that reflects the consideration the entity expects to be entitled in exchange for those goods or services. It also requires comprehensive disclosures and changes the way entities communicate information in the notes to the financial statements. The principles in ASC 606 are applied using the following five steps: (i) identify the contract(s) with a customer, (ii) identify the performance obligations in the contract, (iii) determine the transaction price, (iv) allocate the transaction price to the performance obligations in the contract, and (v) recognize revenue when (or as) the entity satisfies a performance obligation. ASC 606 requires retrospective adoption either using a “full retrospective” method (applied to all the periods presented) or a “modified retrospective” method (applied only to the most current period presented in the financial statements).

Following are comparison between IFAS and US GAAP, effective from 1 January 2020.

Under IFAS, a completed contract is one in which the entity has fully transferred all of the goods and services identified in accordance with legacy IFRS and related interpretations. An entity must assess whether it is probable that the entity will collect the consideration to which it will be entitled in exchange for the goods or services that will be transferred to the customer. However, for purposes of this analysis, the term “probable” is defined as “more likely than not,” consistent with its definition elsewhere in IFRS. IFAS does not specify the measurement date for noncash consideration. IFAS also does not address how the constraint is applied when the noncash consideration is variable due to both its form and other reasons. IFAS does not address how the constraint is applied when the noncash consideration is variable due to both its form and other reasons. IFAS permits the reversal of some or all of previous impairment losses when impairment conditions no longer exist or have improved. However, the increased carrying value of the asset must not exceed the amount that would have been determined (net of amortization) if no impairment had been recognized previously.

Under US GAAP, a completed contract is one for which all (or substantially all) of the revenue was recognized in accordance with revenue guidance that is in effect before the date of initial application. An entity must assess whether it is probable that the entity will collect substantially all of the consideration to which it will be entitled in exchange for the goods or services that will be transferred to the customer. For purposes of this analysis, the term “probable” is defined as “the future event or vents are likely to occur,” consistent with its definition elsewhere in US GAAP. Under US GAAP, an entity is required to measure the estimated fair value of noncash consideration at contract inception. When the variability of noncash consideration is due to both the form (e.g., changes in share price) of the consideration and for other reasons (e.g., a change in the exercise price of a share option because of the entity’s performance), the constraint on variable consideration applies only to the variability for reasons other than its form. Under US GAAP, reversal of impairment losses is prohibited for all costs to obtain and/or fulfill a contract.

Share-Based Payments

Under IFAS, there is no accounting policy election for forfeitures. Initial accruals of compensation cost are based on the estimated number of instruments for which the requisite service is expected to be rendered. That estimate should be revised if subsequent information indicates that the actual number of instruments expected to vest is likely to differ from previous estimates. Under U.S. GAAP, entities will have to elect whether to account for forfeitures by: (i) recognizing forfeitures of awards as they occur (e.g. when an award does not vest because the employee leaves the entity), or (ii) estimating the number of awards expected to be forfeited and adjusting the estimate when subsequent information indicates that the estimate is likely to change.

Under IFAS, a performance condition is a vesting condition that must be met while the counterparty is rendering service. The period to achieve a performance condition must not extend beyond the end of the service period. If a performance target can be achieved after the employee's requisite service period, it would be accounted for as a non-vesting condition that affects the grant date fair value of the award. Under U.S. GAAP, a performance condition where the performance target affects vesting can be achieved after the employee's requisite service period. Therefore, the period to achieve a performance target can extend beyond the end of the service period.

Under IFAS, the definition of an employee is more general in that it includes individuals who provide services like those rendered by employees. Fair value of the transaction should be based on the fair value of the goods or services received, and only on the fair value of the equity instruments granted in the rare circumstance that the fair value of the goods and services cannot be reliably estimated. Measurement date is the date the entity obtains the goods or the counterparty renders the services. No performance commitment concept exists. Under U.S. GAAP, the definition of an employee focuses primarily on the common law definition of an employee. The fair value of: (i) the goods or services received, or (ii) the equity instruments granted, whichever is more reliably measurable, is used to value the transaction. Measurement date is the earlier of: (i) the date at which a "commitment for performance" by the counterparty is reached, or (ii) the date at which the counterparty's performance is complete.

Under IFAS, compensation cost for awards with graded vesting features must be recognized on an accelerated basis and each individual tranche must be separately measured. Under U.S. GAAP, entities make an accounting policy election to recognize compensation cost for awards containing only service conditions either on a straight-line basis or on an accelerated basis, regardless of whether the fair value of the award is measured based on the award as a whole or for each individual tranche.

Under IFAS, liability classification is required (i.e. no six-month consideration exists like in U.S. GAAP) for equity repurchase features at employee's election. Under U.S. GAAP, liability classification is not required if employee bears risks and rewards of equity ownership for at least six months from the date the shares are issued or vest.

Under IFAS, when there is modification of vesting terms that are improbable of achievement, compensation cost is determined based on the grant date fair value of the award, together with any incremental fair value at the modification date. The determination of whether the original grant date fair value affects the accounting is based on the ultimate outcome (i.e. whether the original or modified conditions are met) rather than the probability of vesting as of the modification date. Under U.S. GAAP, if an award is modified such that the service or performance condition, which was previously improbable of achievement, is probable of achievement because of the modification, the compensation cost is determined based on the fair value of the modified award at the modification date. Grant date fair value of the original award is not recognized.

Employee Benefits Other Than Share-Based Payments

Under IFAS, the projected unit credit method is required in all cases in computing employee benefits liability for defined benefit plans. Under U.S. GAAP, different methods are required in computing employee benefits liability for defined benefit plans, depending on the characteristics of the plan's benefit formula.

Under IFAS, the concept of an expected return on plan assets does not exist in calculating the expected return on plan assets. Instead, a "net interest" expense/(income) on the net defined benefit liability/(asset) is recognized as a component of defined benefit cost based on the discount rate used to determine the obligation. Under U.S. GAAP, the concept of an expected return on plan assets exists in calculating the expected return on plan assets, which is calculated using the expected long-term rate of return on invested assets and the market related value of the assets (based on either the fair value of plan assets at the measurement date or a "calculated value" that smooths changes in fair value over a period not to exceed five years, at the employer's election).

Under IFAS, actuarial gains and losses must be recognized immediately in other comprehensive income. Gains and losses are not subsequently recognized in net income. Under U.S. GAAP, actuarial gains and losses may be recognized in net income as they occur or deferred in other comprehensive income and subsequently amortized to net income through a corridor approach.

Under IFAS, prior service costs or credits from plan amendments are recognized immediately in net income. Under U.S. GAAP, prior service costs or credits from plan amendments are initially deferred in other comprehensive income and subsequently recognized in net income over the average remaining service period of active employees or, when all or almost all participants are inactive, over the average remaining life expectancy of those participants.

Under IFAS, settlement gain or loss is recognized in net income when it occurs. Fewer events qualify as settlements under IFAS. Change in the defined benefit obligation from a curtailment is recognized in net income at the earlier of when it occurs or when related restructuring costs or termination benefits are recognized. Under U.S. GAAP, settlement gain or loss is recognized in net income when the obligation is settled. Curtailment loss is recognized in net income when the curtailment is probable of occurring and the loss is estimable, while curtailment gain is recognized in net income when the curtailment occurs.

Under IFAS, a multi-employer post-retirement plan is accounted for as either a defined contribution plan or defined benefit plan based on the terms (contractual and constructive) of the plan. If it is accounted for as a defined benefit plan, an entity must account for the proportionate share of the plan like any other defined benefit plan unless sufficient information is not available. Under U.S. GAAP, a multi-employer post-retirement plan is accounted for like a defined contribution plan.

Earnings per Share

Under IFAS, contracts that may be settled in shares or cash at the issuer's option are always assumed to be settled in shares. Under U.S. GAAP, contracts that may be settled in shares or cash at the issuer's option are presumed to be settled in shares unless evidence is provided to the contrary (i.e. the issuer's past practice or stated policy is to settle in cash).

Under IFAS, in computing the year-to-date and annual diluted earnings per share ("EPS") for options and warrants (using the treasury stock method) and for contingently issuable shares, regardless of whether the period is profitable, the number of incremental shares is computed as if the entire

year-to-date period were “the period” (i.e. not to average the current quarter with each of the prior quarters). Under U.S. GAAP, in computing the year-to-date and annual diluted EPS for options and warrants (using the treasury stock method) and for contingently issuable shares, for year-to-date and annual computations when each period is profitable, the number of incremental shares added to the denominator is the weighted average of the incremental shares that were added to the denominator in each of the quarterly computations.

Under IFAS, for options, warrants, and their equivalents, IFAS does not explicitly require assumed proceeds under the treasury stock method to include the income tax effects on additional paid-in capital. Under U.S. GAAP, assumed proceeds under the treasury stock method exclude the income tax effects of share-based payment awards because they are no longer recognized in additional paid-in capital.

Under IFAS, potentially issuable shares in a contingently convertible debt situation are considered “contingently issuable” and are included in diluted EPS using the “if-converted” method only if the contingencies are satisfied at the end of the reporting period. Under U.S. GAAP, potentially issuable shares in a contingently convertible debt situation are included in diluted EPS using the “if-converted” method if one or more contingencies relate to a market price trigger (e.g. the entity’s share price), even if the market price trigger is not satisfied at the end of the reporting period.

Segment Reporting

Under IFAS, all entities determine segments based on the management approach, regardless of form of organization. Under U.S. GAAP, entities with a “matrix” form of organization must determine segments based on products and services.

Subsequent Events

Under IFAS, subsequent events are evaluated through the date that the financial statements are “authorized for issue”. Depending on an entity’s corporate governance structure and statutory requirements, authorization may come from management or a board of directors. Under U.S. GAAP, subsequent events are evaluated through the date the financial statements are issued (for United States Securities and Exchange Commission (“SEC”) registrants and conduit bond obligors) or available to be issued (for all entities other than SEC registrants and conduit bond obligors). Financial statements are considered issued when they are widely distributed to shareholders or other users in a form that complies with U.S. GAAP. Financial statements are considered available to be issued when they are in a form that complies with U.S. GAAP and all necessary approvals have been obtained.

IFAS does not specifically address the reissuance of financial statements and recognizes only one date through which subsequent events are evaluated, that is, the date that the financial statements are authorized for issuance, even if they are being reissued. As a result, only one date will be disclosed with respect to the evaluation of subsequent events, and an entity could have adjusting subsequent events in reissued financial statements. If financial statements are reissued because of adjusting subsequent events or an error correction, the date the reissued statements are authorized for reissuance is disclosed. IFAS does not address the presentation of re-issued financial statements in an offering document when the originally issued financial statements have not been withdrawn, but the reissued financial statements are provided either as supplementary information or as a re-presentation of the originally issued financial statements in an offering document in accordance with regulatory requirements. Under U.S. GAAP, if the financial statements are reissued, events or transactions may have occurred that require disclosure in the reissued financial statements to keep them from being misleading. However, an entity should not recognize events occurring between the time the financial statements were issued or available to be issued and the time the financial statements were reissued

unless the adjustment is required by U.S. GAAP or regulatory requirements (e.g. stock splits, discontinued operations, or the effect of adopting a new accounting standard retrospectively would give rise to an adjustment). Entities must disclose both the date that the financial statements were originally issued and the date that they were reissued if the financial statements were revised due to an error correction (i.e. a “type I” subsequent event or retrospective application of US GAAP).

Under IFAS, short-term loans refinanced after the date of the statement of financial position may not be reclassified to long-term liabilities unless the entity expected and had the discretion to refinance the obligation for at least 12 months at the date of the statement of financial position. Under U.S. GAAP, short-term loans are classified as long-term if the entity intends to refinance the loans on a long-term basis and, prior to issuing the financial statements, the entity can demonstrate an ability to refinance the loans by meeting specific criteria.

GLOSSARY

Oil and Gas Terms

“AMDAL”	means Environmental Impact Analysis (<i>Analisa Mengenai Dampak Lingkungan</i>).
“API gravity”	means American Petroleum Institute gravity, which is the inverse measure of the relative density of a petroleum liquid and the density of water.
“bottom upgrade”	means the upgrading of a refinery to produce higher value products.
“CBM”	means coal bed methane gas.
“CDU”	means crude distillation unit.
“CNG”	means compressed natural gas.
“contract area”	means a specified geographic area that is the subject of a production sharing arrangement pursuant to which an operator and its partners provide financing and technical expertise to conduct exploration, development and production operations.
“delineation well”	means a well drilled in a newly discovered or known discovery to gain further information.
“developed reserves”	means reserves that can be expected to be recovered through existing wells with existing equipment and operating methods. Additional oil and gas expected to be obtained through the application of fluid injection or other improved recovery techniques for supplementing the natural forces and mechanisms of primary recovery are included as “developed reserves” only after testing by a pilot project or after the operation of an installed program has confirmed through production response that increased recovery will be achieved.
“development well”	means a well that is drilled to exploit the hydrocarbon accumulation defined by a delineation well.
“dry well”	an exploratory, development or delineation well found to be incapable of producing either oil or gas in sufficient quantities to justify completion as an oil or gas well.
“exploration well”	means a well that is designed to test the validity of a seismic interpretation and to confirm the presence of hydrocarbons in an undrilled formation.
“FCCU”	means fluidized catalytic cracking unit.

“floating production and storage unit”	means a floating production and storage unit, which is a vessel used for both the processing of hydrocarbons and storage of oil.
“floating storage and regasification unit”	means a floating storage and regasification unit, which is a special vessel designed for the transport of LNG.
“fractions”	chemical components of crude oil separated by a refining process.
“FTP”	means first tranche petroleum.
“HVU”	means high vacuum unit.
“ICP”	means the Indonesian Crude Price, a reference price calculated using a formula determined by the Government.
“Indonesian Participant”	means an Indonesian entity designated by SKK MIGAS, which must be offered a certain specified percentage undivided interest in the total rights and obligations under a production sharing arrangement.
“Indonesian Participation Arrangement” or “IP”	means our participation in an agreement pursuant to our role as the Indonesian Participant.
“JOB”	means joint operating body.
“JOC”	means joint operating contract.
“lead”	means preliminary interpretation of geological and geophysical information that may or may not lead to prospects.
“lifting cost”	means, for a given period, cost incurred to operate and maintain wells and related equipment and facilities.
“LNG”	means liquefied natural gas.
“LPG”	means liquefied petroleum gas.
“LSWR”	means low sulfur waxy residual fuel oil.
“MOPS”	means Mean of Platts Singapore, a measure of fuel oil pricing in Singapore. It refers to the mean price of oil traded through Singapore as per the data from Platts, a commodity information and trading company.
“NCF”	means Nelson Complexity Index, a measure of the level of complexity of a refinery’s processing equipment.

“net working interest production”	means the product of multiplying gross field production by the company’s equity interest in the field.
“Oil Fuel Market Index Price”	means a reference price for certain fuel products as determined by the Director General of Oil and Gas on behalf of Minister of Energy and Mineral Resources by taking into consideration oil fuels price on a certain period of time based on the calculation of the MOPS published price.
“production”	represents our Company’s share of the gross production from a block or field, as the case may be, attributable to our Company’s working interest.
“production capacity”	means, in respect of a facility, the maximum amount that can, or is expected to be able to, be produced by such facility.
“proved reserves”	represent those quantities of petroleum which, by analysis of geological and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under current economic conditions, operating methods and Government regulations.
“proved plus probable reserves”	represent proved reserves plus those reserves that are unproved reserves which analysis of geological and engineering data suggests are more likely than not to be recoverable.
“PSC”	means production sharing contract.
“RCC”	means residual catalytic cracker.
“reserves”	represent our Company’s share of the gross reserves in a block or field, as the case may be, attributable to our Company’s working interest.
“TAC”	means technical assistance contract.
“turnaround”	an event wherein an entire process unit is taken offstream for maintenance or renewal.
“UKL”	means an environmental management effort plan (Upaya Pengelolaan Lingkungan).
“UPL”	means an environmental monitoring effort plan (Upaya Pemantauan Lingkungan).

Units of Measurement

“bbl” or “bbls”	means barrel or barrels.
“bbls/d”	means barrels per day.

“bcf”	means billion cubic feet.
“bcfd”	means billion cubic feet per day.
“boe”	means barrels of oil equivalent; natural gas is converted to boe using the ratio of 1 mmcf of natural gas to 0.1726 mboe of oil equivalent, except in “Industry Overview,” where natural gas is converted to boe using the ratio of one mmcf of natural gas to 0.176 mboe of oil equivalent.
“btu”	means British thermal unit.
“bbtu”	means billion British thermal units.
“bbtu/d”	means billion British thermal units per day.
“bnboe”	means billion barrels of oil equivalent.
“GW”	means gigawatt.
“GWh”	means gigawatt hour.
“kg”	means kilograms.
“KL”	means kiloliters.
“KWh”	means kilowatt hours.
“mbbls/d” or “kb/d”	means thousand barrels per day.
“mboe” or “kboe”	means thousand barrels of oil equivalent.
“mboe/d” or “kboe/d”	means thousand barrels of oil equivalent per day.
“mcf”	means thousand cubic feet.
“mcf/d”	means thousand cubic feet per day.
“mmbbls”	means million barrels.
“mmbbls/d”	means million barrels per day.
“mmboe” or “Mboe”	means million barrels of oil equivalent.
“mmboe/d” or “Mboe/d”	means million barrels of oil equivalent per day.
“mmbtu” or “mmBtu”	means million British thermal units.

“mmcf” means million cubic feet.
“mmscfd” or “MMscfd” means million standard cubic feet per day.
“mmcf/d” or “mmcf/d” means million cubic feet per day.
“mtoe” means metric tons of oil equivalent.
“mmtoe” means million metric tons of oil equivalent.
“mt” means metric ton.
“Mton” means thousand metric tons.
“mtpa” means metric ton per annum.
“mtpd” means metric ton per day.
“mmtpa” or “Mtpa” means million metric ton per annum.
“MW” means megawatts.
“MWh” means megawatts hours.

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**PT PERTAMINA (PERSERO)
AND ITS SUBSIDIARIES**

Unaudited interim consolidated financial statements
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with reports on review of interim financial information

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as of December 31, 2019, 2018, and 2017
and for the years then ended
with independent auditors' reports

**PT PERTAMINA (PERSERO) AND ITS SUBSIDIARIES
THE UNAUDITED INTERIM CONSOLIDATED FINANCIAL STATEMENTS
AS OF SEPTEMBER 30, 2020 AND FOR THE
NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2020 AND 2019
WITH REPORTS ON REVIEW OF INTERIM FINANCIAL INFORMATION
AND THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS
AS OF DECEMBER 31, 2019, 2018, AND 2017 AND FOR THE YEARS THEN ENDED
WITH INDEPENDENT AUDITORS' REPORT**

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**DIRECTORS' STATEMENT
REGARDING THE RESPONSIBILITY FOR
THE UNAUDITED INTERIM CONSOLIDATED FINANCIAL STATEMENTS
AS OF SEPTEMBER 30, 2020, AND FOR THE
NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2020 AND 2019
AND THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS
AS OF DECEMBER 31, 2019, 2018, AND 2017 AND FOR THE YEARS THEN ENDED
PT PERTAMINA (PERSERO) AND SUBSIDIARIES**

We, the undersigned:

1. Name : Nicke Widyawati
Office address : Jl. Medan Merdeka Timur 1A
Jakarta 10110
Telephone : 021 - 3815200
Position : President Director and CEO
2. Name : Emma Sri Martini
Office address : Jl. Medan Merdeka Timur 1A
Jakarta 10110
Telephone : 021 - 3816000
Position : Finance Director

declare best on our best knowledge and belief that:

1. We are responsible for the preparation and fair presentation of the following accompanying consolidated financial statements of PT Pertamina (Persero) and its subsidiaries (collectively referred to as the "Group") in accordance with Indonesian Financial Accounting Standards and for the related internal control as we determine is necessary to enable the preparations of such consolidated financial statements that are free from material misstatement whether due to fraud or error:
 - The unaudited interim consolidated financial statements as of September 30, 2020 and for the nine-month periods ended September 30, 2020 and 2019; and
 - The audited consolidated financial statements as of December 31, 2019, 2018, and 2017 and for the years then ended.
2. All information contained in the accompanying consolidated financial statements have been adequately and correctly disclose; and
3. The accompanying consolidated financial statements do not contain false information or facts, or omit material information or facts.

Jakarta, January 29, 2021
PT Pertamina (Persero)


Nicke Widyawati
President Director and CEO


Emma Sri Martini
Finance Director

Report on Review of Interim Financial Information

Report No. 00013/2.1032/JL.O/02/0694-1/1/I/2021

The Shareholder and the Boards of Commissioners and Directors PT Pertamina (Persero)

We have reviewed the accompanying interim consolidated financial statements of PT Pertamina (Persero) (the "Company") and its subsidiaries, which comprise the interim consolidated statement of financial position as of September 30, 2020, and the interim consolidated statements of profit or loss and other comprehensive income, changes in equity, and cash flows for the nine-month periods ended September 30, 2020 and 2019, and a summary of significant accounting policies and other explanatory information. Management is responsible for the preparation and fair presentation of these interim consolidated financial statements in accordance with Indonesian Financial Accounting Standards. Our responsibility is to express a conclusion on these interim consolidated financial statements based on our reviews.

Scope of review

We conducted our reviews in accordance with Standard on Review Engagements 2410, "Review of Interim Financial Information Performed by the Independent Auditor of the Entity", established by the Indonesian Institute of Certified Public Accountants. A review of interim financial information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Standards on Auditing established by the Indonesian Institute of Certified Public Accountants and consequently, does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion

Based on our reviews, nothing has come to our attention that causes us to believe that the accompanying interim consolidated financial statements do not present fairly, in all material respects, the consolidated financial position of PT Pertamina (Persero) and its subsidiaries as of September 30, 2020, and their consolidated financial performance and cash flows for the nine-month periods ended September 30, 2020 and 2019, in accordance with Indonesian Financial Accounting Standards.



Report on Review of Interim Financial Information (continued)

Report No. 00013/2.1032/JL.O/02/0694-1/1/I/2021 (continued)

Other matter

This report has been prepared solely for inclusion in the offering document in connection with the proposed offering of the debt securities of the Company in the United States of America and outside of the United States of America in reliance on Rule 144A and Regulation S, respectively, under the United States Securities Act of 1933, and is not intended to be, and should not be used, for any other purposes.

KAP Purwantono, Sungkoro & Surja

Feniwati Chendana
Public Accountant Registration No. AP.0694

January 29, 2021

Independent Auditors' Report

Report No. 00032/2.1032/AU.1/02/0684-5/1/I/2021

The Shareholder and the Boards of Commissioners and Directors PT Pertamina (Persero)

We have audited the accompanying consolidated financial statements of PT Pertamina (Persero) (the "Company") and its subsidiaries, which comprise the consolidated statements of financial position as of December 31, 2019, 2018, and 2017, and the consolidated statements of profit or loss and other comprehensive income, changes in equity, and cash flows for the years then ended, and a summary of significant accounting policies and other explanatory information.

Management's responsibility for the financial statements

Management is responsible for the preparation and fair presentation of such consolidated financial statements in accordance with Indonesian Financial Accounting Standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' responsibility

Our responsibility is to express an opinion on such consolidated financial statements based on our audits. We conducted our audits in accordance with Standards on Auditing established by the Indonesian Institute of Certified Public Accountants. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether such consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.



Independent Auditors' Report (continued)

Report No. 00032/2.1032/AU.1/02/0684-5/1/I/2021 (continued)

Auditors' responsibility (continued)

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of PT Pertamina (Persero) and its subsidiaries as of December 31, 2019, 2018, and 2017, and their consolidated financial performance and cash flows for the years then ended, in accordance with Indonesian Financial Accounting Standards.

Other matter

This report has been prepared solely for inclusion in the offering document in connection with the proposed offering of the debt securities of the Company in the United States of America and outside of the United States of America in reliance on Rule 144A and Regulation S, respectively, under the United States Securities Act of 1933, and is not intended to be, and should not be used, for any other purposes.

KAP Purwantono, Sungkoro & Surja

Drs. Hari Purwantono
Public Accountant Registration No. AP.0684

January 29, 2021

PT PERTAMINA (PERSERO) AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION
AS OF SEPTEMBER 30, 2020 AND DECEMBER 31, 2019, 2018, AND 2017
(Expressed in thousands of United States Dollars, unless otherwise stated)

			(As restated Note 5)		
		As of September 30, 2020	As of December 31,		
	Notes	(Unaudited)	2019	2018	2017
ASSETS					
CURRENT ASSETS					
Cash and cash equivalents	2f,2g,7	10,206,405	6,770,194	9,123,488	6,429,163
Restricted cash	2f,2g,8	180,798	182,129	108,915	119,671
Short-term investments	2g	290,954	392,584	225,199	249,282
Trade receivables	2h				
Related parties	2e,42a	1,776,712	1,554,094	1,297,651	1,095,016
Third parties	9a	1,629,184	1,957,717	1,982,894	1,620,404
Due from the Government - current portion	2e,2g,2h,10	1,632,710	3,375,794	1,834,261	1,492,625
Other receivables	2h				
Related parties	2e,42b	184,279	182,487	149,178	255,054
Third parties	9b	882,365	958,075	735,758	622,197
Inventories	2i,11	5,062,095	5,897,054	6,327,415	6,040,190
Prepaid taxes - current portion	2t,41a	788,882	1,364,165	822,057	794,558
Prepayments and advances	2j	579,846	449,702	536,501	477,260
Other investments	2g,12	16,259	85,834	80,171	27,328
Total Current Assets		23,230,489	23,169,829	23,223,488	19,222,748
NON-CURRENT ASSETS					
Due from the Government - net of current portion	2e,2g,2h,10	2,570,953	3,313,801	2,924,148	663,114
Deferred tax assets	2t,41e	1,168,881	1,511,216	1,445,337	1,374,778
Long-term investments	2g,2l,13	2,585,163	2,987,005	2,822,272	2,969,652
Fixed assets	2m,2n,14a	13,752,510	13,454,195	12,934,875	12,510,443
Oil and gas and geothermal properties	2n,2o,15a	19,398,000	19,756,792	18,614,286	18,031,374
Right of use assets	14b, 15b	1,963,497	-	-	-
Prepaid taxes - net of current portion	2t,41a	1,087,704	875,900	820,287	829,300
Other non-current assets	2g,16	2,018,428	2,229,937	2,088,174	1,981,675
Total Non-current Assets		44,545,136	44,128,846	41,649,379	38,360,336
TOTAL ASSETS		67,775,625	67,298,675	64,872,867	57,583,084

The accompanying notes form an integral part of these consolidated financial statements

PT PERTAMINA (PERSERO) AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION (continued)
AS OF SEPTEMBER 30, 2020 AND DECEMBER 31, 2019, 2018, AND 2017
(Expressed in thousands of United States Dollars, unless otherwise stated)

	Notes	As of September 30, 2020 (Unaudited)	(As restated Note 5)		
			As of December 31,		
			2019	2018	2017
LIABILITIES					
SHORT-TERM LIABILITIES					
Short-term loans	2g,17	1,410,603	1,285,420	4,353,356	452,879
Trade payables	2h				
Related parties	2g,42c	73,970	73,304	78,781	49,277
Third parties	18	2,769,840	4,591,829	3,609,806	3,914,854
Due to the Government - current portion	2e,2g,19	984,337	940,413	1,207,743	1,050,619
Taxes payable	2t,41b				
Income taxes		334,014	200,302	468,455	309,725
Other taxes		366,151	304,207	259,842	251,804
Accrued expenses	2g,20	2,763,190	2,815,710	2,149,023	2,029,616
Long-term liabilities - current portion	2g,2n,21	151,382	536,679	362,896	321,970
Lease liabilities - current portion	21b	730,319	44,525	58,722	50,410
Bonds payable - current portion	2g,22	391,372	-	-	-
Other payables	2g				
Related parties	2e,42d	44,296	72,672	52,455	56,625
Third parties	2g	1,053,192	1,122,452	1,212,830	1,132,280
Deferred revenue - current portion	2q	228,819	256,996	202,013	260,838
Total Short-term Liabilities		11,301,485	12,244,509	14,015,922	9,880,897
LONG-TERM LIABILITIES					
Due to the Government - net of current portion	2e,2g,19	774,536	796,029	795,082	780,626
Deferred tax liabilities	2t,41e	3,424,570	3,731,626	3,307,613	2,848,352
Long-term liabilities - net of current portion	2g,2n,21	1,419,741	1,434,140	1,718,514	1,963,742
Lease liabilities - net of current portion	21b	1,215,046	135,015	103,334	158,948
Bonds payable - net of current portion	2g,22	14,610,167	12,614,493	11,094,096	10,385,873
Employee benefits liabilities	2r,23	2,026,631	2,014,855	1,866,705	2,225,830
Provision for decommissioning and site restoration	2p,24	2,600,721	2,458,905	2,029,735	2,129,337
Deferred revenue - net of current portion	2q	111,722	53,826	74,623	42,716
Other non-current payables	2g	716,972	508,099	178,905	84,701
Total Long-term Liabilities		26,900,105	23,746,988	21,168,607	20,620,125
TOTAL LIABILITIES		38,201,590	35,991,497	35,184,529	30,501,022

The accompanying notes form an integral part of these consolidated financial statements

PT PERTAMINA (PERSERO) AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION (continued)
AS OF SEPTEMBER 30, 2020 AND DECEMBER 31, 2019, 2018, AND 2017
(Expressed in thousands of United States Dollars, unless otherwise stated)

	Notes	As of September 30, 2020 (Unaudited)	(As restated Note 5)		
			As of December 31,		
			2019	2018	2017
EQUITY					
Equity Attributable to Owners of the Parent Entity					
Share capital					
Authorized shares - 600,000,000 (2019 and 2018) and 200,000,000 (2017) ordinary shares at par value of Rp1,000,000 (full amount) per share					
Issued and paid-up - 171,227,044 shares (2019 and 2018); 133,090,697 shares (2017)	26a	16,191,204	16,191,204	16,191,204	13,417,047
Additional paid-in capital	26b	(857,806)	(924,296)	(924,296)	2,736
Merging entity's equity		-	44,304	40,099	1,840,087
Government contributed assets pending final clarification of status	27	1,361	146,578	401,120	1,361
Other equity components		(64,254)	77,204	617,068	487,699
Retained earnings	28				
- Appropriated		12,681,824	10,770,470	8,796,357	6,871,101
- Unappropriated		(530,526)	2,529,342	2,526,772	2,540,195
Total Equity Attributable to Owners of the Parent Entity		27,421,803	28,834,806	27,648,324	25,160,226
Non-controlling interests	2c,25	2,152,232	2,472,372	2,040,014	1,921,836
Total Equity		29,574,035	31,307,178	29,688,338	27,082,062
TOTAL LIABILITIES AND EQUITY		67,775,625	67,298,675	64,872,867	57,583,084

The accompanying notes form an integral part of these consolidated financial statements

PT PERTAMINA (PERSERO) AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENTS OF PROFIT OR LOSS AND COMPREHENSIVE INCOME
FOR THE NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2020 AND 2019,
AND FOR THE YEARS ENDED DECEMBER 31 2019, 2018, AND 2017
(Expressed in thousands of United States Dollars, unless otherwise stated)

(As restated Note 5)

	Notes	For the nine-month periods ended September 30,		For the years ended December 31,		
		2020 (Unaudited)	2019 (Unaudited)	2019	2018	2017
Sales and other operating revenues						
Domestic sales of crude oil, natural gas, geothermal energy and oil products	2q					
Subsidy reimbursements from the Government	29	24,501,801	32,429,455	43,783,510	44,742,511	39,788,784
Export of crude oil, natural gas and oil products	30	2,493,463	3,654,557	4,875,075	5,632,468	3,572,084
Marketing fees	31	2,620,486	2,483,980	3,628,904	3,636,953	1,874,281
Revenues from other operating activities	32	-	9,430	-	15,432	25,474
		634,876	750,050	2,505,031	4,083,802	915,102
TOTAL SALES AND OTHER OPERATING REVENUES		30,250,626	39,327,472	54,792,520	58,111,166	46,175,725
Cost of sales and other direct costs						
Cost of goods sold	2q					
Upstream production and lifting costs	33	(20,602,231)	(29,112,979)	(39,559,658)	(42,787,916)	(33,175,656)
Exploration costs	34	(3,546,242)	(3,573,512)	(4,999,734)	(4,386,516)	(3,421,207)
Expenses from other operating activities	35	(111,622)	(120,070)	(206,929)	(267,680)	(165,356)
	36	(1,720,806)	(1,330,506)	(1,868,210)	(1,357,518)	(1,016,439)
TOTAL COST OF SALES AND OTHER DIRECT COSTS		(25,980,901)	(34,137,067)	(46,634,531)	(48,799,630)	(37,778,658)
GROSS PROFIT		4,269,725	5,190,405	8,157,989	9,311,536	8,397,067
Selling and marketing expenses	2q,37	(813,874)	(1,082,200)	(1,624,902)	(1,642,831)	(1,590,202)
General and administrative expenses	2q,38	(1,026,878)	(1,196,005)	(1,635,161)	(1,412,195)	(1,606,729)
Gain (loss) on foreign exchange - net	2q,2s	(640,232)	140,494	289,430	19,623	58,137
Finance income	2r,39	326,383	400,745	1,221,682	257,103	233,812
Finance costs	2r,39	(761,662)	(722,876)	(968,306)	(836,672)	(818,044)
Share in net profit of associates and joint ventures	2c,2q	(17,188)	59,722	80,322	122,723	37,905
Other expenses - net	2q,40	(987,916)	(333,904)	(638,948)	(77,338)	(831,387)
		(3,921,367)	(2,734,024)	(3,275,883)	(3,569,587)	(4,516,508)
PROFIT BEFORE INCOME TAX		348,358	2,456,381	4,882,106	5,741,949	3,880,559
Income tax expense - net	2u,40c	(1,046,396)	(1,675,848)	(2,264,069)	(3,016,201)	(1,170,373)
PROFIT FOR THE PERIOD/YEAR AFTER THE EFFECT OF MERGING ENTITY'S INCOME ADJUSTMENT		(698,038)	780,533	2,618,037	2,725,748	2,710,186

The accompanying notes form an integral part of these consolidated financial statements.

PT PERTAMINA (PERSERO) AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENTS OF PROFIT OR LOSS AND COMPREHENSIVE INCOME (continued)
FOR THE NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2020 AND 2019,
AND FOR THE YEARS ENDED DECEMBER 31 2019, 2018, AND 2017
(Expressed in thousands of United States Dollars, unless otherwise stated)

(As restated Note 5)					
Notes	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (Unaudited)	2019 (Unaudited)	2019	2018	2017
PROFIT FOR THE PERIOD/YEAR AFTER THE EFFECT OF MERGING ENTITY'S INCOME ADJUSTMENT	(698,038)	780,533	2,618,037	2,725,748	2,710,186
OTHER COMPREHENSIVE (LOSS) INCOME					
Items not to be reclassified to profit or loss in subsequent periods (net of tax):					
Remeasurement of net defined benefit liability	2r	(6,325)	(37,661)	(93,315)	228,498
Items to be reclassified to profit or loss in subsequent periods (net of tax):					
Foreign exchange difference from translation of financial statements in foreign currency	2c,2s	248	(63,326)	48,178	(79,561)
Share of other comprehensive income (loss) of associates	2c,2l	(409,567)	93,503	(144,748)	(127,106)
Other comprehensive income (loss), net of tax	(415,644)	(7,484)	(189,885)	21,831	(143,209)
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD/YEAR AFTER THE EFFECT OF MERGING ENTITY'S INCOME ADJUSTMENT	(1,113,682)	773,049	2,428,152	2,747,579	2,566,977
Adjustment of merging entity's income:					
Owners of the parent entity	2c	(815)	(2,964)	294	(50,510)
Non-controlling interests		(658)	(2,900)	55	(39,200)
		(1,473)	(5,864)	349	(89,710)
PROFIT FOR THE PERIOD/YEAR BEFORE THE EFFECT OF MERGING ENTITY'S INCOME ADJUSTMENT ATTRIBUTABLE TO:					
Owners of the parent entity	2c	(530,526)	730,444	2,529,342	2,526,771
Non-controlling interests		(168,985)	44,226	89,044	109,267
		(699,511)	774,670	2,618,386	2,636,038
Adjustment of merging entity's comprehensive income:					
Owners of the parent	2c	(815)	(2,949)	(362)	(49,286)
Non-controlling interests		(658)	(2,892)	(1,749)	(38,966)
		(1,473)	(5,841)	(2,111)	(88,252)
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD/YEAR BEFORE EFFECT OF MERGING ENTITY'S INCOME ADJUSTMENT ATTRIBUTABLE TO:					
Owners of the parent	2c	(801,788)	363,017	1,989,475	2,536,559
Non-controlling interests		(313,367)	404,191	427,167	122,769
		(1,115,155)	767,208	2,416,642	2,659,328

The accompanying notes form an integral part of these consolidated financial statements.

PT PERTAMINA (PERSERO) AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
FOR THE NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2020 AND 2019, AND THE YEARS ENDED DECEMBER 31, 2019, 2018, AND 2017
(Expressed in thousands of United States Dollars, unless otherwise stated)

Attributable to owners of the parent entity													
	Notes	Issued and paid-up capital	Advance for share issuance	Merging entities equity	Additional paid in capital	Government contributed assets pending final clarification of status	Other equity components					Non-controlling interests	Total equity
							Differences arising from translation of non US\$ currency financial statements	Other Comprehensive income	Retained earnings		Total		
									Appropriated	Unappropriated			
Balance as of January 1, 2017/ December 31, 2016 (As previously reported)		13,417,047	-	1,801,742	2,736	1,361	(304,201)	968,818	4,631,441	3,147,043	23,665,987	1,578,771	25,244,758
Merging entity's equity		-	-	23,125	-	-	-	-	-	-	23,125	22,289	45,414
Balance as of January 1, 2017/ December 31, 2016 (as restated)		13,417,047	-	1,824,867	2,736	1,361	(304,201)	968,818	4,631,441	3,147,043	23,689,112	1,601,060	25,290,172
Impact of consolidated beginning balance of non-controlling interest Etablissements Maurel et Prom SA	5	-	-	-	-	-	-	-	-	-	-	252,158	252,158
Adjustment of merging entity's comprehensive income for the year		-	-	87,818	-	-	-	-	-	-	87,818	72,147	159,965
Adjustment of merging entity's other equity transaction		-	-	(72,598)	-	-	-	-	-	-	(72,598)	47,264	(119,862)
Differences arising from translation of non-US dollar currency financial statements	2c,2t	-	-	-	-	-	1,225	-	-	-	1,225	3,271	4,496
Other comprehensive income from associates		-	-	-	-	-	-	(55,421)	-	-	(55,421)	28,050	230,084
Remeasurements of net defined benefit liability	2s	-	-	-	-	-	-	(122,722)	-	-	(122,722)	(10)	(122,732)
Dividends declared	2aa,27	-	-	-	-	-	-	-	-	(907,383)	(907,383)	-	(907,383)
Appropriation of other reserves	27	-	-	-	-	-	-	-	2,239,660	(2,239,660)	-	-	-
Profit for the year		-	-	-	-	-	-	-	-	2,540,195	2,540,195	12,424	2,552,619
Balance as of December 31, 2017 (as restated)	5	13,417,047	-	1,840,087	2,736	1,361	(302,976)	790,675	6,871,101	2,540,195	25,160,226	1,921,836	27,082,062

The accompanying notes form an integral part of these consolidated financial statements.

PT PERTAMINA (PERSERO) AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (continued)
FOR THE NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2020 AND 2019, AND THE YEARS ENDED DECEMBER 31, 2019, 2018, AND 2017
(Expressed in thousands of United States Dollars, unless otherwise stated)

Attributable to owners of the parent entity													
	Notes	Issued and paid-up capital	Merging entities equity	Additional paid in capital	Government contributed assets pending final clarification of status	Other equity components					Non-controlling interests	Total equity	
							Differences arising from translation of non US\$ currency financial statements	Other comprehensive income	Retained earnings				Total
									Appropriated	Unappropriated			
Balance as of January 1, 2018/ December 31, 2017 (as restated)	5	13,417,047	1,840,087	2,736	1,361	(302,976)	790,675	6,871,101	2,540,195	1,921,836	27,082,062		
Adjustment of merging entity's comprehensive income for the year		-	49,286	-	-	-	-	-	-	(62,511)	(13,225)		
Adjustment of merging entity's other equity transaction		-	(2,149)	-	-	-	-	-	-	(1,370)	(3,519)		
Change in ownership in PT Asuransi Tugu Pratama Indonesia Tbk. and PT Pertamina Internasional Eksplorasi dan Produksi (Note 4c)		-	-	-	-	-	13,710	-	-	68,814	82,524		
Capitalization of advance for share issuance		2,774,157	(1,847,125)	(927,032)	-	-	-	-	-	-	-		
Government contributed assets pending final clarification of status	26	-	-	-	399,759	-	-	-	-	399,759	399,759		
Differences arising from translation of non-US dollar currency financial statements	2c,2t	-	-	-	-	(59,338)	-	-	-	(20,223)	(79,561)		
Other comprehensive income from associates		-	-	-	-	-	(59,634)	-	-	30,334	(29,300)		
Remeasurements of net defined benefit liability	2s	-	-	-	-	-	234,631	-	-	(6,133)	228,498		
Dividends declared	2aa,27	-	-	-	-	-	-	-	(614,939)	-	(614,939)		
Appropriation of other reserves	27	-	-	-	-	-	-	1,925,256	(1,925,256)	-	-		
Profit for the year		-	-	-	-	-	-	-	2,526,772	109,267	2,636,039		
Balance as of December 31, 2018 (as restated)	5	16,191,204	40,099	(924,296)	401,120	(362,314)	979,382	8,796,357	2,526,772	2,040,014	29,688,338		

The accompanying notes form an integral part of these consolidated financial statements.

PT PERTAMINA (PERSERO) AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (continued)
FOR THE NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2020 AND 2019, AND THE YEARS ENDED DECEMBER 31, 2019, 2018, AND 2017
(Expressed in thousands of United States Dollars, unless otherwise stated)

	Attributable to owners of the parent entity											
	Notes	Issued and paid-up capital	Merging entities equity	Additional paid in capital	Government contributed assets pending final clarification of status	Other equity components			Retained earnings		Non-controlling interests	Total equity
						Differences arising from translation of non US\$ currency financial statements	Other comprehensive income	Unappropriated	Total			
Balance as of January 1, 2019/ December 31, 2018 (as restated)	5	16,191,204	40,099	(924,296)	401,120	(362,314)	979,382	8,796,357	2,526,772	27,648,324	2,040,014	29,688,338
Adjustment of merging entity's comprehensive income for the year		-	2,949	-	-	-	-	-	-	-	2,892	5,841
Adjustment of merging entity's other equity transaction		-	3,436	-	-	-	-	-	-	3,436	3,042	6,478
Government contributed assets pending final clarification of status	26	-	-	-	18,448	-	-	-	-	18,448	-	18,448
Differences arising from translation of non-US dollar currency financial statements	2c,2t	-	-	-	-	(142,152)	-	-	-	(142,152)	78,826	(63,326)
Other comprehensive income from associates		-	-	-	-	-	(205,744)	-	-	(205,744)	286,949	81,205
Remeasurements of net defined benefit liability	2s	-	-	-	-	-	(31,851)	-	-	(31,851)	(5,810)	(37,661)
Dividends declared	2aa,27	-	-	-	-	-	-	-	(552,659)	(552,659)	-	(552,659)
Appropriation of other reserves	27	-	-	-	-	-	-	1,974,113	(1,974,113)	-	-	-
Profit for the year		-	-	-	-	-	-	-	730,443	730,443	44,226	774,669
Balance as of September 30, 2019 (as restated)	5	16,191,204	40,484	(924,296)	419,568	(504,363)	741,787	10,770,470	730,443	27,471,195	2,450,139	29,921,334

The accompanying notes form an integral part of these consolidated financial statements.

PT PERTAMINA (PERSERO) AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (continued)
FOR THE NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2020 AND 2019, AND THE YEARS ENDED DECEMBER 31, 2019, 2018, AND 2017
(Expressed in thousands of United States Dollars, unless otherwise stated)

Attributable to owners of the parent entity												
	Notes	Issued and paid-up capital	Merging entities equity	Additional paid in capital	Government contributed assets pending final clarification of status	Other equity components				Total	Non-controlling interests	Total equity
						Differences arising from translation of non US\$ currency financial statements	Other comprehensive income	Retained earnings				
								Appropriated	Unappropriated			
Balance as of January 1, 2019/ December 31, 2018 (as restated)	5	16,191,204	40,099	(924,296)	401,120	(362,314)	979,382	8,796,357	2,526,772	27,648,324	2,040,014	29,688,338
Adjustment of merging entity's comprehensive income for the year		-	362	-	-	-	-	-	-	362	1,749	2,111
Adjustment of merging entity's other equity transaction		-	3,843	-	-	-	-	-	-	3,843	3,442	7,285
Government contributed assets pending final clarification of status	26	-	-	-	(254,542)	-	-	-	-	(254,542)	-	(254,542)
Differences arising from translation of non-US dollar currency financial statements	2c,2t	-	-	-	-	16,388	-	-	-	16,388	31,790	48,178
Other comprehensive income from associates		-	-	-	-	-	(452,730)	-	-	(452,730)	296,126	(156,604)
Remeasurements of net defined benefit liability	2s	-	-	-	-	-	(103,522)	-	-	(103,522)	10,207	(93,315)
Dividends declared	2aa,27	-	-	-	-	-	-	-	(552,659)	(552,659)	-	(552,659)
Appropriation of other reserves	27	-	-	-	-	-	-	1,974,113	(1,974,113)	-	-	-
Profit for the year		-	-	-	-	-	-	-	2,529,342	2,529,342	89,044	2,618,386
Balance as of December 31, 2019 (as restated)	5	16,191,204	44,304	(924,296)	146,578	(345,926)	423,130	10,770,470	2,529,342	28,834,806	2,472,372	31,307,178

The accompanying notes form an integral part of these consolidated financial statements.

PT PERTAMINA (PERSERO) AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (continued)
FOR THE NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2020 AND 2019, AND THE YEARS ENDED DECEMBER 31, 2019, 2018, AND 2017
(Expressed in thousands of United States Dollars, unless otherwise stated)

		Attributable to owners of the parent entity										
Notes	Issued and paid-up capital	Merging entities equity	Additional paid in capital	Government contributed assets pending final clarification of status	Other equity components			Retained earnings		Non-controlling interests	Total equity	
					Differences arising from translation of non US\$ currency financial statements	Other comprehensive income						
							Appropriated	Unappropriated				
Balance as of January 1, 2020/ December 31, 2019 (as restated)	5	16,191,204	44,304	(924,296)	146,578	423,130	(345,926)	10,770,470	2,529,342	28,834,806	2,472,372	31,307,178
Adjustment of merging entity's comprehensive income for the year		-	815	-	-	-	-	-	-	815	658	1,473
Adjustment of merging entity's other equity transaction		-	15,746	-	-	-	-	-	-	15,746	10,898	26,644
Establishment of BUMN Hospital Holding	4m	-	(60,865)	(78,727)	-	-	-	-	-	(139,592)	(18,329)	(157,921)
Capitalization of advance for share issuance		-	-	145,217	-	-	-	-	-	145,217	-	145,217
Government contributed assets pending final clarification of status	26	-	-	-	(145,217)	-	-	-	-	(145,217)	-	(145,217)
Differences arising from translation of non-US dollar currency financial statements	2c,2t	-	-	-	-	(211)	-	-	-	(211)	459	248
Other comprehensive income from associates		-	-	-	-	-	(141,247)	-	-	(141,247)	(138,516)	(279,763)
Remeasurements of net defined benefit liability	2s	-	-	-	-	-	-	-	-	-	(6,325)	(6,325)
Dividends declared	2aa,27	-	-	-	-	-	-	-	-	(599,182)	(599,182)	(599,182)
Appropriation of other reserves	27	-	-	-	-	-	-	1,911,354	(1,911,354)	-	-	-
SFAS 71 adjustment		-	-	-	-	-	-	-	-	(18,806)	-	(18,806)
Profit for the year		-	-	-	-	-	-	-	(530,526)	(530,526)	(168,985)	(699,511)
Balance as of September 30, 2020		16,191,204	-	(857,806)	1,361	(346,137)	281,883	12,681,824	(530,526)	27,421,803	2,152,232	29,574,035

The accompanying notes form an integral part of these consolidated financial statements.

PT PERTAMINA (PERSERO) AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2020 AND 2019,
AND FOR THE YEARS ENDED DECEMBER 31, 2019, 2018, AND 2017
(Expressed in thousands of United States Dollars, unless otherwise stated)

(As restated Note 5)

Notes	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (Unaudited)	2019 (Unaudited)	2019	2018	2017
Cash flows from operating activities:					
Cash receipts from customers	31,652,688	38,161,934	52,051,306	49,045,163	40,387,204
Cash receipts from Government	5,909,891	4,728,593	7,195,147	7,805,648	3,787,855
Cash receipts from tax restitutions	77,562	39,012	82,958	185,016	616,752
Payments to suppliers	(25,816,541)	(28,944,026)	(40,803,244)	(38,333,563)	(29,366,773)
Payments to the Government	(4,323,425)	(7,160,966)	(9,587,675)	(11,279,557)	(7,524,628)
Payments of corporate income taxes	(1,116,365)	(2,033,146)	(2,456,336)	(2,692,807)	(2,104,776)
Cash paid to employees and management	(1,328,521)	(1,534,108)	(1,989,474)	(1,693,702)	(1,589,010)
Receipts from (placement of) restricted cash	(46,839)	(11,523)	(46,969)	73,164	(156,047)
Receipts of interest	136,145	18,747	45,700	61,965	35,933
Net cash generated from operating activities	5,144,493	3,264,517	4,491,413	3,171,327	4,086,510
Cash flows from investing activities:					
Proceeds from disposal of short-term investments	269,811	97,985	162,836	198,439	99,870
Proceeds from disposal of long-term investments	70,054	-	-	-	15,801
Interest received from investments	4,160	9,712	6,237	14,320	18,240
Cash receipts from other investing activities	1,866	406	99,031	262,222	28,681
Proceeds from sale of fixed assets	13,424	1,119	1,255	176	102
Dividends received from associates	31,233	14,783	99,812	214,083	81,648
Purchases of fixed assets	(1,007,458)	(985,614)	(1,295,233)	(1,301,540)	(1,002,346)
Purchases of oil and gas, and geothermal properties	(1,705,042)	(1,372,460)	(2,360,764)	(1,482,518)	(891,964)
Placements in long-term investments	(143,108)	(90,654)	(290,286)	(1,062,244)	(659,992)
Placements in short-term investments	(92,050)	(123,260)	(340,803)	(237,577)	(226,322)
Payments for exploration and evaluation assets	(48,590)	(30,474)	(6,978)	(99,538)	(37,200)
Proceeds from (placement of) restricted cash	44,937	(731)	2,155	(26,175)	(29,441)
Addition of participating interest	-	-	-	-	-
Acquisition of subsidiary net of cash acquired	-	17,038	8,467	-	-
Cash obtained due to change of control	-	-	-	-	203,230
Net cash used in investing activities	(2,560,763)	(2,462,150)	(3,914,271)	(3,520,352)	(2,399,693)

The accompanying notes form an integral part of these consolidated financial statements.

PT PERTAMINA (PERSERO) AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS (continued)
FOR THE NINE-MONTH PERIODS ENDED SEPTEMBER 30, 2020 AND 2019,
AND FOR THE YEARS ENDED DECEMBER 31, 2019, 2018, AND 2017
(Expressed in thousands of United States Dollars, unless otherwise stated)

(As restated Note 5)

	Notes	For the nine-month periods ended September 30,		For the years ended December 31,		
		2020 (Unaudited)	2019 (Unaudited)	2019	2018	2017
Cash flows from financing activities:						
Proceeds from short-term loans	47	5,274,327	5,733,260	7,176,330	9,500,080	4,048,899
Proceeds from bond issuance	47	2,969,093	1,498,855	1,498,855	734,407	625,000
Proceeds from long-term loans	47	547,359	415,185	417,952	263,097	663,361
Repayments of short-term loans	47	(5,130,105)	(8,375,606)	(10,285,189)	(5,591,431)	(3,786,723)
Repayments of long-term loans	47	(916,445)	(491,051)	(526,540)	(467,036)	(2,103,739)
Dividend payments	27,47	(574,274)	(318,025)	(563,106)	(587,064)	(868,524)
Payments of finance costs		(486,186)	(337,521)	(622,819)	(538,897)	(523,427)
Repayments of bonds	47	(608,628)	-		(37,649)	-
Receipts from (placement of) restricted cash		(430)	(1,043)	(139,043)	(312)	(13,249)
Net cash generated from (used in) financing activities		1,074,421	(1,875,946)	(3,043,560)	3,275,195	(1,958,402)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS		3,658,151	(1,073,579)	(2,466,418)	2,926,170	(271,585)
Effect of exchange rate changes on cash and cash equivalents		(221,940)	59,456	113,124	(231,845)	(37,401)
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE PERIOD/YEAR	6	6,770,194	9,123,488	9,123,488	6,429,163	6,738,149
CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD/YEAR	6	10,206,405	8,109,365	6,770,194	9,123,488	6,429,163

The accompanying notes form an integral part of these consolidated financial statements.

PT PERTAMINA (PERSERO) AND ITS SUBSIDIARIES
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1. GENERAL

a. PT Pertamina (Persero) (“the Company”)

i. Company profile

The Company was established in accordance with Notarial Deed No. 20 dated September 17, 2003 of Lenny Janis Ishak, S.H. The Company's deed of establishment was approved by the Minister of Law and Human Rights through Letter No. C-24025 HT.01.01.TH.2003 dated October 9, 2003 and through Circular Letter No. 93 attachments No. 11620 dated November 21, 2003. The establishment of the Company is based on Law No. 1 Year 1995 dated March 7, 1995 regarding Limited Liability Company ("PT"), Government Regulation ("PP") No. 12 Year 1998 dated January 17, 1998 regarding the Company (Persero), and PP No. 45 Year 2001 dated June 5, 2001 regarding Amendments to PP No. 12 Year 1998, Law No. 22 Year 2001 dated November 23, 2001 regarding Oil and Gas, Law No. 19 Year 2003 dated June 19, 2003 regarding State-Owned Enterprises ("BUMN"), and PP No. 31 Year 2003 dated June 18, 2003 regarding changes in the status of Perusahaan Pertambangan Minyak dan Gas Bumi Negara (Pertamina, “the former Pertamina Entity”) to a state Enterprise (Persero).

The Company's Articles of Association have been amended several times. The latest amendment was made to increase the authorized capital of the Company, under Notarial Deed No. 29 dated April 13, 2018 of Aulia Taufani, S.H., which was approved by the Minister of Law and Human Rights through Decision Letter No. AHU-0008395.AH.01.02. Year 2018 dated April 13, 2018.

In accordance with PP No. 31 Year 2003, all rights and obligations arising from contracts and agreements entered between the former Pertamina Entity and third parties, provided these are not contrary to Law No. 22 Year 2001, were transferred to the Company. In accordance with PP No. 31 Year 2003, the objective of the Company is to engage in the oil and gas business in domestic and foreign markets and in other related business activities. In conducting its business, the Company's objective is to generate income and contribute to the improvement of the economy for the benefit of the people of Indonesia.

At the date of establishment of the Company, all oil and gas and geothermal energy activities of the former Pertamina Entity, including joint operations with other companies, were transferred to the Company. These businesses have been transferred to the Company's subsidiaries. All employees of the former Pertamina Entity became employees of the Company.

ii. Business activities and principal address

In accordance with its Articles of Association under Notarial Deed No. 29 dated April 13, 2018 of Aulia Taufani, S.H., which was registered by the Minister of Law and Human Rights through its Letter No. AHU-0008395.AH.01.02. Year 2018 dated April 13, 2018, the Company shall conduct the following main business:

- a. Operate in exploration activities of oil and gas;
- b. Operate in exploitation activities of oil and gas;
- c. Carry out activities in electrical energy, including but not limited to the exploration and exploitation of geothermal energy, geothermal electricity power plant (“PLTP”), gas power plant (“PLTG”) and electricity energy produced by the Company;
- d. Implement refining activities that produce fuel oil, special fuel, non-fuel, petrochemicals, gas fuel, Liquefied Natural Gas (“LNG”) and Gas to Liquid (“GTL”) result/other product either and products or intermediate products

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(Expressed in thousands of United States Dollars, unless otherwise stated)

1. GENERAL

a. PT Pertamina (Persero) ("the Company") (continued)

ii. Business activities and principal address (continued)

- e. Conduct activities of the procurement of raw materials, processing, transportation, storage and trading of Biofuels;
- f. Conduct operational activities, which includes the transport of petroleum, natural gas, fuel oil, fuel gas and/or result/other products for commercial purposes;
- g. Carry out storage activities which includes the reception, the collection and spending of petroleum reservoirs, fuel oil, fuel gas and/or result/other products for commercial purposes;
- h. Carry out commercial trade activities which includes the purchase, sale, export and import of petroleum, fuel oil, fuel gas and/or result/other products; the distribution of natural gas through pipelines including commercial electrical energy produced by the Company; and
- i. Conduct developmental activities, exploration, production and trading of new and renewable energy, among others, Coal Bed Methane ("CBM"), liquified coal, gasified coal, shale gas, shale oil, bio fuel, diesel fuel, wind energy and biomass.

In addition to the above main business activities, the Company may conduct business in order to optimize the utilization of available resources as follows:

- a. Trading house, real estate, warehousing, tourism, resort, sports and recreation, rest areas, hospitals, education, research, infrastructure, telecommunications, rental services and operation of facilities and infrastructure owned by the Company, the freeway (toll) and shopping centre/mall;
- b. Management of Special Economic Zones;
- c. Industrial complex management; and
- d. Other business activities and association to support its main business.

The Company has processing activities which include the processing of crude oil into oil products and production of Liquified Petroleum Gas ("LPG") and petrochemicals (paraxylene and propylene).

The Company owns six Refinery Units ("RU") with installed processing capacities as follows:

RU	Installed processing capacity of crude oil (barrels/day) (unaudited)
RU II - Dumai and Sungai Pakning, Riau	170,000
RU III - Plaju and Sungai Gerong, South Sumatera	118,000
RU IV - Cilacap, Central Java	348,000
RU V - Balikpapan, East Kalimantan	260,000
RU VI - Balongan, West Java	125,000
RU VII - Kasim, West Papua	10,000

The Company, through its subsidiaries, also conducts certain business activities as disclosed in Notes 1b, and 43.

The Company's head office is located at Jl. Medan Merdeka Timur No. 1A, Jakarta, Indonesia.

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1. GENERAL (continued)

a. PT Pertamina (Persero) (the Company) (continued)

iii. The Company's Boards of Commissioners and Board of Directors

As of September 30, 2020, and December 31, 2019, 2018, and 2017, the composition of the Company's Board of Commissioners are as follows:

	September 30, 2020	2019	December 31, 2018	2017
President Commissioner	Basuki Tjahaja Purnama ^a	Basuki Tjahaja Purnama	Tantri Abeng	Tantri Abeng
Vice President Commissioner	Budi Gunadi Sadikin	Budi Gunadi Sadikin	Arcandra Tahar	Arcandra Tahar
Commissioner	Ego Syahril	Ego Syahril	Sahala Lumban Gaol	Sahala Lumban Gaol
Commissioner	Alexander Lay ^a	Alexander Lay	Suhasil Nazara	Suhasil Nazara
Commissioner	Condro Kirono	Condro Kirono	Ahmad Bambang	Edwin Hidayat Abdullah
Commissioner	Isa Rachmatrawata	Isa Rachmatrawata	Alexander Lay	Alexander Lay
Commissioner	David Bingei ^{a,b}	-	Ego Syahril	-

^a Independent Commissioner

^b Based on resolution No. SK-120/MBU/04/2020 of the GMS dated April 17, 2020

As of September 30, 2020, and December 31, 2019, 2018, and 2017, the composition of the Company's Board of Directors are as follows:

	September 30, 2020	2019	December 31, 2018	2017
President Director & CEO	Nicke Widyawati	Nicke Widyawati	Nicke Widyawati	Elia Massa Manik
Director of Corporate Services	M. Haryo Yudianto ^a	-	-	-
Director of Finance	Emma Sri Martini	Emma Sri Martini	Pahala N. Mansury	Arief Budiman
Director of Human Capital	Koeshartanto	Koeshartanto	Koeshartanto	Nicke Widyawati
Director of Integrated Logistics & Infrastructure	Mulyono ^a	-	-	-
Director of Strategy, Portfolio & New Ventures	Iman Rachman ^a	-	-	-
Marketing Director	-	-	-	Muchamad Iskandar
Corporate Marketing Director	-	Basuki Trihora Putra	Basuki Trihora Putra	-
Retail Marketing Director	-	Mas'ud Khamid	Mas'ud Khamid	-
Upstream Director	-	Dharmawan H. Samsu	Dharmawan H. Samsu	Syamsu Alam
Gas Director	-	-	-	Yenni Andayani
Logistic, Supply Chain, and Infrastructure Director	-	Gandhi Sriwidodo	Gandhi Sriwidodo	-
Refinery Director	-	Budi Santoso Syarif	Budi Santoso Syarif	Toharso
Mega Project Refinery and Petrochemical Director	-	Ignatius Tallulembang	Ignatius Tallulembang	Ardhy N. Mokobombang
Planning Investment and Risk Management Director	-	Heru Setiawan	Heru Setiawan	Gigih Prakoso
Asset Management Director	-	M. Haryo Yudianto	M. Haryo Yudianto	Dwi Wahyu Daryoto

^a Effective June 12, 2020 based on GMS resolution No. SK-198/MBU/06/2020

As of September 30, 2020, and December 31, 2019, 2018, and 2017, the composition of the Company's Audit Committee are as follows:

	September 30, 2020	2019	December 31, 2018	2017
Chairman	David Bingei ^a	Basuki Tjahaja Purnama	Tantri Abeng	Tantri Abeng
Vice Chairman	Alexander Lay	Alexander Lay	Sahala Lumban Gaol	Sahala Lumban Gaol
Vice Chairman	-	-	Ahmad Bambang	Edwin Hidayat Abdullah
Member	Widiyarto Suwanto Sumitro ^b	Agus Yulianto	Agus Yulianto	Agus Yulianto
Member	Wahyu Indra Pramugari ^c	Bonar Lumban Tobing	Bonar Lumban Tobing	Bonar Lumban Tobing
Member	Eddy Fritz Sinaga ^d	-	-	Dwi Martini

^a Effective April 28, 2020 based on Decision Letter of Board of Commissioners No. 012/KPTS/K/DK/2020

^b Effective August 1, 2020 based on Decision Letter of Board of Commissioners No. 015/KPTS/K/DK/2020

^c Effective August 1, 2020 based on Decision Letter of Board of Commissioners No. 017/KPTS/K/DK/2020

^d Effective August 1, 2020 based on Decision Letter of Board of Commissioners No. 019/KPTS/K/DK/2020

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1. GENERAL (continued)

a. PT Pertamina (Persero) (the Company) (continued)

iv. Establishment of subholding structures and subsidiaries

Based on the President Director's Decree Number SK-18/C00000/2020-S0 dated June 12, 2020 concerning the Organizational Structure of PT Pertamina Persero), the Company formed and determined subholding and its subsidiaries:

1. Subholding Upstream
2. Subholding Refining & Petrochemical
3. Subholding Commercial & Trading
4. Subholding Gas
5. Subholding Power & NRE
6. Shipping Co.

v. Number of employees

As of September 30, 2020 and December 31, 2019, 2018, and 2017, the Group has 35,515; 32,449; 31,569; and 30,118 permanent employees (unaudited), respectively.

b. Subsidiaries, associates and joint arrangements

i. Subsidiaries

As of September 30, 2020, and December 31, 2019, 2018, and 2017 the Group has direct or indirect control of the following subsidiaries:

Subsidiaries	Year of establishment	Percentage of ownership			
		September 30, 2020 (unaudited)	December 31,		
			2019	2018	2017
Oil and gas exploration and production					
1. PT Pertamina Hulu Energi	1990	100.00%	100.00%	100.00%	100.00%
2. PT Pertamina EP	2005	100.00%	100.00%	100.00%	100.00%
3. PT Pertamina EP Cepu	2005	100.00%	100.00%	100.00%	100.00%
4. Pertamina E&P Libya Limited, British Virgin Island	2005	100.00%	100.00%	100.00%	100.00%
5. PT Pertamina East Natuna	2012	100.00%	100.00%	100.00%	100.00%
6. PT Pertamina EP Cepu ADK	2013	100.00%	100.00%	100.00%	100.00%
7. PT Pertamina Internasional Eksplorasi dan Produksi	2013	100.00%	100.00%	100.00%	100.00%
8. ConocoPhillips Algeria Limited, Cayman Island *)	2013	100.00%	100.00%	100.00%	100.00%
9. PT Pertamina Hulu Indonesia	2015	100.00%	100.00%	100.00%	100.00%
10. PT Pertamina Hulu Rokan (Note 4g)	2018	100.00%	100.00%	100.00%	-
Geothermal exploration and production					
11. PT Pertamina Geothermal Energy	2006	100.00%	100.00%	100.00%	100.00%
Drilling services					
12. PT Pertamina Drilling Services Indonesia	2008	100.00%	100.00%	100.00%	100.00%
Processing and sale of oil and gas products, construction and oil field services, information technology and telecommunications					
13. PT Elnusa Tbk.	1969	41.10%	41.10%	41.10%	41.10%
Oil and gas trading, gas transportation, processing, distribution and storage					
14. PT Pertamina Gas (Note 4a)	2007	-	-	-	100.00%
15. PT Perusahaan Gas Negara Tbk. (Note 4a)	2018	56.96%	56.96%	56.96%	-

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1. GENERAL (continued)

b. Subsidiaries, associates and joint arrangements (continued)

i. Subsidiaries (continued)

Subsidiaries	Year of establishment	Percentage of ownership			
		September 30, 2020 (unaudited)	2019	December 31, 2018	2017
Electricity					
16. PT Pertamina Power Indonesia	2016	100.00%	100.00%	100.00%	100.00%
Trading services and industrial activities					
17. PT Pertamina Patra Niaga	1997	100.00%	100.00%	100.00%	100.00%
18. Pertamina International Timor S.A	2015	95.00%	95.00%	95.00%	95.00%
Public fuel filling stations business					
19. PT Pertamina Retail	1997	100.00%	100.00%	100.00%	100.00%
Lubricant processing and marketing					
20. PT Pertamina Lubricants	2013	100.00%	100.00%	100.00%	100.00%
Shipping					
21. PT Pertamina Trans Kontinental	1969	100.00%	100.00%	100.00%	100.00%
22. PT Pertamina International Shipping	2016	100.00%	100.00%	100.00%	100.00%
Air transportation services					
23. PT Pelita Air Service	1970	100.00%	100.00%	100.00%	100.00%
Investment management					
24. PT Pertamina Pedeve Indonesia (formerly PT Pertamina Dana Ventura)	2002	100.00%	100.00%	100.00%	100.00%
Human resources development services					
25. PT Pertamina Training & Consulting	1999	100.00%	100.00%	100.00%	100.00%
Offices, house rental and hotel operations					
26. PT Patra Jasa	1975	100.00%	100.00%	100.00%	100.00%
Health services and hospital operations					
27. PT Pertamina Bina Medika IHC (formerly PT Pertamina Bina Medika) (Note 4m)	1997	81.12%	100.00%	100.00%	100.00%
Insurance services					
28. PT Asuransi Tugu Pratama Indonesia Tbk. (formerly PT Tugu Pratama Indonesia) ("ATPI") **)	1981	58.50%	58.50%	58.50%	65.00%
Refineries					
29. PT Kilang Pertamina Internasional	2017	100.00%	100.00%	100.00%	100.00%
Liquefied Natural Gas ("LNG")					
30. PT Nusantara Regas (Note 4b)	2010	82.78%	82.78%	82.78%	60.00%
Logistics & bunker business and sales & distribution					
31. Pertamina International Marketing and Distribution Pte. Ltd.	2019	100.00%	100.00%	-	-

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1. GENERAL (continued)

b. Subsidiaries, associates and joint arrangements (continued)

i. Subsidiaries (continued)

Subsidiaries	Year of establishment	Total assets before elimination			
		September 30, 2020	December 31,		
		(unaudited)	2019	2018	2017
Oil and gas exploration and production					
1. PT Pertamina Hulu Energi	1990	5,197,058	5,126,398	4,531,667	4,780,787
2. PT Pertamina EP	2005	7,501,731	7,598,719	7,498,644	7,621,461
3. PT Pertamina EP Cepu	2005	3,558,771	3,557,976	2,992,894	2,608,022
4. Pertamina E&P Libya Limited, British Virgin Island	2005	154	154	154	154
5. PT Pertamina East Natuna	2012	129	129	129	129
6. PT Pertamina EP Cepu ADK	2013	12,579	12,743	12,847	18,534
7. PT Pertamina Internasional Eksplorasi dan Produksi	2013	5,113,787	6,049,259	5,841,041	5,776,299
8. ConocoPhillips Algeria Limited, Cayman Island *)	2013	-	-	774,216	1,065,720
9. PT Pertamina Hulu Indonesia	2015	3,016,916	2,650,108	1,478,109	304,838
10. PT Pertamina Hulu Rokan (Note 4g)	2018	784,900	785,002	785,000	-
Geothermal exploration and production					
11. PT Pertamina Geothermal Energy	2006	2,541,529	2,573,432	2,556,651	2,408,120
Drilling services					
12. PT Pertamina Drilling Services Indonesia	2008	540,075	574,631	560,423	574,402
Processing and sale of oil and gas products, construction and oil field services, information technology and telecommunications					
13. PT Elnusa Tbk.	1969	509,657	489,599	390,995	358,319
Oil and gas trading, gas transportation, processing, distribution and storage					
14. PT Pertamina Gas (Note 4a)	2007	-	-	-	1,926,760
15. PT Perusahaan Gas Negara Tbk. (Note 4a)	2018	7,452,181	7,373,713	6,716,682	6,293,129
Electricity					
16. PT Pertamina Power Indonesia	2016	121,331	128,300	114,721	99,726
Trading services and industrial activities					
17. PT Pertamina Patra Niaga	1997	1,085,629	1,031,496	908,986	960,394
18. Pertamina International Timor S.A,	2015	42,098	43,356	36,643	28,677
Public fuel filling stations business					
19. PT Pertamina Retail	1997	250,623	269,469	203,312	150,643

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1. GENERAL (continued)

b. Subsidiaries, associates and joint arrangements (continued)

i. Subsidiaries (continued)

Subsidiaries	Year of establishment	Total assets before elimination			
		September 30, 2020 (unaudited)	December 31,		
			2019	2018	2017
Lubricant processing and marketing					
20. PT Pertamina Lubricants	2013	480,716	498,008	413,332	500,637
Shipping					
21. PT Pertamina Trans Kontinental	1969	359,833	340,517	307,519	287,014
22. PT Pertamina International Shipping	2016	530,838	419,060	296,335	217,466
Air transportation services					
23. PT Pelita Air Service	1970	120,020	63,365	60,380	65,300
Investment management					
24. PT Pertamina Pedeve Indonesia (formerly PT Pertamina Dana Ventura)	2002	62,773	62,715	62,098	71,327
Human resources development services					
25. PT Pertamina Training & Consulting	1999	34,911	50,402	39,799	40,768
Offices, house rental and hotel operations					
26. PT Patra Jasa	1975	328,408	308,519	236,119	229,394
Health services and hospital operations					
27. PT Pertamina Bina Medika IHC (formerly PT Pertamina Bina Medika)	1997	358,460	326,001	262,870	254,716
Insurance services					
28. PT Asuransi Tugu Pratama Indonesia Tbk. (formerly PT Tugu Pratama Indonesia) ("ATPI") **)	1981	1,214,681	1,249,846	923,376	836,387
Refineries					
29. PT Kilang Pertamina Internasional	2017	386,771	141,432	1,836	738
Liquefied Natural Gas ("LNG")					
30. PT Nusantara Regas (Note 4b)	2010	439,328	275,767	240,817	277,438
Logistics & bunker business and sales & distribution					
31. Pertamina International Marketing and Distribution Pte. Ltd. (Note 4l)	2019	198,162	121,617	-	-

*) Effective liquidation on February 28, 2019.

**) Deduction in the effective percentage of ownership in ATPI due to the issuance of new equity shares by ATPI in 2018.

ii. Associates

The directly owned associates as of September 30, 2020, are as follows:

Associates	Percentage of ownership	Nature of business
1. PPT Energy Trading Co., Ltd.	50.00%	Marketing services
2. PT Trans-Pacific Petrochemical Indotama	48.59%	Processing and sale of oil and gas products and services
3. PT Tuban Petrochemical Industries ("Tuban Petro")	51.00%	General Trading, industries and services

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1. GENERAL (continued)

b. Subsidiaries, associates and joint arrangements (continued)

ii. Associates (continued)

The indirectly owned associates as of September 30, 2020, are as follows:

Associates	Percentage of ownership	Nature of business
1. PT Donggi Senoro LNG	29.00%	LNG Processing
2. PT Asuransi Samsung Tugu	19.50%	Insurance
3. Seplat Petroleum Development Company Plc, ("Seplat") Nigeria	20.46%	Oil and gas exploration and production
4. PT Gas Energi Jambi	40.00%	Transportation and distribution of natural gas

iii. Joint arrangements

The indirectly owned joint ventures as of September 30, 2020, are as follows:

Associates	Percentage of ownership	Nature of business
1. PT Patra SK	35.00%	Lube Base Oil ("LBO") processing
2. PT Perta-Samtan Gas	66.00%	LNG processing
3. PT Perta Daya Gas	65.00%	LNG regasification
4. PT Indo Thai Trading	51.00%	Petrochemical trading
5. PT Pertamina Rosneft Pengolahan dan Petrokimia	55.00%	Development of Petroleum and Petrochemical refineries
6. PT Transportasi Gas Indonesia ("Transgasindo")	59.87%	Transport of natural gas via transmission pipes
7. PT Permata Karya Jasa ("Perkasa")	60.00%	Workshop services, guidance, distribution of labor services Indonesia

PT Pertamina Rosneft Pengolahan dan Petrokimia ("PRPP") was established by Notarial Deed No. 13 dated November 28, 2017 of Mina NG, SH., M.KN., PRPP's Deed of Establishment was approved by the Minister of Justice and Human Rights through letter No. AHU-0053838.AH.01.01.Year 2017 dated November 28, 2017.

As of January 24, 2018, based on amendment of the Articles of Association of Perkasa, the Group no longer possessed control over Perkasa. As a result, the Group recognized investment in Perkasa as an investment in joint venture.

On April 11, 2018, the Company obtained control over PT Nusantara Regas. Previously, the Company recognized investment in PT Nusantara Regas as an investment in joint venture (Note 4b).

The indirectly owned joint operation as of September 30, 2020, is as follows:

Associates	Percentage of ownership	Nature of business
1. Natuna 2 B.V., Netherland	50.00%	Exploration and production

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1. GENERAL (continued)

b. Subsidiaries, associates and joint arrangements (continued)

iii. Joint arrangements (continued)

The Group considered the existence of substantive participating rights held by the non-controlling shareholders of PT Perta-Samtan Gas, PT Perta Daya Gas and PT Pertamina Rosneft Pengolahan dan Petrokimia which provide such shareholders with joint control over significant financial and operating policies. With respect to non-controlling rights, the Group does not have control over the significant financial and operating policies of PT Perta-Samtan Gas, PT Perta Daya Gas and PT Pertamina Rosneft Pengolahan dan Petrokimia even though the Group has more than 50% of share ownership.

As of December 31, 2018 and 2017, The Group considered the existence of substantive participating rights held by the non-controlling shareholders of PT Indo Thai Trading which provide such shareholders with joint control over significant financial and operating policies. With respect to non-controlling rights, the Group does not have control over the significant financial and operating policies of PT Indo Thai Trading even though the Group has more than 50% of share ownership.

Based on Notarial Deed No. 27 dated July 31, 2019, PTTGC International Private Limited sold and transferred its ownership of 3,920,000 shares of PT Indo Thai Trading to PT Patra Trading, a subsidiary of PT Pertamina Patra Niaga. Therefore, from such date, Group controls PT Indo Thai Trading.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

a. Basis of preparation of the consolidated financial statements

The accounting and financial reporting policies adopted by the Group conform to the Indonesian financial accounting standards, which are based on Indonesian Statements of Financial Accounting Standards ("SFAS"). The accounting policies were applied consistently in the preparation of the consolidated financial statements as of September 30, 2020, and December 31, 2019, 2018, and 2017 and the nine-month periods ended September 30, 2020 and 2019, and the years ended December 31, 2019, 2018, and 2017 by the Group.

The consolidated financial statements, except consolidated statement of cash flows have been prepared on the accrual basis and the measurement basis used is historical cost, except for certain accounts which requires different measurement as disclosed on each account's accounting policies.

The consolidated statements of cash flows have been prepared based on the direct method by classifying the cash flows into operating, investing and financing activities.

The consolidated financial statements are presented in thousands of US dollar (US\$), which is also the Group's functional currency, unless otherwise stated.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

b. Change in accounting policies and disclosure

i. New standards adopted by the Group

The Group has adopted the following standards with the following impacts on Group's businesses groups:

- SFAS 71 : Financial Instruments

The Group has retrospectively applied the modified SFAS 71 on the required effective date on, January 1, 2020. The starting 2020 balances have been adjusted, but for prior periods are not restated.

- Classification and measurement

Based on SFAS 71, the Group classifies its financial assets as amortized cost, on FVTPL, and on FVTOCI. Previously under SFAS 55, they were classified as loans and receivables and available for sale. The classification is based on two criteria, namely the Group's business model for managing assets and whether the instrument's contractual cash flows represent payments of principal and interest on the principal outstanding.

The assessment of the Group's business model was carried out on January 1, 2020, and then applied retrospectively to modifications to financial assets that were not derecognized before January 1, 2020. The assessment of whether the contractual cash flows on payment instruments payable are solely principal and interest is made based on facts and circumstances such as on initial recognition of assets.

Qualitatively, the application of SFAS 71 will increase the equity balance resulting from measurement of the fair value of investments in equity instruments that were previously measured using the cost method, impairment of receivables and investments that are measured at fair value through other comprehensive income where the calculation of impairment is recognized based on the model expected credit loss. The Group has conducted a related study on the classification of financial assets, especially the possibility of changing the classification and measurement of investments in mutual funds previously recorded as AFS to FVTPL, where the impact of the changes on January 1, 2020 is not material.

- Impairment

The application of an impairment calculation using the expected credit method has fundamentally changed the way the Group has done at this time. The table below is a reconciliation of the final impairment allowance based on SFAS 55 and SFAS 71 at the initial implementation date, January 1, 2020:

	Carrying value based on SFAS 55	Remeasurement based on SFAS 71	New carrying value based on SFAS 71
Accounts receivable – 3rd Party	214,433	18,181	232,614
Accounts receivable – Related Party	69,144	7,218	76,362
Other Receivables – 3rd Party	20,450	1,091	21,541
Other Financial Assets	-	368	368

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

b. Change in accounting policies and disclosure (continued)

i. New standards adopted by the Group (continued)

- SFAS 72: Revenue from Contract with Customers

PSAK 72 establishes the requirements for the recognition and measurement of revenue arising from contracts with customers.

In general, the application of PSAK 72 does not have a significant impact on the Group's interim consolidated financial statements, except for the accounting treatment for overlifts and underlifts.

The Group may only recognize revenue when control of the goods passes to the customer. Revenue recorded by the Company must reflect the consideration received from customers for transferring goods or services promised to customers, not including amounts billed on behalf of third parties. There were no impacts on the Company's equity balance as of January 1, 2020 due to this change because the changes were only in the form of a reclassification of income, other income, operating expenses and direct selling expenses.

The Group applies practical guidance to adjust the amount of consideration promised for the impact of a significant component of income if the Group estimates, at contractual inception, that the period between the point of transfer of the goods or services and payment for the goods or services will be one year or less.

Property sales revenue recognition - The Group recognizes revenue when control of property is transferred to the customer, that is, when the rights of ownership are legal transferred to the customer. For contracts for the sale of property where the transfer of property to a customer is estimated to occur within a year or less, the Group applies practical guidance to recognize the incremental costs of the property contract as an expense when incurred.

- SFAS 73: Leasing

The Group effectively implemented SFAS 73 for the financial year beginning January 1, 2020, but did not restate comparative figures for the previous reporting period as permitted under the special transitional provisions in the standard.

For lessees, SFAS 73 will affect almost all leases recognized in the statement of financial position, because the difference between an operating lease and a finance lease is written off. Under the new standard, an asset (a right to lease the item) and a financial liability to pay the lease are recognized. The only exceptions are short-term leases and low value assets. The accounting treatment of the lessors will not differ significantly.

When SFAS 73 adopted, the Group recognizes leased assets and liabilities related to leases that were previously classified as operating leases based on the principles in SFAS 30 Leases. Lease liabilities are measured at the present value of the remaining lease payments, discounted using the Group's incremental lending rate as of January 1, 2020. The weighted average incremental interest rate is 6.87% at the date of initial application.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

b. Change in accounting policies and disclosure (continued)

i. New standards adopted by the Group (continued)

- SFAS 73: Leasing (continued)

As of the issuance of the 2020 financial statements, the Group has conducted quantitative impact assessments of most shipping contracts, leasing of transportation services, buildings and some related equipment in production facilities (upstream facilities). Useful assets are measured at the same amount as the lease liability, adjusted for the amount of prepayments or lease payments accrued in respect of the lease recognized in the financial statements as of December 31, 2019. By applying this standard to these contracts, on January 1, 2020, the Group's property, plant and equipment increased by US\$2,167,241 consisting of the recognition of leases previously recognized as operating leases amounting to US\$2,156,576 and reclassification of US\$10,664 prepaid expenses of building leases. In addition, the Group's lease obligations increased by US\$2,156,576 as of January 1, 2020.

The reconciliation between the operating lease commitments disclosed under SFAS 30 as of December 31, 2019 and the lease liabilities recognized under SFAS 73 on January 1, 2020 are as follows:

	2020
Operating lease commitments disclosed	1,095,321
Discounted using Group's incremental interest rate	(24,437)
Addition:	
Finance Lease Liability on December 31, 2019	171,993
Undisclosed lease commitments as December 31, 2019	1,480,844
Less:	
Short term lease	(395,152)
Commitments for lease that have not yet started	-
Total lease liability recognized on January 1, 2020	2,328,569

Practical Guide

In applying SFAS 73 for the first time, the Group applies the following practical procedures permitted by the standard:

- § Operating leases whose lease term ends in 12 months from January 1, 2020 are treated as short-term leases.
- § Exclusion of initial direct costs from measurement of use rights assets at the date of initial application.
- § Use hindsight in determining the lease term if the contract contains an option to extend or terminate the lease.
- § To not separate the non-rent component from the rental component based on the underlying asset class.
- § Applying the requirements of SFAS 48 to assess whether there are indications of impairment in ROU on January 1, 2020.

The Group also chose not to re-evaluate contracts identified as containing leases under SFAS 30 and IFAS 8.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

b. Change in accounting policies and disclosure (continued)

ii. The adoption of these new/revised standards and interpretations did not result in substantial changes to the Group's accounting policies and had no material effect on the amounts reported in the consolidated financial statements

The following new standards, amendments to existing standards and interpretations have been published and are mandatory for the first time adoption for the Group's financial year beginning January 1, 2020 or later periods.

The Group has adopted them, but they have no significant impact to the Group's current business:

- Amendments to SFAS 15: Investments in Associates and Joint Ventures
- Amendments to SFAS 62: Accounting Contract
- Amendments to SFAS 1: Presentation of financial statements
- Amendments to SFAS 25: Accounting Policies.

iii. New standards, amendments and interpretations issued but not yet effective

The following are several accounting standards issued by the Indonesian Financial Accounting Standards Board ("DSAK") that are considered relevant to the financial reporting of the Group but not yet effective for consolidated financial statements as of September 30, 2020, and December 31, 2019, 2018, and 2017 and the nine-month periods ended September 30, 2020 and 2019, and the years ended December 31, 2019, 2018, and 2017:

Effective January 1, 2020

- Amendment of SFAS 22: Business Combinations on Business Definitions. This amendments clarify the definition of business with the aim of assisting the entity in determining whether a transaction should be recorded as a business combination or asset acquisition.

The Group is currently evaluating and has not yet determined the effects of these accounting standards on its Consolidated Financial Statements.

c. Principles of consolidation

The consolidated financial statements comprise the financial statements of the Company and its subsidiaries as described in Note 1b.

Subsidiaries are entities over which the Group has control. The Group controls an entity when the Group is exposed or has rights to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the Subsidiary and ceases when the Group loses control of the subsidiary.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

c. Principles of consolidation (continued)

A change in the ownership interest of a Subsidiary, without a loss of control, is accounted for as an equity transaction.

If the Group loses control over a Subsidiary, it derecognizes the related assets (including goodwill), liabilities, non-controlling interest ("NCI") and other components of equity while any resulting gain or loss is recognized in profit or loss. Any investment retained is recognized at fair value.

The consolidated financial statements have been prepared using the same accounting policies for transactions and other events in similar circumstances. If a member of the Group uses accounting policies other than those adopted for transactions and events in similar circumstances, appropriate adjustments are made to its financial statements in preparing the consolidated financial statements.

All intercompany accounts and transactions between the Company and its Subsidiaries have been eliminated to reflect the financial position and the results of operations of the Group as one business entity.

NCI represents the portion of the profit or loss and net assets of the Subsidiaries attributable to equity interests that are not owned directly or indirectly by the Company, which are presented in the consolidated statement of profit or loss and other comprehensive income and under the equity section of the consolidated statement of financial position, respectively, separately from the corresponding portion attributable to the equity holders of the parent company.

Profit or loss and each component of other comprehensive income ("OCI") are attributed to the equity holders of the parent of the Group and to the NCI, even if this results in the NCI having a deficit balance.

For consolidation purpose of subsidiaries using currency other than US dollar as functional currency, assets and liabilities are translated using the Bank of Indonesia middle rate at the end of reporting period. On the other hand, revenue and expenses are translated using the average Bank of Indonesia middle rate during the profit or loss period.

The difference arising from the translation of those subsidiaries' financial statements into the US dollar is presented as "Other comprehensive income - Differences arising from translation of financial statements" account as part of other equity components in the equity section of the consolidated statements of financial position.

d. Business combinations

Business combinations are accounted using the acquisition method as stipulated in SFAS 22 (Revised 2015). The cost of an acquisition is measured as the aggregate of the consideration transferred, measured at acquisition date fair value and the amount of any NCI in the acquiree. For each business combination, the acquirer measures the NCI in the acquiree either at fair value or at the proportionate share of the acquiree's identifiable net assets. Transaction costs incurred are directly expensed and included in "Selling, General and Administrative Expenses".

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

d. Business combinations (continued)

When the Group acquires a business, it assesses the financial assets acquired and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances, and pertinent conditions as at the acquisition date. This includes the separation of embedded derivatives in host contracts by the acquiree.

If the business combination is achieved in stages, the acquisition date fair value of the acquirer's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date and any resulting gain or loss is recognized in profit or loss.

Any contingent consideration to be transferred by the acquirer will be recognized at fair value at the acquisition date. Subsequent changes to the fair value of the contingent consideration which is deemed to be an asset or liability will be recognized in accordance with SFAS No. 55 (Revised 2014) either in profit or loss or as other comprehensive income. If the contingent consideration is classified as equity, it should not be remeasured until it is finally settled within equity.

At acquisition date, goodwill is initially measured at cost being the excess of the aggregate of the consideration transferred and the amount recognized for NCI over the net identifiable assets acquired and liabilities assumed. If this consideration is lower than the fair value of the net assets of the Subsidiary acquired, the difference is recognized in profit or loss. Afterwards, impairment test on goodwill will be examined at the end of every subsequent period.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is allocated from the acquisition date to each of the Group's cash-generating units ("CGU") that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquirer are assigned to those CGUs.

Where goodwill forms part of a CGU and part of the operation within that CGU is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation. Goodwill disposed of in this circumstance is measured based on the relative values of the operation disposed of and the portion of the CGU retained.

In accordance with the provision of SFAS No. 22 (Revised 2015), if the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group shall report in its consolidated financial statements provisional amounts for the items for which the accounting is incomplete. During the measurement period, the Group shall retrospectively adjust the provisional amounts recognized at the acquisition date to reflect new information obtained about facts and circumstances that existed as of the acquisition date and, if known, would have affected the measurement of the amounts recognized as of that date.

The Company classified its investment in PT Badak Natural Gas Liquefaction ("Badak NGL") as available-for-sale financial asset at cost because the Company, in substance, does not control those companies as its operations are controlled by the natural gas producers. These investments are measured at cost since their fair values are not reliably measurable (Notes 2gi).

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

e. Related party transactions

Business combination transaction under common control, in the form of transfer of business within the framework of reorganization of entities under the same business group is not a change of ownership in economic substance, therefore it would not result in a gain or loss for the group as a whole or to the individual entity within the same group, therefore the transactions are recorded using the pooling-of-interests method.

The entity that disposed and received the business records the difference between the consideration received/transferred and the carrying amount of the disposed business/carrying amount of any business combination transaction in equity and presents it in "Additional Paid-in Capital" account.

In applying the pooling-of-interests method, the components of the financial statements for the period during which the business combination occurred and for other periods presented for comparison purposes are presented in such a manner as if the combination has already occurred since the beginning of the period in which the entities were under common control.

The Company enters into transactions with related parties as defined in SFAS 7 (Revised 2015): Related Party Disclosures. All significant transactions and balances with related parties are disclosed in the notes to these consolidated financial statements.

f. Cash and cash equivalents

Cash and cash equivalents are cash on hand, cash in banks, and time deposits with maturity periods of three months or less at the time of placement and which are not used as collateral or are not restricted.

For the purpose of the consolidated statements of cash flows, cash and cash equivalents are presented net of overdrafts.

Cash and cash equivalents which are restricted for repayment of currently maturing obligations are presented as restricted cash under the current assets section, while cash and cash equivalents which are restricted to repay obligations maturing after one year from the date of consolidated statement of financial position are presented as part of other non-current assets.

g. Financial instruments

i. Financial assets

Initial recognition

Financial assets are classified as financial assets at fair value through profit or loss, loans and receivables, held-to-maturity investments, available-for-sale financial assets, or as derivatives designated as hedging instruments in an effective hedge. The classification depends on the nature and purpose for which the asset was acquired and is determined at the time of initial recognition.

Financial assets are recognized initially at fair value, and in the case of financial assets not at fair value through profit or loss, directly attributable transaction costs are added to the fair value.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

g. Financial instruments (continued)

i. Financial assets (continued)

Subsequent measurement

The subsequent measurement of financial assets depends on their classification as follows:

- i. Financial assets at fair value through profit or loss
Financial assets at fair value through profit or loss include financial assets held for trading and financial assets designated upon initial recognition at fair value through profit or loss.
- ii. Financial assets measured by amortized cost
Financial assets measured at amortized cost are subsequently measured using the effective interest rate ("EIR") method, after deducting any impairment losses. Amortized cost is calculated by calculating the discount or premium on acquisition costs or costs that are an integral part of the EIR. The EIR amortization is included in the consolidated statements of income. The losses arising from impairment are also recognized in the consolidated statement of income.
- iii. Financial assets measured at fair value through other comprehensive income
Available for sale financial assets are non-derivative financial assets that are designated as available for sale or that are not classified in the previous two categories. After initial measurement, available-for-sale financial assets are measured at fair value with unrealized gains or losses recognized in equity until the investment is derecognized. At that time, cumulative gains or losses previously recognized in equity will be reclassified to the consolidated statement of profit or loss and other comprehensive income as an adjustment to the reclassification.

Impairment of financial assets

During each reporting period, the Group assesses whether credit risk from financial instruments has increased significantly since initial recognition. When making an assessment, the Group uses changes in default risk that occur over the expected life of the financial instrument rather than changes in the amount of expected credit losses. In making the assessment, the Group compares the risk of default that occurs on financial instruments during the reporting period with the risk of default that occurs for financial instruments at initial recognition and considers the reasonableness and availability of information, which is available without cost or effort at the related reporting date, with past events, current conditions and forecasts of future economic conditions, which indicate an increase in credit risk since initial recognition.

ECL is recognized in two stages. For credit exposures for which the increase in credit risk has not been significant since initial recognition, ECL is calculated for credit losses resulting from inherent events that are possible in the next 12 months (ECL 12 months). For credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for the expected credit losses over the remaining life of the exposure, regardless of the carry-on time (ECL lifetime).

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

g. Financial instruments (continued)

i. Financial assets (continued)

Expected credit loss ("ECL") (continued)

For trade receivables, lease receivables and contract assets, the Group adopts a simplified approach to calculating the ECL. Therefore, the Group does not track changes in credit risk, but instead recognizes an allowance for losses using ECL for life at each reporting date. For receivables that have similar risk characteristics, the Group calculates collectively using the provision matrix in calculating the ECL where this approach is based on historical credit loss experience, adjusted to forecast future economic conditions relevant to the debtor and the economic environment. All forms of collateral owned by the Company (for example bank guarantees and domestic documented letters of credit ('SKBDN')) will be treated as a deduction for balances that are subject to impairment. Other financial assets that are not calculated collectively will be carried out individually by taking into account the weighted probability and historical conditions adjusted to future economic forecasts.

For debt instruments under FVTOCI, the Group applies the low credit risk simplification. At each reporting date, the Group evaluates whether a debt instrument is considered to have low credit risk using all reasonable and reliable information that is available without undue cost or effort. In carrying out that evaluation, the Group reassesses the external credit ratings of debt instruments.

The Group's debt instruments at FVTOCI only consist of quoted bonds that are rated in the top investment category rating (Very Good and Good) by Good Credit Rating Agencies and, therefore, are considered low risk credit investments. The Group has a policy of measuring ECL on this basis on a 12 month basis. However, when there has been a significant increase in credit risk from the outset, the allowance will be based on ECL for life. The Group uses ratings from the Good Credit Rating Agency, both to determine whether debt instruments significantly increase credit risk and estimate ECL.

Termination of recognition of financial assets

Financial assets (or which is more appropriate, part of a financial asset or part of a group of similar financial assets) are derecognized when: (1) the right to receive cash flows from the asset has expired; or (2) the Group has transferred their right to receive cash flows arising from the asset or is obliged to pay the cash flows received in full without material delay to a third party under a "pass-through" agreement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group does not transfer or retain substantially all the risks and rewards of an asset, but has transferred control of the asset.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

g. Financial instruments (continued)

ii. Financial Liabilities

Initial recognition

There are no changes in the classification and measurement of financial liabilities.

Financial liabilities are classified as financial liabilities at fair value through profit or loss and other financial liabilities that are not held for trading or not designated at fair value through profit or loss. The Group determines the classification of its financial liabilities at initial recognition.

Financial liabilities are recognized initially at fair value and, in the case of financial liabilities recognized at amortized cost, include directly attributable transaction costs.

The Group's financial liabilities which are classified as other financial liabilities include short-term loans, trade payables, due to the Government, accrued expenses, long-term liabilities, other payables, bonds payable, and other non-current payables.

Subsequent measurement

The measurement of financial liabilities depends on their classification as follows:

i. 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 at fair value through profit or loss.

Financial liabilities are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the near term. Derivative liabilities are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognized in the consolidated statement of profit or loss and other comprehensive income.

Gains or losses on liabilities held for trading are recognized in the consolidated statement of profit or loss and other comprehensive income.

ii. Financial liabilities at amortized cost

After initial recognition, interest-bearing loans and borrowings are subsequently measured at cost using the effective interest rate ("EIR") method. At the reporting date, the accrued interest is recorded separately from the respective principal loans as part of current liabilities. Gains and losses are recognized in the consolidated statement of profit or loss and other comprehensive income when the liabilities are derecognized as well as through the amortization process using the EIR method.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

g. Financial instruments (continued)

ii. Financial Liabilities (continued)

Subsequent measurement (continued)

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 a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognized in the consolidated statement of profit or loss and other comprehensive income.

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or has expired.

Effective interest Rate (“EIR”) method

The EIR method is a method of calculating the amortized cost of a financial asset and of allocating interest income over the relevant period.

iii. Offsetting financial instruments

Financial assets and liabilities are offset and the net amount is reported in the consolidated statements of financial position, when there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis, or to realize the asset and settle the liability simultaneously.

iv. Derivative financial instruments and hedge accounting

The Group uses derivative foreign currency forward and option contracts to hedge its foreign currency risks. Such derivative financial instruments are initially recognized at fair value on the date on which a derivative contract is entered into and are subsequently remeasured 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.

The Group entered into forward and currency option contracts that are used as a hedge for the exposure to changes in cash flows relating to interest payments and bonds repayment due to changes in foreign exchange rates. Such forward and option contracts do not meet the criteria of hedge accounting.

The method of recognizing the resulting gains or losses depends on whether the derivative is intended as a hedging instrument, and if so, the nature of the item being hedged.

For derivatives that are categorized as cash flow hedges, at the beginning of the transaction, the Company documents the relationship between the hedging instrument and the hedged item, along with the risk management objectives and strategy for implementing the hedging transaction. The company also documents its assessment, on the inception of the hedge and on an ongoing basis, whether the derivatives used in the hedging transaction are highly effective in eliminating the effect of changes in fair value on the cash flows being hedged.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

g. Financial instruments (continued)

iv. Derivative financial instruments and hedge accounting (continued)

The full fair value of hedged derivatives are classified as non-current assets or long-term liabilities if the remaining maturity of the hedged principal exceeds 12 months, and as current assets or current liabilities if the remaining maturities are less than 12 months.

Changes in the fair value of derivatives that are designated and qualify as cash flow hedges for accounting purposes, the effective portion, are recognized in other comprehensive income within "cash flow hedge reserves". When the derivative instrument has expired or no longer meets the criteria of hedging for accounting purposes, the cumulative gain or loss in other comprehensive income is recognized in the consolidated statement of income.

Changes in the fair value of derivatives that do not qualify for hedging for accounting purposes are recognized directly in the consolidated statement of income under "gain (loss) on changes in fair value of derivatives-net."

h. Receivables

Trade and other receivables are initially recognized at fair value and are subsequently measured at amortized cost using the effective interest method, less provision for any impairment. If collection is expected in one year or less (or in the normal operating cycle of the business if longer), these receivables are classified as non-current assets.

i. Inventories

Crude oil and oil product inventories are recognized at the lower of cost or net realizable value.

Cost is determined based on the average method and comprises all costs of purchases, costs of conversion and other costs incurred in bringing the inventory to its present location and current condition.

The net realizable value of subsidized fuel products ("BBM") are recognized at the lower of next month Government decreed price and the formula price.

The net realizable value of 3 kg LPG cylinders is the Aramco LPG contract price plus distribution costs and a margin (alpha), less the estimated costs of completion and the estimated costs necessary to make the sale.

Materials such as spare parts, chemicals and others are stated at average cost. Materials exclude obsolete, unusable and slow-moving materials which are recorded as part of other assets under the non-current assets section.

A provision for obsolete, unuseable and slow-moving materials is provided based on management's analysis of the condition of such materials at the end of the year.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

j. Prepayments and advances

Prepayments are amortized on a straight-line basis over the estimated beneficial periods of the prepayments.

k. Assets held for distribution to the Company

Assets held for distribution to the Group are recognized at the lower of carrying amount and fair value less costs to sell.

l. Long-term investments

i. Investments in associates

Associates are all entities over which the Group has significant influence but not control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting and are initially recognized at cost. The Group's investment in associates includes goodwill identified on acquisition, net of any accumulated impairment loss.

The Group's share of its associates' post-acquisition profits or losses is recognized in the profit or loss, and its share of post-acquisition movements in other comprehensive income is recognized in OCI.

Dilution gains and losses arising from investments in associates are recognized in the profit or loss.

ii. Investment property

Investment property consists of land and buildings held by the Group to earn rental income or for capital appreciation, or both, rather than for use in the production or supply of goods or services, administrative purposes or sale in the normal course of business.

An investment property is measured using the cost model that is stated at cost including transaction costs less accumulated depreciation and impairment losses, if any, except for land which is not depreciated. Such cost includes the cost of replacing part of the investment property, if the recognition criteria are satisfied, and excludes operating expenses involving the use of such property.

Building depreciation is computed using the straight-line method over the estimated useful lives of buildings ranging from 10 to 25 years.

An investment property is derecognized upon disposal or when such investment property is permanently withdrawn from use and no future economic benefits are expected from its disposal. Gains or losses arising from the derecognition or disposal of investment property are recognized in the profit or loss in the year such derecognition or disposal occurs.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

i. Long-term investments (continued)

ii. Investment property (continued)

Transfers to investment property are made when there is a change in use, evidenced by the end of owner-occupation or commencement of an operating lease to another party. Transfers from investment property are made when there is a change in use, evidenced by the commencement of owner-occupation.

For a transfer from investment property to owner-occupied property, the Group uses the cost method at the date of change in use. If owner-occupied property becomes an investment property, the Group recognized the investment property in accordance with the fixed asset policies the date of change in use.

m. Fixed assets

The Group applies accounting policy on fixed assets as stipulated in SFAS 16 (Revised 2015), as follows:

Direct ownership

Land is recognized at cost and not depreciated. Fixed assets are initially recognized at cost and subsequently, except for land, carried at cost less accumulated depreciation and any impairment losses.

Subsequent costs are included in the asset's carrying amount or recognized as a separate asset, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The Group recognized significant repair and maintenance costs as fixed assets. The carrying amount of the replaced part is derecognized. All other repairs and maintenance are charged to the profit or loss during the financial period in which they are incurred.

Initial legal costs incurred to obtain legal rights are recognized as part of the acquisition cost of the land, and these costs are not depreciated. Costs related to renewal of land rights are recognized as intangible assets and amortized during the period of the land rights.

Fixed assets, except land, are depreciated using the straight-line method over their estimated useful lives as follows:

	Years
Tanks, pipeline installations and other equipment	5-25
Refineries	10-20
Buildings	5-25
Ships and aircrafts	6-25
Moveable assets	5-20
Major repairs and maintenance	3

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

m. Fixed assets (continued)

At each financial year-end, the residual values, useful lives and methods of depreciation of assets are reviewed and adjusted prospectively, as appropriate.

When assets are retired or otherwise disposed of, their carrying values are eliminated from the consolidated financial statements, and the resulting gains and losses on the disposal of fixed assets are recognized in the profit or loss.

Assets under construction

Assets under construction represent costs for the construction and acquisition of fixed assets and other costs. These costs are transferred to the relevant fixed asset account when the construction is complete. Depreciation is charged from the date the assets are available for use.

n. Leases

Starting January 1, 2020, the Group applied SFAS 73 which requires the recognition of lease obligations relating to leases that were previously classified as 'operating leases'. This policy applies to contracts agreed upon or changed, on or after January 1, 2020.

The Group classifies leases based on the extent to which risks and rewards incidental to the ownership of a leased asset are vested upon the lessor or the lessee, and the substance of the transaction rather than the form of the contract, at the time of initial recognition.

The Group as Lessee

At the commencement date of the contract, the Group assesses whether the contract is, or contains, the lease. A contract is, or contains a lease if the contract gives the right to control the use of the identification asset for a period of time to be exchanged for compensation.

To assess whether the contract gives the right to control the use of identification assets, the Group must assess whether:

- The contract involves the use of the assets identified - this can be determined explicitly or implicitly, and must be physically diffeleases or substantially represent the entire capacity of the physically diffeleases assets. If the supplier has substantive substitution rights, then the asset is not identified;
- The Group has the right to obtain substantially all economic benefits from the use of assets during the period of use and
- The group has the right to direct the use of assets. The company has this right when it has the most relevant decision making rights to change how and for what purpose the asset is used. In rare cases where a decision on how and for what purpose an asset is used is predetermined, the Company has the right to direct the use of the asset if one of:
 - 1) The Group has the right to operate the assets;
 - 2) The Group has designed the assets by determining in advance how and for what purpose the assets will be used during the period of use This policy applies to contracts made, or modified, on or after January 1, 2020.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

n. Leases (continued)

The Group as Lessee (continued)

On the date of the conception or on the revaluation of the contract containing a component of the lease, the Group allocates compensation in the contract to each component of the lease based on the relative price of the lease component and the aggregate price of the non-lease component. However, for supporting leases which act as tenants, the Group decides not to separate the non-leases component and records the lease and non-leased component as one lease component.

At the commencement date, the Group recognizes right-of-use assets and lease liabilities. Right-of-use assets are measured at cost, which includes the initial measurement of the lease liability adjusted for the lease payments made or before the commencement date, plus the initial direct costs incurred and the estimated costs to be incurred to dismantle and move the underlying assets or to restore underlying assets to required conditions and terms of the lease, less the leases incentives received.

The right-of-use assets are then depreciated using the straight-line method from the commencement date to the earlier date between the useful life of the right-of-use assets or the end of the lease period.

Lease liabilities are measured at the present value of the unpaid lease payments at the start date, discounted using the implicit interest rate in the lease or if the interest rate cannot be determined, then using an incremental loan interest rate. Generally, the Group uses loan interest rates as interest rates.

Lease payments included in the measurement of lease liabilities include the following payments:

- Fixed payments, including fixed payments that are substantially reduced by lease incentives receivables;
- Payment of variable leases that depends on the index or interest rate which is initially measured by using an index or interest rate at the start date;
- The amount expected to be paid by the lessee with a guaranteed residual value;
- The exercise price of the buy option if the lessee is certain enough to execute the option; and
- Penalty payments for termination of leases unless the Group is certain enough not to stop early.

Lease payments are allocated as a principal and financial cost. Financial costs are charged to profit or loss during the lease period so as to produce a constant periodic interest rate on the balance of the liability for each period.

The Group presents right-of-use assets separately from the "fixed assets" and lease liabilities section of the statement of financial position

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

n. Leases (continued)

Short-term leases

The Group has decided not to recognize lease rights and lease assets for short-term leases that have a lease period of 12 months or less. The Group recognizes lease payments for leases as an expense on a straight-line basis over the lease period.

Modification of leases

The Group records lease modifications as separate leases if:

- modification increases the scope of the lease by adding the right to use one or more underlying assets; and
- lease fees increase by an amount equivalent to a separate price for an increase in scope and an appropriate adjustment to that separate price to reflect certain contract conditions.

For lease modifications that are not recorded as separate leases, on the effective date of the lease modification, the Group:

- re-measuring and allocating compensation contract modifications;
 - determine the lease period of the modified lease;
 - re-measure lease liabilities by discounting revision fee payments using a revised discount rate based on the remaining life of the lease and remaining lease payments by making adjustments to the right-of-use asset. The revised discount rate is determined as the tenant's incremental loan interest rate on the effective date of modification.
 - decrease the carrying amount of the right-of-use assets to reflect the partial or full termination of the lease for modification of the lease which decreases the scope of the lease. The Group recognizes in profit or loss any profit or loss relating to the partial or full termination of the lease.
 - make adjustments related to right-of-use assets for all other lease modifications.
- i. A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership of the leased assets. Such leases are capitalized at the inception of the lease at the fair value of the leased property or, if lower, at the present value of minimum lease payments. Lease payments are apportioned between the finance charges and reduction of the lease liability so as to achieve a constant periodic rate of interest on the remaining balance of the liability. Finance charges are charged directly to profit or loss.
 - ii. A lease is classified as an operating lease if it does not transfer substantially all the risks and rewards incidental to ownership of the leased asset. Accordingly, the related lease payments are recognized in profit or loss on a straight-line basis over the lease term.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

n. Leases (continued)

The Group as Lessor

When the Group acts as a lessor, the Group classifies each lease in either an operating lease or a finance lease.

Leases in which the Group does not transfer substantially all the risks and rewards of ownership of an asset are classified as operating leases. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized over the lease term on the same basis of rental income. Contingent rents are recognized as revenues in the period in which they are earned.

o. Oil and gas and geothermal properties

i. Exploration and evaluation assets

Oil and natural gas, as well as geothermal exploration and evaluation expenditures, are accounted for using the successful efforts method of accounting. Costs are accumulated on a field by field basis.

Geological and geophysical costs are expensed as incurred.

Costs to acquire rights to explore for and produce oil and gas are recorded as unproved property acquisition costs for properties where proved reserves have not yet been discovered, or proved property acquisition costs if proved reserves have been discovered.

The costs of drilling exploratory wells and the costs of drilling exploratory-type stratigraphic test wells are capitalized as part of assets under construction - exploratory and evaluation wells, within oil and gas properties pending determination of whether the wells have found proved reserves. If the well has not found proved reserves, the capitalized costs of drilling the well are then charged to profit or loss as a dry hole expense.

Afterwards, exploration and evaluation assets are reclassified from exploration and evaluation assets when evaluation procedures have been completed. Exploration and evaluation assets for which commercially-viable reserves have been identified are reclassified to development assets. Exploration and evaluation assets are tested for impairment immediately prior to reclassification out of exploration and evaluation assets.

ii. Development assets

The costs of drilling development wells including the costs of drilling unsuccessful development wells and development-type stratigraphic wells are capitalized as part of assets under construction of development wells until drilling is completed. When the development well is completed on a specific field, it is transferred to the production wells.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

o. Oil and gas and geothermal properties (continued)

iii. Production assets

Production assets are aggregated exploration and evaluation assets and development expenditures associated with the producing wells. Production assets are depleted using a unit-of-production method on the basis of proved developed reserves, from the date of commercial production of the respective field.

iv. Other oil and gas and geothermal assets

Other oil and gas and geothermal properties are depreciated using the straight-line method over the lesser of their estimated useful lives or the term of the relevant Production Sharing Contract ("PSC") are as follows:

	Years
Installations	3-30
LPG plants	10-20
Buildings	5-30
Moveable assets	2-27
Geothermal wells	10-20

Land and land rights are stated at cost and are not amortized.

The useful lives and methods of depreciation of assets are reviewed, and adjusted prospectively if appropriate, at least at each financial year-end. The effects of any revisions are recognized in profit or loss, when the changes arise.

Subsequent costs are included in the asset's carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. All other repairs and maintenance are charged to the profit or loss during the financial period in which they are incurred.

The accumulated costs of the construction, installation or completion of buildings, plant and infrastructure facilities such as platforms and pipelines are capitalized as assets under construction. These costs are reclassified to the relevant fixed asset accounts when the construction or installation is ready for use. Depreciation is charged from that date.

p. Provision for decommissioning and site restoration

The provision for decommissioning and site restoration provides for the legal obligations associated with the retirement of oil and gas properties including the production facilities that result from the acquisition, construction or development and/or normal operation of such assets. The retirements of such assets, other than temporary suspension of use, are removed from service including sale, abandonment, recycling or disposal in some other manner.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

p. Provision for decommissioning and site restoration (continued)

These obligations are recognized as liabilities when a constructive obligation with respect to the retirement of an asset is incurred. An asset retirement cost equivalent to these liabilities is capitalized as part of the related asset's carrying value and is subsequently depreciated or depleted over the asset's useful life. These obligations are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation.

The increase in these obligations due to the passage of time is recognised as an interest expense. The capitalised assets are depreciated on a straight-line basis over the lesser of their estimated useful lives or the term of the PSC for other oil and gas assets and using a unit-of-production method for the production assets.

The changes in the measurement of these obligations that result from changes in the estimated timing or amount of the outflow of resources embodying economic benefits required to settle the obligation, or a change in the discount rate will be added to or deducted from the cost of the related asset in the current period. The amount deducted from the cost of the asset should not exceed its carrying amount. If a decrease in the liability exceeds the carrying amount of the asset, the excess is recognised immediately in profit or loss. If the adjustment results in an addition to the acquisition cost of an asset, the Company and Subsidiaries will consider whether this is an indication that the new carrying amount of the asset may not be fully recoverable. If there is such an indication, the Company and Subsidiaries will test the asset for impairment by estimating its recoverable amount and will account for any impairment loss incurred.

Provision for environmental issues that may not involve the retirement of an asset, where the Group is a responsible party, is recognized when:

- the Group has a present legal or constructive obligation as a result of past events;
- it is probable that an outflow of resources will be required to settle the obligation; and
- the amount has been reliably estimated.

Asset retirement obligations for downstream facilities generally become firm at the time the facilities are permanently shutdown and dismantled. However, these facilities have indeterminate lives based on plans for continued operations, and as such, the fair value of the conditional legal obligations cannot be measured, since it is impossible to estimate the future settlement dates of such obligation. The Group performs periodic reviews of its downstream assets for any changes in facts and circumstances that might require recognition of asset retirement obligations.

The Group are required to place funds in restricted bank accounts, where applicable, which represent the deposits for the site restoration, decommissioning and post operation obligations. These deposits are maintained in joint bank accounts between SKK Migas and the Group and can only be used for such purposes with approval from SKK Migas, or the amounts should be transferred to SKK Migas if the activities are not conducted by the Company and Subsidiaries.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

q. Revenue and expense recognition

i. Revenue

Revenue from the production of crude oil and natural gas are recognized using sales method in accordance with PSAK 72.

Prior to January 1, 2020, revenue from the production of crude oil and natural gas are recognized on the basis of the provisional entitlements method at the point of lifting. Differences between the actual liftings of crude oil and natural gas result in a receivable when final entitlements exceed liftings of crude oil and gas (underlifting position) and in a payable when lifting of crude oil and natural gas exceed final entitlements (overlifting position). Underlifting and overlifting volumes are valued based on the annual weighted average Indonesian Crude Price ("ICP") (for crude oil) and price as determined in the respective Sale and Purchase Contract (for natural gas).

The Company recognizes subsidy revenue as it sells the subsidy products and becomes entitled to the subsidy.

The Company recognizes revenue when (or during) the Company fulfills its performance obligations by transferring the promised goods or services to the customer. The goods or services are transferred when (or during) the customer obtains control of the goods or services.

Revenue from sales of goods and services is recognized when the significant risks and rewards of ownership of the goods are transferred to the buyer and when such services are performed, respectively.

Penalty income from overdue receivables from BBM sales is recognized when the Company and its customers agree on the amount of the penalties and there is evidence that the customers have committed to pay the penalties.

Revenues from gas distribution and toll fees from gas transmission are recognized when the gas is distributed or transmitted to the customers based on the gas meter readings.

Revenue arising from the operation of the asset and pipeline transmission is recognized after the service is rendered and is measured based on the unit of gas which has been transported during such period.

For transaction before January 1, 2020, the cost and revenue involving sales of electricity among PGE, geothermal contractors and PT Perusahaan Listrik Negara (Persero) ("PLN") are recorded based on Energy Sales Contracts under a Joint Operating Contracts ("JOC"). The contracts stipulate that the sale of electricity from the JOC contractors to PLN is to be made through PGE in the same amount of the purchase costs as the electricity from the JOCs. Since 1 January 2020, PGE assessed that it acted as an agent in relation to this transaction in accordance with PSAK 72.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

q. Revenue and expense recognition (continued)

i. Revenue (continued)

Excess and/or shortfall of revenue from differences of formula retail selling price and Government's stipulated selling price ("Disparity of Selling Price") of certain type of fuel ("JBT") Diesel Fuel and special fuel assignment ("JBKP") Premium are recognized in the period when sale of JBT Diesel Fuel and JBKP Premium occurs as long as the settlement and/or collectability of such Disparity of Selling Prices is certain at the completion date of the financial statements.

The Company records such excess and/or shortfall of revenue from the Disparity of Selling Prices in revenue from other operating activities account because it is part of the Company's operations.

Deferred revenue consist of:

- a. amounts billed and collected involving "take or pay" gas quantities, which will be recognized as revenue when the related gas quantities are delivered to customers or when the contract expires.
- b. payment for rental and services charges received upfront.
- c. rental revenue that is received in advance.

ii. Expense

Expense is recognized when incurred on an accrual basis.

r. Pension plan and employee benefits

i. Pension obligations

Entities within the Group operate various pension schemes. The Group has both defined benefit and defined contribution plans. A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employee the benefits relating to employee service in the current and prior years.

The Group is required to provide a minimum amount of pension benefit in accordance with Labour Law No. 13/2003 or the Group's Collective Labour Agreement ("the CLA"), whichever is higher. Since the Labour Law or the CLA sets the formula for determining the minimum amount of pension benefits, in substance, pension plans under the Labour Law or the CLA represent defined benefit plans.

The liability recognized in the statement of financial position in respect of the defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting date less the fair value of plan assets.

The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

r. Pension plan and employee benefits (continued)

i. Pension obligations (continued)

Expense charged to profit or loss includes current service costs, interest expense/income, past service cost and gains and losses on settlements. Gains or losses on the curtailment or settlement of a defined benefit plan are recognized when the curtailment or settlement occurs.

Remeasurements arising from defined benefit retirement plans are recognized in OCI.

Termination benefits are payable when an employee's employment is terminated by the Group before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits.

The Group recognizes the termination benefits at the earlier of the following dates: (a) when the Group can no longer withdraw the offer of those benefits; and (b) when the Group recognizes restructuring costs involving the payment of termination benefits.

ii. Other post-employment obligations

Companies within the Group provide "post retirement" healthcare benefits to their retired employees. This benefit is eligible for the employee that remains working up to retirement age and approaching a minimum service period. The expected cost of this benefit is accrued over the period of employment using the projected unit credit method. This obligation is valued annually by independent qualified actuaries.

s. Transactions and balances in non-US dollar denomination

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency).

Non-US dollar currency transactions are translated into US dollar using the exchange rates prevailing at the dates of the transactions. At each reporting date, monetary assets and liabilities denominated in non-US dollar currency are translated into US dollar using the closing exchange rate. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at period-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in the profit or loss, except when deferred in equity as qualifying cash flows hedges and qualifying net investment hedges.

For domestic and foreign subsidiaries that are not integral to the Company's operations and for which the functional currency is not the US dollar, the assets and liabilities are translated into US dollars at the exchange rates prevailing at the date of statement of financial position.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

s. Transactions and balances in non-US dollar denomination (continued)

The exchange rates used as of September 30, 2020 and December 31, 2019, 2018, and 2017 were as follows (full amount):

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
1,000 Rupiah/US dollar	0,07	0,07	0,07	0,07
Singapore dollar/US dollar	0,73	0,74	0,73	0,75
100 Japanese Yen/US dollar	0,95	0,92	0,91	0,89
Hong Kong dollar/US dollar	0,13	0,13	0,13	0,13
Euro/US dollar	1,17	1,12	1,14	1,19
Malaysian Ringgit/US dollar	0,24	0,24	0,24	0,25
Algerian Dinar/US dollar	0,01	0,01	0,01	0,01

t. Income tax

Current Income Tax

Current tax assets and liabilities are measured at the amount expected to be refunded from or paid to the taxation authority. The tax rates and tax regulations used to calculate these amounts are those that have been enacted or substantively enacted at the reporting date in the country where the Group operates and produce taxable income.

Interest and penalties are presented as part of income or other operating expenses because they are not considered as part of the income tax expense.

The Group periodically evaluates positions reported in Annual Tax Returns ("SPT") in connection with situations in which application of certain tax regulation are subject to interpretation. Where appropriate, the Group establishes provision based on the amounts expected to be paid to the tax authorities including consideration of tax court and supreme court decision in case of Group's appeal process.

Corrections to taxation obligations are recorded when an assessment is received, or for assessment amounts appealed against by the Group, when: (1) the result of the appeal is determined, unless there is significant uncertainty as to the outcome of such an appeal, in which event the impact of the amendment of tax obligations based on an assessment is recognized at the time of making such appeal, or (2) at the time based on knowledge of developments in similar cases involving matters appealed, in rulings by the Tax Court or the Supreme Court, where a positive appeal outcome is adjudged to be significantly uncertain, in which event the impact of an amendment of tax obligations is recognized based on the assessment amounts appealed.

In income tax calculation, the Company recognizes revenue from Disparity of Selling Price in the amount of the value of the receivables before adjusting for fair value (Note 9a). Difference in value of receivables with fair value is recognized as deferred tax assets. Recovery from adjusting the fair value of receivables in subsequent years will be recorded as interest income. The interest income is not recognized as an object of income tax but as a reversal of previously deferred tax assets.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

t. Income tax (continued)

Deferred Tax

Deferred tax is recognized using the liability method for temporary differences between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

Deferred tax liabilities are recognized for all taxable temporary differences, except:

- i. deferred tax liabilities that occur from the initial recognition of goodwill or from assets or liabilities from transactions that are not business combination transactions, and at the time of the transaction do not affect accounting profit and taxable/taxable income;
- ii. from taxable temporary differences in investments in subsidiaries, associated companies and interests in joint arrangements, which when reversed can be controlled and it is probable that the temporary differences will not be reversed in the near future.

Deferred tax assets are recognized for all deductible temporary differences, unused tax credit balances and accumulated unused tax losses. Deferred tax assets are recognized to the extent that it is probable that the amount of taxable income will be sufficient to be compensated with deductible temporary differences, and the application of unused tax credits and taxable accumulated losses that can be used, except:

- i. if deferred tax assets arise from the initial recognition of an asset or liability in a transaction that is not a business combination transaction and does not affect the accounting profit or taxable income/tax loss; or
- ii. from temporary differences that can be deducted from investments in subsidiaries, associated companies and interests in joint arrangements, deferred tax assets are only recognized if it is probable that the temporary differences will not be reversed in the near future and taxable profits can be compensated by the temporary difference.

The carrying amount of deferred tax assets is reviewed at each reporting date and is reduced if the taxable income may not be sufficient to compensate for part or all of the benefits of the deferred tax asset. Deferred tax assets that are not recognized are reviewed at each reporting date and will be recognized if it is probable that future taxable profits will be available for recovery.

Deferred tax assets and liabilities are measured using the tax rate that is expected to apply to the year when the asset is recovered or the liability is settled based on the tax rates and applicable tax regulations or substantively enacted at the reporting date.

Deferred tax assets and liabilities related to PSC activities are calculated using the tax rate that applies to the effective date of the PSC or renewal date or date of change in the PSC.

Deferred tax on goods recognized outside of profit or loss is recognized outside of profit or loss. Estimated deferred tax is recognized to correlate with underlying transactions in both the OCI and directly in equity.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

t. Income tax (continued)

Value Added Tax ("VAT")

Revenues, expenses and assets are recognized net of the amount of VAT except:

- i. VAT that arises from the purchase of an asset or service that cannot be credited by the tax office, in which case the VAT is recognized as part of the acquisition cost of the asset or as part of the items applied for expenses; and
- ii. Receivables and payables presented include the amount of VAT.

VAT on subsidies and/or Disparity of Selling Price will be recorded by the Company when submitting payments for subsidies and/or price differences to the Directorate General of Budget.

Final Tax

In accordance with taxation regulations in Indonesia, final tax is applied to the gross value of the transactions, even when the parties carrying the transactions recognizing losses.

Referring to revised PSAK No. 46 (Revised 2014), final tax is no longer governed by PSAK No. 46. Therefore, the Company has decided to present all of the final tax arising from interest income which subject to final tax as separate line item.

u. Segment information

An operating segment is a component of an enterprise:

- a. that engages in business activities from which it may earn revenues and incur expenses (including revenue and expenses related to the transactions with different components within the same entity);
- b. whose operating results are regularly reviewed by the enterprise's chief operating decision maker to make decisions about resources to be allocated to the segment and to assess its performance; and
- c. for which discrete financial information is available.

v. Impairment of non-financial assets

Assets that have an indefinite useful life - for example, goodwill or intangible assets not ready for use - are not subject to amortization and are tested annually for impairment.

Assets that are subject to amortization or depreciation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized in the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (Cash-Generating Units or CGUs). Non-financial assets other than goodwill that suffer an impairment are reviewed for possible reversal of the impairment at each reporting date.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

w. Bond issue costs

Bond issue costs are presented as a deduction from bonds payable as part of non-current liabilities in the consolidated statement of financial position.

The difference between net proceeds and nominal value represents a discount which is amortized using the EIR method over the term of the bond.

x. Joint arrangements

The Group is a party to a joint arrangement when there is a contractual arrangement that confers joint control over the relevant activities of the arrangement to the Group and at least one other party. Joint control is assessed under the same principles as control over subsidiaries.

The Group classifies its interests in joint arrangements as either:

- a. Joint ventures: where the Group has rights to only the net assets of the joint arrangement.
- b. Joint operations: where the Group has both the rights to assets and obligations for the liabilities of the joint arrangement.

In assessing the classification of interests in joint arrangements, the Group considers:

- a. the structure of the joint arrangement;
- b. the legal form of joint arrangements structured through a separate vehicle;
- c. the contractual terms of the joint arrangement agreement;
- d. any other facts and circumstances (including any other contractual arrangements).

The Group recognizes its interest in joint venture using equity method.

Any premium paid for an investment in a joint venture above the fair value of the Group's share of the identifiable assets, liabilities and contingent liabilities acquired is capitalized and included in the carrying amount of the investment in joint venture. Where there is objective evidence that the investment in a joint venture has been impaired, the carrying amount of the investment is tested for impairment in the same way as non-financial assets.

The Group accounts for its interests in joint operations by recognizing its share of assets, liabilities, revenues and expenses in accordance with its contractually conferred rights and obligations.

y. Share capital

Ordinary shares are classified as equity.

Incremental costs directly attributable to the issuance of new shares are shown in equity as a deduction, net of tax, from the proceeds.

z. Dividends

Dividend distribution to the shareholders is recognized as a liability and deducted from equity in the Group consolidated financial statements in the period in which the dividends are declared.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

aa. Borrowing costs

Borrowing costs are interest and exchange differences on foreign currency denominated borrowings and other costs (amortization of discounts/premiums on borrowings, etc) incurred in connection with the borrowing of funds.

Borrowing costs which are directly attributable to the acquisition, construction, or production of qualifying assets are capitalized as part of the acquisition cost of the qualifying assets. Other borrowing costs are recognized as expense in the period in which they are incurred.

The Group ceases capitalizing borrowing costs when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete.

ab. Fair value measurement

The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- in the principal market for the asset or liability or;
- in the absence of a principal market, in the most advantageous market for the asset or liability.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorized within the fair value hierarchy as follows:

- Level 1 - quoted (unadjusted) market prices in active markets for identical assets or liabilities;
- Level 2 - valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable; and
- Level 3 - valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable.

ac. Insurance Contract

An insurance contract is a contract issued by an insurance company where at the time of issuance of the policy the insurance company accepts significant insurance risk from the policy holder.

Insurance risk is the possibility of paying significant benefits to policyholders if an insured event occurs compared to the minimum benefit to be paid if the insured risk does not occur.

The scenarios to consider are those that contain commercial elements. The Group defines a significant insurance risk as the likelihood that the Group has agreed to compensate the policyholder if certain uncertain future events (insured events) adversely affect the policyholder.

When a contract has been classified as an insurance contract, reclassification of that contract cannot be carried out unless the terms of the agreement are later amended. Insurance contracts are classified as follows:

- Short-term insurance contract
Short-term insurance contracts are insurance contracts that only provide insurance protection without a component of the deposit for a period of equal to or less than twelve months.
- Long-term insurance contract
Long-term insurance contracts are insurance contracts that only provide insurance protection without a component of the deposit for a period of more than twelve months.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

ac. Insurance Contract (continued)

1) Underwriting income recognition

Underwriting income is recognized since the policy came into effect. Premiums from insurance and reinsurance contracts are recognized as revenues during the policy period (contract) based on the proportion of the amount of protection provided.

Premiums from joint policies are recognized at the Group's premium share. Reinsurance premiums are part of the gross premiums that become reinsurance rights based on the reinsurance agreement (contract). Reinsurance premiums are recognized over the period of the reinsurance contract in proportion to the protection obtained. Reserve for premiums that are not yet recognized as revenues are part of the premiums related to the terms of protection coverage that has not yet ended. The Group recognized reserves for short-term premiums that are not yet recognized as revenues using the daily method.

The Group also recognizes reserves for long-term premiums that are not yet recognized as revenues calculated using the present value method of future cash flows (discounted cash flows). The Company's subsidiaries calculate the liability for future policy benefits using the Gross Premium Reserve method that reflects the present value of estimated payments for all benefits promised, including all options provided, the estimated present value of all costs incurred and also considers the receipt of future premiums. (Increase) / decrease in reserves for premiums that are not yet recognized as revenues is the difference between premiums that have not recognized as revenues for the current period and past periods and is recognized net value of the consolidated profit and loss.

The portion of reinsurance assets of reserves for premiums that are not yet recognized as revenues is recognized together when the emergence of reserves for premiums that are not yet recognized as revenues. The portion of reinsurance assets from reserves for premiums that are not yet recognized as revenues is measured based on reinsurance contracts related to consistency with the method of measuring reserves for premiums that are not yet recognized as revenues.

The presentation of net premium income in the consolidated profit or loss shows the amount of gross premiums, reinsurance and retrocession premiums, and (increase) / decrease in reserves for premiums that are not yet recognized as revenues. Reinsurance and retrocession premiums are presented as a deduction from gross premiums.

2) Reinsurance

The Group reinsures some of the risks from the insurance coverage to other insurance companies and reinsurance companies. The amount of premiums paid or part of the premiums on prospective reinsurance and retrocession transactions are recognized as reinsurance premiums during the reinsurance and retrocession contract period in proportion to protection provided. Payments or liabilities for retrospective reinsurance and retrospective transactions are recognized as reinsurance receivables in the amount of the liabilities recorded in connection with the reinsurance and retrocession contracts. The Group has proportional and non-proportional reinsurance and retraction contracts with domestic and foreign insurance companies and reinsurance companies. The purpose of this reinsurance is to share risks that exceed the Group's retention capacity. Reinsurance and retrocession premiums, reinsurance and retrocession claims and reinsurance and retrocession discounts are deducted from gross premiums, gross claims and gross commission. The Group reinsures a portion of the risk to reinsurance companies. The amount of premiums paid or the portion of premiums on prospective reinsurance transactions is recognized in accordance with the proportion of the reinsurance protection received.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

ac. Insurance Contract (continued)

2) Reinsurance (continued)

Reinsurance assets include balances that expected to be paid by reinsurance companies for ceded estimated reinsurance claims, and ceded premiums do not yet recognized as revenues. The amount of benefits covered by the reinsurer is estimated to be consistent with the liabilities associated with the reinsurance policy. If the reinsurance asset is impaired, the Group reduces the carrying amount and recognizes the impairment loss in the consolidated profit and loss. Reinsurance assets are impaired if there is objective evidence, as a result of an event that occurs after the initial recognition of reinsurance assets, that the Group cannot receive the entire amount because it is under contract conditions, and the impact on the amount to be received from the reinsurers can be measured in terms of reliability. The Group presents reinsurance assets separately as assets for premiums not yet recognized as revenues and estimated liability claims.

Acquisition costs are expenses incurred to obtain insurance premiums, such as commissions paid to insurance brokers, agents and other insurance entities. These acquisition costs are deferred and amortized according to the method of calculating the reserve for the premium.

3) Claim

Claims include settled claims, claims in the process of settlement, including estimates of claims that have occurred but have not been reported (IBNR) and claims settlement costs. Such claims are recognized as an expense when the liability for the claim is incurred. Part of the claims obtained from reinsurers are recognized and recorded as a deduction from claim expenses in the same period as the claim expense recognition period. Subrogation rights are recognized as a deduction from claims expense at the time of realization.

Presentation of claims expense in the consolidated statement of profit and loss shows the amount of gross claims, reinsurance claims, and (increases) / decreases in estimated own retention claims. Reinsurance claims are presented as a deduction from gross claims.

Allowance for estimated gross claims is based on estimating claims expenses to be paid according to claims received by the Group up to the report date. Recovery of claims from reinsurers for a reserve of estimated gross claims is recorded as estimated reinsurance claims on reinsurance assets. The Group determines reserves based on line of business. There are two categories of reserve: reserves for claims that have already been reported and reserves for claims that have occurred but not yet reported (IBNR).

The Group's reserves for claims that have been reported are based on estimating future payments to settle reported claims. The Group makes the estimate based on facts that are available when the reserves are determined. Changes in the estimated amount of claims, as a result of the further review process and the difference between the estimated amount of claims paid, are recognized in the consolidated profit and loss in the year the change occurs.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

ac. Insurance Contract (continued)

4) Liability adequacy testing

Liability adequacy testing is carried out on the reporting date for individual contracts or per product group, determined according to how the Group obtains, maintains, and measures the profitability of the insurance contract. The Group assesses insurance liabilities at the end of each reporting period to ensure that the insurance liabilities recorded are sufficient to cover estimated losses at the end of the reporting period, using current estimates of future cash flows based on insurance contracts.

If the valuation shows a deficiency between the carrying value of the insurance liability (less the related deferred acquisition costs) compared to the estimated future cash flows, all of the deficiencies are recorded in the consolidated profit and loss. At the reporting date, the total recorded insurance assets and liabilities have been estimated and management believes that this amount is adequate.

ad. Onerous Contract

An onerous contract is a contract in which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it. The unavoidable costs under a contract reflect the least net cost of exiting from the contract, which is the lower of the cost of fulfilling it and any compensation or penalties arising from failure to fulfil it. If the Group has a contract that is onerous, the present obligation under the contract shall be recognised and measured as a provision.

ae. Completion of consolidated financial statements

The company's management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with Indonesian Financial Accounting Standards, which were completed and authorized for issuance by the Board of Directors of the Company on January 29, 2021.

3. MANAGEMENT'S USE OF ESTIMATES, JUDGEMENTS AND ASSUMPTIONS

In the application of the Group's accounting policies, which are described in Note 2 to the consolidated financial statements, management is required to make estimates, judgements and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources.

These estimates, judgements and assumptions are based on historical experience and other factors that are considered to be relevant.

a. Judgements

The following judgements are made by management in the process of applying the Group's accounting policies:

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3. MANAGEMENT'S USE OF ESTIMATES, JUDGEMENTS AND ASSUMPTIONS (continued)

a. Judgements (continued)

i. Exploration and evaluation expenditures

The Group's accounting policies for exploration and evaluation expenditures result in certain items of expenditure being capitalized for an area of interest where it is considered likely to be recoverable by future exploitation or sale or where the activities have not reached a stage which permits a reasonable assessment of the existence of reserves. This policy requires management to make certain estimates and assumptions as to future events and circumstances, in particular whether an economically viable extraction operation can be established.

ii. Development expenditures

Development activities commence after a project is sanctioned by the appropriate level of management. Judgement is applied by management in determining when a project is economically viable.

iii. Uncertain tax exposure

Based on the tax regulations currently enacted, the management assessed if the amounts recorded under claim for tax refund are recoverable and refundable from the Tax Office. Further, the management also assessed possible liability that might arise from the tax assessment under objection.

Significant judgment is involved in determining the provision for corporate income tax and other taxes on certain transactions. Uncertainties exist with respect to the interpretation of complex tax regulations and the amount and timing of future taxable income. The Group makes an analysis of all tax positions related to income taxes to determine if a tax liability for unrecognized tax benefit should be recognized.

iv. Recognition of disparity of selling price of JBT diesel fuel and JBKP premium

The Presidential Regulation No. 43 Year 2018 dated May 25, 2018 regarding Amendment to Presidential Regulation No. 191 Year 2014 regarding Provision, Distribution and HJE Fuel Oil states that, in the event, based on the results of the audit by the Audit Board of the Republic of Indonesia (BPK), there are excess and/or shortfall of revenue of an assigned business entity in 1 (one) fiscal year, as a result of Government's stipulated selling price of fuel oil, the Minister of Finance ("MoF"), in coordination with the Minister of Energy and Mineral Resources (the "MoEMR") and the Minister of State-Owned Enterprises (the "MoSOE"), will establish a policy regarding settlement of excess and/or shortfall of revenue of such business entity.

Management believes that it is appropriate to recognize excess and/or shortfall of revenue from the Disparity of Selling Price in the period when sales of JBT Diesel Fuel and JBKP Premium occur and that the settlement and/or collectability of such Disparity of Selling Price is certain when (i) the Company has transferred all risks and rewards of JBT Diesel Fuel and JBKP Premium to consumers across Indonesia, (ii) the Company retains neither continuing managerial involvement and effective control over JBT Diesel Fuel and JBKP Premium when the sale occurred and (iii) the BPK's audit results on the Disparity of Selling Price are received by the Company and, in respect of the shortfall of revenue from the Disparity of Selling Price, the collectability of revenue from the Disparity of Selling Price is certain when the Decision Letter from the Minister of Finance ("Decision Letter") has been received by the Company prior to the completion of the financial statements.

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3. MANAGEMENT'S USE OF ESTIMATES, JUDGEMENTS AND ASSUMPTIONS (continued)

a. Judgements (continued)

iv. Recognition of disparity of selling price of JBT diesel fuel and JBKP premium (continued)

Such excess and/or shortfall of revenue from the Disparity of Selling Price is recorded as revenue from other operating activities because it is part of the Company's operations.

b. Estimates and assumptions

The key assumptions regarding the future and other key sources of estimation uncertainty at the reporting date that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial period are disclosed below. The Group based its assumptions and estimates on parameters available when the consolidated financial statements were prepared.

i. Impairment of non-financial assets

In accordance with the Group's accounting policy, each asset or CGU is evaluated every reporting period to determine whether there are any indications of impairment.

The determination of fair value and value in use requires management to make estimates and assumptions about expected production and sales volumes, commodity prices (considering current and historical prices, price trends and related factors), reserves, operating costs, decommissioning and site restoration cost, and future capital expenditure. These estimates and assumptions are subject to risk and uncertainty; hence there is a possibility that changes in circumstances will alter these projections, which may have an impact on the recoverable amount of the assets.

ii. Reserves estimates

Proved oil and gas reserves are the estimated quantities of crude oil and natural gas which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions. Proved reserves include:

- (i) proved developed reserves: amounts of hydrocarbons that are expected to be retrieved through existing wells, facilities and operating methods; and
- (ii) proved undeveloped reserves: amounts of hydrocarbons that are expected to be retrieved following new drilling, facilities and operating methods.

The accuracy of proved reserve estimates depends on a number of factors, assumptions and variables such as: the quality of available geological, technical and economic data, results of drilling, testing and production after the date of the estimates, the production performance of the reservoirs, production techniques, projecting future rates of production, the anticipated cost and timing of development expenditures, the availability for commercial market, anticipated commodity prices and exchange rates.

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3. MANAGEMENT'S USE OF ESTIMATES, JUDGEMENTS AND ASSUMPTIONS (continued)

b. Estimates and Assumptions (continued)

ii. Reserves estimates (continued)

As the economic assumptions used to estimate reserves change from year to year, and additional geological data are generated during the course of operations, estimates of reserves may change from year to year. Changes in reported reserves may affect the Group's financial results and financial position in a number of ways, including:

- i. Depreciation and amortization which are determined on a unit of production basis, or where the useful economic lives of assets change.
- ii. Decommissioning, site restoration and environmental provision may change where changes in estimated reserves affect expectations about the timing or cost of these activities.
- iii. The carrying value of deferred tax assets/liabilities may change due to changes in estimates of the likely recovery of the tax benefits.

The Group has established proven reserves based on the principle of Petroleum Resources Management System ("PRMS") 2018, starting for January 1, 2019 (Previously based on PRMS 2007). The characteristics of the estimation uncertainty of natural reservoirs of oil and gas reserve may lead to changes in the estimated reserves due to the additional data obtained by the Group.

iii. Oil and gas properties

The Group applies the successful efforts method for its oil and natural gas exploration and evaluation activities.

For exploration and exploratory-type stratigraphic test wells, costs directly associated with the drilling of those wells are initially capitalized as assets under construction within oil and gas properties, pending determination of whether potentially economically viable oil and gas reserves have been discovered by the drilling effort.

Such estimates and assumptions may change as new information becomes available. If the well does not discover potentially economically viable oil and gas quantities, the well costs are expensed as a dry hole and are reported in exploration expense.

iv. Provision for the impairment of loans and receivables

Provision for the impairment of receivables is maintained at a level considered adequate to provide for potentially uncollectible receivables. The Group assesses specifically at each balance sheet date whether there is objective evidence that a financial asset is impaired (uncollectible).

The level of provision is based on past collection experience and other factors that may affect collectability.

Loans and receivables write-offs are based on management's decision that the financial assets are uncollectible or cannot be realized regardless of the actions taken.

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3. MANAGEMENT'S USE OF ESTIMATES, JUDGEMENTS AND ASSUMPTIONS (continued)

b. Estimates and Assumptions (continued)

v. Due from the Government

The Group recognizes amounts due from the Government for cost subsidies for certain fuel ("BBM") products and 3 kg LPG cylinders and marketing fees in relation to the Government's share of crude oil, natural gas and LNG. The Group makes an estimation of the amount due from the Government based on the actual delivery volume parameter and rates based on government regulations. The amount of subsidies is subject to audit and approval by the Audit Board of the Republic of Indonesia ("BPK"). The actual results may be different from the amounts recognized.

vi. Depreciation, estimate of residual values and useful lives of fixed assets

The useful lives of the Group's investment properties and fixed assets are estimated based on the period over which the asset is expected to be available for use. Such estimation is based on a collective assessment of similar businesses, internal technical evaluations and experience with similar assets.

vii. Deferred tax assets

Deferred tax assets are recognized only where it is considered more likely than not that they will be recovered, which is dependent on the generation of sufficient future taxable profits.

viii. Provision for decommissioning and site restoration

The Group is obliged to carry out decommissioning of oil and gas production facilities and pipelines at the end of their economic lives. The largest decommissioning obligations faced by the Group relate to the plugging and abandonment of wells and the removal and disposal of oil and gas platforms and pipelines in its contract area.

The Group recognizes provision for assets decommissioning and site restoration ("ASR") for all assets in the Group's PSC areas, except for certain subsidiaries as disclosed in Note 49n.

Most of these decommissioning events are many years in the future and the precise requirements that will have to be met when the removal event actually occurs are uncertain. Decommissioning technologies and costs are constantly changing, as well as political, environmental, safety and public expectations. Consequently, the timing and amounts of future cash flows are subject to significant uncertainty. Changes in the expected future costs are reflected in both the provision and the related asset and could have a material impact on the Group's consolidated financial statements.

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4. ACQUISITION AND ADDITION OF PARTICIPATING INTEREST

The Group has acquired and added participating interest through acquisition transactions or acquisitions of terminated blocks. The acquisition transactions were made in accordance with the Group's strategy to develop its upstream business i.e. to increase oil, gas and geothermal production and reserves, and to expand the business overseas. The summary of the Group's acquisitions from 2017 until September 30, 2020 is as follows:

Acquisition of working area and interest	Working area	Area	Effective date of contract	Expiry date of contract	Percentage of Participation	Production	Contract period	Sub-holding
Offshore North West Java Block	Offshore North West Java Block	North West Java	19/01/2017*	18/01/2037	90%	Oil and gas	20 years	PT Pertamina Hulu Energi
Geothermal Gunung Lawu	Gunung Lawu	Central Java and East Java	30/01/2017	29/01/2054	100%	Geothermal	37 years	PT Pertamina Geothermal Energy and PT Pertamina Hulu Energi
Jambaran Tiung Biru Unitization Field	EP Block and Cepu Block	Central Java-East Java	01/01/2018**	16/09/2035	91.93%	Gas	Until the end of PEPC's PSC	PT Pertamina EP Cepu
Attaka (Unitization) Field	Attaka***	East Kalimantan	01/01/2018	24/10/2018	100%	Oil and gas	10 months	PT Pertamina Hulu Indonesia
Mahakam Block	Mahakam	East Kalimantan	01/01/2018	31/12/2037	90%	Oil and gas	20 years	PT Pertamina Hulu Indonesia
Geothermal Seulawah Agam	Seulawah Agam	Aceh	09/04/2018	08/04/2055	75%	Geothermal	37 years	PT Pertamina Geothermal Energy
Tuban Block	Tuban Block	East Java	20/05/2018*	19/05/2038	100%	Oil and gas	20 years	PT Pertamina Hulu Energi
Ogan Komering Block	Ogan Komering Block	South Sumatera	20/05/2018*	19/05/2038	100%	Oil and gas	20 years	PT Pertamina Hulu Energi
Sukowati Unitization Field	Sukowati	Tuban	20/05/2018	-	100%	-	20 years	PT Pertamina EP
Sanga Sanga Block	Sanga Sanga Block	East Kalimantan	08/08/2018*	07/08/2038	100%	Oil and gas	20 years	PT Pertamina Hulu Indonesia
Offshore Southeast Sumatera ("OSSES") Block	SES Block	South East Sumatera	06/09/2018*	05/09/2038	100%	Oil and gas	20 years	PT Pertamina Hulu Energi
North Sumatera Offshore ("NSO") Block	NSO Block	North Sumatera	17/10/2018*	16/10/2038	100%	Oil and gas	20 years	PT Pertamina Hulu Energi
East Kalimantan and Attaka Block	East Kalimantan and Attaka Block***	East Kalimantan	25/10/2018*	24/10/2038	100%	Oil and gas	20 years	PT Pertamina Hulu Indonesia
Jambi Merang Block	Jambi Merang Block	South Sumatera	10/02/2019*	09/02/2039	100%	Oil and gas	20 years	PT Pertamina Hulu Energi
Raja/Pendopo Block	Raja/Pendopo Block	South Sumatera	06/07/2019*	05/07/2039	100%	Oil and gas	20 years	PT Pertamina Hulu Energi
Salawati Block	Salawati Block	Papua	23/04/2020*	22/04/2040	30%	Oil and gas	20 years	PT Pertamina Hulu Energi
Kepala Burung Block	Kepala Burung Block	Papua	15/10/2020*	14/10/2040	30%	Oil and gas	20 years	PT Pertamina Hulu Energi
Maratua Block	Maratua Block	North Kalimantan & East Kalimantan	18/02/2019*	17/02/2049	100%	Oil and gas	20 years	PT Pertamina Hulu Energi
Rokan Block	Rokan Block	Central Sumatera	09/08/2021	08/08/2041	100%	Oil and gas	20 years	Pertamina Hulu Rokan
West Ganai Block	West Ganai Block	Makassar	26/01/2020	25/01/2050	30%	Oil and gas	30 years	Pertamina Hulu Indonesia
Coridor Block	Coridor Block	South Sumatera	20/12/2023	19/12/2043	30%	Oil and gas	20 years	Pertamina Hulu Energi

* Note 4d

** Note 4f

*** Effective October 2018, Attaka Block was merged into East Kalimantan Block

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4. ACQUISITION AND ADDITION OF PARTICIPATING INTEREST (continued)

a. Establishment of State-owned Oil and Gas Holding Enterprise

On December 30, 2016, the Government of Indonesia ("GOI") issued Government Regulation ("PP") No. 72/2016 as a revision to PP No. 44/2005 regarding Procedures and Administration of State Capital Investment in State-Owned Enterprises and Limited Company. This regulation is the legal basis for the establishment of state-owned holding enterprise that is being deliberated by the GOI.

On February 28, 2018, the GOI issued PP No. 6/2018 regarding Additional State Capital Investment in the Company. This regulation is to increase the GOI paid-up capital in the Company by transferring 13,809,038,755 (full amount) B series shares of PT Perusahaan Gas Negara Tbk ("PGN")'s owned by the GOI, which represents 56.96% of total PGN shares, to the Company.

On March 28, 2018, the Ministry of Finance issued Decree No. 286/KMK.06/2018 regarding the determination of the value of additional State capital participation in the Company's share capital. The decree stipulates that the value of additional State capital participation in the Company's share capital is Rp38,136,346,046,696 (full amount).

On April 11, 2018, the Minister of State-Owned Enterprises ("MoSOE") issued Letter No. S-216/MBU/2018 to approve the transfer of 56.96% B series shares of PGN and additional State capital investment in the Company amounting to Rp38,136,346,046,696 (full amount). On the same date, the MoSOE issued Letter No. S-217/MBU/04/2018 to increase the Company's authorized share capital from Rp200 trillion to Rp600 trillion with nominal amount of Rp1,000,000 (full amount) per share. This letter also approved additional issued and paid-up capital of the Company by 38,136,347 shares or amounting to Rp38,136,346,046,696 (full amount) or equivalent to US\$2,774,157.

Further, on April 11, 2018, the MoSOE and the Company entered into an agreement regarding the transfer of Government rights at PGN to the Company, to increase the state capital participation in the Company.

On April 13, 2018, the Minister of Law and Human Rights issued Letter No. AHU-0008395.AH.01.02. 2018 regarding Approval of Changes in PT Pertamina (Persero) Articles of Association. It is stipulated that changes to Pertamina's Article of Association in relation to the total issued and paid-up shares of Rp171,227,044,000,000 (full amount) or equivalent to US\$16,191,204 has been approved.

On May 9, 2018, the MoSOE, as the holder of PGN's A Series Dwiwarna shares, issued a Power of attorney letter in relation to transfer of rights and authority of A series shares of PGN share to the Company as the majority holder of B series shares of PGN shares. This letter is to provide PT Pertamina (Persero) control over PGN.

The above transaction is recorded in accordance with SFAS 38 (Revised 2012) "Business Combinations of Entities Under Common Control".

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4. ACQUISITION AND ADDITION OF PARTICIPATING INTEREST (continued)

a. Establishment of State-owned Oil and Gas Holding Enterprise (continued)

The following is a summary of PGN's financial information at the acquisition date:

	Book value
ASSETS	
Current assets	2,021,879
Non-current assets	4,442,988
Total assets	6,464,867
LIABILITIES	
Current liabilities	553,560
Non-current liabilities	2,649,167
Total liabilities	3,202,727
EQUITY	
Share capital	344,019
Other paid-in capital	284,339
Retained earnings	
Appropriated	2,427,854
Unappropriated	223,501
Other components of equity	(36,868)
Total equity attributable to owners of the parent entity	3,242,845
B series shares transfer representing 56.96% ownership of interest	(1,847,125)
Consideration amount	2,774,157
Additional paid-in capital	927,032

Based on the amendment and restatement of the share purchase agreement between the Company and PGN dated December 28, 2018, PGN officially acquired 51% (or 2,591,099 shares) of PT Pertamina Gas ("Pertagas") owned by the Company with total transaction value of Rp20.18 trillion, equivalent to US\$1,351,955. With the acquisition of these shares, PGN effectively owned 51% of Pertagas shares including Pertagas's 5 subsidiaries, PT Pertagas Niaga, PT Perta Arun Gas, PT Perta Daya Gas, PT Perta-Samtan Gas, and PT Perta Kalimantan Gas. Pursuant to this transaction, the Company's effective ownership of Pertagas decreased from 100% to 78.05%.

b. Control over PT Nusantara Regas ("Regas")

The Company and PGN own 60% and 40% ownership of interest in Regas, respectively. As a result of the establishment of state-owned oil and gas enterprise, the Company indirectly owns 82.78% ownership of interest. The management conclude that the Company has majority vote over Regas to direct relevant activities. Therefore, the Company has control over Regas and starting April 11, 2018, the Company consolidates Regas financial statements.

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4. ACQUISITION AND ADDITION OF PARTICIPATING INTEREST (continued)

b. Control over PT Nusantara Regas ("Regas") (continued)

The following is a summary of Regas' financial information at the date when the Company obtains control.

	Book value
ASSETS	
Current assets	233,935
Non-current assets	56,116
Total Assets	290,051
LIABILITIES	
Current liabilities	20,769
Non-current liabilities	12,707
Total Liabilities	33,476
EQUITY	
Share capital	145,589
Retained earnings	
Appropriated	43,129
Unappropriated	68,026
Other components of equity	(169)
Total Equity	256,575

c. Acquisition of Etablissements Maurel et Prom SA ("M&P") shares

M&P is a listed company in the Paris Stock Exchange which has the following production assets: Ezanga Block in Gabon (as the operator with Working Interest ("WI") of 80%); Mnazi Bay Field in Tanzania (as the operator with WI of 48.06%); and owns 20.46% shares in Seplat (a Company listed in Lagos Stock Exchange, Nigeria and London Stock Exchange, England) which has several production assets in Nigeria. M&P also has exploration assets and undeveloped discovery areas located in Italy, France, Myanmar, Canada, Tanzania, Gabon, Colombia, and Namibia.

On August 25, 2016, the Group through PT Pertamina Internasional Eksplorasi dan Produksi ("PIEP"), a wholly owned subsidiary of the Company, purchased all of the shares held by Pacifico SA in M&P representing 47,916,026 shares corresponding to 24.53% shares ownership in M&P. PIEP had increased its shares ownership through a tender offer with the same terms and conditions to all M&P's shares.

The process of step-up acquisition through Voluntary Tender Offer is conducted in two stages. The first phase was completed on January 25, 2017 and the payment was made on February 1, 2017, after which PIEP owns 64.46% of M&P shares and 63.35% of voting rights, resulting in a "change of control" of M&P. The second phase of voluntary tender offer was completed on February 15, 2017 and the payment was executed on February 22, 2017, from that date, PIEP becomes the holder of:

1. 141,911,939 M&P shares, representing 72.65% of share capital and 71.39% of the voting rights in M&P;
2. 14,641,233 ORNANE 2019 bonds, which represent 99.88% of the outstanding bonds;
3. 10,435,331 ORNANE 2021 bonds, which represent 99.99% of the outstanding bonds.

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4. ACQUISITION AND ADDITION OF PARTICIPATING INTEREST (continued)

c. Acquisition of Etablissements Maurel et Prom SA ("M&P") shares (continued)

On December 20, 2017, M&P redeemed all ORNANE 2019 and ORNANE 2021 bonds owned by PIEP and paid in cash the nominal amount of the bonds and interest thereon, so that PIEP no longer holds ORNANE 2019 and ORNANE 2021 bonds.

Following the completion of the shares acquisition, PIEP became the majority shareholder and has control over M&P.

Calculation of the fair value of identified assets and liabilities taken over by PIEP was completed on December 31, 2017. Fair value adjustments mainly come from the valuation of reserves and sources of oil acquired, for exploration and/or production assets, in Gabon, Nigeria, Tanzania, and Venezuela.

The fair value of identified assets and liabilities arising from the acquisition of M&P are as follows:

	Amount
ASSETS	
Financial assets	353,653
Inventories	9,678
Prepaid taxes	70,844
Deferred tax assets	35,096
Long-term investments	94,697
Oil and gas properties	1,723,322
Other non-current assets	85,318
Total assets	2,372,608
LIABILITIES	
Financial liabilities	913,431
Tax payables	39,801
Deferred tax liabilities	371,004
Employee benefit liabilities	1,143
Provision for decommissioning and site restoration	41,110
Total liabilities	1,366,489
Net assets at the acquisition date (include deferred tax assets and liabilities)	1,006,119
Excess of book value over fair value	9,600
Fair value of net assets	1,015,719
Interest acquired	72.65%
Fair value of net assets acquired	737,920
Foreign currency translation	28,337
Bargain purchase	(54,130)
Purchase consideration through cash	712,127

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4. ACQUISITION AND ADDITION OF PARTICIPATING INTEREST (continued)

c. Acquisition of Etablissements Maurel et Prom SA ("M&P") shares (continued)

The fair value of identified assets and liabilities arising from the acquisition of M&P are as follows:
(continued)

	Amount
Below is the cash flow analysis from the acquisition of M&P:	
Transaction value of the acquisition	712,127
Less: Cash from M&P	(203,230)
Net cash flow to acquire control	508,897

The bargain purchase amount also include gain on remeasurement of the previously held equity interest amounting to US\$42,658.

On November 5, 2018, M&P entered into an agreement with Rockover Energy Limited ("Rockover") to acquire the deferred payments owned by Rockover for a consideration of US\$10.75 million (full amount) to be paid in cash and issuance of 5,373,209 new M&P shares.

On December 12, 2018, the extraordinary general meeting of M&P shareholders approved the delegation of authority relating to the capital increase for the purpose of transaction with Rockover to the Board of Directors. On December 14, 2018, the Board of Directors of M&P implemented this delegation of authority and decided to carry out the capital increase for a total nominal amount of €4,137,371 (full amount) through issuance of 5,373,209 new shares with a par value of €0.77 (full amount) each and a unit subscription price of €5,182 (full amount) each. Pursuant to the completion of the capital increase, Rockover holds 2.68% of M&P's share capital and resulted in dilution of the Company's percentage of ownership in M&P from 72.65% to 70.75%.

In October 2018, Maurel & Prom Venezuela SLU ("M&P Venezuela"), a wholly owned subsidiary of M&P, signed a Share Sale and Purchase Agreement ("SSPA") for the acquisition of Shell Exploration and Production Investments B.V. ("Shell")'s 40% interest as "Shareholder B" in Mixed Company. Mixed Company operates the Urdaneta West field in Lake Maracaibo, Venezuela. Petróleos de Venezuela S.A. ("PDVSA"), through its wholly owned subsidiaries Corporación Venezolana del Petróleo ("CVP") and PDVSA Social ("PDVSAS") - collectively referred to as "Shareholder A", own the remaining 60% stake of the Mixed Company.

On December 3, 2018, pursuant to the approval from the Ministry of Petroleum of Venezuela, M&P Venezuela effectively acquired 40% shares from Shell in Mixed Company with total consideration payment for the acquisition of €70 million, which will be settled as follows:

1. €47 million have been paid at closing of the transaction in December 2018, and
2. €23 million to be in December 2019, 1 (one) year after the closing of the transaction.

On July 17, 2019 M&P and Sucre Energy Latam B.V (Sucre Energy) signed an agreement, whereby Sucre Energy took over 20% ownership of M&P in M&P Iberoamerica S.L. (formerly M&P Venezuela), which has a 40% ownership in Mixed Company. The price condition for this acquisition was the same as those that applied to the transaction completed between M&P and Shell over Mixed Company in December 2018.

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4. ACQUISITION AND ADDITION OF PARTICIPATING INTEREST (continued)

c. Acquisition of Etablissements Maurel et Prom SA ("M&P") shares (continued)

On July 31, 2019, M&P has completed the acquisition of the 20% working interest owned by Angola Japan Oil Co., Ltd. ("AJOCO"), a majority owned subsidiary of Mitsubishi Corporation ("Mitsubishi"), in two blocks offshore Angola, Block 3/05 and Block 3/05A. As per the sales and purchase agreement, the purchase considerations of US\$80 million (full amount), less a deposit of US\$2 million (full amount) paid at the announcement of the transaction and has been adjusted by US\$43 million (full amount) for working capital and cash flows received and disbursed by AJOCO on behalf of M&P since the contractual economic effective date of 1 January 2018. As a result, the net cash paid to AJOCO by M&P on the transaction completion date is US\$35 million (full amount).

d. Gross split contract ("Gross Split")

On January 13, 2017, the regulation of the Minister of Energy and Mineral Resources ("MoEMR") No. 08/2017 regarding principles of the Production Sharing Contract without Cost Recovery Mechanism, also known as Gross Split PSC, was issued.

e. Mahakam production sharing contract

In accordance with MoEMR Letter No. 2793/13/ME.M/2015 regarding *Pengelolaan Wilayah Kerja ("WK") Mahakam Pasca 2017*, the Company is appointed as the contractor and operator of the Mahakam Contract Area (previous contractors are Total E&P Indonesia and INPEX Corporation). To manage such working area, the Company, through PT Pertamina Hulu Indonesia ("PHI") established PT PHM.

Mahakam PSC was signed on December 29, 2015 by SKK Migas and PHM with effective date on January 1, 2018. The PSC uses the concept of production sharing, but has introduced a new sliding scale approach to calculate the contractor entitlement based on Revenue Over Costs ("R/C") ratio.

On October 25, 2016, the Amendment of Mahakam PSC was adopted, adding some important points, including the certainty of the costs incurred by PHM after the date of signing the contract but before the effective date of the contract. These costs will be included in cost recovery as operating cost after the effective date of contract.

On April 20, 2018, the second amendment of Mahakam PSC was signed, adding some important points, including the addition of Tengah working area into Mahakam working area. This amendment was effective on October 5, 2018.

The PSC term refers to PP No. 79 Year 2010, where the assume and discharge mechanism for taxes that became incentives for PSC Contractors are treated as part of the cost to be recovered through the cost recovery mechanism.

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4. ACQUISITION AND ADDITION OF PARTICIPATING INTEREST (continued)

e. Mahakam production sharing contract (continued)

The provisions are as follows:

- Crude oil and natural gas production sharing

The sharing of oil production between PHM and the Government is 23.5294% and 76.4706%, respectively, while sharing of gas production is 47.0588% and 52.9412% for the first year of contract. The R/C factor in effect in the first year is 1.3 as stipulated in the PSC. Oil and gas production sharing for subsequent years are listed in the table below with R/C factor at the end of previous year.

The R/C factor itself is the contractor's cumulative revenue from the date of signing the contract divided by the contractor's cumulative cost since the signing of the contract.

R/C	Tax Rate	Gross Contractor Share		Net Contractor Share	
		Oil	Gas	Oil	Gas
0 – 1	36.25%	31.3726%	54.9020%	20%	35%
0 – 1.2	36.25%	27.4510%	50.9804%	18%	33%
1.2 – 1.4	36.25%	23.5294%	47.0588%	15%	30%
1.4 – 1.6	36.25%	19.6078%	43.1373%	12%	28%
> 1.6	36.25%	15.6863%	39.2157%	10%	25%

- First Tranche Petroleum (“FTP”)

The Government and PHM are entitled to receive an amount equal to 20% of the total production of oil and gas each year before any deduction for recovery of operating costs and investment credit. FTP is shared between the Government and PHM in accordance with the entitlements to oil and gas production.

As at the authorization date of these consolidated financial statements, the scheme for utilization of assets previously utilized by the predecessor Mahakam PSC contractors has not yet been determined by the Government, in this case the Directorate General of State Assets and MoEMR.

On April 20, 2018, the second amendment of Mahakam PSC was signed adding some important points, including the addition of Tengah working area into Mahakam working area. This amendment became effective on October 5, 2018.

f. Addition of 41.37% of PT Pertamina EP Cepu’s (“PEPC”) participating interest in Jambaran-Tiung Biru (“JTB”) unitization field

Effective November 3, 2017, PEPC acquired an additional 41.37% participating interest in the JTB unitization field previously held by ExxonMobil Cepu Limited and Ampolex (Cepu) Pte. Ltd., increasing the Company's participating interest in JTB unitization field to 82.74%. The other contractors in JTB field are PT Pertamina EP with 8.06% and Several Region Owned Enterprises (“BUMD”) with 9.19%.

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4. ACQUISITION AND ADDITION OF PARTICIPATING INTEREST (continued)

f. Addition of 41.37% of PT Pertamina EP Cepu's ("PEPC") participating interest in Jambaran-Tiung Biru ("JTB") unitization field (continued)

Through Letter No. 001/KETUA-BKS/XI/2017 dated November 17, 2017 and Letter No. 004/KETUA-BKS/XII/2017 dated December 19, 2017, Cooperating Body Participating Interest Block ("PI BKS") Cepu conveyed the resignation of 4 Members of the PI BKS Cepu Block namely PT Asri Dharma Sejahtera ("ADS"), PT Sarana Patra Hulu Cepu ("SPHC"), PT Blora Patragas Hulu ("BPH"), PT Petrogas Jatim Utama Cendana ("PJUC"), which the four members stated they would not participate in the development of the Jambaran-Tiung Biru Field Gas project ("JTB") starting January 1, 2018.

Effective January 1, 2018, the Company acquired a 9.19% participating interest in the JTB unitization field previously owned by the BKS (ADS, SPHC, BPH, PJUC) so that the Company's participating interest in the JTB unitization field becomes 91.93%. Payment for this acquisitions totaled to US\$16,764. The acquisitions of this participating interests was recorded as an additional oil and gas assets.

g. Establishment of PT Pertamina Hulu Rokan ("PHR")

Based on the Decree of the Minister of Energy and Mineral Resources No. 1923K/10/MEM/2018 dated August 6, 2018 regarding Agreement on Management of Establishment of Principal Forms and Conditions (Terms and Conditions) of Cooperation Contracts in Rokan Work Areas, one of the requirements that must be fulfilled by Pertamina includes preparing a new subsidiary, signature bonus and payment of work commitments (Note 4d).

On December 20, 2018, PT Pertamina Hulu Rokan was established based on Notarial Deed No.13 dated December 20, 2018 from Lenny Janis Ishak, S.H. Deed of establishment of PHR was approved by the Minister of Law and Human Rights through Letter No. AHU-0061348.AH.01.01.2018 dated December 21, 2018. PHR will manage the Rokan Block from 2021 to 2041. Total authorized capital of PHR is US\$3,140,000 with paid-in capital of US\$785,000. The paid-up capital was used to pay the signing bonus to the Government of Indonesia in the amount of US\$783,980 on December 21, 2018, and is to be used as working capital during the first year of managing its working area.

h. Addition of 20% of PT Pertamina EP's participating interest in Sukowati unitization field

Based on SKK Migas letter No. SRT-0493/SKKMA0000/2018/S1 dated June 25, 2018 regarding the determination of the new unitization operator of Sukowati Field, CPA Mudi production facilities and Cintanatomas FSO, PT Pertamina EP was appointed as the new operator of the Sukowati Field.

Based on a joint agreement regarding the management of Sukowati Field unitization, the operation of the CPA Mudi production facility and Cintanatomas FSO dated May 16, 2018 between PT Pertamina EP and PT Pertamina Hulu Energi Tuban East Java, it was agreed that PT Pertamina EP has an interest participation unit of 100% (Note 44c).

i. Temporary cooperation contract of Attaka working area

The Temporary Cooperation Contract ("TCC") was made and signed on November 2, 2017 by SKK Migas and PT Pertamina Hulu Attaka, explained all terms, conditions, rights and obligations, of and pursuant to the ex-Attaka PSC shall be applicable to the TCC from the date of January 1, 2018 until October 24, 2018. Effective from October 25, 2018, the Attaka working area was combined into East Kalimantan PSC.

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4. ACQUISITION AND ADDITION OF PARTICIPATING INTEREST (continued)

j. Decrease in the percentage of ownership of the Company at PT Asuransi Tugu Pratama Indonesia Tbk (formerly PT Tugu Pratama Indonesia)

On May 28, 2018, ATPI became a public company by issuing 177,777,800 shares of new shares. As a result, the percentage of the Company's ownership in ATPI decreased from 65.0% to 58.5%. This reduction in the percentage of ownership does not result in a loss of Company's control in ATPI. Thus, the impact of this transaction amounting to US\$20,551 is calculated as an equity transaction and recorded in the difference account of transactions with non-controlling interests.

k. Addendum to the agreement on the transfer and management of the ONWJ Block PSC

On February 6, 2019, PHE ONWJ and PT Migas Hulu Jabar ONWJ ("MUJ ONWJ") signed an addendum on the transfer agreement and management of 10% working interest at in the ONWJ PSC. MUJ's share of production from the ONWJ PSC, less its share of expenses in the PSC from January 19, 2017 to December 31, 2018 is US\$16,303. Settlement of such amount has been made by PHE ONWJ to MUJ on February 8, 2019.

Starting from the date of the transfer, payments of MUJ ONWJ's share of the production is made on a monthly basis by PHE ONWJ after deducting MUJ ONWJ's share of the ONWJ PSC's operating costs and other obligations in accordance with the PSC.

In the event MUJ ONWJ's share of production in the current month is insufficient to cover MUJ ONWJ's share of operating costs, the cumulative underpayment will be carried over to the following months.

To ensure MUJ ONWJ's revenue, the production sharing and operating costs sharing with MUJ ONWJ is calculated based on provisional percentage for a full year, in accordance with the attachment to the addendum to the agreement. In the event in any year the cumulative operating costs which is payable by MUJ ONWJ to PHE ONWJ exceeds MUJ ONWJ's share of production, PHE ONWJ will pay US\$1 (full amount) for each month in the following year.

l. Establishment of Pertamina International Marketing & Distribution Pte. Ltd. ("PIMD")

On August 5, 2019, based on Certificate Confirming Incorporation of Company No. 201925608H which was approved by Registrar Tan Yong Tat, Singapore, Pertamina International Marketing & Distribution was established with issued and paid-up shares of US\$40,200. PIMD is engaged in the business of bunkers and logistics, and sales and distribution of fuel and LPG.

m. Establishment of BUMN Hospital Holding

Based on the Letter of the Minister of SOE No. S-736 / MBU / 12/2016 dated 21 December 2016, PT Pertamina Bina Medika IHC acquired 8 Subsidiaries in 2 stages:

1. Stage 1, March 31, 2020: PT RS Peln (51%)
2. Stage 2, August 7, 2020: PT Pelindo Husada Citra (67%), PT Krakatau Medika (67.8%), PT Hospital Port (67%), PT Nusantara Medika Utama (67%), PT Nusantara Sebelas Medika (67%), PT Rolas Nusantara Medika (67%), PT Rumah Sakit Bakti Timah (67%)

Total consideration for the above acquisition amounting to Rp2.28 trillion (equivalent to US\$157.9 million), which consist of cash payment amounting to Rp1.37 trillion (equivalent to US\$95.9 million) and shares swap amounting to Rp0.91 trillion (equivalent to US\$62 million). As a result, the Company's percentage of ownership in PT Pertamina Bina Medika IHC reduce from 100% to 81.12% (Note 5).

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5. PURPOSE OF PREPARATION AND ISSUANCE OF CONSOLIDATED FINANCIAL STATEMENTS

In 2020, the Company restated prior periods consolidated financial statements of the Group as of December 31, 2019, 2018, and 2017 and for the nine-month periods ended September 30, 2019 and the years ended December 31, 2019, 2018, and 2017, due to retrospectively application of SFAS 38 (Revised 2012) Business Combination between Entities Under Common Control (Notes 2e) in relation to establishment of BUMN Hospital Holding (Note 4m).

The effect of the above mentioned restatement to the consolidated financial statements of the Group as of December 31, 2019, 2018, and 2017 and for the nine-month periods ended September 30, 2019 and the years ended December 31, 2019, 2018, and 2017, are as follows:

Consolidated Statement of Financial Position of the Group as of December 31, 2019:

	As previously reported	Proforma adjustment	As restated
ASSETS			
CURRENT ASSETS			
Cash and cash equivalents	6,756,252	13,942	6,770,194
Restricted cash	182,129	-	182,129
Short-term investments	392,584	-	392,584
Trade receivables			
Related parties	1,554,094	-	1,554,094
Third parties	1,892,058	65,659	1,957,717
Due from the Government - current portion	3,375,794	-	3,375,794
Other receivables			
Related parties	182,487	-	182,487
Third parties	956,932	1,143	958,075
Inventories	5,893,332	3,722	5,897,054
Prepaid taxes - current portion	1,361,726	2,439	1,364,165
Prepayments and advances	447,604	2,098	449,702
Other investments	85,834	-	85,834
Total Current Assets	23,080,826	89,003	23,169,829
NON-CURRENT ASSETS			
Due from the Government - net of current portion	3,313,801	-	3,313,801
Deferred tax assets	1,506,071	5,145	1,511,216
Long-term investments	2,973,879	13,126	2,987,005
Fixed assets	13,352,327	101,868	13,454,195
Oil and gas, and geothermal properties	19,756,792	-	19,756,792
Prepaid taxes - net of current portion	875,900	-	875,900
Other non-current assets	2,226,812	3,125	2,229,937
Total Non-Current Assets	44,005,582	123,264	44,128,846
TOTAL ASSETS	67,086,408	212,267	67,298,675

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5. RESTATEMENT OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

Consolidated Statement of Financial Position of the Group as of December 31, 2019: (continued)

	As previously reported	Proforma adjustment	As restated
LIABILITIES			
SHORT-TERM LIABILITIES			
Short-term loans	1,270,052	15,368	1,285,420
Trade payables			
Related parties	73,304	-	73,304
Third parties	4,570,033	21,796	4,591,829
Due to the Government - current portion	940,413	-	940,413
Taxes payable			
Income taxes	199,380	922	200,302
Other taxes	302,942	1,265	304,207
Accrued expenses	2,798,681	17,029	2,815,710
Long-term liabilities - current portion	573,726	7,478	581,204
Other payables			
Related parties	74,459	(1,787)	72,672
Third parties	1,103,362	19,090	1,122,452
Deferred revenue - current portion	256,996	-	256,996
Total Short-term Liabilities	12,163,348	81,161	12,244,509
LONG-TERM LIABILITIES			
Due to the Government - net of current portion	796,029	-	796,029
Deferred tax liabilities	3,731,426	200	3,731,626
Long-term liabilities - net of current portion	1,546,412	22,743	1,569,155
Bonds payables	12,614,493	-	12,614,493
Employee benefits liabilities	1,994,389	20,466	2,014,855
Provision for decommissioning and site restoration	2,458,905	-	2,458,905
Deferred revenue - net of current portion	53,826	-	53,826
Other non-current payables	508,099	-	508,099
Total Long-term Liabilities	23,703,579	43,409	23,746,988
TOTAL LIABILITIES	35,866,927	124,570	35,991,497
EQUITY			
Equity attributable to owners of the parent entity			
Share capital	16,191,204	-	16,191,204
Advance for share issuance	-	-	-
Additional paid-in capital	(924,296)	-	(924,296)
Merging entity's equity	-	44,304	44,304
Government contributed assets pending final clarification of status	146,578	-	146,578
Other equity components	67,697	9,507	77,204
Retained earnings			
- Appropriated	10,770,470	-	10,770,470
- Unappropriated	2,529,342	-	2,529,342
Total equity attributable to owners of the parent entity	28,780,995	53,811	28,834,806
Non-controlling interests	2,438,486	33,886	2,472,372
TOTAL EQUITY	31,219,481	87,697	31,307,178
TOTAL LIABILITIES AND EQUITY	67,086,408	212,267	67,298,675

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5. RESTATEMENT OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

Consolidated Statement of Profit or Loss and Other Comprehensive Income of the Group for the year ended December 31, 2019:

	As previously reported	Proforma adjustment	As restated
Sales and other operating revenues			
Domestic sales of crude oil, natural gas, geothermal energy, and oil products	43,783,510	-	43,783,510
Subsidy reimbursements from the Government	4,875,075	-	4,875,075
Export of crude oil, natural gas, and oil products	3,628,904	-	3,628,904
Marketing fees	-	-	-
Revenues from other operating activities	2,297,168	207,863	2,505,031
TOTAL SALES AND OTHER OPERATING REVENUES	54,584,657	207,863	54,792,520
Cost of sales and other direct costs			
Cost of goods sold	(39,559,658)	-	(39,559,658)
Upstream production and lifting costs	(4,999,734)	-	(4,999,734)
Exploration costs	(206,929)	-	(206,929)
Expenses from other operating activities	(1,741,689)	(126,521)	(1,868,210)
TOTAL COST OF SALES AND OTHER DIRECT COST	(46,508,010)	(126,521)	(46,634,531)
GROSS PROFIT	8,076,647	81,342	8,157,989
Selling and marketing expenses	(1,624,902)	-	(1,624,902)
General and administrative expenses	(1,553,620)	(81,541)	(1,635,161)
Gain (loss) on foreign exchange - net	289,429	-	289,429
Finance income	1,221,380	302	1,221,682
Finance costs	(965,290)	(3,016)	(968,306)
Share in net profit of associates and joint ventures	80,322	-	80,322
Other expenses - net	(642,988)	4,040	(638,948)
	(3,195,668)	(80,215)	(3,275,883)
PROFIT BEFORE INCOME TAX	4,880,979	1,127	4,882,106
Income tax expenses - net	(2,262,593)	(1,476)	(2,264,069)
PROFIT FOR THE YEAR AFTER THE EFFECT OF MERGING ENTITIES INCOME ADJUSTMENT	2,618,385	(349)	2,618,037

PT PERTAMINA (PERSERO) AND ITS SUBSIDIARIES
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5. RESTATEMENT OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

Consolidated Statement of Profit or Loss and Other Comprehensive Income of the Group for the year ended December 31, 2019 (continued):

	As previously reported	Proforma adjustment	As restated
PROFIT FOR THE YEAR AFTER THE EFFECT OF MERGING ENTITIES INCOME ADJUSTMENT	2,618,385	(349)	2,618,037
OTHER COMPREHENSIVE (LOSS) INCOME			
Items not to be reclassified to profit or loss in subsequent periods (net of tax)			
Remeasurement of net defined benefit liability	(93,315)	-	(93,315)
Items to be reclassified to profit or loss in subsequent periods (net of tax)			
Foreign exchange difference from translation of financial statements in foreign currency	48,178	-	48,178
Share of other comprehensive income of associates	(156,607)	11,859	(144,748)
Other comprehensive Income (loss), net of tax	(201,744)	11,859	(189,885)
TOTAL COMPREHENSIVE INCOME FOR THE YEAR AFTER THE EFFECT OF MERGING ENTITY'S INCOME ADJUSTMENT	2,416,642	11,510	2,428,152

Consolidated Statement of Cash Flows of the Group for the year ended December 31, 2019:

	As previously reported	Proforma adjustment	As restated
Net cash generated from operating activities	4,490,733	680	4,491,413
Net cash used in investing activities	(3,897,428)	(16,843)	(3,914,271)
Net cash used in financing activities	(3,062,489)	18,929	(3,043,560)
NET DECREASE IN CASH AND CASH EQUIVALENTS	(2,469,184)	2,766	(2,466,418)
Effect of exchange rate changes on cash and cash equivalents	113,124	-	113,124
CASH AND CASH EQUIVALENTS AT BEGINNING OF THE YEAR	9,112,312	11,176	9,123,488
CASH AND CASH EQUIVALENTS AT END OF THE YEAR	6,756,252	13,942	6,770,194

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5. RESTATEMENT OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

Consolidated Statement of Financial Position of the Group as of December 31, 2018:

	As previously reported	Proforma adjustment	As restated
ASSETS			
CURRENT ASSETS			
Cash and cash equivalents	9,112,312	11,176	9,123,488
Restricted cash	108,915	-	108,915
Short-term investments	225,199	-	225,199
Trade receivables			
Related parties	1,297,651	-	1,297,651
Third parties	1,933,455	49,439	1,982,894
Due from the Government - current portion	1,834,261	-	1,834,261
Other receivables			
Related parties	149,178	-	149,178
Third parties	734,312	1,446	735,758
Inventories	6,323,165	4,250	6,327,415
Prepaid taxes - current portion	820,598	1,459	822,057
Prepayments and advances	534,987	1,514	536,501
Other investments	80,171	-	80,171
Total Current Assets	23,154,204	69,284	23,223,488
NON-CURRENT ASSETS			
Due from the Government - net of current portion	2,924,148	-	2,924,148
Deferred tax assets	1,441,866	3,471	1,445,337
Long-term investments	2,819,054	3,218	2,822,272
Fixed assets	12,859,274	75,601	12,934,875
Oil and gas, and geothermal properties	18,614,286	-	18,614,286
Prepaid taxes - net of current portion	820,287	-	820,287
Other non-current assets	2,085,333	2,841	2,088,174
Total Non-current Assets	41,564,248	85,131	41,649,379
TOTAL ASSETS	64,718,452	154,415	64,872,867
LIABILITIES AND EQUITY			
LIABILITIES			
SHORT-TERM LIABILITIES			
Short-term loans	4,347,035	6,321	4,353,356
Trade payables			
Related parties	78,781	-	78,781
Third parties	3,597,777	12,029	3,609,806
Due to the Government - current portion	1,207,743	-	1,207,743
Taxes payable			
Income taxes	467,605	850	468,455
Other taxes	258,405	1,437	259,842
Accrued expenses	2,135,509	13,514	2,149,023
Long-term liabilities - current portion	420,577	1,041	421,618
Other payables			
Related parties	54,011	(1,556)	52,455
Third parties	1,203,426	9,404	1,212,830
Deferred revenue - current portion	202,013	-	202,013
Total Short-term Liabilities	13,972,882	43,040	14,015,922

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5. RESTATEMENT OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

Consolidated Statement of Financial Position of the Group as of December 31, 2018 (continued):

	As previously reported	Proforma adjustment	As restated
LONG-TERM LIABILITIES			
Due to the Government - net of current portion	795,082	-	795,082
Deferred tax liabilities	3,307,406	207	3,307,613
Long-term liabilities - net of current portion	1,805,300	16,548	1,821,848
Bonds payables	11,094,096	-	11,094,096
Employee benefits liabilities	1,850,383	16,322	1,866,705
Provision for decommissioning and site restoration	2,029,735	-	2,029,735
Deferred revenue - net of current portion	74,623	-	74,623
Other non-current payables	178,905	-	178,905
Total Long-term Liabilities	21,135,530	33,077	21,168,607
TOTAL LIABILITIES	35,108,412	76,117	35,184,529
EQUITY			
Equity attributable to owners of the parent entity			
Share capital	16,191,204	-	16,191,204
Additional paid-in capital	(924,296)	-	(924,296)
Merging entity's equity	-	40,099	40,099
Government contributed assets pending final clarification of status	401,120	-	401,120
Other equity components	607,564	9,504	617,068
Retained earnings			
- Appropriated	8,796,357	-	8,796,357
- Unappropriated	2,526,772	-	2,526,772
Total equity attributable to owners of the parent entity	27,598,721	49,603	27,648,324
Non-controlling interests	2,011,319	28,695	2,040,014
TOTAL EQUITY	29,610,040	78,298	29,688,338
TOTAL LIABILITIES AND EQUITY	64,718,452	154,415	64,872,867

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5. RESTATEMENT OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

Consolidated Statement of Profit or Loss and Other Comprehensive Income of the Group for the year ended December 31, 2018:

	As previously reported	Proforma adjustment	As restated
Sales and other operating revenues			
Domestic sales of crude oil, natural gas, geothermal energy, and oil products	44,742,511	-	44,742,511
Subsidy reimbursements from the Government	5,632,468	-	5,632,468
Export of crude oil, natural gas, and oil products	3,636,953	-	3,636,953
Marketing fees	15,432	-	15,432
Revenues from other operating activities	3,906,207	177,595	4,083,802
TOTAL SALES AND OTHER OPERATING REVENUES	57,933,571	177,595	58,111,166
Cost of sales and other direct costs			
Cost of goods sold	(42,787,916)	-	(42,787,916)
Upstream production and lifting costs	(4,386,516)	-	(4,386,516)
Exploration costs	(267,680)	-	(267,680)
Expenses from other operating activities	(1,271,977)	(85,541)	(1,357,518)
TOTAL COST OF SALES AND OTHER DIRECT COST	(48,714,089)	(85,541)	(48,799,630)
GROSS PROFIT	9,219,482	92,054	9,311,536
Selling and marketing expenses	(1,642,831)	-	(1,642,831)
General and administrative expenses	(1,329,911)	(82,284)	(1,412,195)
Gain (loss) on foreign exchange - net	19,622	1	19,623
Finance income	256,573	530	257,103
Finance costs	(835,238)	(1,434)	(836,672)
Share in net profit of associates and joint ventures	122,724	(1)	122,723
Other expenses - net	(80,825)	3,487	(77,338)
	(3,489,886)	(79,701)	(3,569,587)
PROFIT BEFORE INCOME TAX	5,729,596	12,353	5,741,949
Income tax expenses - net	(3,013,202)	(2,999)	(3,016,201)
PROFIT FOR THE YEAR AFTER THE EFFECT OF MERGING ENTITIES INCOME ADJUSTMENT	2,716,394	9,354	2,725,748
OTHER COMPREHENSIVE (LOSS) INCOME			
Items not to be reclassified to profit or loss in subsequent periods (net of tax)			
Remeasurement of net defined benefit liability	228,498	-	228,498
Items to be reclassified to profit or loss in subsequent periods (net of tax)			
Foreign exchange difference from translation of financial statements in foreign currency	(79,561)	-	(79,561)
Share of other comprehensive income of associates	(130,775)	3,669	(127,106)
Other comprehensive income (loss), net of tax	18,162	3,669	21,831
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD/ YEAR AFTER THE EFFECT OF MERGING ENTITY'S INCOME ADJUSTMENT	2,734,556	13,023	2,747,579

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5. RESTATEMENT OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

Consolidated Statement of Cash Flows of the Group for the year ended December 31, 2018:

	As previously reported	Proforma adjustment	As restated
Net cash generated from operating activities	3,169,369	1,958	3,171,327
Net cash (used in) investing activities	(3,503,762)	(16,590)	(3,520,352)
Net cash (used in) from financing activities	3,268,723	6,472	3,275,195
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	2,934,330	(8,160)	2,926,170
Effect of exchange rate changes on cash and cash equivalents	(231,845)	-	(231,845)
CASH AND CASH EQUIVALENTS AT BEGINNING OF THE YEAR	6,409,827	19,336	6,429,163
CASH AND CASH EQUIVALENTS AT END OF THE YEAR	9,112,312	11,176	9,123,488

Consolidated Statement of Financial Position of the Group as of December 31, 2017:

	As previously reported	Proforma adjustment	As restated
ASSETS			
CURRENT ASSETS			
Cash and cash equivalents	6,409,827	19,336	6,429,163
Restricted cash	119,671	-	119,671
Short-term investments	249,282	-	249,282
Trade receivables			
Related parties	1,095,016	-	1,095,016
Third parties	1,580,627	39,777	1,620,404
Due from the Government - current portion	1,492,625	-	1,492,625
Other receivables			
Related parties	255,054	-	255,054
Third parties	620,460	1,737	622,197
Inventories	6,036,137	4,053	6,040,190
Prepaid taxes - current portion	794,255	303	794,558
Prepayments and advances	476,326	934	477,260
Other investments	27,328	-	27,328
Total Current Assets	19,156,608	66,140	19,222,748
NON-CURRENT ASSETS			
Due from the Government - net of current portion	663,114	-	663,114
Deferred tax assets	1,371,080	3,698	1,374,778
Long-term investments	2,970,918	(1,266)	2,969,652
Fixed assets	12,439,511	70,932	12,510,443
Oil and gas, and geothermal properties	18,031,374	-	18,031,374
Prepaid taxes - net of current portion	829,300	-	829,300
Other non-current assets	1,977,470	4,205	1,981,675
Total Non-current Assets	38,282,767	77,569	38,360,336
TOTAL ASSETS	57,439,375	143,709	57,583,084

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5. RESTATEMENT OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

Consolidated Statement of Financial Position of the Group as of December 31, 2017: (continued)

	As previously reported	Proforma adjustment	As restated
LIABILITIES			
SHORT-TERM LIABILITIES			
Short-term loans	452,879	-	452,879
Trade payables			
Related parties	49,277	-	49,277
Third parties	3,900,121	14,733	3,914,854
Due to the Government - current portion	1,050,619	-	1,050,619
Taxes payable			
Income taxes	308,803	922	309,725
Other taxes	250,533	1,271	251,804
Accrued expenses	2,019,896	9,720	2,029,616
Long-term liabilities - current portion	365,959	6,421	372,380
Other payables			
Related parties	56,625	-	56,625
Third parties	1,121,494	10,786	1,132,280
Deferred revenue - current portion	260,838	-	260,838
Total Short-term Liabilities	9,837,044	43,853	9,880,897
LONG-TERM LIABILITIES			
Due to the Government - net of current portion	780,626	1	780,627
Deferred tax liabilities	2,848,152	200	2,848,352
Long-term liabilities - net of current portion	2,109,767	12,923	2,122,690
Bonds payables	10,385,873	-	10,385,873
Employee benefits liabilities	2,208,220	17,610	2,225,830
Provision for decommissioning and site restoration	2,129,337	-	2,129,337
Deferred revenue - net of current portion	42,716	-	42,716
Other non-current payables	84,373	327	84,700
Total Long-term Liabilities	20,589,064	31,061	20,620,125
TOTAL LIABILITIES	30,426,108	74,914	30,501,022
EQUITY			
Equity attributable to owners of the parent entity			
Share capital		-	
Advance for share issuance	13,417,047	-	13,417,047
Additional paid-in capital	2,736	-	2,736
Merging entity's equity	1,804,579	35,508	1,840,087
Government contributed assets pending final clarification of status	1,361	-	1,361
Other equity components	487,699	-	487,699
Retained earnings			
- Appropriated	6,871,101	-	6,871,101
- Unappropriated	2,540,195	-	2,540,195
Total equity attributable to owners of the parent entity	25,124,718	35,508	25,160,226
Non-controlling interests	1,888,549	33,287	1,921,836
TOTAL EQUITY	27,013,267	68,795	27,082,062
TOTAL LIABILITIES AND EQUITY	57,439,375	143,709	57,583,084

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5. RESTATEMENT OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

Consolidated Statement of Profit or Loss and Other Comprehensive Income of the Group for the year ended December 31, 2017:

	As previously reported	Proforma adjustment	As restated
Sales and other operating revenues			
Domestic sales of crude oil, natural gas, geothermal energy, and oil products	39,788,784	-	39,788,784
Subsidy reimbursements from the Government	3,572,084	-	3,572,084
Export of crude oil, natural gas, and oil products	1,874,281	-	1,874,281
Marketing fees	25,474	-	25,474
Revenues from other operating activities	740,100	175,002	915,102
TOTAL SALES AND OTHER OPERATING REVENUES	46,000,723	175,002	46,175,725
Cost of sales and other direct costs			
Cost of goods sold	(33,175,656)	-	(33,175,656)
Upstream production and lifting costs	(3,421,207)	-	(3,421,207)
Exploration costs	(165,356)	-	(165,356)
Expenses from other operating activities	(862,962)	(153,477)	(1,016,439)
TOTAL COST OF SALES AND OTHER DIRECT COST	(37,625,181)	(153,477)	(37,778,658)
GROSS PROFIT	8,375,542	21,525	8,397,067
Selling and marketing expenses	(1,590,202)	-	(1,590,202)
General and administrative expenses	(1,598,934)	(7,795)	(1,606,729)
Gain (loss) on foreign exchange - net	58,137	-	58,137
Finance income	233,074	738	233,812
Finance costs	(817,711)	(333)	(818,044)
Share in net profit of associates and joint ventures	37,904	1	37,905
Other expenses - net	(830,582)	(805)	(831,387)
	(4,508,314)	(8,194)	(4,516,508)
PROFIT BEFORE INCOME TAX	3,867,228	13,331	3,799,022
Income tax expenses - net	(1,674,145)	(1,703)	(1,170,373)
PROFIT FOR THE YEAR AFTER THE EFFECT OF MERGING ENTITIES INCOME ADJUSTMENT	5,541,373	15,034	2628,649
OTHER COMPREHENSIVE (LOSS) INCOME			
Items not to be reclassified to profit or loss in subsequent periods (net of tax)			
Remeasurement of net defined benefit liability	(129,059)	3,338	(230,085)
Items to be reclassified to profit or loss in subsequent periods (net of tax)			
Foreign exchange difference from translation of financial statements in foreign currency	7,060	1,779	8,839
Share of other comprehensive income of associates	(25,134)	(1,194)	(26,328)
Other comprehensive income (loss), net of tax	(147,133)	3,924	(143,209)
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD/ YEAR AFTER THE EFFECT OF MERGING ENTITY'S INCOME ADJUSTMENT	2,553,271	13,706	2,566,977

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5. RESTATEMENT OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

Consolidated Statement of Cash Flows of the Group for the year ended December 31, 2017:

	As previously reported	Proforma adjustment	As restated
Net cash generated from operating activities	4,076,878	9,632	4,086,510
Net cash used in investing activities	(2,379,283)	(20,410)	(2,399,693)
Net cash (used in) from financing activities	(1,972,171)	13,769	(1,958,402)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(274,576)	2,991	(271,585)
Effect of exchange rate changes on cash and cash equivalents	(37,165)	(236)	(37,401)
CASH AND CASH EQUIVALENTS AT BEGINNING OF THE YEAR	6,721,568	16,581	6,738,149
CASH AND CASH EQUIVALENTS AT END OF THE YEAR	6,409,827	19,336	6,429,163

Consolidated Statement of Profit or Loss and Other Comprehensive Income of the Group for the nine-month periods ended September 30, 2019:

	As previously reported	Proforma adjustment	As restated
Sales and other operating revenues			
Domestic sales of crude oil, natural gas, geothermal energy, and oil products	32,429,455	-	32,429,455
Subsidy reimbursements from the Government	3,654,557	-	3,654,557
Export of crude oil, natural gas, and oil products	2,483,980	-	2,483,980
Marketing fees	9,430	-	9,430
Revenues from other operating activities	597,346	152,704	750,050
TOTAL SALES AND OTHER OPERATING REVENUES	39,174,768	152,704	39,327,472
Cost of sales and other direct costs			
Cost of goods sold	(29,112,979)	-	(29,112,979)
Upstream production and lifting costs	(3,573,512)	-	(3,573,512)
Exploration costs	(120,070)	-	(120,070)
Expenses from other operating activities	(1,252,486)	(78,020)	(1,330,506)
TOTAL COST OF SALES AND OTHER DIRECT COST	(34,059,047)	(78,020)	(34,137,067)
GROSS PROFIT	5,115,721	74,684	5,190,405
Selling and marketing expenses	(1,082,200)	-	(1,082,200)
General and administrative expenses	(1,129,282)	(66,723)	(1,196,005)
Gain (loss) on foreign exchange - net	140,511	(17)	140,494
Finance income	400,512	233	400,745
Finance costs	(721,197)	(1,679)	(722,876)
Share in net profit of associates and joint ventures	59,722	-	59,722
Other expenses - net	(333,753)	(151)	(333,904)
	(2,665,687)	(68,337)	(2,734,024)
PROFIT BEFORE INCOME TAX	2,450,034	6,347	2,456,381
Income tax expense - net	(1,674,145)	(1,703)	(1,675,848)
PROFIT FOR THE PERIOD AFTER THE EFFECT OF MERGING ENTITY'S INCOME ADJUSTMENT	775,889	4,644	780,533

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5. RESTATEMENT OF THE CONSOLIDATED FINANCIAL STATEMENTS (continued)

Consolidated Statement of Profit or Loss and Other Comprehensive Income of the Group for the nine-month periods ended September 30, 2019 (continued):

	As previously reported	Proforma adjustment	As restated
PROFIT FOR THE PERIOD AFTER THE EFFECT OF MERGING ENTITY'S INCOME ADJUSTMENT	775,889	4,644	780,533
OTHER COMPREHENSIVE (LOSS) INCOME			
Items not to be reclassified to profit or loss in subsequent periods (net of tax)			
Remeasurement of net defined benefit liability	(37,661)	-	(37,661)
Items to be reclassified to profit or loss in subsequent periods (net of tax)			
Foreign exchange difference from translation of financial statements in foreign currency	72,972	(136,298)	(63,326)
Share of other comprehensive income of associates	(111,260)	204,763	93,503
Other comprehensive Income (loss), net of tax	(75,949)	68,465	(7,484)
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD/ YEAR AFTER THE EFFECT OF MERGING ENTITY'S INCOME ADJUSTMENT	699,940	73,109	773,049

Consolidated Statement of Cash Flows of the Group for the nine-month periods ended September 30, 2019:

	As previously reported	Proforma adjustment	As restated
Net cash generated from operating activities	3,253,511	11,006	3,264,517
Net cash used in investing activities	(2,450,807)	(11,343)	(2,462,150)
Net cash used in financing activities	(1,879,693)	3,747	(1,875,946)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(1,076,989)	3,410	(1,073,579)
Effect of exchange rate changes on cash and cash equivalents	59,456	-	59,456
CASH AND CASH EQUIVALENTS AT BEGINNING OF THE PERIOD	9,112,312	11,176	9,123,488
CASH AND CASH EQUIVALENTS AT END OF THE PERIOD	8,094,779	14,586	8,109,365

6. PURPOSE OF PREPARATION AND ISSUANCE OF CONSOLIDATED FINANCIAL STATEMENTS

These consolidated financial statements has been prepared solely for inclusion in the offering document in connection with the proposed offering of the debt securities of the Company in the United States of America and outside of the United States of America in reliance on Rule 144A and Regulation S, respectively, under the United States Securities Act of 1993.

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7. CASH AND CASH EQUIVALENTS

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
Cash on hand	4,403	5,886	4,247	8,353
Cash in banks	7,490,067	4,202,272	5,055,925	2,775,175
Time deposits	2,771,935	2,562,036	4,063,316	3,645,636
Total	10,206,405	6,770,194	9,123,488	6,429,164

The details of cash and cash equivalents based on currency and by individual bank are as follows:

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
Cash on hand:				
Rupiah	3,629	4,857	3,256	7,693
US dollar	682	950	891	567
Others	92	79	100	92
Total cash on hand	4,403	5,886	4,247	8,352
Cash in banks				
US dollar:				
<u>Government-related entities</u>				
- PT Bank Negara Indonesia (Persero) Tbk. ("BNI")	1,525,421	785,983	844,933	636,281
- PT Bank Rakyat Indonesia (Persero) Tbk. ("BRI")	1,364,099	957,552	891,329	514,299
- PT Bank Mandiri (Persero) Tbk. ("Bank Mandiri")	787,180	382,760	581,752	562,533
- Other banks (each below US\$10,000)	336,107	81,392	1,526	852
<u>Third parties</u>				
- Crédit Agricole Corporate and Investment Bank ("Crédit Agricole CIB", previously "Calyon")	126,185	191,196	214,982	83,209
- Citibank, N.A. ("Citibank")	7,843	54,980	49,440	35,603
- J.P. Morgan Chase & Co.	-	42,043	16,130	-
- Sumitomo Mitsui Banking Corporation ("SMBC")	13,206	7,453	94,194	-
- PT Bank Sumitomo Mitsui Indonesia ("SMBC Indonesia")	2,129	27,862	2,515	32,293
- PT Bank Maybank Indonesia Tbk. ("Maybank" previously PT Bank Internasional Indonesia Tbk. "BII")	-	-	3,797	4,523
- Other banks (each below US\$10,000)	74,065	13,932	9,735	14,291
Total US dollar accounts	4,236,235	2,545,153	2,710,333	1,883,884
Indonesian rupiah:				
<u>Government-related entities</u>				
- Bank Mandiri	1,179,321	508,067	654,149	273,448
- BRI	690,637	427,205	599,503	133,469
- BNI	579,430	426,729	548,271	186,057
- PT Bank Tabungan Negara (Persero) Tbk. ("BTN")	464,020	136,860	265,065	198,404
- PT Bank BRI Syariah Tbk. ("BRI Syariah")	33,324	24,842	48,692	9
- BNI Syariah	13,840	14,953	15,608	1,098
- Others banks (each below US\$10,000)	83,224	20,795	13,493	3,035
<u>Third parties</u>				
- PT Bank Central Asia Tbk. ("BCA")	35,188	20,581	40,155	32,155
- Citibank	8,705	267	24,875	20,965
- Other banks (each below US\$10,000)	144,428	9,974	18,337	16,104
Total Indonesian rupiah accounts	3,232,117	1,590,273	2,228,147	864,745

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7. CASH AND CASH EQUIVALENTS (continued)

The details of cash and cash equivalents based on currency and by individual bank are as follows (continued):

	September 30, 2020 (unaudited)	December 31, 2019	December 31, 2018	2017
Cash in banks (continued)				
Euro:				
<u>Government-related entities</u>				
- BNI	7	7	8	554
- Bank Mandiri	7	7	220	123
- BRI	-	-	1	1
<u>Third parties</u>				
- Crédit Agricole CIB	7,631	39,847	64,889	-
- Other banks (each below US\$10,000)	7	7	-	-
Total Euro accounts	7,652	39,868	65,118	678
Malaysian ringgit:				
<u>Third parties</u>				
- RHB Bank Berhad	9,683	18,516	39,417	20,946
Cash in banks-other currency accounts-Third Parties	4,380	8,462	12,910	4,921
Total cash in banks	7,490,067	4,202,272	5,055,925	2,775,175
Time deposits with original maturities of three months or less				
US dollar accounts:				
<u>Government-related entities</u>				
- BRI	632,511	770,655	508,397	1,003,976
- BNI	148,201	323,448	193,671	398,530
- Bank Mandiri	541,051	34,625	32,760	22,958
- BTN	198,133	205,000	127,500	17,500
- PT Bank Syariah Mandiri ("Bank Syariah Mandiri")	275	275	50,005	5
- PT Bank Rakyat Indonesia Agroniaga Tbk. ("BRI Agroniaga")	-	18,500	-	-
<u>Third parties</u>				
- Citibank	-	-	15,000	-
- Industrial and Commercial Bank of China Ltd. ("ICBC")	-	-	20,000	-
- PT Bank Muamalat Tbk. ("Bank Muamalat")	-	-	12,000	-
- PT Bank Bukopin Tbk. ("Bukopin")	-	-	7,900	3,670
- BCA	-	-	-	-
- Other banks (each below US\$10,000)	9,942	1,622	-	245
Total time deposits-US dollar accounts	1,577,319	1,354,125	967,233	1,446,884
Indonesian rupiah accounts:				
<u>Government-related entities</u>				
- BRI	189,509	252,135	1,351,264	1,003,716
- BTN	127,456	217,280	454,425	129,046
- Bank Mandiri	92,925	75,729	517,000	410,143
- BNI	357,331	258,049	505,346	471,616
- Bank Syariah Mandiri	106,103	74,886	137,711	56,627
- BRI Syariah	116,106	98,611	13,811	148
- PT Bank Rakyat Indonesia Agroniaga Tbk. ("BRI Agroniaga")	81,264	66,347	47,807	25,834
- BNI Syariah	49,555	86,889	18,591	29,340
- Other banks (each below US\$10,000)	42,821	3,681	3,845	2,804

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7. CASH AND CASH EQUIVALENTS (continued)

The details of cash and cash equivalents based on currency and by individual bank are as follows (continued):

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
Time deposits with original maturities of three months or less (continued)				
Indonesian rupiah accounts: (continued)				
<u>Third parties</u>				
- ICBC	-	21,513	-	-
- Bukopin	7,519	23,799	12,098	24,648
- Bank Muamalat	-	-	7,032	3,125
- BCA	-	-	3,798	23,620
- Other banks (each below US\$10,000)	5,937	28,515	17,015	18,085
Total time deposits-Indonesian rupiah accounts	1,176,526	1,207,434	3,089,742	2,198,752
Time deposits-other currencies accounts	5,296	477	6,341	-
Total time deposits	2,771,935	2,562,036	4,063,316	3,645,636
Total cash and cash equivalents	10,206,405	6,770,194	9,123,488	6,429,164

Annual interest rates on time deposits during nine-month period ended September 30, 2020, and for the years ended December 31, 2019, 2018, and 2017, were as follows:

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
Indonesian rupiah	2.40%-7.75%	2.50%-9.00%	3.25%-9.00%	3.00%-8.75%
US dollar	0.45%-3.65%	0.10%-3.65%	0.50%-3.37%	0.40%-2.36%
Singapore dollar	0.05%-1.97%	0.50%-1.00%	0.50%	-

The maximum exposure to credit risk at the end of the reporting period is the carrying amount of each class of cash and cash equivalents mentioned above.

8. RESTRICTED CASH

Restricted cash are moneys in escrow accounts in US dollar and Indonesian rupiah, and are as follows:

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
US dollar accounts:				
<u>Government-related entities</u>				
- BNI	14,808	6,094	10,401	38,526
- Bank Mandiri	25,981	5,137	58,140	2,165
- BRI	135,652	111,956	11,725	40,469
<u>Third parties</u>				
- The Hongkong and Shanghai Banking Corporation Limited ("HSBC")	1,996	35,632	-	-
- PT Bank BNP Paribas Indonesia ("BNP Paribas")	-	18,000	18,000	18,000
- SMBC Indonesia	-	-	4,000	11,752
- Other banks (each below US\$10,000)	189	652	685	231

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8. RESTRICTED CASH (continued)

Restricted cash are moneys in escrow accounts in US dollar and Indonesian rupiah, and are as follows: (continued)

	September 30, 2020 (unaudited)	December 31, 2019	December 31, 2018	2017
Indonesian rupiah accounts:				
<u>Government-related entities</u>				
- BNI	957	3,009	3,553	3,453
- BRI	91	234	1,421	3,408
- Bank Mandiri	1,124	1,415	990	875
<u>Third parties</u>				
- Other banks (each below US\$10,000)	-	-	934	792
	180,798	182,129	108,915	119,671

Annual interest rates on restricted cash as of September 30, 2020, and for the years ended December 31, 2019, 2018, and 2017 were as follows:

	September 30, 2020 (unaudited)	December 31, 2019	December 31, 2018	2017
Indonesian rupiah	2.00%-6.00%	4.25%-7.65%	5.00%-7.80%	2.00%-8.50%
US dollar	0.00%-2.25%	0.50%-3.25%	0.24%-0.88%	0.75%-0.80%

US dollar accounts

The escrow accounts were related to letters of credit ("L/C") issued for the procurement of crude oil and other petroleum products as well as bank guarantees.

Indonesian rupiah accounts

The escrow accounts are time deposits used as collateral for bank guarantees and performance bonds.

9. RECEIVABLES THIRD PARTIES

a. Trade receivables

	September 30, 2020 (unaudited)	December 31, 2019	December 31, 2018	2017
Trade receivables	1,909,282	2,177,164	2,212,961	1,832,977
Provision for impairment	(280,098)	(219,447)	(230,067)	(212,573)
Total	1,629,184	1,957,717	1,982,894	1,620,404

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9. RECEIVABLES THIRD PARTIES (continued)

a. Trade receivables (continued)

Movements in the provision for impairment of trade receivables are as follows:

	September 30, 2020 (unaudited)	December 31, 2019	2018	2017
Beginning balance	(219,447)	(230,067)	(212,573)	(204,340)
Adjustment of balance				
On the initial of implementing SFAS 71	(18,181)	-	-	-
Impairment during the period/year	(65,380)	(15,189)	(30,956)	(43,068)
Reversal of impairment on the recovered receivables during the period/year	39,900	1,921	7,652	33,935
Foreign exchange difference	(16,990)	23,888	5,810	900
Ending balance	(280,098)	(219,447)	(230,067)	(212,573)

The maximum exposure to credit risk at reporting date is the carrying value of the receivables mentioned above. The Group does not hold any collateral as security.

Based on management's review of the collectability of each balance of trade receivables as at the dates of September 30, 2020, and December 31, 2019, 2018, and 2017, management believes that the provision for impairment is adequate to cover the potential losse as a result of uncollected third party trade receivables.

Certain trade receivables were pledged as collateral for certain subsidiaries' long term loans (Note 21a).

Details of trade receivables by curencies are as follows:

	September 30, 2020 (unaudited)	December 31, 2019	2018	2017
Indonesian rupiah	810,303	895,896	888,635	795,751
US dollar	1,098,180	1,278,057	1,323,528	1,037,216
Singapore dollar	699	3,115	700	-
Thailand bath	-	-	-	-
Euro	100	96	98	10
Total	1,909,282	2,177,164	2,212,961	1,832,977

b. Other receivables

	September 30, 2020 (unaudited)	December 31, 2019	2018	2017
Reinsurance assets	473,899	532,781	333,119	243,068
Receivables from subsidiary operations in oil and gas related activities	132,955	149,529	132,545	256,883
Others	298,226	296,215	288,234	140,797
Sub-total	905,080	978,525	753,898	640,748
Provision for impairment	(22,715)	(20,450)	(18,140)	(18,551)
Total other receivables	882,365	958,075	735,758	622,197

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9. RECEIVABLES THIRD PARTIES (continued)

b. Other receivables (continued)

Reinsurance assets represent the amount of premium paid or part of ATPI premium for prospective reinsurance and retrocession transactions.

Movements in the provision for impairment of other receivables are as follows:

	September 30, 2020 (unaudited)	December 31, 2019	December 31, 2018	2017
Beginning balance	(20,450)	(18,140)	(18,551)	(11,635)
Adjustment of balance				
On the initial of implementing SFAS 71	(1,091)	-	-	-
Recovery (additions) of impairment during the period/year	(1,174)	(2,310)	411	(6,916)
Ending balance	(22,715)	(20,450)	(18,140)	(18,551)

Based on a review of the balance of other receivables at the end of the year, management believes that the allowance for impairment losses is adequate to cover possible losses that may arise from uncollectible other receivables.

10. DUE FROM THE GOVERNMENT

	September 30, 2020 (unaudited)	December 31, 2019	December 31, 2018	2017
The Company:				
Receivables on revenue recognition from Disparity of Selling Price	2,570,953	5,451,285	2,924,148	-
Receivables from reimbursement of subsidy costs for LPG 3 kg cylinders	639,048	310,924	1,147,538	1,404,911
Receivables from reimbursement of subsidy costs for certain fuel (BBM) products	509,419	490,256	175,556	473,928
Receivables for kerosene subsidies reimbursement	16,334	17,529	16,828	-
Receivables from marketing fees	72,489	72,489	72,489	49,902
Kerosene conversion	-	839	10,626	-
Others	-	-	-	102
Sub-total	3,808,243	6,343,322	4,347,185	1,928,843
Subsidiaries	467,909	418,762	411,224	337,832
	4,276,152	6,762,084	4,758,409	2,266,675
Provision for impairment	(72,489)	(72,489)	-	(110,936)
Total (Note 42)	4,203,663	6,689,595	4,758,409	2,155,739
Current portion	(1,632,710)	(3,375,794)	(1,834,261)	(1,492,625)
Non-current portion	2,570,953	3,313,801	2,924,148	663,114

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10. DUE FROM THE GOVERNMENT (continued)

Movements in the provision for impairment of due from the Government are as follows:

	September 30, 2020 (unaudited)	December 31, 2019	December 31, 2018	December 31, 2017
Beginning balance	(72,489)	-	(110,936)	-
Impairment during the period/year	-	(72,489)	-	(363,830)
Reversal of impairment during the period/year	-	-	106,085	252,894
Foreign exchange gain	-	-	4,851	-
Ending balance	(72,489)	(72,489)	-	(110,936)

a. Receivables on revenue recognition from Disparity of Selling Price

Details of receivable from revenue recognition from Disparity of Selling Price are as follows:

	September 30, 2020 (unaudited)	December 31, 2019	December 31, 2018	December 31, 2017
Receivables on revenue recognition from Disparity of Selling Price:				
2019	1,521,948	1,888,134	-	-
2018	2,628,904	2,657,132	2,657,132	-
2017	1,300,433	1,248,347	1,248,347	-
Sub-total	5,451,285	5,793,613	3,905,479	-
Initial fair value adjustments of receivables:				
2019	-	(366,186)	-	-
2018	-	(773,562)	(773,562)	-
2017	-	(207,769)	(207,769)	-
Sub-total	-	(1,347,517)	(981,331)	-
Net receivables amount post fair value adjustment before unwinding interest, changes in estimate and effect of foreign exchange difference (beginning balance):				
2019	1,521,948	1,521,948	-	-
2018	2,628,904	1,883,570	1,883,570	-
2017	1,300,433	1,040,578	1,040,578	-
Sub-total	5,451,285	4,446,096	2,924,148	-
Effects of unwinding interest:				
2019	68,328	-	-	-
2018	47,749	655,182	-	-
2017	-	212,684	-	-
Sub-total	116,077	867,866	-	-
Effect of foreign exchange difference:				
2019	(105,030)	-	-	-
2018	(180,066)	90,152	-	-
2017	(88,654)	47,171	-	-
Sub-total	(373,750)	137,323	-	-

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10. DUE FROM THE GOVERNMENT (continued)

a. Receivables on revenue recognition from Disparity of Selling Price (continued)

Details of receivable from revenue recognition from Disparity of Selling Price are as follows:

	September 30, 2020 (unaudited)	December 31, 2019	December 31, 2018	December 31, 2017
Payment:				
2019	-	-	-	-
2018	(1,410,880)	-	-	-
2017	(1,211,779)	-	-	-
Total	(2,622,659)	-	-	-
Net ending balance:				
2019	1,485,246	1,521,948	-	-
2018	1,085,707	2,628,904	1,883,570	-
2017	-	1,300,433	1,040,578	-
Total	2,570,953	5,451,285	2,924,148	-

The Minutes of BPK Audit Result on the Volume and Value of Subsidies of JBT Distribution and Calculation on Excess (Shortfall) of revenue from Determination of Retail Sales Price of JBT Diesel Fuel and JBKP Premium in 2019 of PT Pertamina (Persero) No. 12/ST.04/04/2020 dated April 27, 2020, states that the Calculation of Excess (Shortfall) of revenue from Determination of Retail Sales Price of JBT Diesel Fuel and JBKP Premium in 2019 are as follows :

- Shortfall of revenue from Disparity of Selling Price in the distribution of JBT Diesel Fuel in 2019 amounting to Rp16.39 trillion or equivalent to US\$1,179,043 (including VAT and PBBKB amounting to Rp2.49 trillion or equivalent to US\$179,251);
- Shortfall of revenue from the sale of JBKP Premium Non Jamali in 2019 amounting to Rp8.99 trillion or equivalent to US\$646,390 (including VAT and PBBKB amounting to Rp1.32 trillion or equivalent to US\$95,223);
- Shortfall of revenue from the sale of JBKP Premium Jamali in 2019 amounting to Rp6.02 trillion or equivalent to US\$433,187 (including VAT and PBBKB amounting to Rp885 billion or equivalent to US\$63,698).

In accordance with the MoF letter No. S-361/MK.02/2020 dated May 6, 2020, the MoF, based on the results of coordination with the Minister of EMR and the Minister of SOEs, issued a policy that the Government will reimburse the shortfall of the Company's revenue from the sale of JBT Diesel Fuel and JBKP Premium Jamali, and Non Jamali in 2019 in accordance with the aforementioned BPK Minutes. The amount to be reimbursed for JBT Diesel Fuel, JBKP Premium Jamali and JBKP Premium Non Jamali are as follows :

- The reimbursement of JBT Diesel Fuel is amounting to Rp16.39 trillion or equivalent to US\$1,179,043 (including VAT and PBBKB of Rp2.49 trillion or equivalent to US\$179,251);
- The reimbursement of JBKP Premium Jamali is amounting to Rp8.99 trillion or equivalent to US\$646,390 (including VAT and PBBKB of Rp1.32 trillion or equivalent to US\$95,223);
- The reimbursement of JBKP Premium Non-Jamali is amounting to Rp5.49 trillion or equivalent to US\$394,851 (including VAT and PBBKN of Rp801.74 billion or equivalent to US\$57,675).

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10. DUE FROM THE GOVERNMENT (continued)

a. Receivables on revenue recognition from Disparity of Selling Price (continued)

The Minutes of Reconciliation of Recording and Presentation of Debt Compensation between the MoF of the Republic of Indonesia and the Company No. BA-24/AG.6/2020 and No.004/H00000/2020-S0, states that:

1. Receivable on revenue from Disparity Selling Price of Rp45 trillion or equivalent to US\$3,237,177) is recorded and presented as current receivables with the following details:
 - Receivable on revenue from the Disparity Selling Price of JBT Diesel Fuel in 2017 amounted to Rp20.8 trillion, equivalent to US\$1,495,498;
 - Receivable on revenue from the Disparity Selling Price of JBT Diesel Fuel in 2018 amounted to Rp24.2 trillion, equivalent to US\$1,741,679.
2. Receivable on revenue from Disparity Selling Price of Rp51.5 trillion (equivalent to US\$3,704,960) is recorded and presented as non-current receivables with the following details:
 - Receivable on revenue from the Disparity Selling Price of JBT Diesel Fuel in 2018 amounted to Rp5.1 trillion (equivalent to US\$366,981);
 - Receivable on revenue from the Disparity Selling Price of JBKP Premium Non-Jamali in 2018 amounted to Rp15.6 trillion (equivalent to US\$1,117,695);
 - Receivable on revenue from the Disparity Selling Price of JBT Diesel Fuel in 2019 amounted to Rp16.4 trillion (equivalent to US\$1,179,043);
 - Receivable on revenue from the Disparity Selling Price of JBKP Premium Non-Jamali in 2019 amounted to Rp8.9 trillion (equivalent to US\$646,390);
 - Receivable on revenue from the Disparity Selling Price of JBKP Premium Jamali in 2018 amounted to Rp5,5 trillion (equivalent to US\$394,851).

In accordance with the above Minutes, the Company reclassified the portion of current and non-current receivables and makes adjustments to the assumptions used in calculating fair value as explained below,

The assumptions used for calculating the fair value on December 31, 2018, are as follows:

Year	Payment Installments	Discount interest rate (yield)	Estimate Year of Receipt
		Government Rupiah Bonds	
2018	Installment 1	7.91%	2022
	Installment 2	8.01%	2023
2017	Installment 1	7.38%	2020
	Installment 2	7.72%	2021

The assumptions used for calculating the fair value in the Financial Statements on December 31, 2019, are as follows:

Year	Payment Installments	Discount interest rate (Yield)	Estimate Year of Receipt
		Government Rupiah Bonds	
2019	Installment 1	6.25%	2022
	Installment 2	6.46%	2023
2018	Installment 1	5.94%	2021

The change in payment assumptions and the calculation of fair value discussed above resulted in acceleration of recognition of unwinding interest on revenue from disparity of selling price between HJE in 2017 and 2018 amounting to US\$132,286 and US\$501,736, respectively.

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10. DUE FROM THE GOVERNMENT (continued)

a. Receivables on revenue recognition from Disparity of Selling Price (continued)

Fair value adjustments on recognition of receivable on revenue from the Government for disparity of selling price in 2019 and 2018 are amounting to Rp5.09 trillion or equivalent to US\$366,186 and Rp1.93 trillion or equivalent to US\$133,521, respectively.

Recognition of receivable on revenue from the 2017 Disparity Selling Price is based on the MoF Letter No. 642/MK.02/2018 dated August 24, 2018, which states that, the MoF based on coordination with the Minister of EMR and the Minister of SOE issued a policy that the Government would compensate for the Company's revenue shortfall from the sale of JBT Diesel Fuel in accordance with LHP BPK. The Company recorded net receivables from the revenue shortfall from the sale of JBT Diesel Fuel in 2017 amounting to Rp18.08 trillion or equivalent to US\$1,248,347, after deducting VAT and PBBKB of Rp2.71 trillion, equivalent to US\$187,252, and after deducting adjustment to the fair value of receivables.

Further, the recognition of receivable on revenue from the 2018 Disparity of Selling Price is based on the MoF Letter No.S-430/MK.02/2019 dated May 28, 2019, the MoF, based on the results of coordination with the Minister of EMR and the Minister of SOE, issued a policy that the Government would replace the Company's shortfall of revenue from the sale of JBT Diesel Fuel and JBKP Premium Non-Jamali in 2018 in accordance with LHP BPK No.31/AUDITAMA VII/PDPTT/05/2019. As for the Company's shortfalls and excesses revenues from the sale of JBKP Premium Jamali to be the shortfalls and excesses of the Company's revenues. The Company recorded net receivables for the shortfalls in revenue from the sale of JBT Diesel Fuel and JBKP Premium Non-Jamali year 2018 amounting to Rp38.48 trillion (equivalent to US\$2,657,132) after deducting VAT and PBBKB amounting to Rp6.37 trillion or equivalent to US\$440,001, and after deducting adjustments to the fair value of receivables.

b. Receivables from Subsidy Reimbursement for 3Kg LPG Cylinders

These receivables represent subsidy reimbursements for 3 kg LPG cylinders which were distributed to the public by the Company. This Government assignment is in the form of a PSO and its pricing is based on a yearly contract with MoEMR.

The receivable balance for the 3 kg LPG cylinders subsidy will be settled through the APBN mechanism in the next period.

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
Beginning balance	310,924	1,147,538	1,404,911	1,068,920
Subsidy reimbursements for 3 kg LPG cylinders for current year (Note 30)	1,836,006	2,673,170	3,496,603	2,977,967
Correction from government audit for subsidy reimbursement for 3 kg LPG cylinders for the year:				
- 2019 (Note 30)	-	(1,073)	-	-
- 2018 (Note 30)	-	-	(1,252)	-
- 2017 (Note 30)	-	-	(5,661)	-
- 2016 (Note 30)	-	-	-	(484)
Cash received	(1,425,455)	(3,551,833)	(3,614,277)	(2,624,110)
Adjustment fair value of subsidy receivable (Note 30)	(30,633)	(19,411)	-	-
Unwinding interest	9,413	-	-	-
Foreign exchange gain (loss)	(61,207)	62,533	(132,786)	(17,382)
Ending balance	639,048	310,924	1,147,538	1,404,911

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10. DUE FROM THE GOVERNMENT (continued)

c. Receivables from reimbursement of subsidy costs for certain fuel (BBM) products

The Company's receivable of subsidy reimbursements for BBM products represents billings for the BBM subsidy provided to the public.

The PSO mandate to the Company from the Government is based on annual contract with BPH Migas. The retail sales price of the subsidised BBM products is based on MoEMR's Decree.

The receivable balance of subsidy reimbursements for BBM products will be settled through the next State Budget and Expenditure ("APBN") period.

	September 30, 2020 (unaudited)	December 31, 2019	2018	2017
Beginning balance	490,256	175,556	473,928	422,398
Subsidy reimbursements for BBM products for current year (Note 30)	694,236	2,263,031	2,126,796	595,206
Taxes	59,651	168,792	266,693	69,617
Correction from Government audit for subsidy reimbursement for BBM products for the year:				
- 2019 (Note 30)	-	(2,060)	-	-
- 2018 (Note 30)	-	-	(699)	-
- 2017 (Note 30)	-	-	(147)	-
- 2016 (Note 30)	-	-	-	(605)
Cash received	(718,259)	(2,101,936)	(2,600,487)	(600,992)
Adjustment fair value of subsidy receivable (Note 30)	(6,146)	(38,582)	-	-
Unwinding interest	16,993	25,455	-	-
Gain(loss) on foreign exchange	(27,312)	-	(90,528)	(11,696)
Ending balance	509,419	490,256	175,556	473,928

On May 19, 2020, Ministry of Finance issued statement letter No.246/KMK.02/2020 which replaces MoEMR Regulation No. 40 of 2018 regarding the calculation of the retail selling price of fuel oil. In accordance to new statement, amount subsidies of fuel oil Rp.1.000,00 (one thousand rupiah) per liter and applied retrospectively starting January 1,2020.

d. Receivables from marketing fees

These receivables represent amounts due from the Government through SKK Migas to the Company for fees from marketing activities in relation to the Government's crude oil, natural gas and LNG.

The details of marketing fees are as follows:

	September 30, 2020 (unaudited)	December 31, 2019	2018	2017
Marketing fees:				
2018	22.587	22.587	22.587	-
2017	26.529	26.529	26.529	26.529
2016	23,373	23,373	23,373	23,373
Sub total	72,489	72,489	72,489	49,902
Provision for impairment	(72,489)	(72,489)	-	-
Total	-	-	72,489	49,902

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10. DUE FROM THE GOVERNMENT (continued)

d. Receivables from marketing fees (continued)

Based on the Directorate General of Budget ("DJA") Letter No. S-271/AG/2020 dated March 3, 2020 regarding the Marketing Fee and/or the Government's Portion of Sales of Crude Oil and/or Condensate ("MMKBN") and based on the Minutes of Meeting of the Discussion of the Government's Portion of LNG Sales Volume, the Company had not obtained SKK Migas and DJA agreement on marketing services fees, therefore the Company provided a full provision for the 2016-2018 marketing fees and did not recognize marketing fees for the year of 2019.

e. Subsidiaries receivables

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
PEP				
- Domestic Market Obligation ("DMO") fees	53,756	99,370	106,398	90,930
- Underlifting	3,670	32,040	18,942	-
- Gas price differential	10,930	-	-	-
PHE				
- DMO fees	30,413	27,261	15,414	25,859
- Underlifting	7,728	22,684	25,730	46,480
- Gas price differential	4,600	-	-	-
PEPC				
- Underlifting	316,019	202,563	224,904	174,563
PHI				
- DMO fees	38,980	32,314	18,780	-
- Underlifting	1,224	2,530	1,056	-
- Gas price differential	589	-	-	-
Total - subsidiaries	467,909	418,762	411,224	337,832

DMO fees represent amounts due from the Government in relation with the obligations of subsidiaries in providing crude oil to meet domestic market needs for oil products in accordance with their KKS.

The underlifting receivables represent receivables from subsidiaries of SKK Migas as a result of SKK Migas, actual lifting of crude oil and gas being higher than its entitlement for the respective year.

Gas prices differentials represent amounts to be received from the Government from additional contractors entitlement to cover for the impacts of gas prices cap in relation to Decree of the Minister of Energy and Mineral Resources No. 89 Year 2020.

Based on management's review of the collectibility of each balance of subsidiaries receivables, management believes that the provision for impairment is adequate to cover potential losses as a result of uncollected subsidiaries' receivables from Government.

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10. DUE FROM THE GOVERNMENT (continued)

f. Receivables for reimbursement of subsidized costs for kerosene

As discussed in Note 10a above, based on BPK's LHP No. 31/AUDITAMA VII/PDPT/05/2019 dated May 20, 2019, the Company experienced a shortfall of revenue in the distribution of JBT Kerosene amounting to Rp243.68 billion or equivalent to US\$16,828 (excluding VAT amounting to Rp24.38 billion or equivalent to US\$1,683) due to the determination of Market Index Prices ("HIP") and Basic Prices of Kerosene JBT were not in accordance with the calculation of formula retail prices of fuel oil stipulated in MoEMR Decree No.62K/10/MEM/2019 regarding Basic Formula Price for Specific Type of Fuel Oils and Special Types of Fuel Assignment. The Company's management believes that such shortfall of revenue will be reimbursed by the Government through a subsidy mechanism.

11. INVENTORIES

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
Gas	22,950	4,805	13,984	23,528
Crude oil:				
Domestic production	1,015,563	1,149,929	1,026,225	1,029,639
Imported	448,185	527,401	579,765	754,663
Sub-total for crude oil	1,463,748	1,677,330	1,605,990	1,784,302
Oil products:				
Automotive Diesel Oil ("ADO")	687,391	662,800	1,018,791	755,620
Premium gasoline	346,849	606,642	536,309	594,740
Pertamax, Pertamax Plus, Peralite				
gasoline and Pertadex (diesel oil)	377,408	495,518	491,005	451,999
Intermediary	211,208	370,703	337,246	272,786
Oil products in process of production	265,730	326,094	399,963	347,408
Avtur and Avigas	156,809	177,278	264,545	220,903
Petrochemicals	108,558	131,670	170,815	127,457
LPG	193,502	224,826	262,104	277,690
Kerosene	52,509	93,967	94,299	75,503
Industrial/ Marine Fuel Oil ("IFO/MFO")	84,947	91,722	148,621	118,515
Industrial Diesel Oil ("IDO")	10,443	14,207	17,563	21,722
Others	274,049	342,728	476,999	514,176
Sub-total for oil products	2,769,403	3,538,155	4,218,260	3,778,519
Sub-total for gas, crude oil and oil products	4,256,101	5,220,290	5,838,234	5,586,349
Less:				
Provision for decline in value of oil products (Note 33)	(97,782)	(82,654)	(167,270)	(92,854)
	4,158,319	5,137,636	5,670,964	5,493,495
Materials	1,018,499	861,759	758,478	649,878
Less:				
Provision for decline in value of materials	(114,723)	(102,341)	(102,027)	(103,183)
	903,776	759,418	656,451	546,695
Total	5,062,095	5,897,054	6,327,415	6,040,190

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11. INVENTORIES (continued)

Movements in the provision for decline in value of oil products are as follows:

	September 30, 2020 (unaudited)	December 31, 2019	2018	2017
Beginning balance	(82,654)	(167,270)	(92,854)	(76,542)
Reversal (addition) during the period/year - net (Note 33)	(15,128)	84,616	(74,416)	(16,312)
Ending balance	(97,782)	(82,654)	(167,270)	(92,854)

Movements in the provision for decline in value of materials are as follows:

	September 30, 2020 (unaudited)	December 31, 2019	2018	2017
Beginning balance	(102,341)	(102,027)	(103,183)	(30,223)
(Addition) reversal during the period/year - net	(12,382)	(314)	1,156	(72,960)
Ending balance	(114,723)	(102,341)	(102,027)	(103,183)

Management believes that the provision for declining in value of oil products and materials are adequate to cover possible losses that may arise from a decline in the realizable value of inventories.

As of September 30, 2020, and December 31, 2019, 2018, and 2017 inventories were insured against fire and other risks (Note 14). Management believes that the insurance coverage amount is adequate to cover any possible losses that may arise in relation to the insured inventories.

12. OTHER INVESTMENTS

These investments represent net assets held for distribution to the Company in connection with the liquidation of Pertamina Energy Trading Limited ("Petal"), Zambesi Investment Limited ("Zambesi") and Pertamina Energy Services Pte.Ltd. ("PES") in accordance with the General Meeting of Shareholder ("GMS") decision of the Company on July 13, 2015.

On March 13, 2017, Petral has distributed its funds to the Company. On June 16, 2017, Zambesi was liquidated. On October 31, 2017, Petral was liquidated.

As of September 30, 2020, and December 31, 2019, 2018, and 2017, the balance of net assets held for distribution to the Company based on the liquidator's report for PES amounted to US\$16,259, and US\$85,834, US\$80,171, and US\$27,328, respectively.

Based on the Company's GMS dated January 3, 2019, the Company's shareholder agreed to extend the liquidation period of PES until the completion of the dissolution/liquidation process, and approved the Company to take the corporate actions needed to complete the dissolution/liquidation.

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13. LONG TERM INVESTMENTS

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
Investment in oil and gas blocks - net	646,622	925,518	1,024,237	1,227,187
Investments in associates - net	868,334	976,801	725,846	583,694
Investment in bonds - net	416,575	448,567	391,307	391,307
Investments in joint ventures	356,011	330,458	369,922	457,405
Investment properties	284,666	272,282	279,134	282,925
Investments in shares of stock - net	6,292	6,292	6,292	6,292
Other financial assets	6,663	27,087	25,534	20,842
Total	2,585,163	2,987,005	2,822,272	2,969,652

a. Investment in oil and gas block

Investment in oil and gas blocks represents the Group's investment in several oil and gas blocks located in Malaysia which are being operated by PTT Exploration and Production ("PTTEP") (previously by Murphy Sabah Oil Co. Ltd. and Murphy Sarawak Oil Co. Ltd.). The Group recorded the investment using the equity method because it has significant influence in the undivided interest of those oil and gas blocks.

The movement of investments in oil and gas block are as follows:

September 30, 2020 (unaudited)						
	Beginning balance	Addition	Adjustment	Transfer	Recovery/ (impairment) in value	Ending balance
Cost	1,550,749	14,215	-	-	-	1,564,964
Accumulated amortization	(625,231)	(59,130)	-	-	(233,981)	(918,342)
Net book value	925,518	(44,915)	-	-	(233,981)	646,622

December 31, 2019						
	Beginning balance	Addition/ Deduction	Adjustment	Transfer	Recovery/ (impairment) in value	Ending balance
Cost	1,556,487	29,446	-	-	(35,184)	1,550,749
Accumulated amortization	(532,250)	(92,981)	-	-	-	(625,231)
Net book value	1,024,237	(63,535)	-	-	(35,184)	925,518

December 31, 2018						
	Beginning balance	Addition	Adjustment	Transfer	Recovery (impairment) in value	Ending balance
Cost	1,614,965	-	96,295	-	(154,773)	1,556,487
Accumulated amortization	(387,778)	(144,472)	-	-	-	(532,250)
Net book value	1,227,187	(144,472)	96,295	-	(154,773)	1,024,237

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13. LONG TERM INVESTMENTS (continued)

a. Investment in oil and gas block (continued)

The movement of investments in oil and gas block are as follows (continued):

	December 31, 2017					
	Beginning balance	Addition	Adjustment	Transfer	Recovery (impairment) in value	Ending balance
Cost	1,698,348	-	(113)	-	(83,270)	1,614,965
Accumulated amortization	(271,337)	(116,441)	-	-	-	(387,778)
Net book value	1,427,011	(116,441)	(113)	-	(83,270)	1,227,187

b. Investments in associates

The movement of investments in associates are as follows:

	September 30, 2020 (unaudited)							
	Percentage of ownership	Beginning balance	Additions (deduction)	Other changes	Share in net income/ (loss)	Dividends	Recovery (impairment) in value	Ending balance
The Company								
- PPT Energy Trading Co., Ltd.	50.00%	40,228	-	-	(369)	-	-	39,859
- PT Tuban Petrochemical Industries	51.00%	233,791	-	-	(3,234)	-	-	230,557
- PT Trans-Pacific Petrochemical Indotama ("TPPI")	37.65%	46,380	-	-	(17,628)	-	-	28,752
		320,399	-	-	(21,231)	-	-	299,168
Indirect investments in shares of associates								
- PT Donggi Senoro LNG	29.00%	293,297	-	67	3,425	-	-	296,789
- PT Asuransi Samsung Tugu	30.00%	9,638	-	(164)	617	(131)	-	9,960
- Seplat Petroleum Development Company Plc, Nigeria	20.46%	272,519	(53,389)	(4,620)	(18,258)	(6,020)	-	190,232
- Others	19.67%-50%	80,948	-	2,926	(11,689)	-	-	72,185
		656,402	(53,389)	(1,791)	(25,905)	(6,151)	-	569,166
Total investments in associates		976,801	(53,389)	(1,791)	(47,136)	(6,151)	-	868,334

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13. LONG TERM INVESTMENTS (continued)

b. Investments in associates (continued)

The movement of investments in associates are as follows (continued):

December 31, 2019								
	Percentage of ownership	Beginning balance	Additions (deduction)	Other changes	Share in net income/ (loss)	Dividends	Recovery (impairment) in value	Ending balance
The Company								
- PPT Energy Trading Co., Ltd.	50.00%	48,038	-	(2,565)	(1,674)	(3,571)	-	40,228
- PT Tuban Petrochemical Industries	51.00%	-	224,171	-	9,620	-	-	233,791
- PT Trans-Pacific Petrochemical Indotama ("TPPI")	37.65%	82,005	20,672	110	(56,407)	-	-	46,380
		130,043	244,843	(2,455)	(48,461)	(3,571)	-	320,399
Indirect investments in shares of associates								
- PT Donggi Senoro LNG	29.00%	279,219	-	-	14,078	-	-	293,297
- PT Asuransi Samsung Tugu	30.00%	9,069	-	(31)	665	(65)	-	9,638
- Seplat Petroleum Development Company Plc, Nigeria	20.46%	224,548	-	-	59,914	(11,943)	-	272,519
- Others	19.67%-50%	82,967	-	(853)	(1,166)	-	-	80,948
		595,803	-	(884)	73,491	(12,008)	-	656,402
Total investments in associates		725,846	244,843	(3,339)	25,030	(15,579)	-	976,801

December 31, 2018								
	Percentage of ownership	Beginning balance	Additions (deduction)	Other changes	Share in net income/ (loss)	Dividends	Recovery (impairment) in value	Ending balance
The Company								
- PPT Energy Trading Co., Ltd.	50.00%	35,489	-	-	12,549	-	-	48,038
- PT Trans-Pacific Petrochemical Indotama ("TPPI")	48.59%	151,937	-	-	(69,932)	-	-	82,005
		187,426	-	-	(57,383)	-	-	130,043
Indirect investments in shares of associates								
- PT Donggi Senoro LNG	29.00%	240,437	-	2	38,780	-	-	279,219
- PT Asuransi Samsung Tugu	19.50%	8,741	-	19	434	(125)	-	9,069
- Seplat Petroleum Development Company Plc, Nigeria	20.46%	92,440	-	68,043	76,124	(12,059)	-	224,548
- PT Gas Energi Jambi ^(c)	40.00%	-	-	-	-	-	-	-
- Others	19.67%-50%	54,650	27,458	2,298	(1,439)	-	-	82,967
		396,268	27,458	70,362	113,899	(12,184)	-	595,803
Total investments in associates		583,694	27,458	70,362	56,516	(12,184)	-	725,846

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13. LONG TERM INVESTMENTS (continued)

b. Investments in associates (continued)

The movement of investments in associates are as follows (continued):

December 31, 2017								
	Percentage of ownership	Beginning balance	Additions (deduction)	Other changes	Share in net income/ (loss)	Dividends	Recovery (impairment) in value	Ending balance
The Company								
- PPT Energy Trading Co., Ltd.	50.00%	32,499	-	1,516	2,616	(1,142)	-	35,489
- PT Trans-Pacific Petrochemical Indotama ("TPPI")	48.59%	204,907	-	-	(52,970)	-	-	151,937
		237,406	-	1,516	(50,354)	(1,142)	-	187,426
Indirect investments in shares of associates								
- PT Donggi Senoro LNG	29.00%	195,083	-	-	45,354	-	-	240,437
- PT Tugu Reasuransi Indonesia ^{a)}	33.01%	29,849	-	(29,849)	-	-	-	-
- PT Asuransi Samsung Tugu	19.50%	8,290	-	(19)	648	(178)	-	8,741
- Etablissements Maurel et Prom SA ^{b)} (Notes 4c)	72.65%	227,222	-	(227,222)	-	-	-	-
- Seplat Petroleum Development Company Plc, Nigeria	21.37%	-	92,440	-	-	-	-	92,440
- PT Gas Energi Jambi ^{c)}	40.00%	-	-	-	-	-	-	-
- Others	19.67%-50%	-	54,650	-	-	-	-	54,650
		460,444	147,090	(257,090)	46,002	(178)	-	396,268
Total investments in associates		697,850	147,090	(255,574)	(4,352)	(1,320)	-	583,694

^{a)} In 2017, the Group obtained control over PT Tugu Reasuransi Indonesia ("TRI") and consolidates its financial statements.

^{b)} On February 15, 2017, PT Pertamina Internasional Eksplorasi & Produksi had a 72.65% ownership interest in Etablissements Maurel et Prom SA and consolidates its financial instrument.

^{c)} PGN has ownership interest in PT Gas Energi Jambi ("GEJ") of 40.00% from 2015. GEJ is in an accumulative losses position.

^{d)} In 2016, the Company sold its shares in Korea Indonesia Petroleum Co. Ltd., Labuan.

Management believes that the provision for decline in value of investments in associates is adequate to cover possible losses that may arise from declining in value.

The Group's share of the results of its principal associates and their aggregated assets (including goodwill) and liabilities, are as follows:

	Country of Incorporation	Assets	Liabilities	Revenues	Profit (loss)	Percentage of ownership
September 30, 2020 (unaudited)						
- PPT Energy Trading Co., Ltd.	Japan	94,780	(22,434)	41	(738)	50.00%
- PT Tuban Petrochemical Industries	Indonesia	327,674	(110,508)	160,216	(6,341)	53.00%
- PT Trans-Pacific Petrochemical Indotama ("TPPI")	Indonesia	498,926	(1,048)	53,454	(46,820)	60.23%
- PT Donggi Senoro LNG	Indonesia	2,705,334	(1,697,128)	614,863	11,633	29.00%
- PT Asuransi Samsung Tugu	Indonesia	78,137	(56,072)	4,522	2,069	30.00%
- Seplat Petroleum Development Company Plc, Nigeria	Nigeria	2,896,818	(1,211,507)	387,775	(96,320)	20.46%
December 31, 2019						
- PPT Energy Trading Co., Ltd.	Japan	139,339	(68,572)	391,020	(10,604)	50.00%
- PT Tuban Petrochemical Industries	Indonesia	346,990	(109,193)	243,206	41,724	51.00%
- PT Trans-Pacific Petrochemical Indotama ("TPPI")	Indonesia	876,161	(751,983)	85,219	116,089	37.65%
- PT Donggi Senoro LNG	Indonesia	2,630,034	(1,618,410)	1,059,671	48,543	29.00%
- PT Asuransi Samsung Tugu	Indonesia	74,449	(529,051)	9,938	2,214	30.00%
- Seplat Petroleum Development Company Plc, Nigeria	Nigeria	3,271,110	(1,467,171)	697,777	277,008	20.46%

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13. LONG TERM INVESTMENTS (continued)

b. Investments in associates (continued)

	Country of Incorporation	Assets	Liabilities	Revenues	Profit (loss)	Percentage of ownership
December 31, 2018						
- PPT Energy Trading Co., Ltd.	Japan	118,983	(30,486)	731,189	25,098	50.00%
- PT Trans-Pacific Petrochemical Indotama ("TPPI")	Indonesia	866,155	(697,385)	65,136	(141,991)	48.59%
- PT Donggi Senoro LNG	Indonesia	2,646,556	(1,669,778)	1,174,024	133,726	29.00%
- PT Asuransi Samsung Tugu	Indonesia	61,997	(31,766)	9,046	1,446	19.50%
- Seplat Petroleum Development Company Plc, Nigeria	Nigeria	2,526,565	(925,680)	746,140	146,576	20.46%
- PT Gas Energi Jambi	Indonesia	41	(653)	-	-	40.00%
December 31, 2017						
- PPT Energy Trading Co., Ltd.	Japan	153,471	(82,496)	692,966	5,232	50.00%
- PT Trans-Pacific Petrochemical Indotama ("TPPI")	Indonesia	601,445	(1,045,454)	59,574	(50,519)	48.59%
- PT Donggi Senoro LNG	Indonesia	2,466,693	(1,627,338)	998,208	155,704	29.00%
- PT Asuransi Samsung Tugu	Indonesia	55,775	(36,791)	11,161	2,163	19.50%
- Seplat Petroleum Development Company Plc, Nigeria	Nigeria	2,207,964	(975,232)	371,413	(3,307)	21.37%
- PT Gas Energi Jambi	Indonesia	41	(653)	-	-	40.00%

c. Investment in bonds

As of September 30, 2020 and December 31, 2019, 2018, and 2017, investment in bonds represents investment in bonds issued by PT Trans-Pacific Petrochemical Indotama.

d. Investment in joint ventures

The movements of investments in joint ventures are as follows:

	September 30, 2020 (unaudited)							
	Percentage of ownership	Beginning balance	Additional investment	Other changes	Share in net income (loss)	Dividends	Recovery (impairment) in value	Ending balance
Indirect investments in joint ventures								
- PT Perta Samtan Gas	66.00%	79,960	-	7,926	7,546	(16,500)	-	78,932
- PT Patra SK	35.00%	57,015	-	(459)	1,548	(14,000)	-	44,104
- PT Perta Daya Gas	65.00%	4,874	-	412	(1,185)	-	-	4,101
- PT Pertamina Rosneft Pengolahan dan Petrokimia	55.00%	407	54,664	-	(707)	-	-	54,364
- PT Transportasi Gas Indonesia	59.87%	183,386	-	10,522	21,815	(47,601)	-	168,122
- PT Permata Karya Jasa	60.00%	4,816	-	641	931	-	-	6,388
Total investments in joint venture		330,458	54,664	19,042	29,948	(78,101)	-	356,011

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13. LONG TERM INVESTMENTS (continued)

d. Investment in joint ventures (continued)

The movements of investments in joint ventures are as follows (continued):

December 31, 2019								
	Percentage of ownership	Beginning balance	Additional investment	Other changes	Share in net income (loss)	Dividends	Recovery (impairment) in value	Ending balance
Indirect investments in joint ventures								
- PT Perta Samtan Gas	66.00%	89,976	-	(3,135)	16,219	(23,100)	-	79,960
- PT Patra SK	35.00%	62,406	-	(57)	5,166	(10,500)	-	57,015
- PT Indo Thai Trading (Note 1b)	51.00%	7,070	(7,070)	-	-	-	-	-
- PT Perta Daya Gas	65.00%	3,734	-	(2,156)	3,296	-	-	4,874
- PT Pertamina Rosneft Pengolahan dan Petrokimia	55.00%	407	-	-	-	-	-	407
- PT Transportasi Gas Indonesia	59.87%	202,743	-	(48)	29,381	(48,690)	-	183,386
- PT Permata Karya Jasa	60.00%	3,586	-	-	1,230	-	-	4,816
Total investments in joint venture		369,922	(7,070)	(5,396)	55,292	(82,290)	-	330,458
December 31, 2018								
	Percentage of ownership	Beginning balance	Additional investment	Other changes	Share in net income (loss)	Dividends	Recovery (impairment) in value	Ending balance
Indirect investments in joint ventures								
- PT Perta Samtan Gas	66.00%	91,173	-	32	21,871	(23,100)	-	89,976
- PT Patra SK	35.00%	65,769	-	-	5,387	(8,750)	-	62,406
- PT Indo Thai Trading	51.00%	6,281	790	(791)	790	-	-	7,070
- PT Perta Daya Gas	65.00%	1,683	-	28	2,023	-	-	3,734
- PT Pertamina Rosneft Pengolahan dan Petrokimia	55.00%	407	-	-	-	-	-	407
- PT Transportasi Gas Indonesia	59.87%	281,700	-	(1,013)	27,814	(105,758)	-	202,743
- Unimar L.L.C *)	50.00%	10,392	(7,176)	(1,657)	6,941	(8,500)	-	-
- PT Permata Karya Jasa	60.00%	-	2,416	-	1,382	(212)	-	3,586
Total investments in joint ventures		457,405	(3,970)	(3,401)	66,208	(146,320)	-	369,922
December 31, 2017								
	Percentage of ownership	Beginning balance	Additional investment	Other changes	Share in net income (loss)	Dividends	Recovery (impairment) in value	Ending balance
Indirect investments in joint ventures								
- PT Perta Samtan Gas	66.00%	79,383	-	7,355	17,635	(13,200)	-	91,173
- PT Patra SK	35.00%	68,919	-	(26)	3,876	(7,000)	-	65,769
- PT Indo Thai Trading	51.00%	4,815	-	(2)	1,468	-	-	6,281
- PT Perta Daya Gas	65.00%	1,403	-	(111)	391	-	-	1,683
- PT Pertamina Rosneft Pengolahan dan Petrokimia	55.00%	-	407	-	-	-	-	407
- PT Elnusa CGGVeritas Seismic **)	20.96%	-	-	-	-	-	-	-
- PT Transportasi Gas Indonesia	59.87%	281,167	-	-	26,072	(25,539)	-	281,700
- Unimar L.L.C	50.00%	45,069	-	-	(7,177)	(27,500)	-	10,392
Total investments in joint ventures		480,756	407	7,216	42,265	(73,239)	-	457,405

*) Unimar L.L.C 11.25% participating interest in old Sanga-sanga PSC which expired on August 8, 2018.

**) On May 24, 2017, PT Elnusa CGGVeritas Seismic was dissolved

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13. LONG-TERM INVESTMENTS (continued)

d. Investment in joint ventures (continued)

The Group's share of the results of its principal joint ventures and their aggregated assets (including goodwill) and liabilities are as follows:

	Country of Incorporation	Assets	Liabilities	Revenues	Profit (loss)	Percentage ownership
September 30, 2020 (unaudited)						
- PT Patra SK	Indonesia	183,091	(54,766)	151,093	4,424	35.00%
- PT Perta Samtan Gas	Indonesia	155,042	(47,458)	61,424	11,433	66.00%
- PT Perta Daya Gas	Indonesia	41,854	(36,179)	3,539	(1,824)	65.00%
- PT Transportasi Gas Indonesia	Indonesia	329,073	(65,067)	117,244	37,205	60.00%
- PT Permata Karya Jasa*	Indonesia	12,087	(2,509)	18,652	1,552	60.00%
- PT Pertamina Rosneft Pengolahan dan Petrokimia	Indonesia	739	-	-	-	55.00%
December 31, 2019						
- PT Patra SK	Indonesia	206,881	(43,981)	299,674	14,760	35.00%
- PT Perta Samtan Gas	Indonesia	151,803	(69,469)	97,783	24,574	66.00%
- PT Perta Daya Gas	Indonesia	50,497	(40,013)	9,748	4,740	65.00%
- PT Transportasi Gas Indonesia	Indonesia	365,829	(59,521)	157,117	49,075	59.87%
- PT Permata Karya Jasa*	Indonesia	10,771	(2,684)	16,685	2,050	60.00%
- PT Pertamina Rosneft Pengolahan dan Petrokimia	Indonesia	739	-	-	-	55.00%
December 31, 2018						
- PT Patra SK	Indonesia	232,842	(54,539)	341,114	15,391	35.00%
- PT Perta Samtan Gas	Indonesia	166,010	(29,683)	121,802	33,187	66.00%
- PT Perta Daya Gas	Indonesia	48,618	(42,873)	12,497	3,113	65.00%
- PT Indo Thai Trading	Indonesia	35,332	(21,470)	184,779	1,549	51.00%
- PT Elnusa CGGVeritas Seismic	Indonesia	511	-	-	3	20.96%
- PT Transportasi Gas Indonesia	Indonesia	735,029	(96,391)	153,413	46,458	59.87%
- Unimar L.L.C	USA	33,740	(19,387)	43,918	13,881	28.48%
- PT Permata Karya Jasa*	Indonesia	6,308	(2,040)	16,301	1,383	60.00%
- PT Pertamina Rosneft Pengolahan dan Petrokimia	Indonesia	739	-	-	-	55.00%
December 31, 2017						
- PT Patra SK	Indonesia	244,717	(59,696)	259,596	11,072	35.00%
- PT Perta Samtan Gas	Indonesia	180,172	(42,032)	106,950	26,720	66.00%
- PT Perta Daya Gas	Indonesia	53,219	(50,630)	12,469	602	65.00%
- PT Indo Thai Trading	Indonesia	31,994	(19,369)	156,716	2,869	51.00%
- PT Elnusa CGGVeritas Seismic	Indonesia	515	-	-	-	20.96%
- PT Transportasi Gas Indonesia	Indonesia	557,875	(87,357)	151,625	43,548	59.87%
- Unimar L.L.C	USA	49,370	(31,899)	61,993	(9,991)	50.00%
- PT Pertamina Rosneft Pengolahan dan Petrokimia	Indonesia	739	-	-	-	55.00%

* Note 1b.iii

e. Investment properties

September 30, 2020 (unaudited)

	Beginning balance	Additions	Deductions	Transfers/ Reclassi- fications	Ending balance
Historical cost:					
Land and land rights	260,255	15,124	-	(1,763)	273,616
Buildings	42,881	1,658	(572)	(1,947)	42,020
Total historical cost	303,136	16,782	(572)	(3,710)	315,636
Accumulated depreciation:					
Buildings	(30,854)	(1,584)	572	896	(30,970)
Net book value	272,282				284,666

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13. LONG-TERM INVESTMENTS (continued)

e. Investment properties (continued)

December 31, 2019					
	Beginning balance	Additions	Deductions	Transfers/ Reclassi- fications	Ending balance
Historical cost:					
Land and land rights	265,230	-	(7,570)	2,595	260,255
Buildings	42,298	-	(252)	835	42,881
Total historical cost	307,528	-	(7,822)	3,430	303,136
Accumulated depreciation:					
Buildings	(28,394)	(1,954)	-	(506)	(30,854)
Net book value	279,134				272,282

December 31, 2018					
	Beginning balance	Additions	Deductions	Transfers/ Reclassi- fications	Ending balance
Historical cost:					
Land and land rights	267,650	1,074	(17,473)	13,979	265,230
Buildings	43,483	1,217	-	(2,402)	42,298
Total historical cost	311,133	2,291	(17,473)	11,577	307,528
Accumulated depreciation:					
Buildings	(28,208)	(2,058)	-	1,872	(28,394)
Net book value	282,925				279,134

December 31, 2017					
	Beginning balance	Additions	Deductions	Transfers/ Reclassi- fications	Ending balance
Historical cost:					
Land and land rights	288,314	-	(1,576)	(19,088)	267,650
Buildings	43,042	196	-	245	43,483
Total historical cost	331,356	196	(1,576)	(18,843)	311,133
Accumulated depreciation:					
Buildings	(26,983)	(2,350)	-	1,125	(28,208)
Net book value	304,373				282,925

Depreciation expenses for the nine-month periods ended September 30, 2020 and 2019, and for the years ended December 31, 2019, 2018, and 2017, with respect to such investment properties amounted to US\$1,58, US\$1,448 US\$1,954, US\$2,058 and US\$2,301, respectively (Note 38).

As of September 30, 2020, all of the Group's investment properties, except land and land rights, were insured against fire and other possible risks (Note 14).

As of September 30, 2020, and December 31, 2019, 2018, and 2017, management has estimated fair values of the investment properties to be US\$1,509,363, US\$1,552,307, US\$1,579,971, US\$1,803,218, and US\$1,503,088, respectively.

Rental income from investment properties recognized for the nine-month periods ended September 30, 2020, 2019 and for the years ended December 31, 2019, 2018, and 2017 amounted to US\$21,665, US\$21,952, US\$25,395, US\$26,588, and US\$11,792, respectively.

Based on the Group management's review, there were no events or changes in circumstances which indicated impairment in the value of investment properties as of September 30, 2020, and December 31, 2019, 2018, and 2017.

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13. LONG-TERM INVESTMENTS (continued)

f. Investments in shares of stock

	Percentage of ownership				Balance			
	September 30, 2020 (unaudited)	December 31,			September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017		2019	2018	2017
The Company								
- PT Seamless Pipe Indonesia Jaya	4.97%	4.97%	4.97%	4.97%	25,026	25,026	25,026	25,026
- PT Arun NGL ^{a)}	100.00%	100.00%	100.00%	100.00%	170	170	170	170
- PT Badak NGL ^{b)}	55.00%	55.00%	55.00%	55.00%	149	149	149	149
					25,345	25,345	25,345	25,345
Subsidiaries								
- PT Staco								
Jasapratama Indonesia	4.46%	4.46%	4.46%	4.46%	751	751	751	751
- PT Marga Raya Jawa Tol	6.86%	6.86%	6.86%	6.86%	2,690	2,690	2,690	2,690
- PT Trans Javagas Pipeline	10.00%	10.00%	10.00%	10.00%	739	739	739	739
- PT Asuransi Maipark Indonesia	7.31%	7.31%	7.31%	7.31%	604	604	604	604
- PT Bhakti Patra Nusantara	4.11%	4.11%	4.11%	4.11%	77	77	77	77
- PT Banten Gas Synergi ^x	0.14%	0.14%	0.14%	0.14%	3	3	3	3
					4,864	4,864	4,864	4,864
Total					30,209	30,209	30,209	30,209
Provision for impairment					(23,917)	(23,917)	(23,917)	(23,917)
Net					6,292	6,292	6,292	6,292

^{a)} in liquidation process

^{b)} refer to note 2d

The Group classified its investments in shares of stock as available-for-sale at cost because the Company, in substance, does not control those companies. These investments are measured at cost since their fair values cannot be measured reliably.

The Group did not recognize its share on the changes in the joint ventures entities' net assets arising from other comprehensive income since the amounts are not material.

g. Other financial assets

As of September 30, 2020, and December 31, 2019, 2018, and 2017, other financial assets mainly represent investment in bonds owned by PT Asuransi Tugu Pratama Indonesia Tbk. (formerly PT Tugu Pratama Indonesia).

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14. FIXED ASSETS AND RIGHT OF USE ASSET

a. Fixed Assets

September 30, 2020 (unaudited)						
	Beginning balance	Additions	Deductions	Transfers/ Reclassifications	Translations	Ending balance
Acquisition cost:						
Direct acquisition:						
Land and land rights	1,821,945	9,072	-	(1,280)	(7,426)	1,822,311
Tanks, pipeline installations and other equipment	10,146,698	119,152	-	265,878	(13,570)	10,518,158
Refineries	4,665,290	-	-	42,851	(97)	4,708,045
Buildings	1,384,996	20,198	(48)	27,174	(15,749)	1,416,570
Ships and aircrafts	2,174,207	11,852	-	86,251	(17,589)	2,254,721
Moveable assets	1,870,466	34,718	(8,558)	53,545	(36,763)	1,913,407
Assets under construction	2,269,056	1,108,663	(313)	(499,746)	(4,603)	2,873,058
Sub-total	24,332,658	1,303,655	(8,919)	(25,327)	(95,797)	25,506,270
Accumulated depreciation:						
Direct acquisition:						
Land rights	(263)	-	-	-	(555)	(818)
Tanks, pipeline installation and other equipment	(5,379,436)	(305,563)	-	(18,573)	3,106	(5,700,466)
Refineries	(2,870,642)	(210,553)	-	(162)	70	(3,081,287)
Buildings	(602,609)	(47,860)	48	2,612	5,037	(642,772)
Ships and aircrafts	(917,185)	(78,277)	-	(647)	4,812	(991,297)
Moveable assets	(1,120,619)	(86,710)	8,508	584	22,920	(1,175,317)
Sub-total	(10,890,754)	(728,963)	8,556	(16,186)	35,390	(11,591,957)
Provision for Impairment	(150,005)	(11,838)	40	-	-	(161,803)
Net book value	13,291,899					13,752,510

December 31, 2019						
	Beginning balance	Additions	Deductions	Transfers/ Reclassifications	Translations	Ending balance
Acquisition cost:						
Direct acquisition:						
Land and land rights	1,711,203	60,536	-	46,977	3,228	1,821,945
Tanks, pipeline installations and other equipment	9,328,502	146,331	-	670,431	1,434	10,146,698
Refineries	4,265,934	-	-	399,314	42	4,665,290
Buildings	1,329,730	19,482	(458)	30,201	6,041	1,384,996
Ships and aircrafts	2,096,335	41,201	-	26,983	9,688	2,174,207
Moveable assets	1,693,334	61,556	(23,506)	122,802	16,280	1,870,466
Assets under construction	2,132,379	1,496,485	(327)	(1,358,526)	2,122	2,272,133
Sub-total	22,557,417	1,825,591	(24,291)	(61,818)	38,835	24,335,734
Finance lease assets:						
Land rights	-	-	-	-	-	-
Buildings	205,737	1,054	-	7,029	-	213,820
Tanks, pipelines installations and other equipment	414,634	15,110	-	(41,815)	-	387,929
Moveable assets	167,015	585	(577)	(7,679)	2,112	161,456
Sub-total	787,386	16,749	(577)	(42,465)	2,112	763,205
Total acquisition cost	23,344,803	1,842,340	(24,868)	(104,283)	40,947	25,098,939

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14. FIXED ASSETS AND RIGHT OF USE ASSET (continued)

a. Fixed Assets (continued)

	December 31, 2019					
	Beginning balance	Additions	Deductions	Transfers/ Reclassifications	Translations	Ending balance
Accumulated depreciation:						
Direct acquisition:						
Land rights	(212)	-	-	-	(51)	(263)
Tanks, pipeline installation and other equipment	(4,835,843)	(544,807)	2,704	(567)	(923)	(5,379,436)
Refineries	(2,598,926)	(275,029)	-	3,352	(39)	(2,870,642)
Buildings	(538,676)	(58,785)	418	(3,174)	(2,392)	(602,609)
Ships and aircrafts	(813,091)	(104,453)	-	2,534	(2,175)	(917,185)
Moveable assets	(1,020,849)	(115,762)	18,296	8,143	(10,447)	(1,120,619)
Sub-total	(9,807,597)	(1,098,836)	21,418	10,288	(16,027)	(10,890,754)
Finance lease assets:						
Land rights	-	-	-	-	-	-
Buildings	(161,389)	(18,674)	-	(6,293)	-	(186,356)
Tanks, pipeline installation and other equipment	(249,815)	(34,421)	-	8,617	-	(275,619)
Moveable assets	(136,838)	(6,649)	315	1,254	(92)	(142,010)
Sub-total	(548,042)	(59,744)	315	3,578	(92)	(603,985)
Total accumulated depreciation	(10,355,639)	(1,158,580)	21,733	13,866	(16,119)	(11,494,739)
Provision for Impairment	(54,289)	(98,297)	126	2,482	(27)	(150,005)
Net book value	12,934,875					13,454,195

	December 31, 2018					
	Beginning balance	Additions	Deduction	Transfer/ Reclassification	Translation	Ending balance
Acquisition cost:						
Direct acquisition:						
Land and land rights	1,704,263	7,156	-	5,618	(5,834)	1,711,203
Tanks, pipeline installation and other equipment	9,172,632	31,392	(569)	131,485	(6,438)	9,328,502
Refineries	4,022,746	145,518	-	97,740	(70)	4,265,934
Buildings	1,242,494	26,922	(367)	70,994	(10,313)	1,329,730
Ships and aircrafts	2,015,720	120,523	-	(26,626)	(13,282)	2,096,335
Moveable assets	1,678,185	43,018	(5,875)	7,713	(29,707)	1,693,334
Assets under construction	1,458,232	1,083,618	(9,430)	(397,603)	(2,438)	2,132,379
Sub-total	21,294,272	1,458,147	(16,241)	(110,679)	(68,082)	22,557,417
Finance lease assets:						
Land rights	157,605	-	-	(155,364)	(2,241)	-
Buildings	83,987	-	-	121,750	-	205,737
Tanks, pipeline installation and other equipment	369,534	44,097	-	1,003	-	414,634
Moveable assets	156,432	10,707	-	-	(124)	167,015
Sub-total	767,558	54,804	-	(32,611)	(2,365)	787,386
Total acquisition cost	22,061,830	1,512,951	(16,241)	(143,290)	(70,447)	23,344,803

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14. FIXED ASSETS AND RIGHT OF USE ASSET (continued)

a. Fixed Assets (continued)

December 31, 2018						
	Beginning balance	Additions	Deduction	Transfer/ Reclassification	Translation	Ending balance
Accumulated depreciation:						
Direct acquisition:						
Land rights	(876)	-	-	-	664	(212)
Tanks, pipeline installations and other equipment	(4,394,865)	(504,731)	42	58,559	5,153	(4,835,843)
Refineries	(2,349,134)	(249,586)	-	(307)	101	(2,598,926)
Buildings	(487,409)	(53,898)	271	(1,435)	3,796	(538,676)
Ships and aircrafts	(775,835)	(105,264)	-	65,138	2,870	(813,091)
Moveable assets	(999,986)	(108,424)	5,697	62,727	19,138	(1,020,849)
Sub-total	(9,008,106)	(1,021,904)	6,010	184,682	31,722	(9,807,597)
Finance lease assets:						
Land rights	(82,872)	(6,070)	-	88,942	-	-
Buildings	(58,902)	(14,272)	-	(88,215)	-	(161,389)
Tanks, pipeline installations and other equipment	(210,786)	(38,302)	-	(727)	-	(249,815)
Moveable assets	(133,666)	(7,877)	-	4,628	77	(136,838)
Sub-total	(486,226)	(66,521)	-	4,628	77	(548,042)
Total accumulated depreciation	(9,494,332)	(1,088,425)	6,010	189,310	31,799	(10,355,639)
Provision for impairment	(57,055)	-	2,719	-	47	(54,289)
Net book value	12,510,443					12,934,875

December 31, 2017						
	Beginning balance	Additions	Deduction	Transfer/ Reclassification	Translation	Ending balance
Acquisition cost:						
Direct acquisition:						
Land and land rights	1,663,116	31,702	-	10,259	(814)	1,704,263
Tanks, pipeline installations and other equipment	8,226,598	160,782	(1,855)	787,473	(366)	9,172,632
Refineries	3,815,932	175,395	(349)	31,774	(6)	4,022,746
Buildings	1,003,055	57,907	(1,984)	193,110	(9,594)	1,242,494
Ships and aircrafts	1,894,266	52,838	-	70,460	(1,844)	2,015,720
Moveable assets	1,563,969	139,687	(7,203)	(29,853)	11,585	1,678,185
Assets under construction	1,792,241	1,011,450	(12,896)	(1,332,310)	(253)	1,458,232
Sub-total	19,959,177	1,629,761	(24,287)	(269,087)	(1,292)	21,294,272
Finance lease assets:						
Land rights	122,815	-	-	35,216	(426)	157,605
Buildings	83,987	-	-	-	-	83,987
Tanks, pipeline installations and other equipment	305,567	63,967	-	-	-	369,534
Moveable assets	152,167	6,498	-	(1,740)	(493)	156,432
Sub-total	664,536	70,465	-	33,476	(919)	767,558
Total acquisition cost	20,623,713	1,700,226	(24,287)	(235,611)	(2,211)	22,061,830

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14. FIXED ASSETS AND RIGHT OF USE ASSET (continued)

a. Fixed Assets (continued)

	December 31, 2017					
	Beginning balance	Additions	Deduction	Transfer/ Reclassification	Translation	Ending balance
Accumulated depreciation:						
Direct acquisition:						
Land rights	(697)	-	-	(181)	2	(876)
Tanks, pipeline installations and other equipment	(3,883,879)	(545,950)	676	34,121	167	(4,394,865)
Refineries	(2,139,241)	(223,626)	-	13,722	11	(2,349,134)
Buildings	(426,461)	(66,182)	492	4,494	247	(487,409)
Ships and aircrafts	(675,211)	(101,882)	-	849	409	(775,835)
Moveable assets	(883,826)	(106,150)	4,229	(9,023)	(5,216)	(999,986)
Sub-total	(8,009,315)	(1,043,790)	5,397	43,982	(4,380)	(9,008,106)
Finance lease assets:						
Land rights	(70,578)	(12,294)	-	-	-	(82,872)
Buildings	(50,506)	(8,396)	-	-	-	(58,902)
Tanks, pipeline installations and other equipment	(165,624)	(34,098)	-	(11,064)	-	(210,786)
Moveable assets	(121,208)	(9,216)	-	(4,432)	1,190	(133,666)
Sub-total	(407,916)	(64,004)	-	(15,496)	1,190	(486,226)
Total accumulated depreciation	(8,417,231)	(1,107,794)	5,397	28,486	(3,190)	(9,494,332)
Provision for impairment	(49,697)	(7,364)	-	-	6	(57,055)
Net book value	12,156,785					12,510,443

The allocation of depreciation expenses are as follows:

	For the nine-month period ended September 30, 2020 (unaudited)	For the years ended December 31,		
		2019	2018	2017
Cost of goods sold (Note 33)	732,112	537,783	566,412	551,911
Expenses from other operating activities (Note 36)	260,167	96,211	88,405	84,635
Selling and marketing expenses (Note 37)	176,138	383,594	328,695	362,242
General and administrative expenses (Note 38)	65,364	140,992	104,914	109,006
Total	1,233,781	1,158,580	1,088,426	1,107,794

As of September 30, 2020, the Group owned parcels of land at various locations in Indonesia with Building Rights Title ("HGB") ranging from 20-30 years. Some of the HGBs are near their expiration dates. Management believes that those HGB licenses can be extended upon their expirations.

As of September 30, 2020, and December 31, 2019, 2018, and 2017, the Group's inventories, investment properties, fixed assets, and oil & gas and geothermal properties, except for land and land rights (Notes 10, 12, 13, and 14), were insured against fire and other possible risks for a total insurance coverage of US\$58,055,193, and US\$54,254,089, US\$53,391,900 and US\$50,430,767 respectively.

Management believes that the insurance coverage is adequate to cover any possible losses that may arise in relation to the insured assets.

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14. FIXED ASSETS AND RIGHT OF USE ASSET (continued)

a. Fixed Assets (continued)

Certain fixed assets were pledged as collateral for certain subsidiary short term loan and long term loans (Notes 17 and 21a).

Interest capitalized as part of fixed assets for the nine-month period ended September 30, 2020, and December 31, 2019, 2018, and 2017 amounting to US\$42,677, and US\$18,964, US\$31,500, and US\$25,611 respectively.

Management believes that the provision for impairment in the value of fixed assets as of September 30, 2020, and December 31, 2019, 2018, and 2017 is adequate to cover any possible losses from impairment of fixed assets.

Assets under construction as of September 30, 2020, and December 31, 2019, 2018, and 2017 consists of refineries, buildings, vessels, installations and moveable assets.

b. Right-of-use asset

On January 1, 2020, the Group adopted SFAS 73, so that the Group reclassified the assets under finance leases of fixed assets to become right-of-use assets. The impact of the adoption of SFAS 73 on the reclassification of finance leased assets and movement during the 6 months is as follows:

September 30, 2020						
	Beginning Balance	Adjustment of SFAS 73			Beginning Balance	Ending Balance
		Additions	Transfer/ Reclassification			
The acquisition cost of						
Finance lease assets:						
Land and land rights	-	-	-	-	-	-
Buildings	213,820	-	(213,820)	-	-	-
Tanks, pipeline						
Installations and other-equipment	387,929	-	(387,929)	-	-	-
Moveable assets	161,456	-	(161,456)	-	-	-
Asset under construction	3,076	-	(3,076)	-	-	-
Total acquisition cost	766,281	-	(766,281)	-	-	-
Accumulated depreciation:						
Land rights	-	-	-	-	-	-
Buildings	(186,356)	-	186,356	-	-	-
Tanks, pipeline						
installation and other-equipment	(275,619)	-	275,619	-	-	-
Moveable assets	(142,010)	-	142,010	-	-	-
Total accumulated depreciation	(603,985)	-	603,985	-	-	-
Net book values	162,296	-	(162,296)	-	-	-

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14. FIXED ASSETS AND RIGHT OF USE ASSET (continued)

	September 30, 2020				
	December 31, 2019	Effect Adoption PSAK 73	January 1, 2020	Addition	Ending Balance
Acquisition cost of right-of-use asset:					
Land rights	-	29,497	29,497	1,298	30,795
Refineries	-	163,988	163,988	-	163,988
Buildings	213,820	23,400	237,220	291	237,511
Tanks, pipeline installations and other equipment	391,005	16,079	407,084	119	407,203
Ships and aircrafts	-	1,375,435	1,375,435	217,483	1,592,918
Moveable assets	161,456	122,062	283,518	7,961	291,479
Total acquisition cost	766,281	1,730,461	2,496,742	227,152	2,723,894
Accumulated depreciation of right-of-use asset:					
Land rights	-	-	-	(4,568)	(4,568)
Refineries	-	-	-	(30,384)	(30,384)
Buildings	(186,356)	-	(186,356)	(6,959)	(193,315)
Tanks, pipeline installations and other equipment	(275,619)	-	(275,619)	(918)	(276,537)
Ships and aircrafts	-	-	-	(424,791)	(424,791)
Moveable assets	(142,010)	-	(142,010)	(37,197)	(179,207)
Total accumulated depreciation	(603,985)	-	(603,985)	(504,817)	(1,108,802)
Net book values	162,296				1,615,092

15. OIL AND GAS AND GEOTHERMAL PROPERTIES AND RIGHT OF USE ASSET

a. Oil and gas, and geothermal properties

	September 30, 2020 (unaudited)				
	Beginning balance	Additions	Deductions	Transfers/ Reclassifications	Ending balance
Acquisition cost:					
Direct Acquisition:					
Land and land rights	19.950	-	-	955	20.905
Oil and gas wells	17.700.405	139.127	-	596.080	18.435.612
Geothermal wells	791.735	-	-	163.598	955.333
Installations	7.831.517	65.261	-	214.770	8.111.548
LPG plants	1.600.596	3.063	-	(1.819)	1.601.840
Buildings	215.935	98	-	70.019	286.052
Moveable assets	589.221	-	(169)	(159.006)	430.046
Sub-total	28.749.359	207.549	(169)	884.597	29.841.336
Assets under construction:					
Exploratory and evaluation wells	1.823.004	588.378	-	(350.545)	2.060.837
Development wells	2.468.948	836.485	-	(649.010)	2.656.423
Sub-total	4.291.952	1.424.863	-	(999.555)	4.717.260
Accumulated depreciation, depletion and amortization:					
Direct Acquisition:					
Oil and gas wells	(8.411.148)	(1.204.573)	-	(35.404)	(9.651.125)
Geothermal wells	(191.682)	(34.261)	-	-	(225.943)
Installations	(3.179.489)	(338.077)	-	113.184	(3.404.382)
LPG plants	(341.409)	(55.502)	-	-	(396.911)
Buildings	(61.155)	(13.577)	-	-	(74.732)
Moveable assets	(423.445)	(24.079)	-	128.998	(318.526)
Sub-total	(12.608.328)	(1.670.069)	-	206.778	(14.071.619)
Provision for impairment	(690.742)	(399.573)	-	1.338	(1.088.977)
Net book values	19.742.241				19.398.000

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15. OIL AND GAS AND GEOTHERMAL PROPERTIES AND RIGHT OF USE ASSET (continued)

a. Oil and gas, and geothermal properties (continued)

	December 31, 2019				
	Beginning balance	Additions	Deductions	Transfers/ Reclassifications	Ending balance
Acquisition cost:					
Direct Acquisition:					
Land and land rights	18,281	-	-	1,669	19,950
Oil and gas wells	15,404,342	692,824	(71,352)	1,674,591	17,700,405
Geothermal wells	759,351	-	-	32,384	791,735
Installations	7,675,508	153,291	(11,229)	13,947	7,831,517
LPG plants	1,538,366	-	(104)	62,334	1,600,596
Buildings	198,613	-	-	17,322	215,935
Moveable assets	418,511	22,132	-	148,578	589,221
Sub-total	26,012,972	868,247	(82,685)	1,950,825	28,749,359
Assets under construction:					
Exploratory and evaluation wells	1,380,730	766,115	(37,420)	(286,421)	1,823,004
Development wells	2,423,499	1,659,962	(3,591)	(1,610,922)	2,468,948
Sub-total	3,804,229	2,426,077	(41,011)	(1,897,343)	4,291,952
Finance lease assets:					
Installations	4,672	-	-	183,639	188,311
LPG plants	12,501	-	(6,335)	(6,166)	-
Buildings	19,939	-	-	-	19,939
Moveable assets	195,595	-	-	(183,639)	11,956
Sub-total	232,707	-	(6,335)	(6,166)	220,206
Total acquisition cost	30,049,908	3,294,324	(130,031)	47,316	33,261,517
Accumulated depreciation, depletion and amortization:					
Direct Acquisition:					
Oil and gas wells	(7,044,165)	(1,490,479)	29,969	93,527	(8,411,148)
Geothermal wells	(152,127)	(39,562)	-	7	(191,682)
Installations	(2,717,802)	(387,874)	-	(73,813)	(3,179,489)
LPG plants	(293,601)	(81,294)	-	33,486	(341,409)
Buildings	(48,441)	(13,299)	-	585	(61,155)
Moveable assets	(244,360)	(39,362)	-	(139,723)	(423,445)
Sub-total	(10,500,496)	(2,051,870)	29,969	(85,931)	(12,608,328)
Finance lease assets:					
Installations	(18,723)	8,604	-	(163,639)	(173,758)
LPG plants	(5,777)	6,164	6,335	(6,722)	-
Buildings	(18,522)	(243)	-	(42)	(18,807)
Moveable assets	(181,398)	(2,087)	-	170,395	(13,090)
Sub-total	(224,420)	12,438	6,335	(8)	(205,655)
Total accumulated depreciation, depletion and amortization	(10,724,916)	(2,039,432)	36,304	(85,939)	(12,813,983)
Provision for impairment	(710,706)	(83,511)	106,920	(3,445)	(690,742)
Net book values	18,614,286				19,756,792

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15. OIL AND GAS AND GEOTHERMAL PROPERTIES AND RIGHT OF USE ASSET (continued)

a. Oil and gas, and geothermal properties (continued)

	December 31, 2018				
	Beginning balance	Additions	Deductions	Transfers/Reclassifications	Ending balance
Acquisition cost:					
Direct Acquisition:					
Land and land rights	18,243	-	-	38	18,281
Oil and gas wells	13,915,574	1,116,330	(107,073)	479,511	15,404,342
Geothermal wells	671,595	4,671	-	83,085	759,351
Installations	7,213,878	109,761	(1,195)	353,064	7,675,508
LPG plants	1,538,366	-	-	-	1,538,366
Buildings	173,184	1,152	-	24,277	198,613
Moveable assets	346,955	39,034	-	32,522	418,511
Sub-total	23,877,795	1,270,948	(108,268)	972,497	26,012,972
Assets under construction:					
Exploratory and evaluation wells	1,326,425	606,380	(120,381)	(431,694)	1,380,730
Development wells	2,096,876	1,163,019	(4,519)	(831,877)	2,423,499
Sub-total	3,423,301	1,769,399	(124,900)	(1,263,571)	3,804,229
Finance lease assets:					
Installations	4,672	-	-	-	4,672
LPG plants	12,501	-	-	-	12,501
Buildings	19,939	-	-	-	19,939
Moveable assets	195,595	-	-	-	195,595
Sub-total	232,707	-	-	-	232,707
Total acquisition cost	27,533,803	3,040,347	(233,168)	(291,074)	30,049,908
Accumulated depreciation, depletion and amortization:					
Direct Acquisition:					
Oil and gas wells	(6,096,976)	(965,091)	38,038	(20,136)	(7,044,165)
Geothermal wells	(113,904)	(38,223)	-	-	(152,127)
Installations	(2,121,664)	(586,590)	-	(9,548)	(2,717,802)
LPG plants	(179,681)	(113,920)	-	-	(293,601)
Buildings	(36,698)	(11,743)	-	-	(48,441)
Moveable assets	(214,002)	(30,358)	-	-	(244,360)
Sub-total	(8,762,925)	(1,745,925)	38,038	(29,684)	(10,500,496)
Finance lease assets:					
Installations	(16,695)	(2,028)	-	-	(18,723)
LPG plants	(5,469)	(308)	-	-	(5,777)
Buildings	(18,198)	(324)	-	-	(18,522)
Moveable assets	(181,118)	(280)	-	-	(181,398)
Sub-total	(221,480)	(2,940)	-	-	(224,420)
Total accumulated depreciation, depletion and amortization	(8,984,405)	(1,748,865)	38,038	(29,684)	(10,724,916)
Provision for impairment	(518,024)	(218,189)	-	25,507	(710,706)
Net book values	18,031,374				18,614,286

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15. OIL AND GAS AND GEOTHERMAL PROPERTIES AND RIGHT OF USE ASSET (continued)

a. Oil and gas, and geothermal properties (continued)

	December 31, 2017				
	Beginning balance	Additions	Deductions	Transfers/ Reclassifications	Ending balance
Acquisition cost:					
Direct Acquisition:					
Land and land rights	17,651	-	-	592	18,243
Oil and gas wells	10,936,067	2,030,494	(172,042)	1,121,055	13,915,574
Geothermal wells	473,810	-	-	197,785	671,595
Installations	6,345,909	138,748	(144)	729,365	7,213,878
LPG plants	1,435,050	-	-	103,316	1,538,366
Buildings	139,738	2,054	-	31,392	173,184
Moveable assets	306,208	9,942	-	30,805	346,955
Sub-total	19,654,433	2,181,238	(172,186)	2,214,310	23,877,795
Assets under construction:					
Exploratory and evaluation wells	1,851,229	463,671	(85,882)	(902,593)	1,326,425
Development wells	1,769,156	1,190,713	-	(862,993)	2,096,876
Sub-total	3,620,385	1,654,384	(85,882)	(1,765,586)	3,423,301
Finance lease assets:					
Installations	21,260	-	(16,588)	-	4,672
LPG plants	28,163	-	-	(15,662)	12,501
Buildings	19,962	-	-	(23)	19,939
Moveable assets	195,572	-	-	23	195,595
Sub-total	264,957	-	(16,588)	(15,662)	232,707
Total acquisition cost	23,539,775	3,835,622	(274,656)	433,062	27,533,803
Accumulated depreciation, depletion and amortization:					
Direct Acquisition:					
Oil and gas wells	(4,582,073)	(914,618)	103,496	(703,781)	(6,096,976)
Geothermal wells	(81,462)	(32,442)	-	-	(113,904)
Installations	(1,592,282)	(529,382)	-	-	(2,121,664)
LPG plants	(105,817)	(58,200)	-	(15,664)	(179,681)
Buildings	(26,761)	(9,937)	-	-	(36,698)
Moveable assets	(176,852)	(37,150)	-	-	(214,002)
Sub-total	(6,565,247)	(1,581,729)	103,496	(719,445)	(8,762,925)
Finance lease assets:					
Installations	(31,060)	(2,223)	16,588	-	(16,695)
LPG plants	(20,517)	(617)	-	15,665	(5,469)
Buildings	(17,787)	(411)	-	-	(18,198)
Moveable assets	(180,831)	(287)	-	-	(181,118)
Sub-total	(250,195)	(3,538)	16,588	15,665	(221,480)
Total accumulated Depreciation, depletion and amortization	(6,815,442)	(1,585,267)	120,084	(703,780)	(8,984,405)
Provision for impairment	(326,671)	(234,614)	43,261	-	(518,024)
Net book values	16,397,662				18,031,374

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15. OIL AND GAS AND GEOTHERMAL PROPERTIES AND RIGHT OF USE ASSET (continued)

a. Oil and gas, and geothermal properties (continued)

	For the nine-month period ended September 30, 2020 (unaudited)	For the years ended December 31,		
		2019	2018	2017
Upstream production and lifting costs (Note 34)	1,795,557	2,030,834	1,741,040	1,578,988
General and administrative expenses (Note 38)	12,574	8,598	7,825	6,279
Total	1,808,131	2,039,432	1,748,865	1,585,267

As of September 30, 2020, and December 31, 2019, 2018, and 2017, all of the PIEP, PEPC, PGE's, PEP, and PGN properties, except land and land rights, were insured against fire and other possible risks (Note 13).

Management believes that the insurance coverage is adequate to cover any possible losses that may arise in relation to the insured oil and gas and geothermal properties.

The increase in the value of oil and gas wells in 2018 and 2017 respectively, resulted from the payment of the Rokan PSC signature bonus (Note 4g) and the consolidation of Maurel et Prom's Etablissements SA.

PGE's interest capitalized as part of geothermal properties amounted to US\$12,622, US\$25,452, US\$24,885, and US\$32,338 as of September 30, 2020 December 31, 2019, 2018, and 2017, respectively.

Impairment of oil and gas properties

Estimated recoverable amounts and book values of the oil and gas properties impaired as of September 30, 2020, and December 31, 2019, 2018, and 2017 are as follows:

September 30, 2020 (unaudited)					
	Estimated recoverable amount	Book value	Estimated impairment loss (recovery)	Impairment loss (recovery) on goodwill	Impairment loss (recovery) in oil and gas and geothermal properties
PGE and its subsidiaries	84.488	98.776	14.288	-	14.288
PIEP and its subsidiaries	1.471.499	1.787.639	316.139	-	316.139
PHI and its subsidiaries	1.035.362	1.056.582	13.526	-	13.526
PGN and its subsidiaries	504.813	560.433	55.620	-	55.620
Net book value	3.096.162	3.503.430	399.573	-	399.573

December 31, 2019					
	Estimated recoverable amount	Book value	Estimated impairment loss (recovery)	Impairment loss (recovery) on goodwill	Impairment loss (recovery) in oil and gas and geothermal properties
PHE and its subsidiaries	392,622	420,904	28,282	-	28,282
PGE and its subsidiaries	96,435	107,480	11,045	-	11,045
PGN and its subsidiaries	592,974	530,238	(62,736)	-	(62,736)
Net book value	1,082,031	1,058,622	(23,409)	-	(23,409)

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15. OIL AND GAS AND GEOTHERMAL PROPERTIES AND RIGHT OF USE ASSET (continued)

a. Oil and gas, and geothermal properties (continued)

December 31, 2018					
	Estimated recoverable amount	Book value	Estimated impairment loss (recovery)	Impairment loss (recovery) on goodwill	Impairment loss (recovery) in oil and gas and geothermal properties
PHE and its subsidiaries	173,488	366,793	193,305	-	193,305
Pertamina EP Cepu ADK	55,046	53,708	(1,338)	-	(1,338)
PGN and its subsidiaries	872,528	898,750	26,222	-	26,222
Net book value	1,101,062	1,319,251	218,189	-	218,189

December 31, 2017					
	Estimated recoverable amount	Book value	Estimated impairment loss (recovery)	Impairment loss (recovery) on goodwill	Impairment loss (recovery) in oil and gas and geothermal properties
PHE and its subsidiaries	856,112	1,097,805	241,693	6,890	234,803
PIEP and its subsidiaries	740,580	708,003	(32,577)	-	(32,577)
Pertamina EP Cepu	58,888	-	(58,888)	-	(58,888)
Pertamina EP Cepu ADK	8,817	63,864	55,047	-	55,047
PGN and its subsidiaries	842,735	835,703	(7,032)	-	(7,032)
Net book value	2,507,132	2,705,375	198,243	6,890	191,353

b. Right-of-use asset

On January 1, 2020, the Group adopted SFAS 73, so that the Group reclassified the assets under finance lease for oil and gas and geothermal assets to become a right-of-use asset. The impact of the adoption of SFAS 73 on the reclassification of assets under finance leases and movement for 6 months is as follows:

September 30, 2020						
	Beginning Balance	Adjustment of SFAS 73			Beginning Balance	Ending Balance
		Additions	Transfer/ Reclassifications		Additions	
Acquisition cost of Finance lease assets:						
Installations	188,311	-	(188,311)	-	-	-
LPG plants	-	-	-	-	-	-
Buildings	19,939	-	(19,939)	-	-	-
Moveable assets	11,956	-	(11,956)	-	-	-
Total acquisition cost	220,206	-	(220,206)	-	-	-
Accumulated depreciation of Right-of-use asset:						
Installations	(173,758)	-	173,758	-	-	-
LPG plants	-	-	-	-	-	-
Buildings	(18,807)	-	18,807	-	-	-
Moveable assets	(13,090)	-	13,090	-	-	-
Total accumulated depreciation	(205,655)	-	205,655	-	-	-
Net book values	14,551	-	(14,551)	-	-	-

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15. OIL AND GAS AND GEOTHERMAL PROPERTIES AND RIGHT OF USE ASSET (continued)

b. Right-of-use asset (continued)

	September 30, 2020				
	December 31, 2019	Effect Adoption PSAK 73	January, 1 2020	Addition	Ending Balance
Acquisition cost of right-of-use asset:					
Land rights	-	10	10	9	19
Installations	188,311	90,502	278,813	6,207	285,020
Buildings	19,939	71,196	91,135	-	91,135
Ships and aircrafts	-	129,138	129,138	17,997	147,135
Moveable assets	11,956	145,934	157,890	10,923	168,813
Sub-total	220,206	436,780	656,986	35,136	692,122
Accumulated depreciation, depletion, and amortization right-of-use asset:					
Land rights				(6)	(6)
Installations	(173,758)	-	(173,758)	(39,451)	(213,209)
Buildings	(18,807)	-	(18,807)	(21,444)	(40,251)
Ships and aircrafts	-	-	-	(41,963)	(41,963)
Moveable assets	(13,090)	-	(13,090)	(35,198)	(48,288)
Sub-total	(205,655)	-	(205,655)	(138,062)	(343,717)
Net book values	14,551				348,405

16. OTHER NON CURRENT ASSETS

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
Restricted funds	1,229,885	1,212,251	950,986	879,928
Government contributed assets pending final clarification of status (Note 27)	1,361	146,578	401,120	1,361
Advances to vendors	207,861	261,570	133,406	217,704
Prepaid expenses	58,455	82,434	65,319	31,601
Other receivables - third parties	194,778	185,505	80,287	243,814
Finance lease receivables	66,636	64,019	200,770	208,908
Goodwill	53,807	53,807	53,807	53,807
Other receivables related parties (Note 42b)	32,521	64,557	64,907	80,349
Long-term employee receivables	32,133	33,107	37,530	45,652
Land rights costs	16,898	17,775	18,917	21,653
Deferred charges	13,288	14,263	18,464	94,629
Intangible assets	5,303	14,061	14,409	18,435
Assets held but not used for operation	17,410	16,070	23,454	24,819
Non-free and non-clear assets	1,837	1,837	1,837	1,837
Others	86,255	62,103	22,961	57,178
Total	2,018,428	2,229,937	2,088,174	1,981,675

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16. OTHER NON CURRENT ASSETS (continued)

a. Restricted funds

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
US dollar accounts				
<u>Government-related entities</u>				
- BRI	370,031	355,755	321,620	263,638
- BNI	84,208	66,420	50,016	-
- Bank Mandiri	84,442	77,920	14,030	47,038
<u>Third parties</u>				
- JP Morgan	28,602	43,303	31,087	24,661
- BCA	71	75	540	-
- Others	13,638	6,031	-	-
	<u>580,992</u>	<u>549,504</u>	<u>417,293</u>	<u>335,337</u>
Indonesian rupiah accounts				
<u>Government-related entities</u>				
- BRI	348,016	353,351	291,434	297,203
- Bank Mandiri	289,931	297,342	233,993	238,692
- BNI	1,262	1,595	840	899
- PT Bank Pembangunan Daerah Jawa Barat dan Banten Tbk,	335	360	-	-
- BTN	335	360	-	-
- BRI Agro	76	79	-	-
- Others	670	1,079	-	-
<u>Third parties</u>				
- PT Bank Mega Tbk,	7,058	7,476	-	-
- BCA	247	337	-	-
- Others	963	768	7,426	7,797
	<u>648,893</u>	<u>662,747</u>	<u>533,693</u>	<u>544,591</u>
Total	<u>1,229,885</u>	<u>1,212,251</u>	<u>950,986</u>	<u>879,928</u>

In accordance with SKK Migas instructions, as of September 30, 2020, and December 31, 2019, 2018, and 2017 PT Pertamina EP deposited for decommissioning funds, site restoration, and other related activities in joint bank accounts held by SKK Migas and PT Pertamina EP in BRI and Mandiri in the amounts of US\$334,393, US\$310,397, US\$275,660 and US\$252,501, respectively. PT Pertamina Internasional Eksplorasi dan Produksi ("PIEP") deposited funds for decommissioning, site restoration and other related activities in a joint bank account as of September 30, 2020, and December 31, 2019, 2018, and 2017 in the amount of US\$35,360, US\$35,289, US\$31,087 and US\$24,661, respectively.

The Company has created reserves fund for past service liabilities to employees as of September 30, 2020, and December 31, 2019, 2018, and 2017 amounting to Rp9,322,296 million (equivalent to US\$624,903), Rp8,987,640 million (equivalent to US\$646,546), Rp7,534,125 million (equivalent to US\$520,277), and Rp7,185,952 million (equivalent to US\$530,407), respectively.

As of September 30, 2020, and December 31, 2019, 2018, and 2017, restrained fund for Partnership Program amounting to Rp12,174 million (equivalent to US\$794), Rp12,174 million (equivalent to US\$876), Rp12,174 million (equivalent to US\$840), and Rp12,174 million (equivalent to US\$899), respectively.

As of September 30, 2020 and December 31, 2019 restrained fund for Community Development Program amounting to Rp317,530 million (equivalent to US\$21,285) and Rp16,570 million (equivalent to US\$1,192).

Included in restricted cash are time deposits which are used as guarantees for operational working contracts in PT Pertamina Bina Medika IHC (formerly PT Pertamina Bina Medika), and PIEP.

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16. OTHER NON CURRENT ASSETS (continued)

b. Advances to vendors - net

	September 30, 2020 (unaudited)	December 31, 2019	2018	2017
Advances to vendors	240,565	294,274	166,110	250,408
Provision for impairment	(32,704)	(32,704)	(32,704)	(32,704)
Net	207,861	261,570	133,406	217,704

On September 30, 2020, the Company made advance payments for the Engineering, Procurement and Construction ("EPC") Inside Battery Limit ("ISBL") and Outside Battery Limit ("OSBL") Refinery Development Master Plan ("RDMP") Project RU-V Balikpapan amounted to US\$195,775. These payments were based on (Note 50m) the EPC ISBL & OSBL First Amendment Contract No. 25/C000002/2018 dated September 5, 2019.

The Company has recognized a provision for impairment to reduce an advance to vendor for oil tanker construction contract with capacity of 30,000 LTDW between the Company and Zhejiang Chenye Shipbuilding Co. Ltd. Management believes that the provision for impairment is adequate to cover possible losses.

c. Finance lease receivables

This account represents the non-current portion of the finance lease receivables from lease arrangement between PT Kalimantan Jawa Gas ("KJG"), PGN's subsidiary, and PT Perusahaan Listrik Negara ("PLN") (Persero) in relation to KJG's subsea pipelines and onshore receiving facility on land Gas Transport Agreement ("GTA") Kalija 1 which is classified as a finance lease transaction.

d. Goodwill

	Beginning balance	Addition	Deduction	Ending balance
<u>September 30, 2020 (unaudited)</u>				
PHE ONWJ	53,337	-	-	53,337
PHE Nunukan Company	415	-	-	415
PGN and its subsidiaries	55	-	-	55
Total	53,807	-	-	53,807
<u>December 31, 2019</u>				
PHE ONWJ	53,337	-	-	53,337
PHE Nunukan Company	415	-	-	415
PGN and its subsidiaries	55	-	-	55
Total	53,807	-	-	53,807
<u>December 31, 2018</u>				
PHE ONWJ	53,337	-	-	53,337
PHE Nunukan Company	415	-	-	415
PGN and its subsidiaries	55	-	-	55
Total	53,807	-	-	53,807
<u>December 31, 2017</u>				
PHE ONWJ	53,337	-	-	53,337
PHE Tuban	4,538	-	(4,538)	-
PGN and its subsidiaries	55	-	-	55
Others	2,767	-	(2,352)	415
Total	60,697	-	(6,890)	53,807

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16. OTHER NON CURRENT ASSETS (continued)

d. Goodwill (continued)

The goodwill is allocated to the Company's identified Cash Generating Unit ("CGU").

The Group calculated the recoverable amounts based on fair value less cost to sell model which provides a higher value than the value-in-use calculation. The fair value less cost to sell was determined by using a post-tax discounted cash flows ("DCF") calculation.

The cash flows projections are based on production and development forecast approved by management covering the estimated period of contract including contract extension and future investments to increase output. The period of projections ranges from 3-30 years.

ONWJ, PHE Tuban and Other

The Company acquired PT Medco E&P Tuban (subsequently changed its name to PT PHE Tuban) in 2008 and BP West Java Ltd., (subsequently changed its name to ONWJ Ltd.). In 2009, PT PHE Oil and Gas ("PHE OG") and other acquisition in 2013. The Group has recorded an impairment in the value of goodwill in 2019 and 2018 amounting to nill, 2017 amounting to US\$4,538 and US\$2,352 (Note 39), from the PHE Blok Tuban and Ambalat Block, respectively to the carrying value of PHE OG.

PGN and its subsidiaries

In 2013, PT PGAS Telekomunikasi Nusantara ("PGASKOM"), a subsidiary of PGN, acquired 100% equity interest of PT Telemedia Dinamika Sarana ("TDS") with consideration paid amounting to Rp675 million (or equivalent to US\$55). PGASKOM recognized goodwill from this acquisition amounting to US\$55.

COPAL

Effective on November 27, 2013, the Company acquired 100% shares of COPAL from Burlington Resources International Holdings LLC with consideration paid of US\$1,669,892. COPAL is a corporation domiciled in the Cayman Island and holds 65% participating interest in Block 405a Algeria. The Company recognized goodwill from this acquisition in the amount of US\$556,703. As of January 1, 2016/December 31, 2015, the Group has recorded impairment loss on COPAL goodwill with total cumulative amount of US\$420,439.

The Group has recorded impairment losses on goodwill for the year ended December 31, 2017 amounting to US\$6,890 from PHE (Block Tuban and Block Ambalat).

The key assumption relates to oil and gas price, was projected based on expectation of market development given the volatility in oil prices. The discount rate used reflects risk relating to the relevant oil and gas industry and considering risks of individual country of operations.

Key assumptions used for the basis of the impairment test on September 30, 2020 are as follows:

	Assumptions 2020				
	2020 (unaudited)	2021	2022	2023	2024
Projected ICP	US\$38.56	US\$45.00	US\$53.34	US\$54.66	US\$56.49
Projected Brent	US\$40.92	US\$47.56	US\$56.16	US\$57.52	US\$59.41

Then increases by US\$1.32 - US\$8.60 per annum either for ICP or Brent.

Gas price	Based on the gas sales agreement
Discount rate	5.59%-12.99%

Management believes the goodwill impairment is sufficient based on the result of the impairment testing.

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16. OTHER NON CURRENT ASSETS (continued)

e. Non-free and non-clear assets - net

	September 30, 2020 (unaudited)	December 31, 2019	2018	2017
Non-free and non-clear assets	112,237	112,237	112,237	112,237
Provision for impairment	(110,400)	(110,400)	(110,400)	(110,400)
Net	1,837	1,837	1,837	1,837

Non-free and non-clear assets represent land plots located in Teluk Semangka, Lampung and certain assets located in other areas where, as of the date of the completion of these consolidated financial statements, the documentation and rights of the Company were still subject to completion of the legal and settlement processes to allow the Company to fully utilize such assets.

The Company has recognized a provision for impairment to reduce the value of such assets to their recoverable amounts. Management believes that the provision for impairment is adequate.

17. SHORT-TERM LOANS

	September 30, 2020 (unaudited)	December 31, 2019	2018	2017
<u>Government-related entities (Note 41)</u>				
- Bank Mandiri	84,963	498,922	1,713,153	166,151
- BRI	109,553	581,659	820,040	189,027
- BNI	66,895	-	637,627	340
- Others (each bellow US\$10,000)	-	4,682	110	-
<u>Third parties</u>				
- The Bank of Tokyo Mitsubishi UFJ, Ltd. ("BOTM")	398,224	-	-	-
- HSBC	163,400	174,181	67,076	-
- PT Bank Mizuho Indonesia	110,449	-	194,272	10,000
- Sumitomo Mitsui Banking Corporation	-	-	81,988	10,000
- PT Bank UOB Indonesia	72,966	1,424	15,028	10,000
- PT Bank ICBC Indonesia	2,011	-	17,974	27,292
- PT Bank Sumitomo Mitsui Indonesia	135,923	20,826	145,368	-
- Citibank, N.A	81,867	-	145,344	-
- PT ANZ Panin Bank	-	-	139,492	-
- BCA	-	-	118,934	-
- Deutsche Bank AG	95,292	-	93,970	32,285
- PT Bank DBS Indonesia	53,559	-	86,842	-
- PT Bank Permata Tbk.	35,341	3,597	74,804	-
- PT Bank CIMB Niaga	-	-	-	5,735
- BNP Paribas	-	-	-	1,329
- Others (each bellow US\$10,000)	160	129	1,334	720
Total	1,410,603	1,285,420	4,353,356	452,879

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17. SHORT-TERM LOANS (continued)

Other information relating to the Group's short-term bank loan facilities as of September 30, 2020 are as follows:

Lenders	Expiration date
Bank Mandiri	April 20, 2025
Bank Mandiri Syariah	March 7, 2021
BNI	February 6, 2021
BNI Syariah	September 30, 2027
BRI	May 31, 2025
BTPN	December 22, 2020
PT Bank Permata Tbk	November 5, 2020
Bank DBS	December 9, 2020
Citibank N.A	December 11, 2020
Deutsche Bank AG	November 5, 2020
PT Bank Mizuho Indonesia	November 30, 2020
The Hongkong and Shanghai Banking Group (HSBC)	December 1, 2020
PT Bank ICBC Indonesia	April 17, 2021
The Bank of Tokyo-Mitsubishi UFJ, Ltd. (BOTM)	December 18, 2020
PT Bank UOB Indonesia	March 23, 2021

Interest rates charged are based on market rates (e.g. Singapore Interbank Offered Rate ("SIBOR") or London Interbank Offered Rate ("LIBOR")) plus certain percentage depending on negotiation at drawdown.

The interest rates on short-term loans for the nine-month period ended September 30, 2020 and for the years ended December 31, 2019, 2018, and 2017 are as follows:

	September 30, 2020 (unaudited)	December 31, 2019	December 31, 2018	December 31, 2017
US dollar	0.87%-4.20%	2.00%-2.93%	2.76%-3.71%	1.42%-2.52%
Indonesian Rupiah	4.15%-12.00%	6.65%-11.50%	7.25%-11.50%	6.40%-12.50%

The funds received from short-term loans are to be used for working capital purposes.

18. TRADE PAYABLES - THIRD PARTIES

	September 30, 2020 (unaudited)	December 31, 2019	December 31, 2018	December 31, 2017
US dollar	2,024,716	4,044,954	3,215,103	3,719,566
Indonesian rupiah	723,984	529,272	386,223	167,281
Others	21,140	17,603	8,480	28,007
Total	2,769,840	4,591,829	3,609,806	3,914,854

The Group's trade payables are mainly related to purchases of crude oil, natural gas and petroleum products.

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19. DUE TO THE GOVERNMENT

	September 30, 2020 (unaudited)	December 31, 2019	December 31, 2018	2017
The Company:				
Conversion account (amount due to the Government for its share in the Indonesian crude oil production supplied to the Company's refineries)	553,163	827,783	961,481	749,956
Ulubelu and Lahendong geothermal project loan	253,310	253,310	253,310	252,123
Lumut Balai geothermal project loan	105,679	102,824	84,594	47,590
The Government's share in the domestic natural gas sales including its share of Indonesian gas production	11,918	17,219	36,889	30,674
Payable for purchase of the Government's share in the LPG production	3,345	4,460	11,358	8,826
Ngurah Rai Airport refuelling facility construction project loan	3,530	3,816	4,505	5,152
Correction of disparity price of Government decreed price and the formula price	265,677	-	-	-
Other liability	-	-	-	174,907
Total - Company	1,196,622	1,209,412	1,352,137	1,269,228
Subsidiaries:				
PT Pertamina EP				
Government's share of production	8,423	26,238	25,764	1,897
Finance lease liability state-owned assets	73,804	83,999	81,815	88,536
Sub-total	82,227	110,237	107,579	90,433
PT Pertamina Hulu Energi				
Overlifting payables	28,614	20,080	37,878	59,678
PT Pertamina Hulu Indonesia				
Overlifting payables	85,196	18,272	109,126	-
PT Perusahaan Gas Negara Tbk.				
Loan for the construction of gas transmission pipelines from South Sumatera to West Java and distribution pipelines in West Java	338,706	344,217	352,971	360,034
Domestic Gas market development project loan	27,508	31,849	36,008	39,996
Gas transmission and distribution project Phase II project loan	-	2,375	7,126	11,876
Total - Subsidiaries	562,251	527,030	650,688	562,017
Total consolidated (Note 42)	1,758,873	1,736,442	2,002,825	1,831,245
Current portion	(984,337)	(940,413)	(1,207,743)	(1,050,619)
Non-current portion	774,536	796,029	795,082	780,626

a. Conversion account

The conversion account represents the Company's liability to the Government in relation to the shipment of the Government's share of Indonesian crude oil production to the Company's refineries for processing to meet the domestic demand for fuel products. The Government's share in the production of Indonesian crude oil derives from the work areas of the PSC contractors.

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19. DUE TO THE GOVERNMENT (continued)

a. Conversion account (continued)

The movements of the conversion account are as follows:

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
Beginning balance	827,783	961,481	749,956	586,171
Add:				
Current year's Government share in the Indonesian crude oil production delivered to the Company's refineries during the year	3,416,694	8,684,149	10,289,631	6,819,294
Less:				
Cash settlement	(3,594,359)	(8,614,115)	(10,029,737)	(6,641,271)
Gains on foreign exchange	(96,955)	(203,732)	(48,369)	(14,238)
Ending balance	553,163	827,783	961,481	749,956

b. Ngurah Rai Airport refueling facility construction project loan

On May 7, 2007, the Government channelled a loan amounting to ¥1,172,872,837 (full amount) from the Overseas Economic Cooperation Fund Japan to the Company in relation to the construction of the Ngurah Rai Airport refuelling facility in accordance with the loan agreement dated November 29, 1994.

The loan is repayable in 36 semi-annual installments commencing in May 2007 through November 2024, and is subject to interest at the rate of 3.1% per annum. The outstanding loan balance as of September 30, 2020 and December 31, 2019, 2018, and 2017 amounted to ¥373,119,626, ¥414,577,362, ¥497,492,834 and ¥580,408,306 (full amount), respectively, or equivalent to US\$3,530, US\$3,816, US\$4,505 and US\$5,152 respectively.

c. Lumut Balai geothermal project loan

On March 29, 2011, the Loan Agreement ("LA") IP-557 was signed between the Government of Indonesia, represented by the Director General of Debt Management, Ministry of Finance, and JICA, represented by the Chief Representative of JICA, with the Company as Executing Agency and PGE as Implementing Agency. The amount of the loan facility is ¥26,966,000,000 (full amount) with drawing period of eight years from the effective date with effective interest rates at 0.3% p.a plus 0.3% p.a and 0.01% p.a plus 0.01% p.a, respectively.

Repayment of the loan principal will be on a semi-annual basis, on March 20, and September 20, commencing on March 20, 2021 to March 2051. The outstanding loan balance as of September 30, 2020, and December 2018, 2017, and 2016 amounted to ¥11,169,782,163, ¥11,169,782,163, ¥9,343,033,479 and ¥5,363,082,289 (full amount), respectively or equivalent to US\$102,824, US\$105,679, US\$84,594 and US\$47,590, respectively.

d. Ulubelu and Lahendong Geothermal project loan

For the implementation of Ulubelu and Lahendong Geothermal Clean Energy Investment Project, the Company has obtained loans from the International Bank for Reconstruction and Development ("IBRD") as part of the World Bank Loan.

On December 5, 2011, LA 8082-ID and TF10417-ID were signed by the Government of Indonesia and IBRD with the Company as Executing Agency and PGE as Implementing Agency, with total amount of US\$300,000 consisting of LA 8082-ID of US\$175,000 and LA TF10417-ID of US\$125,000. Interest rate from World Bank is at LIBOR + 0.45% + 0.5% (bank charges) + variance spread annually, while interest rate from Japan International Cooperation Agency ("JICA") is at 0.25% + 0.25%.

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19. DUE TO THE GOVERNMENT (continued)

d. Ulubelu and Lahendong Geothermal project loan (continued)

Repayment of the loan principal will be on a semi-annual basis, on April 10 and October 10, LA-8082-ID, from October 10, 2020 until October 10, 2035 and LA TF10417-ID, from October 10, 2021 until April 10, 2051.

The following are the outstanding loan balances as of September 30, 2020 and December 31, 2019, 2018, and 2017:

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
LA 8082-ID	129,044	129,044	129,044	131,055
LA TF10417-ID	124,266	124,266	124,266	121,068
Total	253,310	253,310	253,310	252,123

e. Finance lease liability involving state-owned assets utilized by PT Pertamina EP

In accordance with the Minister of Finance Decree dated May 2, 2008, assets previously owned by the former Pertamina Entity which have not been recognized in the opening balance sheet of the Company, represent state-owned assets ("BMN"), the control of which is exercised by the Directorate General of State Assets.

On September 20, 2016, the State Property Lease Agreements between the Ministry of Finance of the Republic of Indonesia with PT Pertamina EP No. PRJ-3-MK.6/2016 and No. 1307/EP0000/2016-S0 have been signed. With the signing of the agreements, management believes that the property lease payable for unutilized BMN, will not be charged by the Government since it was not included as part of the scope of the agreements. Therefore, in 2016, PT Pertamina EP made correction to the BMN lease payable for BMN which are not used by PT Pertamina EP.

The following table represents the finance lease payables to BMN that include installations, buildings, and moveable equipment utilized in the PT Pertamina EP's oil and gas operations:

Lessor	Type of asset	September 30, 2020 (unaudited)	December 31,		
			2019	2018	2017
The Ministry of Finance	Installation assets, buildings and moveable assets	73,804	83,999	81,815	88,536
Less current portion		(1,157)	(1,426)	(1,180)	(1,087)
Non-current portion		72,647	82,573	80,635	87,449

Future minimum lease payments as of September 30, 2020, and December 31, 2019, 2018, and 2017, are as follows:

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
Within one year	0	14,907	14,310	15,295
More than one year but not more than five years	55,562	59,626	71,550	76,475
More than five years	146,181	160,246	153,832	179,716
Total	201,743	234,779	239,692	271,486
Less interest	(127,939)	(150,780)	(157,877)	(182,950)
Net	73,804	83,999	81,815	88,536
Current portion	(1,157)	(1,426)	(1,180)	(1,087)
Non-current portion	72,647	82,573	80,635	87,449

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19. DUE TO THE GOVERNMENT (continued)

f. Overlifting payables

The overlifting payables represent subsidiaries' payable to SKK Migas as a result of subsidiaries' actual lifting crude oil and gas being higher than their entitlements for the respective year.

g. Loans for the construction of gas transmission pipelines from South Sumatera to West Java and distribution pipelines in West Java

On March 27, 2003, Japan Bank for International Cooperation ("JBIC") agreed to provide loans to the Government with a total amount equivalent to ¥49,088,000,000 (full amount) to assist the Government in financing the construction of a gas transmission pipeline network from South Sumatra to Java West and distribution pipelines in West Java.

On May 28, 2003, PGN and the Government entered into a Loan Forwarding Agreement No. SLA1156/DP3/2003, where the Government continues this loan from JBIC with a total not exceeding ¥49,088,000,000 (full amount) to PGN.

The loan principal is repayable on semi-annually basis on March 20 and September 15 starting from March 20, 2013 to March 20, 2043. The loan balance as of September 30, 2020, and December 31, 2019, 2018, and 2017 amounted to ¥35,799,647,694, ¥37,391,273,000, ¥38,983,847,840 and ¥40,554,284,480 (full amounts), respectively or equivalent to US\$338,707, US\$344,217, US\$352,971 and US\$360,034, respectively.

h. Domestic Gas market development project loan

Based on the loan agreement dated February 7, 2006, IBRD agreed to provide loan facility to the Government an aggregate amount equivalent to US\$80,000 to assist the Government in financing the Domestic Gas Market Development Project.

On April 3, 2006, PGN and the Government entered into the related Subsidiary Loan Agreement, which provides for the Government's relending of the IBRD loan proceeds of US\$80,000 to PGN, which shall undertake the Project.

In December 2011, the total loan facility was changed to US\$69,381,312. On November 14, 2013, PGN received Letter No. 5-786/PU/2013 from the Directorate General of Debt Management, Ministry of Finance of the Republic of Indonesia, regarding the approval for the cancellation of the remaining IBRD SLA 1201 loan amounting to US\$7,616 starting on February 1, 2013.

The loan principal is repayable on semi-annually basis on February 15, and August 15 starting from April 3, 2006 to February 15, 2026. The loan balance as of September 30, 2020 and December 31, 2019, 2018 and 2017 US\$27,508, US\$31,849, US\$36,008, and US\$39,996, respectively.

i. Gas transmtion and distribution project Phase II project loan

On September 15, 2000, PGN and the Government entered into a Loan Agreement, which provides for the Government's relending of the EIB loan proceeds not exceeding €70,000,000 (full amount) or equivalen to US\$54,633 to PGN as part of the financing of the Gas Transmission and Distribution Project Phase II.

Under the Loan Agreement, PGN undertakes among other things, that it shall maintain certain financial covenants for each reporting year-end such as debt to equity ratio of maximum 2:1.

As of September 30, 2020, and December 31, 2019, 2018, and 2017 PGN has complied with all financial ratios required to be maintained under the loan agreements.

Payments towards the principal is done semi-annually on June 15, and December 15. Payment started from December 15, 2015 until June 15, 2020. The loan balances as of September 30, 2020, and December 31, 2019, 2018, and 2017 amounted to US\$0, US\$2,375, US\$7,126 and US\$11,876, respectively.

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19. DUE TO THE GOVERNMENT (continued)

j. Disparity of Selling Price JBKP Premium in 2016

As of December 31, 2017, the Company recorded a disparity of selling price of JBKP Premium in 2016 which caused an excess revenue of Rp2.37 trillion (equivalent to US\$174,907 as of December 31, 2017) (the value before VAT and PBBKB) in accordance with the LHP BPK No.39/AUDITAMA VII/PDPT/ 11/2017 dated November 13, 2017.

On June 8, 2018, the Government through the MoF issued a letter No. S-100/MK.2/2018 concerning Submission of the Following-Up of the BPK RI Recommendations in the LHP on the Central Government Financial Report ("LKPP") and the State General Treasurer ("LKBUN") Financial Statements of 2015-2017 and LHP of Examination With Specific Purposes to the MoF in 2015-2016, stating that the excess revenue of JBKP Premium sales in 2016 was recognized as excess revenue for the Company. This resulted in amount of Rp2.37 trillion or equivalent to US\$178,070 which was previously recorded as due to Government that corrected to other operating activities revenue in 2018 (Note 32).

20. ACCRUED EXPENSES

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
Suppliers and contractors	1,460,393	1,596,842	1,077,951	1,047,598
Estimated owned retention claim	459,443	379,836	286,508	190,458
Bonuses, incentives and salaries	421,269	471,979	445,014	463,440
Interest on loans	263,445	117,978	105,062	68,109
Employee benefits liabilities due within one year (Note 23b)	158,640	249,075	234,488	260,011
Total	2,763,190	2,815,710	2,149,023	2,029,616

21. LONG-TERM LIABILITIES

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
Bank loans:				
Government-related entities (Note 42)	132,019	190,651	189,111	185,756
Third parties	1,439,564	1,783,251	1,897,074	2,106,794
	1,571,583	1,973,902	2,086,185	2,292,550
Issuance costs - net	(460)	(3,083)	(4,775)	(6,838)
Total bank loans - net	1,571,123	1,970,819	2,081,410	2,285,712
Finance leases	1,945,365	179,540	162,056	209,358
Total long-term liabilities	3,516,488	2,150,359	2,243,466	2,495,070
Current portion	(881,701)	(581,204)	(421,618)	(372,380)
Long-term liabilities - net of current portion	2,634,787	1,569,155	1,821,848	2,122,690

Annual interest rates on bank loans for the nine-month period ended September 30, 2020, and for the years ended December 31, 2019, 2018, and 2017 are as follows:

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
Indonesian rupiah	6.31%-12.18%	7.58%-10.50%	2.35%-13.00%	7.25%-13.00%
US dollar	1.16%-3.68%	1.37%-4.65%	1.37%-5.60%	1.37%-3.51%

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21. LONG-TERM LIABILITIES (continued)

a. Bank loans

Details of the Group's syndicated and bank loans as of September 30, 2020, and December 31, 2019, 2018, and 2017 are as follows:

	September 30, 2020 (unaudited)		
	Total	Current	Non-current
<u>Government-related entities</u>			
Bank Mandiri	61,099	9,706	
51,393			
Bank Syariah Mandiri	27,333	13,522	13,811
BNI	3,583	1,060	2,523
BRI	3,091	3,091	-
BNI Syariah	6,332	787	5,545
BRI Syariah	5,443	4,391	1,052
BTN	5,028	-	5,028
Other financial institution - PT Multi Sarana Infrastruktur (Persero)	20,110	-	20,110
<u>Third parties</u>			
BOTM (Syndicated loan)	1,153,667	76,118	1,077,549
HSBC	-	-	-
Sumitomo Mitsui Banking Corporation	-	-	-
-			
SMBC Indonesia	69,253	21,318	47,935
ICBC	48,857	20,744	28,113
KEXIM	100,000	-	100,000
Bank Permata	67,033	-	67,033
Others (each below US\$10,000)	754	754	-
Total	1,571,583	151,491	1,420,092

	December 31,								
	2019			2018			2017		
	Total	Current	Non-current	Total	Current	Non-current	Total	Current	Non-current
<u>Government-related entities</u>									
Bank Mandiri	7,671	3,496	4,175	19,753	10,043	9,710	18,259	16,777	1,482
Bank Syariah Mandiri	23,815	3,359	20,456	16,751	5,666	11,085	8,680	2,315	6,365
BNI	1,856	323	1,533	-	-	-	2,715	2,449	266
BRI	560	-	560	1,372	698	674	2,695	1,930	765
BNI Syariah	5,976	343	5,633	456	208	248	515	403	112
Other financial institution - PT Multi Sarana Infrastruktur (Persero)	150,773	773	150,000	150,779	779	150,000	150,517	517	150,000
Lembaga Pembiayaan Ekspor Indonesia	-	-	-	-	-	-	2,376	2,376	-
<u>Third parties</u>									
BOTM (Syndicated loan)	1,282,803	485,119	797,684	1,609,539	333,569	1,275,970	1,935,000	277,547	1,657,453
HSBC	316,000	-	316,000	-	-	-	-	-	-
SMBC	59,697	10,601	49,096	199,318	10,601	188,717	105,575	10,602	94,973
SMBC Indonesia	61,027	10,492	50,535	67,407	9,083	58,324	60,247	7,273	52,974
ICBC	58,826	17,235	41,591	-	-	-	-	-	-
Others (each below US\$10,000)	4,898	-	4,898	20,810	-	20,810	5,972	1,845	4,127
Total	1,973,902	531,741	1,442,161	2,086,185	370,647	1,715,538	2,292,550	324,033	1,968,517

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21. LONG-TERM LIABILITIES (continued)

a. Bank loans (continued)

Other information on the Group's syndicated and bank loans as of September 30, 2020 is as follows:

Creditors	Repayment schedule
The Company	
SMBC (Long-term loan)	Several installments (2016-2025)
Other Financial Institutions	
PT Sarana Multi Infrastruktur (Persero) (Long-term loan)	Several installments (2015-2025)
BOTM (Syndicated loan)	Several installments (2016-2021)
Subsidiaries	
BNI Syariah	
PT Pertamina Trans Kontinental	Several installments (2019-2026)
SMBC Indonesia	
PT Pertamina Trans Kontinental	Several installments (2015-2024)
BOTM (Syndicated loans)	
PT Pertamina Trans Kontinental	Several installments (2018-2023)
Bank Mandiri	
PT Pelita Air Service	Several installments (2014-2021)
BOTM (Syndicated loans)	
PT Pertamina Internasional Eksplorasi dan Produksi	Several installments (2015-2023)
Bank Syariah Mandiri	
PT Pertamina International Shipping	Several installments (2018-2025)
Bank Mandiri	
PT Pertamina International Shipping	Several installments (2018-2025)
SMBC (Syndicated loans)	
PT Perusahaan Gas Negara Tbk.	Several installments (2015-2020)
ICBC	
PT Elnusa Tbk.	Several installments (2018-2023)
HSBC	
PT Pertamina EP Cepu	Several installments (2022-2034)

These bank loans are obtained to finance the capital expenditures of the Company and/or Subsidiaries' projects, general activities and certain costs relating to the agreement.

As specified by the loan agreements, the borrowers are required to comply with certain covenants, such as financial ratio covenants, no substantial change in the general business of the Company and/or Subsidiaries and not entering into mergers.

The certain subsidiaries' long-term bank loans are collateralised by those subsidiaries' receivables (Note 9) and fixed assets (Note 14).

On December 12, 2017, Etablissements Maurel et Prom SA entered into a syndicated loan agreement with 2 (two) national banks and 7 (seven) overseas banks. The Bank of Tokyo Mitsubishi UFJ, Ltd., Hong Kong Branch acting as Facility Agent. The syndicated loan facility amount is US\$600 million (full amount) bears interest at LIBOR plus 1.5% and shall be repaid on quarterly basis starting March 2020 to December 2023.

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21. LONG-TERM LIABILITIES (continued)

a. Bank loans (continued)

Prior to effective date of the above syndicated loan agreement, on December 11, 2017, as required by syndication loan agreement, PIEP, as Sponsor, Maurel et Prom West Africa SA, as Borrower, and The Bank of Tokyo Mitsubishi UFJ, Ltd. Hongkong Branch as Facility Agent, signed the Sponsor Support Agreement. This Agreement stipulates that if the Borrower fails to fulfil its obligations (Borrower Non-Payment), the Borrower must immediately submit the Sponsor Loan Request Notice to the Sponsor, and the Sponsor is obligated to provide funds to the Borrower for all unsettled obligations including outstanding interest payable. On December 11, 2017, the Company has issued a comfort letter as required in the syndicated bank facilities as discussed above, but not constitute a guarantee in respect of the obligation of PIEP under Sponsor Support Agreement and the Company shall not be construed as acting as a guarantor.

On 16 March 2020 M&P signed agreements of amendment on repayment profile of its debt facilities for syndicated bank loan which under the terms of amendments, the scheduled debt repayments have been reduced in 2020 and 2021, no other amendments were made other than debts repayment profiling as disclosed above.

On June 13, 2019, PEPC through a TBS obtained the following financing facilities for JTB project development with a total facility of US\$1,846,400:

- Jambaran-Tiung Biru Loan Agreement, which was signed by the Trustee, MUFG Bank Ltd. as Agent and Lenders, with a total facility of US\$700,000 from Tranche A and US\$1,046,400 from Tranche B. The loan bears interest at a rate of LIBOR + applicable margin of 2.95% for Tranche A and LIBOR + applicable margin of 2.15% for Tranche B.
- Jambaran-Tiung Biru Wakala Agreement, which was signed by the Trustee and MUFG Bank (Malaysia) Berhad as Investment Agent, with a total facility of US\$40,000 from Tranche A and US\$60,000 from Tranche B. The loan bears interest at a rate of LIBOR + applicable margin of 2.95% for Tranche A and LIBOR + applicable margin of 2.15% for Tranche B.

The Tranche A loan principal is repayable on a semi-annual basis with the first payment due on March 31, 2022 and the final payment due on March 31, 2034. The Tranche B loan principal is repayable on a semi-annual basis with the first payment due on March 31, 2022 and the final payment due on March 31, 2029. Drawdown of the loan facilities have been made as of September 30, 2020 with the total amount of US\$606,000.

As of September 30, 2020 and December 31, 2019, 2018 and 2017, the Group complied with the covenants as required by the loan agreement.

b. Finance leases

This account represents the Group's future minimum lease payments from finance lease transactions for the LPG Filling and Transport Stations ("SPPBEs"), landing craft transports, BBM and LPG truck tankers, computer servers, gas pipeline installations and LPG plants.

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21. LONG-TERM LIABILITIES (continued)

b. Finance leases (continued)

Future minimum lease payments as of September 30, 2020, and December 31, 2019, 2018, and 2017 are as follows:

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
Within one year	738,752	64,213	84,339	54,809
Within more than year but not more than five years	985,684	132,948	117,241	123,031
More than five years	402,376	28,739	32,487	49,493
Total	2,126,812	225,900	234,127	227,333
Less: interest	(181,447)	(46,360)	(72,071)	(17,975)
Net	1,945,365	179,540	162,056	209,358
Current portion	(730,319)	(44,525)	(58,722)	(50,410)
Non-current portion	1,215,046	135,015	103,334	158,948

22. BONDS PAYABLE

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
The Company:				
Issued in 2011				
Due in 2021	391,372	1,000,000	1,000,000	1,000,000
Due in 2041	500,000	500,000	500,000	500,000
Issued in 2012				
Due in 2022	1,242,000	1,242,000	1,242,000	1,242,000
Due in 2042	1,221,590	1,221,590	1,221,590	1,230,000
Issued in 2013				
Due in 2023	1,615,000	1,615,000	1,615,000	1,615,000
Due in 2043	1,433,261	1,433,261	1,433,261	1,462,500
Issued in 2014				
Due in 2044	1,500,000	1,500,000	1,500,000	1,500,000
Issued in 2018				
Due in 2048	750,000	750,000	750,000	-
Issued in 2019				
Due in 2029	750,000	750,000	-	-
Due in 2049	750,000	750,000	-	-
Issued in 2020				
Due in 2030	500,000	-	-	-
Due in 2030	650,000	-	-	-
Due in 2050	1,000,000	-	-	-
Due in 2060	800,000	-	-	-
Total	13,103,223	10,761,851	9,261,851	8,549,500
Discount	(64,519)	(65,654)	(65,722)	(51,180)
Issuance cost	(35,697)	(30,350)	(27,211)	(23,552)
Amortization of discount and issuance cost during the period/year	34,783	34,004	28,608	23,679
Bonds payable owned by subsidiaries:	(46,750)	(46,750)	(62,000)	(68,500)
Total Company	12,991,039	10,653,101	9,135,526	8,429,947
Subsidiaries:				
Senior Unsecured Fixed Rate Notes	1,350,000	1,350,000	1,350,000	1,350,000
PT Saka Energi Indonesia ("SEI") Global Bonds	625,000	625,000	625,000	625,000
Elnusa	46,923	-	-	-
Discount and Issuance Cost - net	(11,423)	(13,608)	(16,430)	(19,074)
Total Subsidiaries	2,010,500	1,961,392	1,958,570	1,955,926
Total bonds payable	15,001,539	12,614,493	11,094,096	10,385,873

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22. BONDS PAYABLE (continued)

Other information on the Company's bonds payable as of September 30, 2020 is as follows:

	Nominal Issued Amount	Issuance price	Starting date	Maturity date	Trustee	Interest rate
The Company:						
Issued in 2011						
Due in 2021	1,000,000	98.097%	May 23, 2011	May 23, 2021	HSBC Bank USA, N.A	5.25%
Due in 2041	500,000	98.380%	May 27, 2011	May 27, 2041	HSBC Bank USA, N.A	6.50%
Issued in 2012						
Due in 2022	1,250,000	99.414%	May 3, 2012	May 3, 2022	HSBC Bank USA, N.A	4.88%
Due in 2042	1,250,000	98.631%	May 3, 2012	May 3, 2042	HSBC Bank USA, N.A	6.00%
Issued in 2013						
Due in 2023	1,625,000	100.000%	May 20, 2013	May 20, 2023	The Bank of New York Mellon	4.30%
Due in 2043	1,625,000	100.000%	May 20, 2013	May 20, 2043	The Bank of New York Mellon	5.63%
Issued in 2014						
Due in 2044	1,500,000	100.000%	May 30, 2014	May 30, 2044	The Bank of New York Mellon	6.45%
Issued in 2018						
Due in 2048	750,000	98.061%	Nov. 7, 2018	Nov. 7, 2048	The Bank of New York Mellon	6.50%
Issued in 2019						
Due in 2029	750,000	100.000%	July 30, 2019	July 30, 2029	The Bank of New York Mellon	3.65%
Due in 2049	750,000	100.000%	July 30, 2019	July 30, 2049	The Bank of New York Mellon	4.70%
Issued in 2020						
Due in 2030	500,000	100.000%	January 21, 2020	January 21, 2030	The Bank of New York Mellon	3.10%
Due in 2050	1,000,000	100.000%	January 21, 2020	January 21, 2050	The Bank of New York Mellon	4.175%
Due in 2030	650,000	100.000%	February 25, 2020	August 25, 2030	The Bank of New York Mellon	3.10%
Due in 2060	800,000	100.000%	February 25, 2020	February 25, 2060	The Bank of New York Mellon	4.15%
Subsidiary:						
Issued in 2014						
Due in 2024	1,350,000	99.037%	May 12, 2014	May 16, 2024	The Bank of New York Mellon	5.13%
Issued in 2017						
Due in 2024	625,000	100.000%	April 26, 2017	May 5, 2024	Citicorp International Limited	4.45%
Issued in 2020						
Due in 2025	46,923	100.000%	August 3, 2020	August 11, 2025	PT Bank Rakyat Indonesia	9.00%

The Company

The Indenture stipulates that:

- No later than 30 days following the occurrence of an event in which the Government of Indonesia ceases to own, directly or indirectly, more than 50% of the voting securities of the Company (Change of Control Triggering Event), the Company may be required to make an offer to repurchase all senior notes outstanding at a purchase price equal to 101% of their principal amount plus accrued and unpaid interest, if any, to the date of repurchase. The senior notes are subject to redemption in whole, at 100% of their principal amount, together with any accrued interest, at the option of the Company at a certain time in the event of certain changes affecting Indonesian taxation.
- Certain covenants include among others: limitation on liens, limitation on sale and lease back transactions and provision of financial statements and other reports.
- The Company complied with the restrictions specified within the agreements with the Trustee.
- The proceeds from senior notes issued were used to partially fund the capital expenditure requirements in the acquisition of new blocks, development of existing blocks, rig purchase and tanker building.

As of September 30, 2020, the Company was rated as Baa2 with a stable outlook by Moody's Investors Service, BBB with a stable outlook by Fitch Ratings and BBB with a stable outlook by Standard & Poor's ("S&P").

During the nine-month period ended September 30, 2020, the Company bought back a portion of senior bond amounting US\$608,628 (for the year ended December 31, 2019: US\$ nil).

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22. BONDS PAYABLE (continued)

Subsidiary

- PGN Senior unsecured fixed notes
In relation to these bonds, the Company is restricted in conducting consolidation, merger, transfer, lease or disposal of all or substantially all of its assets.
Based on Moody's Investors Services, S&P and Fitch Rating the bonds were rated at Baa2, BBB-, and BBB-, respectively.
- SEI senior unsecured fixed rate notes
SEI is not required to make sinking fund payment with respect of these bonds.
Based on Moody's Investors Services, S&P and Fitch Rating the bonds were rated at B1, B+, and BB, respectively.
- Elnusa sukuk ijarah On August 3, 2020, the Company has obtained an effective statement from Otoritas Jasa Keuangan ("OJK") on the issuance of Sukuk Ijarah Berkelanjutan (continuous Sukuk Ijarah) I Phase I Year 2020, with Residual Ijarah Benefits amounted to Rp700.000. The Sukuk Ijarah is issued without notes and guaranteed with full commitments and offered with 100% value of Residual Ijarah Benefits, with period of 5 (five) years from the issue date. The Ijarah Installments amounted Rp63.000, or equivalent of 9% annually, which will be paid every 3 (three) months and will be due on August 11, 2025.

23. EMPLOYEE BENEFITS LIABILITIES

a. Post-employment benefit plans and other long-term employee benefits

The Company and certain Subsidiaries have post-employment benefits plans and provide other long-term employee benefits as follows:

1. Post-employment benefits plans

(i) Defined benefit plan managed by Dana Pensiun Pertamina

The Company and certain Subsidiaries received approval from the MoF of the Republic of Indonesia in Decision Letter No. S-190/MK.6/1977 dated July 15, 1977 to establish a separate pension fund, Dana Pensiun Pertamina, from which all employees, after serving a qualifying period, are entitled to defined benefits upon retirement, disability or death, and also post-employment medical benefits. The Defined Benefit Plans ("PPMP") cover employees who were hired before year 2005.

(ii) Post-retirement healthcare benefits

The post-retirement healthcare benefits involve the Company's retired employees and their spouses that had minimum 15 years of services and minimum 46 years old.

(iii) Severance and service pay ("PAP")

PAP benefits consist of additional benefits for employees to which they are entitled when they enter the pension age and in the event of permanent disability, death, or voluntary resignation.

2. Other long-term employee benefits plan

The Company provides other long-term employee benefits in the form of pre-retirement benefits ("MPPK"), repatriation costs, annual leave, the Mandiri Guna I Insurance Program and service anniversaries, except for the insurance program benefit.

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23. EMPLOYEE BENEFITS LIABILITIES (continued)

a. Post-employment benefit plans and other long-term employee benefits (continued)

3. Other long-term employee benefits plan

The Company provides other long-term employee benefits in the form of pre-retirement benefits ("MPPK"), repatriation costs, annual leave, the Mandiri Guna I Insurance Program and service anniversaries, except for the insurance program benefit.

4. Employees' saving plan

The Company and certain Subsidiaries (collectively referred to as the Participants) operate an Employees' Saving Plan ("TP") in the form of a defined contribution plan, in which the saving will be received by employees at the end of their service period. Until the fiscal year 2015, all contributions made are managed by PT Pertamina Pedeve Indonesia. Effective on October 28, 2016, PT Pertamina Pedeve Indonesia made a decision to restructure and it is no longer in business activities as a venture capital company so that all of available funds are transferred by management to Pension Fund ("DPLK").

b. Provision for employee benefits

The estimated employee benefits obligations of the Company and most of its Subsidiaries as of December 31 2019, 2018, 2017, and 2016, were determined based on the valuation reports of an independent actuary, PT Dayamandiri Dharmakonsilindo, dated April 29, 2020, January 9, 2019, January 25, 2018, and January 25, 2017, respectively. The estimated employee benefit obligations of the Company and most of its Subsidiaries as of September 30, 2020 were determined by way of extrapolation of the latest actuarial valuation report. The table below presents a summary of the employee benefits obligations reported in the consolidated statements of financial position:

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
The Company:				
Pension and other post employment benefits:				
- PPMP	164,225	167,066	142,585	200,990
- Post-retirement healthcare benefits	825,824	849,411	786,489	924,654
- PAP	645,654	750,210	718,902	900,396
- Repatriation costs	5,869	5,953	5,423	8,480
Sub-total (Note 23c.i)	1,641,572	1,772,640	1,653,399	2,034,520
Other long-term employee benefits:				
- MPPK	90,136	93,759	104,428	129,278
- Annual leave and service anniversary	4,679	4,440	10,035	16,063
Sub-total (Note 23c.ii)	94,815	98,199	114,463	145,341
Total the Company	1,736,387	1,870,839	1,767,862	2,179,861
Subsidiaries:				
Pension and other post-employment benefits	448,884	393,091	333,331	305,980
Total Consolidated	2,185,271	2,263,930	2,101,193	2,485,841
Current portion (Note 20)	(158,640)	(249,075)	(234,488)	(260,011)
Non-current portion	2,026,631	2,014,855	1,866,705	2,225,830

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23. EMPLOYEE BENEFITS LIABILITIES (continued)

c. Changes in present value of post-employment benefit obligations and fair value of plan assets

The following tables summarize the components of net benefit expense recognized in the statement of profit or loss and other comprehensive income and the funded status and amounts recognized in the statement of financial position for the respective plans for the nine-month period ended September 30, 2020, and the years ended December 31, 2019, 2018, and 2017 are as follows:

i. Post-employment benefits obligations

	September 30, 2020 (unaudited)						
	PPMP						
	Present value of post-employment benefits obligations	Fair value of plan assets	Post-employment benefits obligations	Post-retirement healthcare benefits	PAP	Repatriation cost	Total
Beginning balance	744,859	(577,793)	167,066	849,411	750,210	5,953	1,772,640
Current service cost (contribution from employee)	964	(47,886)	(46,922)	11,229	58,029	269	22,605
Past service cost	76,167	-	76,167	(3,309)	(75,946)	(69)	(3,157)
Interest expense (Interest income)	33,718	(44,530)	(10,812)	46,773	30,989	272	67,222
Sub-total amounts recognized in profit or loss	110,849	(92,416)	18,433	54,693	13,072	472	86,670
Benefits paid from plan asset	(26,642)	50,447	23,805	-	-	-	23,805
Benefits paid by the Company	1,852	-	1,852	(19,720)	(64,987)	(145)	(83,000)
Contribution to plan by the Company	-	(35,369)	(35,369)	-	-	-	(35,369)
Gain (loss) on foreign currency exchange	(52,385)	40,823	(11,562)	(58,560)	(52,641)	(411)	(123,174)
Ending balance	778,533	(614,308)	164,225	825,824	645,654	5,869	1,641,572

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23. EMPLOYEE BENEFITS LIABILITIES (continued)

c. Changes in present value of post-employment benefit obligations and fair value of plan assets (continued)

i. Post-employment benefits obligations (continued)

	December 31, 2019						
	PPMP						
	Present value of post-employment benefits obligations	Fair value of plan assets	Post-employment benefits obligations	Post-retirement healthcare benefits	PAP	Repatriation cost	Total
Beginning balance	674,493	(531,908)	142,585	786,489	718,902	5,423	1,653,399
Current service cost (contribution from employee)	2,651	(899)	1,752	19,505	46,960	346	68,563
Past service cost	-	-	-	847	-	-	847
Interest expense (Interest income)	55,368	(45,543)	9,825	69,061	53,713	420	133,019
Sub-total amounts recognized in profit or loss	58,019	(46,442)	11,577	89,413	100,673	766	202,429
Actuarial (gain) loss arising from:							
Changes in financial assumptions	53,062	16,320	69,382	128,674	55,953	437	254,446
Experience adjustments	(1,880)	-	(1,880)	(162,147)	28,457	(266)	(135,836)
Sub-total Expense (income) recognized in other comprehensive income	51,182	16,320	67,502	(33,473)	84,410	171	118,610
Benefits paid from plan asset	(67,710)	67,710	-	-	(26,345)	-	(26,345)
Benefits paid by the Company	-	-	-	(26,355)	(157,448)	(639)	(184,442)
Contribution to plan by the Company	-	(60,869)	(60,869)	-	-	-	(60,869)
Gain (loss) on foreign currency exchange	28,875	(22,604)	6,271	33,337	30,018	232	69,858
Ending balance	744,859	(577,793)	167,066	849,411	750,210	5,953	1,772,640

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23. EMPLOYEE BENEFITS LIABILITIES (continued)

c. Changes in present value of post-employment benefit obligations and fair value of plan assets (continued)

i. Post-employment benefits obligations (continued)

	December 31, 2018						
	PPMP						
	Present value of post-employment benefits obligations	Fair value of plan assets	Post-employment benefits obligations	Post-retirement healthcare benefits	PAP	Repatriation cost	Total
Beginning balance	790,740	(589,750)	200,990	924,654	900,396	8,480	2,034,520
Current service cost (contribution from employee)	3,935	(1,057)	2,878	27,061	48,428	405	78,772
Interest expense (Interest income)	55,823	(42,502)	13,321	67,111	50,139	542	131,113
Sub-total amounts recognized in profit or loss	59,758	(43,559)	16,199	94,172	98,567	947	209,885
Actuarial (gain) loss arising from:							
Changes in financial assumptions	(67,025)	36,386	(30,639)	(256,537)	(85,986)	(676)	(373,838)
Experience adjustments	2,452	-	2,452	117,720	31,520	(1,715)	149,977
Sub-total Expense (income) recognized in other comprehensive income	(64,573)	36,386	(28,187)	(138,817)	(54,466)	(2,391)	(223,861)
Benefits paid from plan asset	(61,562)	61,562	-	-	-	-	-
Benefits paid by the Company	-	-	-	(35,241)	(169,620)	(1,107)	(205,968)
Contribution to plan by the Company	-	(34,218)	(34,218)	-	-	-	(34,218)
Gain (loss) on foreign currency exchange	(49,870)	37,671	(12,199)	(58,279)	(55,975)	(506)	(126,959)
Ending balance	674,493	(531,908)	142,585	786,489	718,902	5,423	1,653,399

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23. EMPLOYEE BENEFITS LIABILITIES (continued)

c. Changes in present value of post-employment benefit obligations and fair value of plan assets (continued)

i. Post-employment benefits obligations (continued)

	December 31, 2017						
	PPMP						
	Present value of post-employment benefits obligations	Fair value of plan assets	Post-employment benefits obligations	Post-retirement healthcare benefits	PAP	Repatriation cost	Total
Beginning balance	735,775	(593,449)	142,326	832,487	922,194	8,230	1,905,237
Current service cost (contribution from employee)	3,569	(1,266)	2,303	16,809	45,431	534	65,077
Interest expense (Interest income)	60,762	(50,168)	10,594	72,036	67,105	654	150,389
Sub-total amounts recognized in profit or loss	64,331	(51,434)	12,897	88,845	112,536	1,188	215,466
Actuarial (gain) loss arising from:							
Changes in financial assumptions	80,080	22,798	102,878	166,048	76,914	836	346,676
Experience adjustments	(18,440)	-	(18,440)	(120,215)	(35,473)	(1,111)	(175,239)
Sub-total Expense (income) recognized in other comprehensive income	61,640	22,798	84,438	45,833	41,441	(275)	171,437
Benefits paid from plan asset	(64,177)	64,177	-	-	-	-	-
Benefits paid by the Company	-	-	-	(34,417)	(168,325)	(590)	(203,332)
Contribution to plan by the Company	-	(36,763)	(36,763)	-	-	-	(36,763)
Gain (loss) on foreign currency exchange	(6,829)	4,921	(1,908)	(8,094)	(7,450)	(73)	(17,525)
Ending balance	790,740	(589,750)	200,990	924,654	900,396	8,480	2,034,520

Unfunded Defined Benefit Pension Plan ("PPMP") will be settled or paid by the Company in accordance with applicable regulations.

The actual return on plan assets as of September 30, 2020 and December 2019, 2018, and 2017 amounted to US\$44,530, US\$29,223, US\$6,116 and US\$27,369 respectively.

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23. EMPLOYEE BENEFITS LIABILITIES (continued)

c. Changes in present value of post-employment benefit obligations and fair value of plan assets (continued)

ii. Other long-term employment benefits

As of September 30, 2020 (unaudited)			
	MPPK	Annual leave and service anniversary	Total
Beginning balance	93,759	4,440	98,199
Current service cost	3,821	384	4,205
Past service cost	(2,443)	(109)	(2,552)
Interest cost	3,512	221	3,733
Sub-total benefit cost recognized in the profit or loss	4,890	496	5,386
Benefits paid by the Company	(2,074)	54	(2,020)
Gain on foreign exchange	(6,439)	(311)	(6,750)
Ending balance	90,136	4,679	94,815

	As of December 31,								
	2019			2018			2017		
	MPPK	Annual leave and service anniversary	Total	MPPK	Annual leave and service anniversary	Total	MPPK	Annual leave and service anniversary	Total
Beginning balance	104,428	10,035	114,463	129,278	16,063	145,341	114,778	12,843	127,621
Current service cost	5,467	560	6,027	6,743	3,866	10,609	6,573	7,039	13,612
Past service cost	-	(6,567)	(6,567)		-	-	--	-	-
Interest cost	7,995	305	8,300	7,995	802	8,797	8,828	817	9,645
Actuarial gain (losses)	(27,408)	(136)	(27,544)	(18,078)	(3,605)	(21,683)	4,604	864	5,468
Sub-total benefit cost recognized in the profit or loss	(13,946)	(5,838)	(19,784)	(3,340)	1,063	(2,277)	20,005	8,720	28,725
Benefits paid by the Company	(822)	(69)	(891)	(13,453)	(6,138)	(19,591)	(4,367)	(5,353)	(9,720)
(Loss) gain on foreign exchange	4,099	312	4,411	(8,057)	(953)	(9,010)	(1,138)	(147)	(1,285)
Ending balance	93,759	4,440	98,199	104,428	10,035	114,463	129,278	16,063	145,341

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23. EMPLOYEE BENEFITS LIABILITIES (continued)

d. Actuarial assumptions

Significant actuarial assumptions applied in the calculation of post-employment benefit obligations and other long-term employment benefits for the Company are as follows:

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
Discount rate (per annum):				
- Defined benefits plan administered by Dana Pensiun Pertamina	7.34%	7.34%	8.41%	7.76%
- PAP	7.12%	7.12%	8.12%	6.44%
- Post-retirement healthcare benefits	8.21%	8.21%	8.77%	7.76%
- Repatriation cost	7.94%	7.94%	8.29%	7.26%
- MPPK	7.95%	7.95%	8.27%	7.07%
- Annual leave	N/A	N/A	7.39%	6.35%
- Services anniversary	7.75%	7.75%	8.30%	7.07%
Gold in Inflation rate (per annum)	7.00%	7.00%	8.00%	9.00%
Salary increases (per annum)	9.50%	9.50%	9.50%	9.50%
Annual medical expense trend (per annum afterwards)	8.00%	8.00%	8.00%	8.00%
Demographic factors:				
- Mortality:	Tabel Mortalitas Indonesia 3-2011 "TMI 3" 2011	Tabel Mortalitas Indonesia 3-2011 "TMI 3" 2011	Tabel Mortalitas Indonesia 3-2011 "TMI 3" 2011	Tabel Mortalitas Indonesia 3-2011 "TMI 3" 2011
- Disability (TMI 3):	0.75% TMI 3	0.75% TMI 3	0.75% TMI 3	0.75% TMI 3
- Resignation:				
Until 20 years of age (per annum)	1%	1%	1%	1%
26-45 years of age (per annum)	reducing linearly to 0% until the age of 56	reducing linearly to 0% until the age of 56	reducing linearly to 0% until the age of 56	reducing linearly to 0% until the age of 56
- Pension	100% at normal retirement age	100% at normal retirement age	100% at normal retirement age	100% at normal retirement age
- Normal retirement age (years)	56 years	56 years	56 years	56 years
- Operational costs of the pension plan:	8% of service cost and 2.11% of benefit payments	8% of service cost and 2.11% of benefit payments	8% of service cost and 2.11% of benefit payments	8% of service cost and 2.11% of benefit payments

Investment portfolio of plan assets comprises the following:

	September 30, 2020 (unaudited)		December 31,					
			2019		2018		2017	
	Investment value	%	Investment value	%	Investment value	%	Investment value	%
Equity instruments	106,158	18%	113,924	18%	154,253	29%	171,028	29%
Debt instruments	295,494	50%	317,112	50%	218,082	41%	247,694	42%
Others	189,629	32%	203,502	32%	159,573	30%	171,028	29%
Total	591,281	100%	634,538	100%	531,908	100%	589,750	100%

The expected return on plan assets is determined by considering the expected returns from the assets based on current investment policy. Expected yields on fixed interest investments are based on gross redemption yields as of the reporting date. Expected returns on equity and investment properties reflect long-term real rates of return experienced in the respective markets.

Expected contributions to post-employment benefit plans for the nine-month period ended September 30, 2020 and the years ended December 31, 2019, 2018 and 2017, were US\$56,723 and US\$62,067, US\$31,166, and US\$35,703, respectively.

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23. EMPLOYEE BENEFITS LIABILITIES (continued)

d. Actuarial assumptions (continued)

The qualitative sensitivity analysis for significant assumptions as of September 30, 2020 is as follows (unaudited):

	Effect on 1% increase to defined benefit obligation	Effect on 1% decrease to defined benefit obligation
Discount rate	(211,495)	236,321
Salary rate	48,185	(72,503)
Healthcare cost trend rate	144,369	(111,118)

The average duration years of the Company's defined benefits plan obligation as of September 30, 2020 and December 31, 2019, 2018, and 2017, are as follows:

	As of September 30, 2020 (unaudited)	December 31, 2019	December 31, 2018	December 31, 2017
PPMP	9.17	9.17	14.35	15.38
PAP	7.74	7.74	5.98	6.71
Post-retirement healthcare benefits	23.12	23.12	17.84	25.57

The maturity profile of post-employment benefits obligation of the Company as of September 30, 2020 and December 31, 2019, 2018, and 2017, are as follows:

	As of September 30, 2020 (unaudited)	December 31, 2019	December 31, 2018	December 31, 2017
Within 1 years	229,129	246,031	266,405	291,079
2 - 5 years	729,195	782,439	791,955	903,342
More than 5 years	19,685,118	21,129,278	22,500,076	23,312,066
	20,643,443	22,157,748	23,558,436	24,506,487

Management believes that the estimated liabilities for employee benefits from all of the Group's pension programs, based on the estimated calculation provided by the actuaries, exceed the minimum liability that is required by Labour Law No. 13/2003.

24. PROVISION FOR DECOMMISSIONING AND SITE RESTORATION

The movements in the provision for decommissioning and site restoration are as follows:

	As of September 30, 2020 (unaudited)	December 31, 2019	December 31, 2018	December 31, 2017
Beginning balance	2,458,905	2,018,591	2,129,337	1,900,093
Addition (deduction) - net	85,434	353,674	(186,637)	177,746
Accretion expense (Note 39 and 46a)	56,382	86,640	87,035	51,498
Ending balance	2,600,721	2,458,905	2,029,735	2,129,337

The addition (deduction) mainly represents the changes in estimate in decommissioning and site restoration which were applied by the Group.

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25. NON-CONTROLLING INTERESTS

	As of September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
PT Perusahaan Gas Negara Tbk.	1,574,788	1,702,053	1,397,957	1,382,334
PT Pertamina Internasional Eksplorasi dan Produksi	217,425	340,025	333,294	263,376
PT Asuransi Tugu Pratama Indonesia Tbk. (previously PT Tugu Pratama Indonesia)	169,413	228,896	143,831	108,797
PT Elnusa Tbk.	148,936	151,958	134,790	132,956
PT Pertamina Bina Medika IHC (Note 4m)	27,113	33,886	28,695	33,287
PT Patra Jasa	13,987	14,139	-	-
Pertamina International Timor S.A.	335	1,415	1,447	1,086
PT Kilang Pertamina International	235	-	-	-
Total	2,152,232	2,472,372	2,040,014	1,921,836

26. SHARE CAPITAL, ADVANCE FOR SHARE ISSUANCE AND ADDITIONAL PAID-IN CAPITAL

a. Share capital and advance for share issuance

In accordance with Notarial Deed No. 20 dated September 17, 2003 of Lenny Janis Ishak, S.H., and the decision of MoF through Decision Letter No. 408/KMK.02/2003 (KMK 408) dated September 16, 2003, the Company's authorized capital amounted to Rp200 trillion, which consists of 200,000,000 ordinary shares with a par value of Rp1,000,000 (full amount) per share of which Rp100 trillion has been issued and paid by the Government of the Republic of Indonesia through the transfer of identified net assets from the former Pertamina Entity, including its Subsidiaries and its Joint Ventures.

Based on MoF's Decision Letter No. 23/KMK.06/2008 dated January 30, 2008, regarding the Determination of the Opening Balance Sheet of PT Pertamina (Persero) as of September 17, 2003, the total amount of the Government's equity ownership in the Company is Rp82.57 trillion. This amount consists of all of the former Pertamina Entity's net assets and net liabilities excluding LNG plants operated by PT Badak Natural Gas Liquefaction and PT Arun Natural Gas Liquefaction, former upstream assets currently operated by PT Pertamina EP, and certain parcels of land and building assets.

The changes in the Company's issued and paid-up share capital from Rp100 trillion to Rp82,57 trillion (equivalent to US\$9,809,882) (full amount) were approved at a GMS held on June 15, 2009 and was documented in Notarial Deed No. 11 of Lenny Janis Ishak, S.H. The amendment was documented in Notarial Deed No. 4 dated July 14, 2009 of Lenny Janis Ishak, S.H., and approved by the Minister of Law and Human Rights of the Republic of Indonesia in Decision Letter No. AHU-45429.AH.01.02.Tahun 2009 dated September 14, 2009. The reduction in the Company's issued and paid-up share capital is effective retrospectively as of September 17, 2003.

As of August 1, 2012, there were additional share capital contributions documented in Notarial Deed No. 1 of Lenny Janis Ishak, S.H. in the amount of Rp520.92 billion (equivalent to US\$55,019) and based on PP No. 13 Year 2012 regarding the Addition to the Government's Capital Contribution to Share Capital of State Enterprise PT Pertamina (Persero).

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26. SHARE CAPITAL, ADVANCE FOR SHARE ISSUANCE AND ADDITIONAL PAID-IN CAPITAL (continued)

a. Share capital and advance for share issuance (continued)

Based on the GMS dated December 14, 2015, the MoSOE approved the capitalization of retained earnings into share capital amounting to Rp50 trillion with 50,000,000 shares (equivalent to US\$3,552,146).

Subsequently, advances for share issuance was capitalized as an addition to issued and paid-up share capital through Notarial Deed No. 10 dated January 11, 2016 of Lenny Janis Ishak, S.H.

The additional issued and paid-up share capital was reported to the Minister of Law and Human Rights through Receipt of Notification regarding the Amendment of Articles of Association No. AHU-AH.01.3-0003113 dated January 15, 2016.

The increase in the Company's authorized capital from Rp200 trillion to Rp600 trillion has been approved by MoSOE as the GMS of the Company through Approval letter No. S-217/MBU/04/2018 dated April 11, 2018 and was documented in Notarial Deed No. 29 dated April 13, 2018 of Aulia Taufani, S.H., and approved by the Minister of Law and Human Rights of the Republic of Indonesia in Decision Letter No. AHU-0052766.AH.01.11.Year 2018 dated April 13, 2018 (Note 4a).

As of September 30, 2020, and December 31, 2019, 2018, and 2017, the Company's issued and paid-up share capital were as follows:

Shareholder	Number of issued and paid-up shares (full amount)	Percentage of ownership	Issued and paid up share capital
September 30, 2020 (unaudited)			
The Government of the Republic of Indonesia	171,227,044	100%	16,191,204
December 31, 2019			
The Government of the Republic of Indonesia	171,227,044	100%	16,191,204
December 31, 2018			
The Government of the Republic of Indonesia	171,227,044	100%	16,191,204
December 31, 2017			
The Government of the Republic of Indonesia	133,090,697	100%	13,417,047

b. Additional paid-in capital

The additional paid-in capital as of September 30, 2020 and December 31, 2019, 2018, and 2017 represent the effect of applying of SFAS 38, Business Combination of Entities Under Common Control (Revised 2012), to recognize the difference between the consideration received/transferred and the amount recorded.

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27. GOVERNMENT CONTRIBUTED ASSETS PENDING FINAL CLARIFICATION OF STATUS ("BPYBDS")

a. Refuelling apron installation at Sultan Hasanuddin-Makassar Airport and fuel hydrant facilities at Juanda-Surabaya Airport

Based on Memorandum of Operational Acceptances ("MOACs") No. 05/BA/MKS-HND/XII/2011, No. AU/14525/KEU.1227/XII/2011, No. BA084/F100000/2011-S3 and MOACs No. 005/F00000/2012-S0, No. BA.125 Year 2012, No. 0573/B3/KOBU/IV/2012 from the Ministry of Transportation, the Company obtained management and operation rights of Refuelling Apron Installation at Sultan Hasanuddin Airport-Makassar and Fuel Hydrant Facilities at Juanda Airport-Surabaya, resulting in the balance of this account of Rp12,453 million (equivalent to US\$1,361) (Note 16).

b. Natural gas distribution network ("jargas") for households and gas refueling stations ("SPBG") and supporting infrastructure

As of December 31, 2018, the Company and Secretary General of the Directorate of Oil and Gas of the Ministry of Energy and Mineral Resources as the proxy of budget / goods users have signed the Minutes of Handover of Operations Use ("BASTO") BMN in the form of Distribution Network ("Jargas") Natural Gas for Households Number BA-05/C00000/2018-S0 and Gas Filling Stations ("SPBG") and Infrastructure Supporting Number BA-06/C00000/2018-S0. The total value of BMN assets in the form of land and non-land assets with categories of operating and non-operating assets is Rp5.79 trillion (equivalent to US\$399,759).

Based on the results of the discussion between the Ministry of Finance, the Ministry of Energy and Mineral Resources, the Financial and Development Supervisory Agency ("BPKP"), and the Company, it is agreed that BASTO was recorded and treated as BPYBDS and recorded in other asset accounts. Based on the results of the review of BPKP, the free and clear assets of Jargas and SPBG will be recommended for next process as the State Capital Participation ("PMN"), and for non-free and non-clear assets will be evaluate for their performance on periodic basis and process for PMN will be conducted on partially basis in accordance with its performance evaluation results.

On July 1, 2019, the BPKP issued a Review Report Number LHR-91 / D102 / 2/2019 on the Ministry of Energy and Mineral Resources Assets to be recommended as PMN with the conclusion of total assets of Rp5.79 trillion (equivalent with US\$399,759), with the following asset classification.

No	Asset Classification	Amount (in thousand rupiahs)	Total (In US\$)
1	Cannot be recommended as a PMN	36,324,842	2,509
2	Recommended as PMN without notes	2,102,881,621	145,217
3	Recommended as PMN with notes	3,367,200,049	232,525
4	Has not been reviewed yet	132,708,504	9,164
5	Difference between realized value and BASTO	149,793,262	10,344
	Total	5,788,908,278	399,759

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27. GOVERNMENT CONTRIBUTED ASSETS PENDING FINAL CLARIFICATION OF STATUS ("BPYBDS") (continued)

b. Natural gas distribution network ("jargas") for households and gas refueling stations ("SPBG") and supporting infrastructure (continued)

On May 2, 2020, the Company and the Secretary of the Directorate General of Oil and Gas of the MoEMR as the proxy of related assets signed the Memorandum of Transfer of Administration of the Natural Gas Distribution Network for Households for the 2009-2017 Fiscal Year ("Jargas") and the Gas Refueling Station and Supporting Infrastructure for Fiscal Year 2011-2016 ("SPBG") No. 0010/BAST/95/KPB/2020. Based on such Memorandum, it is agreed that the Company will hand over the administration of Jargas and SPBG assets with classification other than can be recommended as PMN without notes amounting to Rp3.68 trillion (equivalent to US\$254,542) to the MoEMR, therefore as of September 30, 2020 the Company's BPYBDS Jargas and SPBG assets recorded is assets with classification can be recommended as PMN without notes amounting to Rp2.10 trillion (equivalent to US\$145,217).

On September 10, 2020, the Government issued PP No. 50 of 2020 concerning the Addition of the State Capital Participation of the Republic of Indonesia to the Share Capital of the Limited Liability Company (Persero) PT. Pertamina amounted to Rp2.10 trillion (equivalent to US \$145,217), so that on September 30, 2020, the Company reclassified BPYBDS assets from other asset accounts to fixed asset accounts, and BPYBDS equity accounts to Additional Paid In Capital accounts. If the Amendment to the Articles of Association of State Equity Participation (PMN) implemented through the GMS mechanism has been approved by a notary deed and registered with the Ministry of Law and Human Rights, the account will be reclassified as Additional Paid in Capital into Full Paid Capital.

28. RETAINED EARNINGS AND INTERIM DIVIDEND

General Meeting of Shareholders ("GMS")

On May 31, 2016, the Company held a GMS for the fiscal year 2015. Based on the minutes of meeting, the shareholders approved, among other, the utilization of 2015 net income of the Company as follows:

- Distribution of dividends amounting to Rp6.8 trillion (equivalent to US\$499,449);
- The remaining amount of US\$920,771 were reserved to support operations and corporate development.

Based on the GMS decision to approve the 2015 annual report of PT Pertamina (Persero), there was an additional appropriation of retained earnings for partnership program and community development program amounting to Rp57,480 million (equivalent to US\$4,222) and Rp57,480 million (equivalent to US\$4,222), respectively.

On March 16, 2017, the Company held a GMS for the fiscal year 2016. Based on the minutes of meeting, the shareholder approved, among others, the utilization of 2016 net income of the Company as follows:

- Distribution of dividends amounting to Rp12.1 trillion (equivalent to US\$907,383); (Note 47b)
- The remaining amount of US\$2,239,660 were reserved to support operations and corporate development.

Based on the GMS decision to approve the 2017 Company Workplan and Budget ("RKAP") the Company, there was an additional appropriation of retained earnings for patnership program and community development program amounting to Rp250 billion (equivalent to US\$18,707).

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28. RETAINED EARNINGS AND INTERIM DIVIDEND (continued)

General Meeting of Shareholders (“GMS”) (continued)

On January 17, 2018 based on the GMS decision to approve the 2018 RKAP of the Company, there was an additional appropriation of retained earnings for community development program amounting to Rp275 billion (equivalent to US\$19,936).

On May 2, 2018, the Company held a GMS for the fiscal year 2017. Based on the minutes of meeting, the shareholders approved, among other things, the utilization of 2017 net income of the Company as follows:

- Distribution of dividends amounting to Rp8.57 trillion (equivalent to US\$614,939); (Note 47b)
- The remaining amount of US\$1,925,256 were reserved to support operations and corporate development.

On January 23, 2019 based on the GMS decision to approve the 2019 RKAP of the Company, there was an additional appropriation of retained earnings for community development program amounting to Rp124.7 billion (equivalent to US\$8,921).

On May 31, 2019, the Company held a GMS for the fiscal year 2018. Based on the minutes of meeting, the shareholder approved, among others, the utilization of 2018 net income of the Company to be as follows:

- Distribution of dividends amounting to Rp7.95 trillion (equivalent to US\$552,659);
- The remaining amount were reserved to support operations and corporate development

On June 18, 2020, the Company held a GMS for the fiscal year 2019. Based on the minutes of meeting, the shareholder approved, among others, the utilization of 2019 net income of the Company to be as follows:

- a. Distribution of dividends amounting to Rp8.5 trillion (equivalent to US\$599,182)
- b. The remaining amount were reserved to support operations and corporate development.

29. DOMESTIC SALES OF CRUDE OIL, NATURAL GAS, GEOTHERMAL ENERGY AND OIL PRODUCTS

	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (unaudited)	2019 (unaudited)	2019	2018	2017
Pertamax, Pertamax turbo, Peralite gasoline and Pertadex (diesel oil)	7,205,900	8,228,496	11,272,222	11,215,914	9,794,161
ADO	5,863,587	7,751,734	10,516,058	10,713,543	9,388,019
LPG, Petrochemicals, Lubricants and Others	4,825,886	6,227,635	8,196,776	8,201,023	4,313,150
Premium gasoline	2,525,031	3,758,212	4,914,915	4,509,233	5,429,272
Avtur and Avigas	1,050,005	2,517,994	3,408,584	3,955,434	2,990,276
Natural gas	1,762,483	1,948,704	2,754,717	3,196,038	5,461,178
Crude oil	439,474	563,324	793,372	917,333	763,281
Geothermal energy-steam and Electricity	253,785	486,473	654,273	645,593	609,610
DMO fees - crude oil	252,196	401,096	548,204	612,953	400,621
IFO/MFO	243,573	455,131	603,971	639,575	492,753
Kerosene	76,142	85,117	112,656	123,894	137,924
IDO	3,738	5,539	7,762	11,978	8,539
Total	24,501,801	32,429,455	43,783,510	44,742,511	39,788,784

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30. SUBSIDY REIMBURSEMENTS FROM THE GOVERNMENT

	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (unaudited)	2019 (unaudited)	2019	2018	2017
Current year:					
Subsidy reimbursements for 3 kg LPG cylinders (Note 10b)	1,836,006	1,991,199	2,673,170	3,496,603	2,977,967
Subsidy reimbursements for certain fuel (BBM) products (Note 10c)	694,236	1,663,358	2,263,031	2,126,796	595,206
Subsidy reimbursements for kerosene (Note 10f)	-	-	-	16,828	-
Sub-total	2,530,242	3,654,557	4,936,201	5,640,227	3,573,173
Adjustment fair value of subsidy reimbursement:					
- BBM year 2020 (Note 10c)	(6,146)	-	-	-	-
- LPG year 2020 (Note 10b)	(30,633)	-	-	-	-
- BBM year 2019 (Note 10c)	-	-	(38,582)	-	-
- LPG year 2019 (Note 10b)	-	-	(19,411)	-	-
Corrections from government audit for subsidy reimbursements:					
- BBM year 2019 (Note 10c)	-	-	(2,060)	-	-
- LPG year 2019 (Note 10b)	-	-	(1,073)	-	-
- BBM year 2018 (Note 10c)	-	-	-	(699)	-
- LPG year 2018 (Note 10b)	-	-	-	(1,252)	-
- BBM year 2017 (Note 10c)	-	-	-	(147)	-
- LPG year 2017 (Note 10b)	-	-	-	(5,661)	-
- BBM year 2016 (Note 10c)	-	-	-	-	(605)
- LPG year 2016 (Note 10b)	-	-	-	-	(484)
Sub-total	(36,779)	-	(61,126)	(7,759)	(1,089)
Total	2,493,463	3,654,557	4,867,075	5,632,468	3,572,084

Any difference in subsidy reimbursement between the amount recorded in the books and the results of BPK's and other Government body audit is adjusted in the period when the audit report is received.

31. EXPORT OF CRUDE OIL, NATURAL GAS AND OIL PRODUCTS

	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (unaudited)	2019 (unaudited)	2019	2018	2017
Oil products	1,812,215	1,265,391	2,034,173	1,811,257	968,882
Natural gas	465,750	491,811	734,405	637,872	245,677
Crude oil	342,521	726,778	860,326	1,187,824	659,722
Total	2,620,486	2,483,980	3,628,904	3,636,953	1,874,281

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32. REVENUES FROM OTHER OPERATING ACTIVITIES

	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (unaudited)	2019 (unaudited)	2019	2018	2017
Upstream support services	99,070	143,164	168,902	156,869	155,443
Shipping services	101,213	133,194	179,318	127,010	124,224
Health and hospital services	224,732	213,589	289,053	254,202	260,385
Natural gas transport services	28,602	60,554	95,528	204,140	151,915
Insurance services	39,371	58,787	93,045	84,585	98,870
Regasification services	24,623	35,103	48,700	31,108	19,224
Office and hospitality services	9,941	33,291	25,756	26,155	23,656
Transport and technical services	88,936	14,707	14,083	13,359	8,994
Air transport services	5,221	13,836	18,946	18,756	39,137
Portfolio management services	11,336	7,746	7,746	4,962	9,157
Human resources provision and development services	1,831	997	2,414	4,825	2,026
Disparity of Selling Price	-	-	1,521,948	3,102,218	-
Other services	-	35,082	39,592	55,613	22,071
Total	634,876	750,050	2,505,031	4,083,802	915,102

33. COST OF GOODS SOLD

	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (unaudited)	2019 (unaudited)	2019	2018	2017
Beginning balance of oil products	(3,538,155)	(4,218,260)	(4,218,260)	(3,778,519)	(2,990,517)
Provision for decline in value of oil products (Note 11)	82,654	167,270	167,270	92,854	76,542
Sub-total	(3,455,501)	(4,050,990)	(4,050,990)	(3,685,665)	(2,913,975)
Production costs:					
- Direct materials	(9,405,336)	(13,197,369)	(18,096,907)	(20,349,186)	(15,368,304)
- Supporting materials	(452,754)	(870,386)	(983,407)	(1,151,033)	(879,291)
- Rent	(220,852)	(498,354)	(697,011)	(286,481)	(717,475)
- Depreciation (Note 14a)	(732,112)	(390,593)	(537,783)	(566,412)	(551,911)
- Salaries, wages, and other employee benefits	(258,285)	(263,209)	(361,026)	(452,184)	(503,547)
- Freight and transportation	(75,293)	(110,665)	(159,816)	(124,215)	(112,534)
- Custom and duty	(102,260)	(98,198)	(132,862)	(152,255)	(138,148)
- Utilities, infrastructure and fuel	(74,349)	(78,781)	(172,602)	(484,322)	(441,655)
- Materials and equipment	(41,737)	(51,101)	(83,017)	(84,460)	(98,863)
- Maintenance and repairs	(65,815)	(59,280)	(101,630)	(115,899)	(114,228)
- Business travel	(7,288)	(18,745)	(22,507)	(17,109)	(15,569)
- Professional services	(94,759)	(79,442)	(137,669)	(124,109)	(82,225)
- Others	(93,376)	(116,992)	(148,430)	(99,311)	(71,035)
Sub-total	(11,624,216)	(15,833,115)	(21,634,667)	(24,006,976)	(19,094,785)

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33. COST OF GOODS SOLD (continued)

	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (unaudited)	2019 (unaudited)	2019	2018	2017
Purchases of oil products and others::					
- Imports of other oil products	(3,404,353)	(5,436,674)	(7,466,222)	(9,230,605)	(7,515,863)
- Imports of premium gasoline	(1,966,930)	(3,680,814)	(4,902,704)	(4,433,062)	(3,811,785)
- Domestic purchases of other oil products	(2,306,300)	(2,529,182)	(3,560,458)	(2,782,989)	(2,340,875)
- Imports of ADO	(24,321)	(133,240)	(138,943)	(1,385,810)	(853,533)
- Purchases of geothermal energy	(492,231)	(865,292)	(1,261,175)	(1,313,799)	(330,505)
Sub-total	(8,194,135)	(12,645,202)	(17,329,502)	(19,146,265)	(14,852,561)
Ending balance of oil products (Note 11)	2,769,403	3,575,137	3,538,155	4,218,260	3,778,519
Provision for decline in value of oil products (Note 11)	(97,782)	(158,809)	(82,654)	(167,270)	(92,854)
Sub-total	2,671,621	3,416,328	3,455,501	4,050,990	3,685,665
Total	(20,602,231)	(29,112,979)	(39,559,658)	(42,787,916)	(33,175,656)

34. UPSTREAM PRODUCTION AND LIFTING COSTS

	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (unaudited)	2019 (unaudited)	2019	2018	2017
Depreciation, depletion and amortization (Note 14)	(1,795,557)	(1,482,889)	(2,030,834)	(1,741,040)	(1,578,988)
Contracts	(560,861)	(585,352)	(901,176)	(734,342)	(373,194)
Salaries, wages and other employee benefits	(433,243)	(536,394)	(674,951)	(618,458)	(419,526)
Materials	(256,923)	(269,699)	(275,452)	(267,437)	(287,612)
Technical Assistance Contracts ("TAC")	(289,101)	(211,018)	(283,062)	(335,532)	(136,609)
Amortization of investment in oil & gas Block (Note 12a)	(59,130)	(68,872)	(92,981)	(144,472)	(116,441)
Others	(151,427)	(419,288)	(741,278)	(545,235)	(508,837)
Total	(3,546,242)	(3,573,512)	(4,999,734)	(4,386,516)	(3,421,207)

35. EXPLORATION COSTS

	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (unaudited)	2019 (unaudited)	2019	2018	2017
Seismic, geological and geophysical	(26,928)	(70,391)	(101,856)	(89,680)	(40,000)
Dry hole	(37,495)	(17,901)	(37,657)	(112,476)	(74,744)
Others	(47,199)	(31,778)	(67,416)	(65,524)	(50,612)
Total	(111,622)	(120,070)	(206,929)	(267,680)	(165,356)

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36. EXPENSES FROM OTHER OPERATING ACTIVITIES

	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (unaudited)	2019 (unaudited)	2019	2018	2017
Cost of services	(1,280,544)	(1,083,694)	(1,456,050)	(1,002,665)	(715,166)
Salaries, wages and other employee benefits	(152,514)	(111,671)	(228,444)	(173,585)	(148,022)
Depreciation (Note 14)	(260,167)	(67,896)	(96,211)	(88,405)	(84,635)
Insurance claims	(27,581)	(67,245)	(87,505)	(92,863)	(68,616)
Total	1,720,806	(1,330,506)	(1,868,210)	(1,357,518)	(1,016,439)

37. SELLING AND MARKETING EXPENSES

	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (unaudited)	2019 (unaudited)	2019	2018	2017
Depreciation (Note 14)	(176,138)	(277,548)	(383,594)	(328,695)	(362,242)
Salaries, wages, and other employee benefits	(152,461)	(188,786)	(271,951)	(263,020)	(222,447)
Freight and transportation	(159,877)	(182,807)	(264,417)	(453,664)	(519,929)
LPG filling fee	(95,784)	(80,416)	(141,416)	(113,971)	(132,647)
Taxes, retributions and penalties	(17,024)	(75,765)	(113,351)	(89,179)	(46,201)
Maintenance and repairs	(35,330)	(68,303)	(62,533)	(84,776)	(66,757)
Rental	(17,608)	(60,604)	(97,245)	(26,210)	(44,981)
Professional services	(79,223)	(30,115)	(40,340)	(96,851)	(53,660)
Advertising and promotions	(24,204)	(20,419)	(39,436)	(24,151)	(25,102)
Travel	(5,497)	(17,125)	(22,149)	(15,331)	(12,483)
Materials and equipment	(15,527)	(16,791)	(34,209)	(33,441)	(45,992)
Utilities, infrastructure and fuel	(15,512)	(14,270)	(21,035)	(21,092)	(8,339)
Others	(19,689)	(49,251)	(133,226)	(92,450)	(49,422)
Total	(813,874)	(1,082,200)	(1,624,902)	(1,642,831)	(1,590,202)

38. GENERAL AND ADMINISTRATIVE EXPENSES

	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (unaudited)	2019 (unaudited)	2019	2018	2017
Salaries, wages and other employee benefits	(508,636)	(578,442)	(768,036)	(710,348)	(825,414)
Taxes, retributions and penalties	(267,482)	(191,832)	(267,168)	(295,439)	(222,737)
Depreciation, depletion and amortization (Notes 13, 14 and 15)	(79,523)	(102,194)	(151,544)	(114,797)	(117,586)
Rental	(34,706)	(89,550)	(45,272)	(33,179)	(19,906)
Professional services	(5,017)	(46,627)	(89,851)	(41,828)	(113,979)
Materials and equipment	(39,832)	(34,298)	(57,285)	(38,748)	(52,663)
Maintenance and repairs	(7,237)	(33,359)	(42,679)	(29,127)	(38,009)
Business travel	(9,193)	(18,597)	(27,676)	(24,073)	(26,136)
Training, education and recruitment	1,503	(13,298)	(28,107)	(30,357)	(22,570)
Others	(73,749)	(87,808)	(157,543)	(94,299)	(167,729)
Total	1,026,878	(1,196,005)	(1,635,161)	(1,412,195)	(1,606,729)

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39. FINANCE INCOME AND COSTS

	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (unaudited)	2019 (unaudited)	2019	2018	2017
Finance income:					
Due from the Government (Note 10a)	114,515	173,396	867,866	-	
Time deposits	71,262	150,267	192,204	161,818	163,562
Current accounts	83,347	42,681	63,434	40,489	38,942
Other investments	57,242	34,401	67,411	54,738	31,189
Other	17	-	30,767	58	119
Total	326,383	400,745	1,221,682	257,103	233,812
Finance Costs:					
Bonds	(502,824)	(414,943)	(572,008)	(351,914)	(352,622)
Long-term loans	(74,598)	(112,252)	(144,404)	(174,020)	(202,974)
Short-term loans	(26,093)	(81,681)	(99,620)	(56,499)	(8,465)
Accretion expense (Note 24)	(56,382)	(60,945)	(86,640)	(87,035)	(51,498)
Finance leases	(67,006)	(13,543)	(30,164)	(30,309)	(58,323)
Others	(34,759)	(39,512)	(35,470)	(136,895)	(144,162)
Total	761,662	(722,876)	(968,306)	(836,672)	(818,044)

40. OTHER EXPENSES - NET

	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (unaudited)	2019 (unaudited)	2019	2018	2017
Income from contract and material penalties and claims	1,964	39,806	59,454	91,106	39,479
Rental	27,592	14,261	14,137	35,325	34,285
Adjustment of fair value of other investment (Note 11)	-	(6,045)	5,663	52,843	(15,862)
Adjustment of deferral notes TPPI (Note 11)	-	-	96,016	-	-
Dilution of shares TPPI (Note 11)	-	-	20,672	-	-
Provision of onerous contract LNG	-	-	(405,630)	-	-
Correction of take or pay LNG contract	-	-	(113,715)	-	-
Recovery (provision) for impairment of receivables	(151,708)	(40,096)	(133,233)	108,757	(49,826)
Increase (decrease) in value of investment in oil and gas blocks (Note 12a)	(233,981)	(52,404)	(35,184)	(154,773)	(83,270)
Reversal (impairment) of fixed assets (Note 13)	(11,798)	(93,456)	(98,171)	2,719	(7,364)
Provision for impairment of oil and gas assets (Note 14)	(399,573)	(109,692)	23,409	(218,189)	(191,353)
Impairment of investment in Bonds TPPI	-	-	(38,756)	-	-
Interest tax income restitution	-	-	-	-	99,577
Tax penalties under payment tax assesment letter ("SKPKB") and tax billed ("STP") (Note 40a)	-	-	-	(36,622)	-
Provision for impairment of goodwill (Note 15d)	-	-	-	-	(6,890)
Provision for tax dispute (Note 40g)	-	-	-	-	(621,148)
Tax refund	-	-	-	-	121,676
Final income tax asset revaluation (Note 40h)	-	-	-	-	(129,610)
Writte off of oil and gas properties	-	-	-	-	(68,546)
Others - net (each below US\$5,000)	(220,412)	(86,278)	(33,610)	41,496	47,466
Total	(987,916)	(333,904)	(638,948)	(77,338)	(831,387)

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41. TAXATION

a. Prepaid taxes

	September 30, 2020 (unaudited)	December 31, 2019	December 31, 2018	December 31, 2017
Corporate Income Tax ("CIT")				
The Company:				
Overpayment of CIT:				
- 2020	338,206	-	-	-
- 2019	-	231,791	-	-
- 2017	14,520	14,520	14,520	164,266
Sub-total	352,726	246,311	14,520	164,266
Subsidiaries:				
CIT and dividend	373,070	491,541	435,182	330,771
Sub-total CIT - Consolidated	725,796	737,852	449,702	495,037
VAT				
The Company:				
- 2020	347,717	-	-	-
- 2019	-	771,402	-	-
- 2018	-	-	386,989	-
- 2017	-	-	-	418,255
- 2016	-	14,052	84,290	-
Sub-total	347,717	785,454	471,279	418,255
Subsidiaries:				
VAT reimbursable	433,191	370,450	315,238	313,468
VAT	369,882	327,315	387,131	397,098
Sub-total	803,073	697,765	702,369	710,556
Sub-total VAT - Consolidated	1,150,790	1,483,219	1,173,648	1,128,821
Other taxes	-	18,994	18,994	-
Total prepaid tax	1,876,586	2,240,065	1,642,344	1,623,858
Current portion	(788,882)	(1,364,165)	(822,057)	(794,558)
Non-current portion	1,087,704	875,900	820,287	829,300

Details of VAT reimbursable are as follows:

	September 30, 2020 (unaudited)	December 31, 2019	December 31, 2018	December 31, 2017
VAT reimbursable by SKK Migas:				
- PT Pertamina EP	127,996	113,473	84,264	73,348
- PT Pertamina EP Cepu	84,919	55,310	31,194	43,160
- PGN and its subsidiaries	63,215	62,696	69,014	75,356
- PHE and its subsidiaries	48,645	26,385	28,009	26,638
Sub-total	324,775	257,864	212,481	218,502
VAT reimbursable by the Directorate General of Budgeting and Finance Stability:				
PT Pertamina Geothermal Energy	108,416	112,586	102,757	94,966
Total	433,191	370,450	315,238	313,468

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41. TAXATION (continued)

a. Prepaid taxes (continued)

The Company has received several warrants to pay the excess tax on January 8 and 28, 2020 regarding the granting of the Company's objections on September 3 and 5, 2019 on the SKPKB of Income Tax (PPh 22, PPh 23, PPh 4 (2), PPh 15) and VAT for fiscal year 2016, amounting to Rp276,788 million (equivalent to US\$19,864) and Rp235,652 million (equivalent to US\$16,940) and compensated with income tax payable of Rp116 million (equivalent to US\$9), the remainder was received by the Company amounting to Rp276,788 million (equivalent to US\$19,864) for income tax (PPh 22, PPh 23, PPh 4 (2), PPh 15) and Rp235,536 million (US\$16,931) for VAT.

On September 3 and 5, 2019, the Company obtained several Decrees from Directorate General of Taxation ("DGT") which approved the objections submitted by the Company on Income Tax SKPKB (PPh 22, PPh 23, PPh 4(2), PPh 15) and VAT for the fiscal year 2016 amounting to Rp907,565 million (equivalent to US\$63,842) and Rp235,652 million (equivalent to US\$16,575), respectively. The SKPKB of income tax amounting to Rp630,777 million (equivalent to US\$44,368) was SKPKB which was not paid and Rp276,788 million (equivalent to US\$19,474) was SKPKB which was recorded as prepaid taxes. As of December 31, 2019, the amount of SKPKB PPh 22, PPh 23, PPh 4 (2), PPh 15 and VAT previously paid by the Company was still recorded as a prepaid taxes, due to the Company has not received payment order from DGT.

On April 9, 2019, the Company obtained a Decree from DGT No. KEP-00297/NKEB/WPJ.19/2019 regarding the waiver of STP VAT penalties for fiscal year 2016 amounting to Rp400.929 million (equivalent to US\$28,147). Such amount has been compensated for the payment of VAT payable for the period of June 2019.

On March 21, 2019, the Company obtained a Decree from DGT No. KEP-00244/NKEB/WPJ.19/2019 through KEP-00255/NKEB/WPJ.19/2019 regarding the waiver of STP VAT for fiscal year 2016 amounting to Rp590,934 million (equivalent to US\$40,578). Such amount has been compensated with tax payable amounting to Rp1,308 million (equivalent to US\$90), therefore it was paid amounting to Rp589,626 million (equivalent to US\$40,488). Such amount has been received by the Company in April 2019.

On December 27, 2018, the Company obtained SKPKB and STP for fiscal year 2016 amounting to Rp3,234 billion (equivalent to US\$222,250). The SKPKB consists of SKPKB of CIT amounting to Rp565,949 million (equivalent to US\$39,031), SKPKB of withholding income tax amounting to Rp1,381 billion (equivalent to US\$94,851) and SKPKB of VAT amounting to Rp295,043 million (equivalent to US\$20,260). STP consists of a tax bill on VAT and penalties amounting to Rp590,934 million (equivalent to US\$40,578) and Rp400,929 million (equivalent to US\$27,531), respectively.

From the overall value of the SKPKB and STP, the Company charged Rp533,324 million (equivalent to US\$36,622) in the 2018 income statement (Note 38), Rp1,504 billion (equivalent to US\$103,283) was recorded as prepaid tax, and Rp565,934 million (equivalent to US\$39,031) was recorded as prior year adjustment of CIT, while the remaining value of amounting to Rp630,776 million (equivalent to US\$43,315) has not been paid. On January 25, 2019, the Company has filed an objection for the SKPKB PPh 22, PPh 23, PPh.4(2), PPh 15, SKPKB and STP of VAT fiscal year 2016.

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41. TAXATION (continued)

a. Prepaid taxes (continued)

The increase in VAT payments in 2019 was mainly due to prepaid payment of VAT on Diesel and LPG subsidies, as well as withholding income tax.

On November 7, 2018, the Company received a letter of tax refund for overpayment of CIT fiscal year 2017 from Regional Tax Office DGT Large Taxpayer III No.80367/051-00367-2018 for tax refund amounting to Rp2,264 billion by calculating taxes payable compensation amounting to Rp159 million, so it was paid amounting to Rp2,264 billion (equivalent to US\$154,758).

On February 9, 2018, the Company obtained decision No. Kep-29/WPJ.19/2018 from DGT regarding the Determination of Certain Taxpayers with Specific Criteria, effective from January 1, 2018 to December 31, 2019. Taxpayers that fulfilled all criterias can be get any tax refund if they had previously overpaid taxes.

On March 21, 2017, the Tax Court partially accepted the Company's tax appeals on SKPKB of VAT for period December 2007. The Company received tax refund for the overpayment of VAT amounting to Rp1,621 billion (equivalent to US\$121,576) on August 3, 2017.

The increase in VAT payments in 2017 was mainly due to advance payment of VAT for LPG and diesel subsidies, and withholding income tax.

On March 3, 2017, the Company received tax refund overpayment letters for overpayment of CIT fiscal years 2014 and 2013, respectively amounting to Rp3,884 billion (equivalent to US\$296,363) and Rp23,253 million (equivalent to US\$1,754).

b. Taxes payable

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
CIT - Company	-	-	19,684	-
CIT - Subsidiaries	334,014	200,302	448,771	309,725
Sub-total	334,014	200,302	468,455	309,725
Other taxes:				
- Income taxes - Article 21	88,018	38,559	35,138	40,609
- Income taxes - Article 23/26	48,424	14,726	13,232	11,708
- Income taxes - Article 22	9,616	13,296	10,580	6,341
- Income taxes - Article 15/4(2)	7,405	9,564	6,348	7,117
- Income taxes - Article 24	3	24	269	1
- VAT	117,666	103,724	74,630	68,681
- Fuel taxes	95,019	124,314	119,645	117,347
Sub-total	366,151	304,207	259,842	251,804
Total	700,165	504,509	728,297	561,529

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41. TAXATION (continued)

c. Income tax expense - net

	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (unaudited)	2019 (unaudited)	2019	2018	2017
Current tax expense (Note 40d)	(955,428)	(1,473,944)	(1,880,157)	(2,630,003)	(1,702,464)
Deferred income tax benefit (expense) (Note 40e)	(90,968)	(201,904)	(383,912)	(386,198)	532,091
Net	(1,046,396)	(1,675,848)	(2,264,069)	(3,016,201)	(1,170,373)

d. Current taxes

Current income tax computation is based on estimated taxable income/(loss). The amounts may be adjusted when annual tax returns are filed with the DGT.

The reconciliation between the consolidated profit before income tax and estimated taxable income is as follows:

	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (unaudited)	2019 (unaudited)	2019	2018	2017
Consolidated profit before income tax expense	348,358	2,456,381	4,882,107	5,741,948	3,880,559
Add:					
Consolidation eliminations	576,590	2,452,722	3,301,412	3,601,121	2,247,936
Profit before income tax - Subsidiaries	(1,266,912)	(4,087,470)	(5,636,848)	(6,613,026)	(3,834,632)
Profit before income tax - the Company	(314,964)	821,640	2,546,671	2,730,043	2,293,863
Temporary differences:					
Provision for incentives and performance bonuses (tantien)	(39,341)	(140,949)	21,576	(6,894)	19,920
Provision for impairment of financial assets	151,362	13,581	147,113	(139,273)	20,305
Finance lease assets and liabilities	(3,348)	13,725	43,041	(7,368)	48,659
Discount and unamortized debt issuance cost	(4,130)	4,334	2,143	(55)	8,095
Provision for impairment of non-free and non-clear assets	-	-	-	-	-
Accrual for legal costs	47,267	295	568	14,918	8,087
Provision for impairment of inventories	(96,833)	8,207	(45,241)	137,248	32,404
Fixed assets depreciation	(192,144)	(83,554)	400,770	(112,976)	(2,756)
Receivable fair value adjustment from differences in pricing	(41,068)	(173,396)	(501,680)	981,331	-
Employee benefits liability	(110,865)	27,830	(112,026)	(181,421)	(121,652)
Fixed asset revaluation	-	-	-	(14,221)	-
Others	112,383	(6,173)	2,926	7,624	(346)

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41. TAXATION (continued)

d. Current taxes (continued)

The reconciliation between the consolidated profit before income tax and estimated taxable income is as follows:

	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (unaudited)	2019 (unaudited)	2019	2018	2017
Permanent differences:					
Non-deductible expenses	343,067	394,914	542,514	342,456	1,093,884
Post-retirement healthcare benefits	(23,587)	57,316	96,394	648	46,334
Non-depreciable fixed assets	2,912	3,859	5,101	5,372	5,201
Income from subsidiaries and associates	(579,435)	(2,353,867)	(3,285,220)	(3,341,620)	(1,997,866)
Interest income subjected to final tax	(94,591)	(326,130)	(229,733)	(149,244)	(148,704)
Other income subjected to final tax	(808)	(2,390)	(8,328)	1,055,818	(147,399)
Total temporary and permanent differences	(529,159)	(2,562,398)	(2,920,082)	(1,407,657)	(1,135,834)
Taxable income (loss) income - the Company	(871,123)	(1,740,758)	(373,411)	1,322,386	1,158,029
Current income tax - the Company	-	-	-	330,597	289,507
Prior year adjustments	-	-	7,172	42,403	-
Current income tax - Subsidiaries	955,428	1,473,944	1,872,985	2,257,003	1,412,957
Consolidated current income tax	955,428	1,473,944	1,880,157	2,630,003	1,702,464

The reconciliation between the Group's income tax expense and the theoretical tax amount on the Group's consolidated profit before income tax is as follows:

	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (unaudited)	2019 (unaudited)	2019	2018	2017
Profit before income tax - Consolidated	348,358	2,456,381	4,882,107	5,741,948	3,880,559
Tax calculated at weighted average statutory tax rates	424,966	1,434,185	2,664,065	2,302,640	1,829,522
Non-deductible expenses	105,239	302,000	416,418	377,256	494,997
Post-retirement healthcare benefits	(5,189)	14,329	24,099	162	11,583
Non-depreciable fixed assets	755	1,016	1,344	1,368	(8,856)
Income from subsidiaries and associates	(124,304)	(603,277)	(853,718)	(868,954)	(553,989)
Income subjected to final tax	333,560	195,787	(21,842)	1,198,784	(35,280)
Interest income subjected to final tax	(29,481)	(103,380)	(66,777)	(37,458)	(34,943)
Fixed assets revaluation	-	-	-	-	(532,661)
Impairment of deferred tax	149,202	-	-	-	-
Prior year adjustments	-	-	7,172	42,403	-
Unrecognized tax loss	191,648	435,188	93,308	-	-
Consolidated corporate income tax expense	1,046,396	1,675,848	2,264,069	3,016,201	1,170,373

The theoretical amount of income tax expense is calculated using the weighted average tax rate applicable to entities consolidated to the Group. The weighted average tax rate were 300%, 68%, 55%, 53% and 30% for the nine-month periods ended September 30, 2020 and 2019, and the years ended December 31, 2019, 2018, and 2017, respectively.

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41. TAXATION (continued)

e. Deferred tax

	September 30, 2020 (unaudited)						
	January 1, 2020	Additions from business combinations	Charged to equity	Translation adjustment	Charged to OCI	Charged to profit or loss	September 30, 2020
Deferred tax assets							
Employee benefits	224,806	-	86	2,927	(284)	(25,954)	201,581
Provision for impairment of financial assets	117,567	-	-	(296)	-	33,661	150,932
Provision for decommissioning and site restoration	74,946	-	17	-	-	(4,474)	70,489
Provision for incentives and performance bonuses (tantiem)	69,543	-	-	(60)	-	(9,618)	59,865
Unrealized profits from transaction at consolidation level	59,618	-	-	-	-	(55,779)	3,839
Fixed assets	754,883	-	-	(116,201)	298	(150,314)	488,666
Provision for impairment of inventories	59,442	-	-	(76)	-	(20,681)	38,685
Provision for impairment of non-free and non-clear assets	27,589	-	-	-	-	-	27,589
Tax losses carry-forward	2,862	-	-	(65)	-	582	3,379
Deferred revenues	398	-	-	21	-	1	420
Accrual for legal cost	7,511	-	-	-	-	10,399	17,910
Oil and gas properties	(10,340)	-	-	-	-	(31,611)	(41,951)
Finance lease assets and liabilities	(2,334)	-	-	(5)	-	154,962	152,623
Discount and unamortized debt issuance cost	(5,415)	-	-	-	-	(908)	(6,323)
Receivable fair value adjustment from Disparity of Selling Price	119,913	-	-	-	-	(9,035)	110,878
Impairment of deferred tax	-	-	-	-	-	(149,202)	(149,202)
Others	10,227	-	7,608	(444)	-	22,110	39,501
Sub-total consolidated deferred tax assets - net	1,511,216	-	7,711	(114,199)	14	(235,861)	1,168,881
Deferred tax liabilities							
Provision for decommissioning and site restoration	338,846	-	(11)	-	-	25,857	364,692
Finance lease assets	28,124	-	(2)	-	24	(161,506)	(133,360)
Deferred revenues	8,297	-	-	-	-	801	9,098
Employee benefits	20,388	-	-	4	-	2,418	22,810
Provision for impairment	(6,094)	-	-	10	-	12,761	6,677
Oil and gas properties	(3,530,323)	-	(18,454)	(58,210)	-	688,577	(2,918,410)
Excess of fair value over net book value	(12,256)	-	-	24	-	471	(11,761)
Fixed assets	(270,515)	-	9,263	220,313	-	(224,894)	(265,833)
Unrealized profits from transaction at consolidation level	(310,952)	-	-	-	-	19,425	(291,527)
Others	2,859	-	9,202	-	-	(219,017)	(206,956)
Sub-total consolidated deferred tax liabilities - net	(3,731,626)	-	(2)	162,141	24	144,893	(3,424,570)
Total	(2,225,355)	-	7,709	52,886	38	(90,968)	(2,255,689)

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41. TAXATION (continued)

e. Deferred tax (continued)

	December 31, 2019						
	January 1, 2019	Additions from business combinations	Charged to equity	Translation adjustment	Charged to OCI	Charged to profit or loss	December 31, 2019
Deferred tax assets							
Employee benefits	247,522	-	(262)	1,541	387	(24,382)	224,806
Provision for impairment of financial assets	79,477	-	-	145	-	37,945	117,567
Provision for decommissioning and site restoration	122,236	-	(103)	-	-	(47,187)	74,946
Provision for incentives and performance bonuses (tantiem)	62,096	-	-	34	-	7,413	69,543
Unrealized profits from transaction at consolidation level	75,694	-	-	-	-	(16,076)	59,618
Fixed assets	590,049	-	-	29,167	-	135,667	754,883
Provision for impairment of inventories	70,367	-	-	30	-	(10,955)	59,442
Provision for impairment of non-free and non-clear assets	27,589	-	-	-	-	-	27,589
Tax losses carry-forward	2,071	-	(647)	52	-	1,386	2,862
Deferred revenues	276	-	-	-	-	122	398
Accrual for legal cost	7,369	-	-	-	-	142	7,511
Oil and gas properties	(72,763)	-	-	-	-	62,423	(10,340)
Finance lease assets and liabilities	(12,996)	-	-	-	-	10,662	(2,334)
Discount and unamortized debt issuance cost	(5,951)	-	-	-	-	536	(5,415)
Receivable fair value adjustment from Disparity of Selling Price	245,333	-	-	-	-	(125,420)	119,913
Others	6,968	-	703	(5,973)	-	8,529	10,227
Sub-total consolidated deferred tax assets - net	1,445,377	-	(309)	24,996	387	40,805	1,511,216
Deferred tax liabilities							
Provision for decommissioning and site restoration	365,065	-	-	-	-	(26,220)	338,846
Finance lease assets	29,905	-	-	-	-	(1,781)	28,124
Deferred revenues	8,068	-	-	-	-	229	8,297
Employee benefits	16,657	-	103	1	320	3,307	20,388
Provision for impairment	2,008	-	439	4	-	(8,545)	(6,094)
Oil and gas properties	(3,070,616)	-	-	-	-	(459,707)	(3,530,323)
Excess of fair value over net book value	(12,598)	-	(426)	(6)	-	774	(12,256)
Fixed assets	(202,102)	-	35	(156)	-	(68,292)	(270,515)
Unrealized profits from transaction at consolidation level	(342,856)	-	-	-	-	31,904	(310,952)
Others	(101,145)	-	-	391	-	103,614	2,859
Sub-total consolidated deferred tax liabilities - net	(3,307,613)	-	151	234	320	(424,717)	(3,731,626)
Total	(1,862,276)	-	(158)	25,230	707	(383,912)	(2,220,410)

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41. TAXATION (continued)

e. Deferred tax (continued)

	December 31, 2018						
	January 1, 2018	Additions from business combinations	Charged to equity	Translation adjustment	Charged to OCI	Charged to profit or loss	December 31, 2018
Deferred tax assets							
Employee benefits	314,471	-	516	5,143	(1,302)	(71,306)	247,522
Provision for impairment of financial assets	121,406	-	-	(367)	-	(41,562)	79,477
Provision for decommissioning and site restoration	136,394	-	591	-	-	(14,749)	122,236
Provision for incentives and performance bonuses (tantiem)	83,513	-	-	(43)	-	(21,374)	62,096
Unrealized profits from transaction at consolidation level	64,825	-	-	-	-	10,869	75,694
Fixed assets	522,034	-	-	(3,274)	133	71,156	590,049
Provision for impairment of inventories	37,156	-	-	(46)	-	33,257	70,367
Provision for impairment of non-free and non-clear assets	27,588	-	-	1	-	-	27,589
Tax losses carry-forward	13,764	-	1,567	(27)	-	(13,233)	2,071
Deferred revenues	7,590	-	-	-	-	(7,314)	276
Accrual for legal cost	3,640	-	-	-	-	3,729	7,369
Oil and gas properties	(5,002)	-	(3,382)	-	-	(64,379)	(72,763)
Finance lease assets and liabilities	(11,205)	-	-	2	-	(1,793)	(12,996)
Discount and unamortized debt issuance cost	(5,937)	-	-	-	-	(14)	(5,951)
Receivable fair value adjustment from Disparity of Selling Price	-	-	-	-	-	245,333	245,333
Others	64,541	-	(2,439)	(298)	-	(54,836)	6,968
Sub-total consolidated deferred tax assets - net	1,374,778	-	(3,147)	1,091	(1,169)	73,784	1,445,337
Deferred tax liabilities							
Provision for decommissioning and site restoration	371,738	-	-	-	-	(6,672)	365,066
Finance lease assets	29,013	-	-	-	-	892	29,905
Deferred revenues	10,750	-	-	-	-	(2,682)	8,068
Employee benefits	8,549	-	-	-	(395)	8,503	16,657
Provision for impairment	1,081	-	-	-	-	927	2,008
Oil and gas properties	(2,801,228)	-	-	-	-	(269,388)	(3,070,616)
Excess of fair value over net book value	(14,114)	-	-	-	-	1,516	(12,598)
Fixed assets	(351,303)	-	-	167	-	149,035	(202,101)
Unrealized profits from transaction at consolidation level	(377,158)	-	-	-	-	34,302	(342,856)
Others	274,320	-	-	949	-	(376,415)	(101,146)
Sub-total consolidated deferred tax liabilities - net	(2,848,352)	-	-	1,116	(395)	(459,982)	(3,307,613)
Total	(1,473,574)	-	(3,147)	2,207	(1,564)	(386,198)	(1,862,276)

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41. TAXATION (continued)

e. Deferred tax (continued)

	December 31, 2017						
	January 1, 2017	Additions from business combinations	Charged to equity	Translation adjustment	Charged to OCI	Charged to profit or loss	December 31, 2017
Deferred tax assets							
Employee benefits	302,651	-	321	3,365	40,486	(32,352)	314,471
Provision for impairment of financial assets	114,611	-	864	(98)	-	6,029	121,406
Provision for decommissioning and site restoration	123,449	-	-	-	-	12,945	136,394
Provision for incentives and performance bonuses (tantiem)	72,084	-	-	102	-	11,327	83,513
Unrealized profits from transaction at consolidation level	48,756	-	-	-	-	16,069	64,825
Fixed assets	(20,845)	-	2,612	(18)	-	540,285	522,034
Provision for impairment of inventories	29,194	-	-	(8)	-	7,970	37,156
Provision for impairment of non-free and non-clear assets	27,588	-	-	-	-	-	27,588
Tax losses carry-forward	41,240	-	-	-	-	(27,476)	13,764
Deferred revenues	12,100	-	-	140	-	(4,650)	7,590
Accrual for legal cost	1,618	-	-	-	-	2,022	3,640
Oil and gas properties	(37,375)	-	-	-	-	32,373	(5,002)
Finance lease assets and liabilities	(23,333)	-	-	(1)	-	12,129	(11,205)
Discount and unamortized debt issuance cost	(7,962)	-	-	-	-	2,025	(5,937)
Others	71,559	-	666	(36)	-	(7,648)	64,541
Sub-total consolidated deferred tax assets - net	755,335	-	4,463	3,446	40,486	571,048	1,374,778
Deferred tax liabilities							
Provision for decommissioning and site restoration	367,350	(1,058)	-	-	-	5,446	371,738
Finance lease assets	30,670	-	-	-	-	(1,657)	29,013
Deferred revenues	22,404	-	-	-	-	(11,654)	10,750
Employee benefits	7,353	-	-	-	180	1,016	8,549
Provision for impairment	1,085	696	-	-	-	(700)	1,081
Oil and gas properties	(2,437,710)	(276,196)	-	-	-	(87,322)	(2,801,228)
Excess of fair value over net book value	(30,845)	2,352	-	-	-	14,379	(14,114)
Fixed assets	(242,985)	(8,362)	-	575	-	(100,528)	(351,300)
Unrealized profits from transaction at consolidation level	(410,531)	-	-	-	-	33,373	(377,158)
Others	164,492	48	-	1,087	-	108,690	274,317
Sub-total consolidated deferred tax liabilities - net	(2,528,717)	(282,520)	-	1,662	180	(38,957)	(2,848,352)
Total	(1,777,382)	(282,520)	4,463	5,108	40,666	532,091	(1,473,574)

Deferred tax assets and liabilities as of September 30, 2019, and December 31, 2018, 2017, and 2016 have been calculated taking into account the applicable tax rates for each respective period.

The Group's management is of the opinion that the above deferred tax assets can be fully recovered through future taxable income.

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41. TAXATION (continued)

f. Administration

The Indonesian prevailing Tax Law requires each Company in the Group to submit individual tax returns on the basis of self assessment. Under the prevailing regulations, DGT may assess or amend tax within certain periods. For the fiscal year of 2007 and backward, this amendment period is within ten years from the time the tax due, but not later than 2013, while for the fiscal year of 2008 and onwards, the period is within five years from the time the tax due.

PGN and its subsidiaries

Audit Result Notification Letter (“SPHP”), Tax Collection Letter (“STP”), and Tax Underpayment Assessment Letter (“SKPKB”) on sales of natural gas

PT PGN received Tax examination result Letter (“SPHP”), Tax Collection Letter (“STP”), and Tax Underpayment Decision Letter (“SKPKB”) amounted Rp 8.79 trillion which is mostly the imposition of VAT on gas sales.

The Company does not agree with those SKPKB and SPHP above because gas sales is not a VAT object. This is based on a letter received from Kantor Pelayanan Pajak Badan Usaha Milik Negara No. S-470.WPJ.19/KP.0307/2009 dated August 19, 2009 confirming that gas is included as a mining or drilling commodity that directly obtained from its sources which is not an object to VAT. Management is of the opinion that these matters will not have material adverse impact on the Group’s financial position and cash flows.

Up until March 2020, the “Surat Keputusan Keberatan” has been issued to granted an appeal of the company of 2014, 2015, 2016 and 2017 SKPKBs which amounting to Rp 3,99 trillion and verdict hearing for SKPKB PPN for the sale of natural gas on 2012 and 2013 period with the court’s decision to granted fully with the totalling amount Rp 4,15 trillion.

Directorat General of Taxation submit the case for reconsideration for the Tax Court’s Verdict of 2012 and 2013 Value-Added Tax Tax Dispute to Supreme Court and company has delivered Counter Memo of the case reconsideration to Supreme Court.

Branch Profit Tax (“BPT”) and transfer tax disputes

On November 18, 2015, DGT issued a Decree of SKPKB withholding tax article 4 (2) No. 00001/245/14/081/2015 amounting to US\$127,720 on behalf of BUT Saka Indonesia Pangkah Limited (“SIPL”). The issuance of the SKPKB is related to the imposition of a Branch Profit Tax (“BPT”) transaction for the indirect transfer of Participating Interest over the transfer of share ownership of BUT SIPL owned by Hess Oil & Gas Holding Inc. (“HOGHI”) to Saka Energi Indonesia (“SEI”). SIPL does not agree and has not paid the SKPKB.

In February 2016, SIPL submitted an objection to the DGT and on February 10, 2017, DGT rejected the objection request through the Decree of the DGT No KEP-00158/KEB/WPJ.07/2017.

In May 2017, SIPL submitted an appeal to the Tax Court, and the appeal was granted based on Tax Court Decision No. Put.112654.35/2014/PP/M.IB year 2018 dated November 28, 2018. Upon the Tax Court’s decision, DGT filed a request for reconsideration (“PK”) to the Supreme Court (“MA”), and upon requesting the PK, the MA granted the PK from DGT based on MA decision No. 4003/B/PK/Act/2019 dated November 28, 2019. Upon the MA decision, the Tax Court sent a letter No. PPMA-316T/PAN/2020 date January 17, 2020 regarding the notification and copy of the Supreme Court decision, which was received by SIPL on January 20, 2020.

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41. TAXATION (continued)

f. Administration (continued)

Branch Profit Tax ("BPT") and transfer tax disputes (continued)

In relation with the above Supreme Court's decision, at the end of 2019 Saka was pursuing legal action in the London Court of International Arbitration ("LCIA") as stipulated in the Sales and Purchase Agreement of Pangkah block acquisition.

SIPBV and SPLLC are also involved in similar tax disputes regarding Income Tax Article 26(4). On August 14, 2020, Supreme Court has issued its decision No. 1208/B/PK/Pjk/2020 which rejected DGT's reconsideration request on the Income Tax Article 26(4) for SIPBV. On December 17, 2020, Supreme Court has released its decision No. 4943B/PK/Pjk/2020 on its website which SPLLC obtained a favourable decision on the Income Tax Article 26(4). Management has not recorded any provision for these tax disputes.

On 14 December 2020, Supreme Court has released its decisions on its website which rejected DGT's reconsideration request on the Income Tax Article 4(2) for SIPL, SIPBV and SPLLC.

Government regulations

As of the completion date of the consolidated financial statements, the Government of Indonesia ratified the Government Regulation in lieu of the Law of the Republic of Indonesia Number 1 Year 2020 regarding the State Financial Policies and Financial System Stability for Handling Pandemic Corona Virus Disease 2019 (Covid-19)/or In the Context to Anticipate Harmful Threats National Economy and/or Financial System Stability as of March 31, 2020. In Chapter II regarding State Financial Policies, the Third Section on Policies in the Field of Taxation, in article 5 paragraph (1) states that there are adjustments to the tax rates for corporate income tax payers and permanent establishments entities to become 22% for fiscal years 2020 and 2021 and 20% starting fiscal year 2022. Therefore, in 2020, if there are no significant changes in other aspects of the industry, a reduction in tax rates will have an impact on the reduction of current tax with a note that the reduction in taxes due to reduction in the Corporate Income Tax Rate is greater than the impairment of Deferred Tax Assets.

g. Tax amnesty

The Company participated in Tax Amnesty Program on March 31, 2017 and received the certificate of Tax Amnesty No. KET-369/PP/WPJ.19/2017 on April 6, 2017. As a result the Company withdrew, by law, all processes of Objections, Appeals, and Judicial reviews for the fiscal year until 2015.

The results of the tax amnesty program are as follows:

- a. The Company's remaining amount of 2014 fiscal loss amounting to US\$75,362 will not be compensated.
- b. Tax dispute which was previously recognized in prepaid tax non-current portion amounting to US\$621,148 (net of provision which has been recorded) (Note 39), were expensed.

PT Pertamina Lubricants participated in Tax Amnesty Program on March 31, 2017 and received the certificate of Tax Amnesty on April 5, 2017. As a result, PT Pertamina Lubricants withdrew, by law, all processes of Objections, Appeals, and Judicial reviews for the fiscal year until 2015.

As consequences of the tax amnesty program discussed above, PT Pertamina Lubricants has written-off its input VAT amounting to Rp210,301 million (equivalent to US\$15,418).

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41. TAXATION (continued)

h. Fixed asset revaluation for tax purposes

The Company submitted a request to revalue certain refineries assets for tax purposes on December 28, 2016.

On July 10, 2017, the Company received approval for the revaluation of refineries as referred to the decision of the Director General of Taxes No. KEP-104/WPJ.19/2017. The consequences of the approval are as follows:

- a. Prepaid tax of final income tax amounting to US\$129,610 was recognized as expense (Note 39).
- b. Recognized deferred tax assets amounting to US\$532,660.

42. RELATED PARTY BALANCES AND TRANSACTIONS

Significant related party accounts are as follows:

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
Cash and cash equivalents (Note 7)	9,739,858	6,253,262	8,426,683	6,082,406
Restricted cash (Note 8)	179,613	127,845	86,230	88,896
Trade receivables - related parties (Note 42a)	1,776,712	1,554,094	1,297,651	1,095,016
Due from the Government (Note 10)	4,203,663	6,689,595	4,758,409	2,155,739
Other receivables – related parties (Note 42b)	184,279	182,487	149,178	255,054
Restricted cash - non-current (Note 16a)	1,179,306	1,154,261	911,933	847,470
Total	17,263,431	15,961,544	15,630,084	10,524,581
As a percentage of total assets	25%	24%	24%	18%
Short-term loans (Note 17)	261,411	1,085,263	3,170,930	355,518
Trade payables - related parties (Note 42c)	73,970	73,304	78,781	49,277
Due to the Government (Note 19)	1,758,873	1,736,442	2,002,825	1,831,245
Long-term liabilities (Note 21)	132,019	190,651	189,111	185,756
Other payables - related parties (Note 42d)	44,296	72,672	52,455	56,625
Total	2,270,569	3,158,331	5,494,102	2,478,421
As a percentage of total liabilities	6%	9%	16%	8%

a. Trade receivables

Trade receivables - related parties result from domestic sales of crude oil, natural gas and geothermal energy and the export of oil products.

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
Trade receivables - related parties	1,962,930	1,623,238	1,330,381	1,141,863
Provision for impairment	(186,218)	(69,144)	(32,730)	(46,847)
Net	1,776,712	1,554,094	1,297,651	1,095,016

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42. RELATED PARTY BALANCES AND TRANSACTIONS (continued)

a. Trade receivables (continued)

Trade receivables based on customers are as follows:

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
Indonesian Armed Forces ("TNI")/ Ministry of Defence (Note 48b,ii)	558,569	432,781	318,142	258,566
PT Garuda Indonesia (Persero) Tbk,	554,983	408,224	239,178	106,801
PLN and its subsidiaries	350,517	420,480	449,662	385,419
PPT Energy Trading Co., Ltd,	177,153	48,938	33,814	47,275
PT Pupuk Indonesia (Persero)	34,145	68,704	25,412	43,667
PT Patra SK	33,430	22,605	40,013	40,117
PT Merpati Nusantara Airlines (Persero)	11,177	11,956	11,499	12,254
Polisi Republik Indonesia ("Polri")	9,784	2,143	508	-
PT Donggi Senoro LNG	5,281	21,537	28,828	14,789
PT Aneka Tambang	3,882	2,801	14,226	-
Others	224,009	183,069	169,099	232,975
	1,962,930	1,623,238	1,330,381	1,141,863
Provision for impairment	(186,218)	(69,144)	(32,730)	(46,847)
Total	1,776,712	1,554,094	1,297,651	1,095,016

Movements in the provision for impairment of trade receivables from related parties are as follows:

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
Beginning balance	(69,144)	(32,730)	(46,847)	(105,824)
Adjustment of balance				
On the initial of implementing SFAS 71	(7,218)	-	-	-
Reversal of provision for impairment for recovered receivables - net	49,422	1,159	18,734	92,757
Impairment during the period/year	(164,880)	(36,475)	(7,606)	(32,854)
Foreign exchange	5,602	(1,098)	2,989	(926)
Ending balance	(186,218)	(69,144)	(32,730)	(46,847)

Management believes that the provision for impairment is adequate to cover possible losses that may arise from the uncollectible trade receivables from related parties.

Details of trade receivables by currencies are as follows:

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
Indonesian rupiah	1,193,107	1,053,963	870,672	610,347
US dollar	769,752	569,206	459,641	531,449
Others	71	69	68	67
Total	1,962,930	1,623,238	1,330,381	1,141,863

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42. RELATED PARTY BALANCES AND TRANSACTIONS (continued)

a. Trade receivables (continued)

Receivable from fuel and lubricant distribution to the Indonesian Armed Forces/Ministry of Defence

The fuel and lubricant distribution to the Indonesian Armed Forces/Ministry of Defence is based on the planned needs of the Indonesian Armed Forces/Ministry of Defence and is capped by the State Budget for Fuels and Lubricants ("BMP") as one of the expenditure items of the Indonesian Armed Forces/Ministry of Defence, the details are as follows:

	September 30, 2020 (unaudited)	December 31, 2019	December 31, 2018	December 31, 2017
Beginning balance	432,781	318,142	258,566	644,950
Distribution of fuel and lubricant	247,253	453,926	479,959	383,307
Collections from BMP distribution	(91,962)	(346,610)	(403,723)	(764,355)
Foreign exchange	(29,503)	7,323	(16,660)	(5,336)
Net	558,569	432,781	318,142	258,566

At September 30, 2020, and December 31, 2019, 2018, and 2017, management has recognized impairment the amounting to US\$32,190, and US\$39,741, US\$12,992 and US\$10,409. respectively.

Receivable from fuel distribution to PLN

The Company distributes diesel fuel and industrial fuel oil to PLN for their power plant in all regions across Indonesia. In 2020, the Company has made collections from PLN based on the price agreed by the Boards of Directors of the Company and PLN on May 22, 2018 which is valid until December 2020.

Should there be difference between the provisional and the final agreed formulation prices, the adjustment will be recorded in the period when the final formulation prices agreement is completed.

b. Other receivables

Other receivables by customers are as follows:

	September 30, 2020 (unaudited)	December 31, 2019	December 31, 2018	December 31, 2017
PT Donggi Senoro LNG	125,646	121,784	115,500	109,458
PLN and its subsidiaries	24,969	44,491	51,159	-
PT Jawa Satu Power	-	-	-	96,000
PT Perta Daya Gas	-	-	-	34,152
PT Merpati Nusantara Airlines (Persero)	17,677	18,919	18,190	19,472
Others (each below US\$10,000)	66,876	82,225	48,852	97,181
Sub-total	235,168	267,419	233,701	356,263
Provision for impairment	(18,368)	(20,375)	(19,616)	(20,860)
Sub-total	216,800	247,044	214,085	335,403
Less: current portion	(184,279)	(182,487)	(149,178)	(255,054)
Non-current portion (Note 16)	32,521	64,557	64,907	80,349

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42. RELATED PARTY BALANCES AND TRANSACTIONS (continued)

b. Other receivables (continued)

Movements in the provision for impairment of other receivables from related parties are as follows:

	September 30, 2020 (unaudited)	December 31, 2019	December 31, 2018	December 31, 2017
Beginning balance	(20,375)	(19,616)	(20,860)	(20,983)
Reversal of impairment on the recovered receivables	38	-	699	127
Impairment during the period/year	(40)	(2)	(705)	(162)
Foreign exchange difference	1,291	(757)	1,250	158
Ending balance	(19,086)	(20,375)	(19,616)	(20,860)

Management believes that the provision for impairment is adequate to cover possible losses that may arise from the uncollectible other receivables from related parties.

Receivables from PT Donggi Senoro LNG

The receivables from PT Donggi Senoro LNG as of September 30, 2020 and December 31, 2019, 2018, and 2017 amounted to US\$125,646, and US\$121,784, US\$115,500, and US\$109,458 are intended for the construction of a LNG production facility with a capacity of 2 million tonnes per year, PT Donggi Senoro LNG is owned by PHE (29%), Sulawesi LNG Development Limited (59.9%) and PT Medco LNG Indonesia (11.1%). This project is funded by 40% from equity and 60% from loan.

The interest rate on the loan is one month US dollar LIBOR plus 3.75% per annum and interest is due every three months after the loan drawdowns. In 2018 and 2017, accrued interest was added to the loan since the LNG production facility is still under construction. Interest income for the nine-month period ended September 30, 2020, and for the years ended December 31, 2019, 2018, and 2017 are US\$4,543, and US\$6,284, US\$7,110 and US\$4,908, respectively.

PT Merpati Nusantara Airlines (Persero) ("MNA")

On October 27, 2009, MNA requested to restructure its payable. An agreement was made on October 17, 2011 through a meeting at MoSOE. As of September 30, 2020, and December 31, 2019, 2018, and 2017, the provision for impairment for these receivables amounting to US\$17,677, and US\$18,919, US\$18,190 and US\$19,472 respectively.

c. Trade payables

	September 30, 2020 (unaudited)	December 31, 2019	December 31, 2018	December 31, 2017
Direktorat Jenderal Pajak ("DJP")	10,275	-	-	-
SKK Migas	9,061	8,325	-	-
PT Wijaya Karya (Persero) Tbk,	-	7,850	3,027	-
PT Trans-Pacific Petrochemical Indotama	-	7,721	-	-
PT Pembangunan Perumahan (Persero) Tbk,	-	6,824	3,690	-
PT Perta-Santan Gas	-	6,558	8,381	-
PT Asuransi Jasa Indonesia (Persero)	5,857	3,766	6,279	-
PT Rekayasa Industri	-	-	8	200
PT Seamless Pipe Indonesia Jaya	-	-	739	-
Others	48,777	32,260	56,657	49,077
Total	73,970	73,304	78,781	49,277

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42. RELATED PARTY BALANCES AND TRANSACTIONS (continued)

d. Other payables

	September 30, 2020 (unaudited)	December 31,		
		2019	2018	2017
DJKN	11,457	25,758	7,606	-
SKK Migas	9,020	5,708	-	-
PT Migas Mandiri Pratama Kutai Mahakam ("MMPKM")	7,213	28	-	-
Lembaga Manajemen Aset Negara ("LMAN")	-	31,923	32,392	-
PLN and its subsidiaries	-	380	6,044	31,452
Others	16,606	8,875	6,413	25,173
Total	44,296	72,672	52,455	56,625

e. Sales and other operating revenues

The Group made sales and other operating revenues to related parties for the nine-month periods ended September 30, 2020 and 2019, and for the years ended December 31, 2019, 2018, and 2017. Sales to related parties represent 26%, 18%, 22%, 24%, and 18% of the total sales and other operating revenues for the respective periods/years. The details are as follows:

	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (unaudited)	2019 (unaudited)	2019	2018	2017
Domestic sales of crude oil, natural gas, geothermal energy and oil products					
- Government-related entities	4,836,888	2,883,385	4,317,369	4,872,641	3,961,054
- Shareholder	395,181	401,096	548,205	450,879	401,299
- Associates	1,616	673	700	1,222	735
Subsidy reimbursements from the Government					
- Shareholder	2,530,242	3,654,557	4,875,075	5,632,468	3,572,084
Marketing fees					
- Shareholder	-	9,430	-	15,432	25,474
Revenues from other operating activities					
- Government-related entities	123,958	63,833	2,467,659	3,210,732	128,870
Total	7,887,885	7,012,974	12,209,008	14,183,374	8,089,516

f. Cost of goods sold

Purchases from related parties for the nine-month periods ended September 30, 2020 and 2019, and for the years ended December 31, 2019, 2018 and 2017 represent 18%, 22%, 22%, 25% and 22% of the total cost of goods sold, for the respective periods/years. The details are as follows:

	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (unaudited)	2019 (unaudited)	2019	2018	2017
Crude oil and gas for shareholder	3,637,749	6,335,700	8,528,269	10,002,633	6,879,687
Oil products:					
Joint ventures	72,130	102,144	133,532	158,260	174,842
Associates	58,516	-	-	332,752	82,140
Government-related entities	-	-	-	-	-
Total	3,768,395	6,437,844	8,661,801	10,493,645	7,136,669

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42. RELATED PARTY BALANCES AND TRANSACTIONS (continued)

g. Compensation of key management and Board of Commissioners

Key management comprises the Board of Directors and other key management personnel who have significant involvement in the operations of the Company. The compensation paid or payable to key management and Board of Commissioners is shown below:

	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (unaudited)	2019 (unaudited)	2019	2018	2017
Salaries and other benefits	26,426	23,775	49,921	47,273	52,781

h. Relationship with related parties

The nature of relationships with the related parties is as follows:

Relationships	Related parties
· Shareholder	The Government of the Republic of Indonesia
· Associates	PPT Energy Trading Co.,Ltd, PT Trans-Pacific Petrochemical Indotama PT Donggi Senoro LNG PT Asuransi Samsung Tugu PT Gas Energi Jambi Seplat Petroleum Development Company Plc,
· Joint ventures	PT Patra SK PT Perta Samtan Gas PT Perta Daya Gas PT Indo Thai Trading (Note 1b) PT Transportasi Gas Indonesia PT Permata Karya Jasa (Perkasa) PT Pertamina Rosneft Pengelolaan dan Petrokimia
· Common key management	Koperasi Karyawan Pertamina Dana Pensiun Pertamina Pertamina Foundation Yayasan Kesehatan Pertamina
· Government-related entities	TNI POLRI Ministry of Finance PLN and its subsidiaries PT Pupuk Indonesia (Persero) PT Krakatau Steel (Persero) Tbk, PT Garuda Indonesia (Persero) Tbk, PT Merpati Nusantara Airlines (Persero) PT Wijaya Karya (Persero) Tbk, PT PAL Indonesia (Persero) PT Bina Bangun Wibawa Mukti PT Rekayasa Industri PT Asuransi Jasa Indonesia (Persero) PT Sarana Multi Infrastruktur (Persero) BNI BNI Syariah BRI BRI Syariah BRI Agroniaga Bank Mandiri Bank Syariah Mandiri PT Arun Natural Gas Liquefaction PT Badak Natural Gas Liquefaction Indonesian Eximbank State-Owned Enterprises Local Government-Owned Enterprises

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42. RELATED PARTY BALANCES AND TRANSACTIONS (continued)

h. Relationship with related parties (continued)

The nature of relationships with the related parties is as follows:

Relationships	Related parties
· Key Management Personnel	Board of Directors Other key management of the personnel
· Governance Oversight Body	Board of Commissioners

43. SEGMENT INFORMATION

Management has determined the operating segments based on the reports reviewed by the strategic steering committee that are used to make strategic decisions.

Segments are grouped into two principal business activities consisting of Upstream and Downstream, representing the Company's reportable segments as defined in the accounting standards for segment reporting SFAS 5 (Amendment 2014), Operating Segments (Note 2u), Business activities related with Gas and New and Renewable Energy are currently grouped into Others segment because they still have not met quantitative thresholds as a reportable operating segment.

	September 30, 2020 (unaudited)					
	Upstream	Downstream	Others*)	Total before elimination	Elimination	Total consolidated
External sales	2,767,746	24,829,510	2,653,370	30,250,626	-	30,250,626
Inter-segment sales	3,354,032	(338,672)	333,818	3,349,178	(3,349,178)	-
Total segment revenues	6,121,778	24,490,838	2,987,188	33,599,804	(3,349,178)	30,250,626
Segment results**)	1,635,285	346,879	329,113	2,311,277	117,696	2,428,973
Gain (loss) on foreign exchange - net						(640,232)
Finance income						326,383
Finance costs						(761,662)
Share in net profit of associates and joint venture						(17,188)
Other expenses - net						(987,916)
Profit before income tax						348,358
Income tax expense						(1,046,396)
Profit for the period after the effect of merging entity's income adjustment						(698,038)
Profit for the year attributable to:						
Owners of the parent						(529,711)
Non-controlling interests						(168,327)
Other Information						
Segment assets	22,998,589	36,252,289	9,254,600	68,505,478	(3,315,016)	65,190,462
Long-term investments	1,125,706	17,902,478	369,008	19,397,192	(16,812,029)	2,585,163
Total assets	24,124,295	54,154,767	9,623,608	87,902,670	(20,127,045)	67,775,625
Total liabilities	8,247,785	27,059,911	5,835,767	41,143,463	(2,941,873)	38,201,590
Depreciation, depletion and amortization expense	1,801,008	926,645	374,973	3,102,626	-	3,102,626
Additions to fixed assets, oil and gas, and geothermal properties	1,896,986	3,099,993	161,275	5,158,254	-	5,158,254

*) Others consist of office and housing rentals, hotel operation, air transportation services, health services and operation of hospitals, investment portfolio management, gas transportation services, human resources development and insurance services.

**) Gross profit less sales and marketing expenses, and general and administrative expenses.

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43. SEGMENT INFORMATION (continued)

	September 30, 2019					
	Upstream	Downstream	Others*)	Total before elimination	Elimination	Total consolidated
External sales	4,699,191	31,383,136	3,245,145	39,327,472	-	39,327,472
Inter-segment sales	4,191,296	478,272	131,754	4,801,322	(4,801,322)	-
Total segment revenues	8,890,487	31,861,408	3,376,899	44,128,794	(4,801,322)	39,327,472
Segment results**)	3,835,682	(1,336,160)	412,701	2,912,223	(23)	2,912,200
Gain (loss) on foreign exchange - net						140,494
Finance income						400,745
Finance costs						(722,876)
Share in net profit of associates and joint venture						59,722
Other expenses - net						(333,904)
Profit before income tax						2,456,381
Income tax expense						(1,675,848)
Profit for the period after the effect of merging entity's income adjustment						780,533
Profit for the year attributable to:						
Owners of the parent						733,408
Non-controlling interests						47,125
Other Information						
Segment assets	28,050,000	28,854,438	6,810,412	63,714,850	(1,706,730)	62,008,120
Long-term investments	1,410,929	16,407,407	574,295	18,392,631	(15,638,925)	2,753,706
Total assets	29,460,929	45,261,845	7,384,707	82,107,481	(17,345,655)	64,761,826
Total liabilities	11,984,057	19,659,439	4,043,355	35,686,851	(846,359)	38,840,492
Depreciation, depletion and amortization expense	1,460,252	549,876	379,863	2,389,991	-	2,389,991
Additions to fixed assets, oil and gas, and geothermal properties	1,833,598	571,970	221,118	2,626,686	-	2,626,686

*) Others consist of office and housing rentals, hotel operation, air transportation services, health services and operation of hospitals, investment portfolio management, gas transportation services, human resources development and insurance services.

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43. SEGMENT INFORMATION (continued)

	December 31, 2019					
	Upstream	Downstream	Others*)	Total before elimination	Elimination	Total consolidated
External sales	6,412,938	44,064,253	4,315,329	54,792,520	-	54,792,520
Inter-segment sales	5,710,697	353,143	473,120	6,536,960	(6,536,960)	-
Total segment revenues	12,123,635	44,417,396	4,788,449	61,329,480	(6,536,960)	54,792,520
Segment results**)	5,112,657	(784,219)	548,660	4,877,098	20,828	4,897,926
Gain (loss) on foreign exchange - net						289,430
Finance income						1,221,682
Finance costs						(968,306)
Share in net profit of associates and joint venture						80,322
Other expenses - net						(638,948)
Profit before income tax						4,882,106
Income tax expense						(2,264,069)
Profit for the period after the effect of merging entity's income adjustment						2,618,037
Profit for the year attributable to:						
Owners of the parent						2,529,048
Non-controlling interests						88,989
Other Information						
Segment assets	25,726,635	34,461,868	6,643,841	66,832,344	(2,520,674)	64,311,670
Long-term investments	1,434,169	16,699,269	458,685	18,592,123	(15,605,118)	2,987,005
Total assets	27,160,804	51,161,137	7,102,526	85,424,467	(18,125,792)	67,298,675
Total liabilities	9,793,778	25,383,631	3,763,056	38,940,465	(2,948,968)	35,991,497
Depreciation, depletion and amortization expense	1,981,649	758,585	552,713	3,292,947	-	3,292,947
Additions to fixed assets, oil and gas, and geothermal properties	3,368,297	1,390,213	378,154	5,136,664	-	5,136,664

*) Others consist of office and housing rentals, hotel operation, air transportation services, health services and operation of hospitals, investment portfolio management, gas transportation services, human resources development and insurance services.

**) Gross profit less sales and marketing expenses, and general and administrative expenses.

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43. SEGMENT INFORMATION (continued)

	December 31, 2018					
	Upstream	Downstream	Others*)	Total before elimination	Elimination	Total consolidated
External sales	7,054,464	45,691,622	5,365,080	58,111,166	-	58,111,166
Inter-segment sales	5,498,100	399,699	266,115	6,163,914	(6,163,914)	-
Total segment revenues	12,552,564	46,091,321	5,631,195	64,275,080	(6,163,914)	58,111,166
Segment results**)	5,960,645	(286,777)	626,121	6,299,989	(43,479)	6,256,510
Gain on foreign exchange - net						19,623
Finance income						257,103
Finance costs						(836,672)
Share in net profit of associates and joint venture						122,723
Other expenses - net						(77,338)
Profit before income tax						5,741,949
Income tax expense						(3,016,201)
Profit for the period/year after the effect of merging entity's income adjustment						2,725,748
Profit for the year after the effect of merging entity's income adjustment attributable to:						
Owners of the parent						2,577,281
Non-controlling interests						148,467
Other Information						
Segment assets	24,620,521	35,093,033	6,806,953	66,520,507	(4,469,912)	62,050,595
Long-term investments	1,472,711	14,970,480	264,676	16,707,867	(13,885,595)	2,822,272
Total assets	26,093,232	50,063,513	7,071,629	83,228,374	(18,355,507)	64,872,867
Total liabilities	10,092,998	26,403,047	3,712,308	40,208,353	(5,023,824)	35,184,529
Depreciation, depletion and amortization expense	1,684,534	715,492	583,794	2,983,820	-	2,983,820
Additions to fixed assets, oil and gas, and geothermal properties	3,110,810	1,135,645	306,843	4,553,298	-	4,553,298

*) Others consist of office and housing rentals, hotel operation, air transportation services, health services and operation of hospitals, investment portfolio management, gas transportation services, human resources development and insurance services.

**) Gross profit less sales and marketing expenses, and general and administrative expenses.

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43. SEGMENT INFORMATION (continued)

	December 31, 2017					
	Upstream	Downstream	Others*)	Total before elimination	Elimination	Total consolidated
External sales	4,489,320	37,000,553	4,685,852	46,175,725	-	46,175,725
Inter-segment sales	3,477,012	372,195	427,098	4,276,305	(4,276,305)	-
Total segment revenues	7,966,332	37,372,748	5,112,950	50,452,030	(4,276,305)	46,175,725
Segment results**)	3,327,892	1,282,198	773,523	5,383,613	(183,477)	5,200,136
Gain on foreign exchange - net						58,137
Finance income						233,812
Finance costs						(818,044)
Share in net profit of associates and joint venture						37,905
Other expenses - net						(831,387)
Profit before income tax						3,880,559
Income tax expense - net						(1,170,373)
Profit for the period/year after the effect of merging entity's income adjustment						2,710,186
Profit for the year after the effect of merging entity's income adjustment attributable to:						
Owners of the parent						2,626,702
Non-controlling interests						83,484
Other Information						
Segment assets	23,969,823	28,451,374	9,023,381	61,444,578	(6,831,146)	54,613,432
Long-term investments	1,476,703	16,490,057	519,182	18,485,942	(15,516,290)	2,969,652
Total assets	25,446,526	44,941,431	9,542,563	79,930,520	(22,347,436)	57,583,084
Total liabilities	12,148,638	21,037,697	4,240,130	37,426,465	(6,925,443)	30,501,022
Depreciation, depletion and amortization expense	1,507,444	692,767	611,641	2,811,852	-	2,811,852
Additions to fixed assets, oil and gas, and geothermal properties	3,672,689	1,529,130	334,029	5,535,848	-	5,535,848

*) Others consist of office and housing rentals, hotel operation, air transportation services, health services and operation of hospitals, investment portfolio management, gas transportation services, human resources development and insurance services,

**) Gross profit less sales and marketing expenses, and general and administrative expenses,

Transactions between segments are carried out at agreed terms between the companies.

The following table shows the distribution of the Group's consolidated revenues based on its geographic segments:

	For the nine-month periods ended September 30,		For the years ended December 31,		
	2020 (unaudited)	2019 (unaudited)	2019	2018	2017
Revenue					
Indonesia	27,630,140	36,843,492	51,163,616	54,474,213	44,301,444
Other countries	2,620,486	2,483,980	3,628,904	3,636,953	1,874,281
Consolidated revenues	30,250,626	39,327,472	54,792,520	58,111,166	46,175,725

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43. SEGMENT INFORMATION (continued)

Revenue from two customers of the downstream segment for the years ended September 30, 2020 and 2019 represented approximately 18% and 15% (US\$5,399,958 and US\$5,729,336) of total sales and other operating revenues, respectively.

All of the Group's assets are substantially located in Indonesia, except for several owned assets outside the country such as PIEP's Subsidiaries which are located in Algeria, Iraq, Malaysia, Italia, France, Myanmar, Canada, Congo, Tanzania, Gabon, Colombia, Namibia, and Venezuela, respectively.

44. OIL AND GAS CONTRACT ARRANGEMENTS

a. Conventional PSC

PSCs are entered into by PSC Contractors with SKK Migas (previously BP Migas) acting on behalf of the Government, for a period of 20-30 years, and may be extended in accordance with applicable regulations.

- Working area

The PSC working area is a designated area in which the PSC contractors may conduct oil and gas operations, On or before the tenth year from the effective date of the PSCs, the PSC contractors must return a certain percentage of this designated working area to SKK Migas on behalf of the Government during the term of the PSC.

- Crude oil and natural gas production sharing

Crude oil and natural gas production sharing is determined annually, representing the total liftings of crude oil and gas in each period/year, net of investment credit, FTP, and cost recovery.

The PSC Contractors are subject to tax on their taxable income from their PSC operations based on their share of equity oil and natural gas production, less bonuses, at a combined tax rate comprising of corporate income tax and dividend tax.

- Cost recovery

Annual cost recovery comprises of:

- i. Current year non-capital costs;
- ii. Current year amortization of capital costs; and
- ii. Unrecovered prior years' operating costs (unrecovered costs).

- Crude oil and natural gas prices

The PSC Contractors' crude oil production is priced at ICP, Natural gas deliveries to third parties and related parties are valued based on the prices stipulated in the respective gas sales and purchase contracts.

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44. OIL AND GAS CONTRACT ARRANGEMENTS (continued)

a. Conventional PSC (conotinuued)

- DMO

Crude oil

The PSC Contractors are required to supply the domestic market in Indonesia with the following annual calculation:

- i. Multiply the total quantity of crude oil produced from the contract area by a fraction, the numerator of which is the total quantity of crude oil to be supplied and the denominator is the entire crude oil production from all petroleum companies in Indonesia.
- ii. Compute 25% of the total quantity of crude oil produced in the PSC's working area.
- iii. Multiply the lower computed, either under (i) or (ii) by the percentage of the contractor's entitlement.

The price of DMO crude oil is equal to the weighted average of all types of crude oil sold by the PSC Contractors or other price determined under the PSC.

Natural gas

The PSC Contractors are required to supply the domestic market in Indonesia with 25% of total quantity of natural gas produced in the working area multiplied by the PSC contractor's entitlement percentage.

The price of DMO for natural gas is the price determined based on the agreed contracted sales price.

- FTP

The Government and Contractors are entitled to receive an amount ranging from 10%-20% of the total production of crude oil and natural gas each year, before any deduction for recovery of operating costs and investment credit.

- Ownership of materials, supplies, and equipment

Materials, supplies, and equipment acquired by the PSC contractors for crude oil and natural gas operations belong to the Government. However, the PSC contractors have the right to utilize such materials, supplies, and equipment until they are declared surplus or abandoned with the approval of SKK Migas.

b. PT Pertamina EP cooperation agreements with SKK Migas

On September 17, 2005, an oil and gas cooperation contract in the form of Pertamina Petroleum Contract ("PPC") which is equivalent to a PSC, was signed between Special Task Force For Upstream Oil and Gas Bussiness Activities ("SKK Migas" formerly Oil and Gas Upstream Activities Agency/"BP Migas") and PT Pertamina EP as a successor contract to PPC. This is valid for a period of 30 years from September 17, 2005 until September 16, 2035, which may be extended in accordance with a written agreement between the parties (SKK Migas and PT Pertamina EP) and approval from the Government.

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44. OIL AND GAS CONTRACT ARRANGEMENTS (continued)

b. PT Pertamina EP cooperation agreements with SKK Migas (continued)

PT Pertamina EP's cooperation contract has the following financial provisions:

- Working area

The designated area in which PT Pertamina EP may conduct oil and gas operation. The area represents the former Pertamina Entity's exploration and production areas excluding Cepu and Randugunting Blocks.

- Crude oil and natural gas production sharing

PT Pertamina EP and the Government's shares of equity (profit) of oil and gas production is 67.2269% and 32.7731%, respectively for non Jambaran Tiung Biru ("JTB") Unitization working area and 75.6303% and 24.3697% for JTB Unitization working area, respectively. Equity oil and gas production is determined annually and represents the total lifting of oil and gas in each year ending December 31, net of FTP, cost recovery and investment credit.

- FTP

The Government and PT Pertamina EP are entitled to receive an amount equal to 5% of the total production of oil and gas each year before any deduction for recovery of operating costs and investment credit, FTP is shared between the Government and PT Pertamina EP in accordance with the entitlements to oil and gas production.

- Crude oil and natural gas price

PT Pertamina EP's crude oil sales are valued with ICP. Transfer of natural gas are valued with decreed price in Gas Sales Agreement ("GSA").

c. PT Pertamina EP cooperation agreements with other parties

PT Pertamina EP has entered into cooperation agreements with other parties in conducting oil and gas activities in certain parts of its PSC working area, under TAC or operating cooperation contracts with the approval of the Government through SKK Migas.

The recoverable costs and shares of equity (profit) of the other parties under the following cooperation agreements form part of PT Pertamina EP's cost recovery under its PSC.

Cooperation agreements with other parties are as follows:

- Technical Assistant Contract ("TAC")

Under a TAC, operations are conducted through partnership arrangements with PT Pertamina EP, TACs are awarded for fields which are currently in production, or which had previously been in production, but the production has ceased, Crude oil and natural gas production is divided into non-shareable and shareable portions, The non-shareable portion represents the production which is expected from the field (based on the historic production trends of the field) at the time the TAC is signed and accrues to PT Pertamina EP, Non-shareable production decreases annually, reflecting expected declines in production, The shareable portion of production corresponds to the additional production resulting from the Partners' investments in the TAC fields.

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44. OIL AND GAS CONTRACT ARRANGEMENTS (continued)

c. PT Pertamina EP cooperation agreements with other parties (continued)

- Technical Assistant Contract ("TAC") (continued)

The Partners are entitled to recover costs, subject to specified annual limitations depending on the contract terms. The remaining portion of shareable production (shareable production less cost recovery) is split between PT Pertamina EP and the Partners. The Partners' share of equity (profit) oil and gas production is stipulated in each contract and ranges from 26,7857% to 35,7143% for oil and 62,5000% for gas.

As of September 30, 2020, there are 4 TAC arrangements of PT Pertamina EP for Sumatera, Java and Papua working areas with contract term for 20 years. The effective term of those contracts range from 2002 and the end term of those contracts until 2022.

At the end of the TACs, all TAC assets are transferred to PT Pertamina EP. The TAC Partners are responsible for settling all outstanding TAC liabilities to third parties until the end of the TACs.

- Operation Cooperation Contract ("OC")

In an OC Contract, operations are conducted through partnership arrangements with PT Pertamina EP. OC Contracts are awarded for fields which are currently in production, or which have previously been in production, in which production has ceased, or for areas with no previous production. The two types of OC contracts are:

- a, OC Production - Exploration contract
- b, OC Production contract

Under an OC Production-Exploration contract, there is no Non-Shareable Oil. While for an OC Production contract, the crude oil production is divided into non-shareable and shareable portions.

The NSO portion of crude oil production represents the production which is expected from the field (based on the historic production trends of the field) at the time the OC contract is signed, and it accrues to PT Pertamina EP. The shareable portion of crude and gas production corresponds to the additional production resulting from the Partners' investments in the OC contract fields and split between the parties in the same way as under a cooperation contract. In certain OC production contracts, in the event that the production is the same as or less than the NSO, the Partner's production cost shall not be deferred and will be recovered with the following provisions:

Partner may recover the operating costs in any Calendar Year if the amount of the Partner's production is greater than the Non-Shareable Oil up to a maximum of Incremental Oil that comprises of:

- 1) Cost recovery for lifting Non-Shareable Oil up to a maximum of 80% (eighty percent) from Operating Costs of Non-Shareable Oil.
- 2) Cost recovery for lifting incremental oil up to a maximum of 80% (eighty percent) from the production of Incremental Oil produced and sold and that were not used in that Calendar Year.

If, in any Calendar Year, the operating costs exceed the value of such crude oil allocated for the Operations in that Calendar Year, then the unrecovered excess will be recovered in the following years.

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44. OIL AND GAS CONTRACT ARRANGEMENTS (continued)

c. PT Pertamina EP cooperation agreements with other parties (continued)

- Operation Cooperation Contract (“OC”) (continued)

The Partner's share of equity (profit) oil and gas production as stipulated in each contract ranges from 16,6667% to 29,8039% for oil and 28,8627% to 53,5714% for gas, respectively.

Specified investment expenditure commitments are required to be made in the first three years after the signing of the OC contract. To ensure that these expenditure commitments are met, the Partners are required to provide PT Pertamina EP with irrevocable and unconditional bank guarantees. The OC Partners are also required to make payments to PT Pertamina EP before the date of signing the OC contracts, of the amounts stated in the bid documents.

As of September 30, 2020, there are 26 OC partnership arrangements of PT Pertamina EP for Sumatera, Java, Kalimantan and Papua working area with contract term for 15-20 years. The effective term of those contracts range from 2007 until 2019 and the end term of those contracts range from 2022 until 2035.

At the end of OC contracts, all OC assets are transferred to PT Pertamina EP. The OC Partners are responsible for settling all outstanding OC liabilities to third parties until the end of the OC contracts.

- Unitisation Agreement

In accordance with Government Regulation No. 35 Year 2004 on Upstream Oil and Gas Business Activities, a PSC contractor is required to conduct unitisation if it is proven that its reservoir extends into another contractor's Working Area. The MoEMR will determine the operator for the unitisation based on the agreement between the contractors entering the unitisation after considering the opinion of SKK Migas.

As of September 30, 2020, there are 6 Unitisation arrangements of PT Pertamina EP for Sumatera, Java and Papua working area with contract term for 10-50 years. The effective term of those contracts range from 1985 until 2013 and the end term of those contracts range from 2023 until 2035.

Based on SKK Migas Letter No. SRT-0493/SKKMA0000/2018/S1 dated June 25, 2018, regarding the Establishment of New Unitization Operators in Sukowati Field, CPA Mudi Production Facilities and FSO Cinta Natomas, the PT Pertamina EP was appointed as the new operator Sukowati Field (Note 4h).

d. PHE's cooperation agreement with other parties

- Gross split contract

On January 13, 2017, the regulation of the Minister of Energy and Mineral Resources No.08/2017 regarding principles of the PSC without Cost Recovery Mechanism, also known as Gross Split PSC was issued.

In Gross Split PSC the sharing of oil and gas production between the Government of Indonesia and the Contractors is based on the following 4 criteria:

1. Base Split
2. Variable Split
3. Progressive Split
4. Ministry Discretion

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44. OIL AND GAS CONTRACT ARRANGEMENTS (continued)

d. PHE's cooperation agreement with other parties (continued)

- Gross split contract (continued)

The Government has also arranged matters related to Gross Split PSC as follows:

- i. The tax regime applicable to the Gross Split PSC is in accordance with the provisions of the income tax law;
- ii. The contractors of Gross Split PSC must reimburse unrecovered investment costs to the old PSC contractors.
- iii. The oil and gas assets of the old PSC which are now owned by the Directorate General of State Assets ("DJKN") are to be used by the Gross Split PSC contractors based on lease scheme.
- iv. Leases are levied on oil and gas assets used by the Gross Split PSC contractors and have the cost recovery, then the fair value is recalculated based on the Indonesian Appraisal Standard by the Public Appraiser, multiplied by the rental rate set by the DJKN.

As of September 30, 2020, the signed gross split PSC is as follows:

PSC partners	Working area	Area	Effective date of contract	Production commencement date	Expiry date of contract	Percentage of participation	Production	Contract period
MUJ ONWJ	Offshore North West Java Block	North West Java	19/01/2017	27/08/1971	18/01/2037	90%	Oil and gas	20 years
None	Tuban Block	East Java	20/05/2018	12/02/1997	19/05/2038	100%	Oil and gas	20 years
None	Ogan Komering Block	South Sumatera	20/05/2018	11/07/1991	19/05/2038	100%	Oil and gas	20 years
None	Offshore Southeast Sumatera Block	Southeast Sumatera	06/09/2018	1975	05/09/2038	100%	Oil and gas	20 years
None	NSO Block	North Sumatera Offshore	17/10/2018	01/10/2015	17/10/2038	100%	Oil and gas	20 years
None	Raja/Pendopo Block	South Sumatera	06/07/2019	21/11/1992	05/07/2039	100%	Oil and gas	20 years
None	Jambi Merang Block	Jambi	10/02/2019	22/02/2011	09/02/2039	100%	Oil and gas	20 years
Eni East Sepinggan Ltd,	East Sepinggan Block	East Kalimantan	20/07/2012	-	19/07/2042	15%	Oil and gas	30 years
None	Maratua Block	North & East Kalimantan	18/02/2019	-	17/02/2049	100%	Oil and gas	30 years
Petrogas (Basin) Ltd,	Kepala Burung Block	Papua	15/10/2020	07/10/1996	14/10/2040	30%	Oil and gas	20 years
Petrogas (Island) Ltd,	Salawati Block	Papua	22/04/2020	21/01/1993	22/04/2040	30%	Oil and gas	20 years
Conoco Phillips (Grissik) Ltd, Talisman, (Corridor) Ltd,	Blok Corridor	Sumatera Selatan	20/12/2023*	01/08/1987	19/12/2043	30%	Oil and gas	20 years
Medco South East Jambi BV, Repsol Exploration	Block South East Jambi	Jambi	17/07/2018*	-	16/07/2048	27%	Oil and gas	30 years

* The amended and restated to Gross Split PSC was signed on November 11, 2019

- Indonesian participation arrangements ("IP")

Through the IP arrangements, the Company, a State-Owned Enterprise, is offered a 10% working interest in PSCs at the first time Plans of Development ("POD") which was approved by the Government of Indonesia (the "Government"), represented by SKK Migas, The 14,28% interest in Jabung Block represents the acquisition of additional interest of 4,28% by the Company, The 5% interest in the Tengah Block represents 10% of the 50% foreign contractor's share, The Company assigned these IP interests to PHE's subsidiaries on January 1, 2008.

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44. OIL AND GAS CONTRACT ARRANGEMENTS (continued)

d. PHE's cooperation agreement with other parties (continued)

- Indonesian participation arrangements ("IP") (continued)

As of September 30, 2020, there are 4 IP partnership arrangements of PHE for Sumatera, Kalimantan and Papua working area with contract terms of 20-30 years, The effective term of those contracts ranges from 1990 until 2005 and the end term of those contracts ranges from 2020 until 2028 with percentage of participation range from 10% until 14,28%.

- PSC interests acquired after the issuance of Law No,22 year 2001, related to Oil and Gas

1. Oil and gas

As of September 30, 2020, there are 16 oil and gas partnership arrangements of PHE for Sumatera, Java, Kalimantan, Sulawesi, Maluku and Papua working area with contract terms of 20-30 years, The effective term of those contracts range from 2002 until 2018 and the end term of those contracts ranges from 2020 until 2046 with percentage of participation ranging from 15% until 100%.

2. Coal bed methane

As of September 30, 2020, there was 5 partnership arrangements for Coal Gas Methane in exploration activities for Sumatera and Kalimantan working area with contract term of 30-year contract period, The effective term of those contracts ranges from 2008 to 2012 and the end term of those contracts ranges from 2038 to 2042 with percentage of participation ranges from 27,5% to 100%.

3. Unconventional oil and gas

As of September 30, 2020, there are 2 Unconventional Oil and Gas partnership arrangements for Sumatera working areas with contract term of 30 years, The effective term of those contracts ranges from 2013 until 2015, and the end term of those contracts ranges from 2043 until 2045 with percentages of participation interests range from 50% until 100%.

- Joint operating body-production sharing contracts ("JOB-PSC")

In a JOB-PSC, operations are conducted by a joint operating body between PHE's Subsidiaries and the contractors, The PHE Subsidiaries' share of expenditures is paid in advance by the contractors and repaid by PHE's Subsidiaries out of their share of crude oil and natural gas production, with a 50% uplift, After all expenditures are repaid, the crude oil and natural gas production is divided between PHE's subsidiaries and the contractors based on their respective percentages of participation in the JOB-PSC, The contractors' share of crude oil and natural gas production is determined in the same manner as for a PSC.

As of September 30, 2020, there are 3 JOB-PSC Partnership arrangements of PHE for Kalimantan, Sulawesi, and Papua working area with contract terms of 30 years, The effective term of those contracts ranges from 1990 until 1998, and the end term of those contracts ranges from 2020 until 2028 with percentage of participation ranging from 37,5% until 50%.

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44. OIL AND GAS CONTRACT ARRANGEMENTS (continued)

d. PHE's cooperation agreement with other parties (continued)

- Pertamina participating interests ("PPI")

Through PPI arrangements, PHE owns working interests in contracts similar to JOB-PSC contracts. The remaining working interests are owned by a contractor who acts as an operator. PHE's share of expenses is either funded by PHE on a current basis, or paid in advance by the contractors and repaid by PHE out of their share of crude oil and natural gas production, with a 50% uplift. The crude oil and natural gas production are divided between PHE and the contractors based on their respective percentages of participation in the PSC. The contractors' share of crude oil and natural gas production is determined in the same manner as for a PSC.

As of September 30, 2020, the Subsidiaries' PPI arrangements were as follows (unaudited):

PPI partners	Working area	Area	Effective date of contract	Production commencement date	Expiry date of contract	Percentage of participation	Production	Contract period
Conoco Phillips (South Jambi) Ltd, and Petrochina International Jambi B Ltd,	B Block	South Jambi	26/01/1990	26/09/2000	25/01/2020	25%	Oil and gas	30 years

- Foreign oil and gas contract interests

Name of JOG	JOB partners	Working area	Area	Effective date of contract	Production commencement date	Percentage of participation	Production	Contract period
Petronas Carigali Pertamina Petro-Vietnam Operating Company Sdn, Bhd, ("PCPP")	Petronas Carigali Sdn, Bhd., Petrovietnam	Offshore Sarawak Block (SK 305)	Malaysia	16/06/2003	26/07/2010	30%	Oil and gas	29 years

- Unitization agreements

In accordance with Government Regulation No. 35 Year 2004 on Upstream Oil and Gas Business Activities, a contractor is required to conduct unitization if it is proven that its reservoir extends into another Contractor's Working Area. The MoEMR will determine the operator for the unitization based on the agreement between the contractors entering the unitization agreements after considering the opinion of SKK Migas.

Since several of PHE Subsidiaries' oil and gas reservoirs extend into other Contractors' Working Areas, PHE Subsidiaries entered into unitization agreements with several contractors.

As of September 30, 2020, there are 6 unitization agreements of PHE for Sumatera, Java, and Papua working areas, with contract terms ranging from 10-50 years. The effective term of those contracts ranges from 1985 until 2019, and the end term of those contracts ranges from 2023 until 2038.

- Extension and termination of PHE cooperation contract

PSC "B" ended on October 3, 2018. On September 25, 2018, the Government, through the Aceh Oil and Gas Management Agency ("BPMA"), appoints PHE NSB as operator of the "B" Working Area for several period amendment, with the latest amendment were for 1 (one) year up to November 17, 2020 or until PSC has just been signed, whichever occurs first.

The Tengah Block PSC ended on October 4, 2018. The Government decides not to extend the management of the Tengah Working Area by the existing Contractor. Until these consolidated financial statements were prepared, PHE Tengah K together, with other contractors (Total Tengah and Inpex Tengah Ltd.), are still in the process of completing their rights and obligations after termination with the Government.

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44. OIL AND GAS CONTRACT ARRANGEMENTS (continued)

e. PT Pertamina EP Cepu (PEPC)'s cooperation agreements with other parties

On September 17, 2005, a Cooperation Contract ("PSC") was signed between SKK Migas and PEPC (50% participating interest), MCL (25.50% participating interest) and Ampolex (24.50% participating interest) (jointly called a Contractor) for a period of 30 years from September 17, 2005 to September 16, 2035, and may be extended in accordance with applicable regulations, The conditions for PSC PEPC are as follows:

PSC Partner	Working area	Area	Effective date of contract	Production commencement date	Expiry date of contract	Percentage of participation	Production	Contract period
ExxonMobil Cepu Limited Ampolex (Cepu) Pte, Ltd, PT Sarana Patra Hulu Cepu PT Petrogas Jatim Utama Cendana PT Blora Patragas Hulu PT Asri Dharma Sejahtera	Cepu Block	Central Java East Java	17/09/2005	31/08/2009	16/09/2035	45%	Oil	30 years

- Unitisation agreements

As of September 30, 2020, the Subsidiaries' unitization agreements are as follows:

Partner	Working area	Area	Effective date of contract	Production commencement date	Expiry date of contract	Percentage of participation	Production	Contract period
PT Pertamina EP	EP Block Cepu Block	East Java	17/09/2005	-	16/09/2035	91.9399%	Gas	30 years

f. PT Pertamina EP Cepu Alas Dara Kemuning (PEPCADK) cooperation agreements with SKK Migas

The PSC was entered into by PEPC ADK with SKK Migas action on behalf of the Government on February 26, 2014 for a period of 30 years from February 26, 2014 until February 25, 2044, The period may be extended in accordance with applicable regulations, The Company has a 100% participating interest in the Alas Dara Kemuning Block PSC.

g. PT Pertamina Hulu Indonesia ("PHI") cooperation agreements with SKK Migas

- PSC

PSC is made by PSC contractors with the Government through the Special Task Force for Upstream Oil and Gas Business Activities ("SKK Migas" - formerly the Executive Agency for Upstream Oil and Gas Business Activities/"BP MIGAS") for a contract period of 20-30 years , This period can be extended in accordance with applicable regulations.

As of September 30, 2020, PHI Group's PSC are as follows:

PSC partner	Working area	Area	Contract effective date	Starting production date	Expiry date of contract	Partnership percentage	Production	Contract period
None	Mahakam Block	Onshore and Offshore East Kalimantan	01/01/2018	01/01/2018	31/12/2037	90%	Oil and gas	20 years

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44. OIL AND GAS CONTRACT ARRANGEMENTS (continued)

g. PT Pertamina Hulu Indonesia (“PHI”) cooperation agreements with SKK Migas (continued)

- Gross Split PSC

PSC partner	Working area	Area	Contract effective date	Starting production date	Expiry date of contract	Partnership percentage	Production	Contract period
None	Sanga Sanga Block	Onshore East Kalimantan	08/08/2018*	08/08/2018	07/08/2038	100%	Oil and gas	20 years
None	East Kalimantan and Ataka Block	Onshore and Offshore East Kalimantan	25/10/2018*	25/10/2018	24/10/2038	100%	Oil and gas	20 years
Eni West Ganal Ltd Neptune Energy West Ganal BV	West Ganal Block	Offshore Makassar Strait	26/01/2020	-	25/01/2050	30%	Oil and gas	30 years

* Contract was signed on April 20, 2018.

- Unitisation agreements

As of September 30, 2020, PHI's has unitisation agreements as follows:

Parties	Operator	Field	Location	Signing date of contract	Start contract	Production	End contract	Contract period
PT Pertamina Hulu Mahakam (PHM) & Pertamina Hulu Sanga Sanga (PHSS)	PT Pertamina Hulu Sanga Sanga (PHSS)	Nilam & Badak	East Kalimantan (KKS Mahakam and KKS Sanga Sanga)	23/10/2019	08/08/2018	08/08/2018	31/12/2037	20 years
PT Pertamina Hulu Mahakam (PHM) & Pertamina Hulu Kalimantan Timur (PHKT)	PT Pertamina Hulu Mahakam (PHM)	Peciko	East Kalimantan (KKS Mahakam and KKS East Kalimantan)	In Progress	25/10/2018	25/10/2018	31/12/2037	20 years

h. PIEP's directly and indirectly held foreign oil and gas PSC interests

As of September 30, 2020, the Company's directly and indirectly held foreign oil and gas PSCs or similar interests were as follows:

Name of JV	JV partners	Working area	Country	Effective date of contract	Date of commencement of production	Percentage of participation	Production	Contract period
Menzel Lejmat North (MLN)	Talisman (Algeria) B.V.	405a Block	Algeria	2000	2003	65%	Oil	25 years
PTTEP HK Offshore Limited	PTTEP HK Offshore Limited Petronas Carigali Sdn, Bhd,	K Block	Malaysia	27/01/1999	2007	24%	Oil and natural gas	38 years
PTTEP HK Offshore Limited	PTTEP HK Offshore Limited Petronas Carigali Sdn, Bhd,	H Block	Malaysia	19/03/2007	Development stage	24%	Natural gas	38 years
PTTEP HK Offshore Limited	PTTEP HK Offshore Limited Petronas Carigali Sdn, Bhd,	SK309	Malaysia	27/01/1999	2003	Rotan 24% Others 18%	Oil, natural gas, and condensate	29 years
PTTEP HK Offshore Limited	PTTEP HK Offshore Limited Petronas Carigali Sdn, Bhd,	SK311	Malaysia	27/01/1999	2007	25.5%	Oil, natural gas, and condensate	29 years
PTTEP HK Offshore Limited	PTTEP HK Offshore Limited Petronas Carigali Sdn, Bhd,	SK314A	Malaysia	07/05/2013	Exploration stage	25.5%	-	27 years
Mnazi Bay Exploration & Mnazi Bay Development/ Production	M&P (Operator); Wentworth, TPDC	Mnazi Bay	Tanzania	October 2006	August 2015	60,075% & 48,06%	Gas can be	2031 and extended up to 2051
Enzanga Production	M&P (Operator); The Gabonese Republic; Tullow	Ezanga	Gabon	01/01/2014	2007	80%	Oil	2034 and can be extended up to 2054

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44. OIL AND GAS CONTRACT ARRANGEMENTS (continued)

h. PIEP's directly and indirectly held foreign oil and gas PSC interests

As of September 30, 2020, the Company's directly and indirectly held foreign oil and gas PSCs or similar interests were as follows:

Name of JV	JV partners	Working area	Country	Effective date of contract	Date of commencement of production	Percentage of participation	Production	Contract period
Seplat Petroleum Development Company Plc	Seplat (Operator); NPDC	OML 4, 38, 41	Nigeria	June 1989	July 2010	45%	Oil and gas	October 2038
Seplat Petroleum Development Company Plc	Pillar Oil (Operator); Seplat	OPL 283	Nigeria	2009	May 2012	40%	Oil	October 2028
Seplat Petroleum Development Company Plc	Seplat and NNPC (Joint Operators)	OML 53	Nigeria	1997	1978	40%	Oil	June 2027
Seplat Petroleum Development Company Plc	Seplat and Belema Oil (Joint Operators); NNPC	OML 55	Nigeria	1997	February 2017	n/a*)	Oil	June 2027
-	Sonangol Pesquisae Producao (Sonangol P&P) China Songol, Eni, Sumoil (Angola), NIS (Serbia) and INA (Croatia)	3/05 Block 3/05A Block	Angola	28/09/2005	1980	20%	Oil	2025
Petroregional del Lago Mixed Company	Petroleos de Venezuela S.A. ("PDVSA"); PDVSA Social	Urdaneta West Field	Venezuela	2006	1974	32%	Oil	2026

*) Based on minutes of Management Committee Meeting dated September 15, 2016, the company has agreed to terminate the contract.

- Technical service contract ("TSC")

As of September 30, 2020, TSC participating interest held by PT Pertamina Irak Eksplorasi Produksi ("PIREP") were as follows:

Name of JV	JV partners	Working area	Country	Effective date of contract	Date of commencement of production	Percentage of participation	Production	Contract period
West Qurna 1 Field Operating Division	ExxonMobil Iraq Limited, Itochu Oil Exploration (Iraq) B.V., PetroChina International Iraq FZE, Oil Exploration Group of Iraqi Ministry of Oil (South Oil Group)	West Qurna 1 Block	Iraq	25/01/2010	25/01/2010	10%	Oil	35 years

- Unitisation agreements

As of September 30, 2020, PIEP's unitization agreements are as follows:

1. Algeria

Name of JV	JV partners	Working area	Country	Effective date of contract	Date of commencement of production	Percentage of participation	Production	Contract period
EMK	Talisman (Algeria) B.V., Sonatrach, Anadarko, Eni, Maersk	405a Block	Algeria	March 2007	2013	16,90%	Oil, Condensate, and LPG	25 years
Ourhoud	Talisman (Algeria) B.V., Sonatrach, Anadarko, Eni, Maersk, Cepsa	405a Block	Algeria	December 1997	2002	3,56%	Oil	25 years

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44. OIL AND GAS CONTRACT ARRANGEMENTS (continued)

h. PIEP's directly and indirectly held foreign oil and gas PSC interests (continued)

- Unitisation agreements

As of September 30, 2020, PIEP's unitization agreements are as follows:

2. Malaysia

Parties	Operator	Unit field	PMEP's percentage of participation	Effective date of contract	Date of commencement of production	Production	Contract period
Shell, Conoco Phillips Sabah Ltd, Petronas Carigali Sdn Bhd Murphy PTTEP Sabah Oil Limited., PMEP	Sabah Shell Petroleum Company Limited	Gumusut Kakap Field	2.75%	20/09/2004	18/11/2012	Oil and natural gas	Not specified
Shell, Conoco Phillips Sabah Ltd, Petronas Carigali Sdn Bhd PTTEP Sabah Oil Limited., PMEP	Murphy Sabah Oil Co,	Siakap North Petai Field	9.6%	01/01/2007	28/02/2014	Oil and natural gas	Not specified

i. PGN Cooperation Agreement

As of September 30, 2020, PGN has interests in the following oil and gas joint operations or Service Contracts Participation and Economic Sharing Agreements:

Working area	Country	Participating interest
Ujung Pangkah Block	Indonesia	100,00%
South Sesulu Block	Indonesia	100,00%
Fasken Block	United States of America	36,00%
Bangkanai Block	Indonesia	30,00%
West Bangkanai Block	Indonesia	30,00%
Muriah Block	Indonesia	20,00%
Ketapang Block	Indonesia	20,00%
Muara Bakau Block	Indonesia	11,67%
Wokam II Block	Indonesia	100,00%
Pekawai Block	Indonesia	100,00%
West Yamdena Block	Indonesia	100,00%

j. Rokan Cooperation Agreement

In connection with the Decree of the MoEMR of the Republic of Indonesia Number: 1923k/10/MEM/2018 regarding the Approval of Management and Determination of the Forms and Terms and Conditions of the Cooperation Contract in the Rokan Working Area dated August 6, 2018, it was decided that The Rokan working area cooperation contract which will expire on August 8, 2021 is not extended and PT Pertamina (Persero) or its affiliates are designated as managers of the Rokan Work Area after August 8, 2021.

The signature bonus that must be paid before signing the Rokan PSC is US\$783,980 and was paid on December 21, 2018, The Rokan PSC was signed on May 9, 2019, by the Special Task Force for Upstream Oil and Gas Business Activities ("SKK Migas") and PT Pertamina Hulu Rokan (PT PHR), PSC contracts effective on August 9, 2021 with the concept of Gross Split.

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44. OIL AND GAS CONTRACT ARRANGEMENTS (continued)

j. Rokan Cooperation Agreement (continued)

Profit sharing for the contractor's part is as follows:

<u>Oil/Natural Gas</u>	<u>New/Existing</u>	<u>Field Type</u>	<u>Contractor Share</u>	<u>Government Share</u>
Oil	New Field	All Fields	57% + Var, Comp, Correction + Progr, Comp, Correction	43% + Var, Comp, Corection + Progr, Comp, Correction
Oil	Existing Field	Duri Fields	65%	35%
Oil	Existing Field	Non-Duri Fields	61%	39%
Natural Gas	New Field	All Fields	52% + Var, Comp, Correction + Progr, Comp, Correction	48% + Var, Comp, Corection + Progr, Comp, Correction
Natural Gas	Existing Field	Duri Fields	70%	30%
Natural Gas	Existing Field	Non-Duri Fields	66%	34%

Since 1974, the former Pertamina Entity has been assigned geothermal working areas in Indonesia based on various decision letters issued by the Minister of Mines and Energy, In accordance with Government Regulation No, 31 Year 2003, all rights and obligations arising from the contracts and agreements entered into between former Pertamina Entity and third parties, so long as these are not contrary to Law No, 22 Year 2001, were transferred to Pertamina Entity effective September 17, 2003, Pertamina Entity through its letter No, 282/C00000/2007-S0 dated March 12, 2007 assigned its geothermal working areas to PGE effective from January 1, 2007, The transfer of Pertamina Entity's rights, obligations, and interests in geothermal business operations to PGE was approved by the MoEMR in Letters No, 2198/30/DJB/2009 dated August 4, 2009 and No, 2523/30/DJB/2009 dated September 1, 2009.

Effective from June 28, 2010, Pertamina Entity's geothermal assets were transferred to PGE, and formed part of Pertamina Entity's contribution to PGE's additional paid-up capital, This transfer of Pertamina Entity's geothermal assets were documented in Notarial Deed No, 23 dated June 28, 2010 of Lenny Janis Ishak, S,H,.

Based on the Decree of the Minister of Mines and Energy No, 2067 K/30/MEM/2012, regarding the affirmation of the territory of power and changes in the coordinate boundaries of the exploitation of geothermal resources, PT Pertamina Geothermal Energy has management rights over 14 geothermal WKPs, Referring to the original provision the Law No, 21 article 78 of 2014 regarding Geothermal Energy, at the end of 2014, 2 (two) WKPs, namely Kotamobagu and Gunung Iyang Argopuro were returned to the Government because the two WKPs up to December 31, 2014, were still not in the Exploitation stage, Furthermore, Pertamina received two (2) new WKPs, namely Mount Lawu (based on ESDM Ministerial Decree No,35,K/30/MEM/2016) and Seulawah (based on the Auction Winner Determination Letter from Aceh Governor No, 541/53157 November 1, 2013), PGE will carry out exploration activities in the two new WKPs.

The operations of the above geothermal working areas are conducted through own operations and joint operating contracts.

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45. GEOTHERMAL WORKING AREAS

As of September 30, 2020, PGE's geothermal working areas were as follows:

a. Own operation

The following working areas are operated by PGE:

Working area	Location	Field status
Gunung Sibayak-Gunung Sinabung	Sibayak, North Sumatra	Production
Kamojang-Darajat	Kamojang, West Java	Production
Lahendong	Lahendong, North Sulawesi	Production
Gunung Way Panas	Ulubelu, Lampung	Production
Karaha-Cakrabuana	Karaha, West Java	Production
Lumut Balai dan Marga Bayur	Lumut Balai, South Sumatera	Production
Hululais	Hululais, Bengkulu	Development
Sungai Penuh	Sungai Penuh, Jambi	Exploration
Gunung Lawu	Central Java	Exploration
Seulawah Agam	Aceh	Exploration

b. Joint operating contracts ("JOCs")

JOCs include geothermal activities in PGE's working areas that are conducted by third parties. In accordance with the JOCs, PGE is entitled to receive production allowances from the JOC contractors at the rate of 2,66% for the Darajat JOC and 4% for the Salak, Wayang Windu, Sarulla, and Bedugul JOCs of the JOC contractors' annual net operating income as calculated in accordance with the JOCs.

As of September, 2020, PGE's JOCs were as follows:

Working area	Location	Field status	Contractor
Cibeureum - Parabakti Ltd,	Salak, West Java	Production	Star Energy Geothermal Salak Ltd, and Star Energy Geothermal Salak Pratama
Pangalengan	Wayang Windu, West Java	Production	Star Energy Geothermal (Wayang Windu) Ltd,
Kamojang-Darajat	Darajat, West Java	Production	Star Energy Geothermal Darajat II Ltd,
Gunung Sibualbuali	Sarulla, North Sumatera	Production	Sarulla Operation Limited
Tabanan	Bedugul, Bali	Exploration	Bali Energy Ltd,

PGE's income from geothermal activities is subject to tax (government share) at the rate of 34% for the Work Area managed before the Law No, 21 of 2014 regarding Geothermal was issued.

46. GOVERNMENT AUDIT

PT Pertamina EP, PT Pertamina EP Cepu, subsidiaries of PT Pertamina Hulu Energi

The accounting policies stipulated in the PSC are subject to interpretation by SKK Migas and the Government. Every year, the accounting records and financial information from all PSC are subject to audit by SKK Migas and/or the Government. Claims arising from the audit will be approved by the PSC operator and recorded in accounting accounting by the PSC or further discussed with SKK Migas and/or the Government. The settlement of the claims discussed requires a long negotiation process.

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46. GOVERNMENT AUDIT (continued)

Management believes that the audit results for PT Pertamina EP Cooperation Contract and other PSC, wherein PT Pertamina EP Cepu and the subsidiaries of PT Pertamina Hulu Energi have the a Participating Interest, will not have a material impact on the Group's financial position and cash flows.

47. ADDITIONAL INFORMATION RELATED TO CASH FLOW

a. Activities that do not affect cash flow

	September 30, 2020 (unaudited)	December 31, 2019	December 31, 2018	December 31, 2017
Increase/decrease in finance lease assets under fixed assets (Note 14)	1,957,613	(24,181)	19,828	103,022
Capitalization of borrowing costs to fixed assets (Note 14)	42,677	18,964	31,500	25,611
Capitalization of borrowing costs to oil and gas and geothermal properties (Note 15)	12,622	25,452	24,885	32,338
Addition (deduction) in oil and gas property arising from provision for decommissioning and site restoration (Note 24)	56,382	86,640	87,035	51,498

b. Reconciliation of liabilities from financing activities

	January 1, 2020	Cash Flows	Non-Cash Changes			September 30, 2020 (unaudited)
			Dividend declare	Foreign exchange	Others	
Short-term loans	1,285,420	144,222	-	(19,039)	-	1,410,603
Dividend payable	-	(574,274)	599,182	(24,908)	-	-
Long-term liabilities	2,150,359	(369,376)	-	9,718	1,725,787	3,516,488
Bonds payable	12,614,493	2,360,465	-	26,581	-	15,001,539
Total liabilities from financing activities	16,050,272	1,561,037	599,182	(7,648)	1,725,787	19,928,630

	January 1, 2019	Cash Flows	Non-Cash Changes			December 31, 2019
			Dividend declare	Foreign exchange	Others	
Short-term loans	4,353,356	(3,108,859)	-	40,923	-	1,285,420
Dividend payable	-	(563,106)	552,659	10,447	-	-
Long-term liabilities	2,243,466	(108,588)	-	-	15,481	2,150,359
Bonds payable	11,094,096	1,498,855	-	21,542	-	12,614,493
Total liabilities from financing activities	17,690,918	(2,281,698)	552,659	72,912	15,481	16,050,272

	January 1, 2018	Cash Flows	Non-Cash Changes			December 31, 2018
			Dividend declare	Foreign exchange	Others	
Short-term loans	452,879	3,908,649	-	(8,172)	-	4,353,356
Dividend payable	-	(587,064)	614,939	(27,875)	-	-
Long-term liabilities	2,495,070	(203,939)	-	(53,281)	5,616	2,243,466
Bonds payable	10,385,873	696,758	-	-	11,465	11,094,096
Total liabilities from financing activities	13,333,822	3,814,404	614,939	(89,328)	17,081	17,690,918

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47. ADDITIONAL INFORMATION RELATED TO CASH FLOW (continued)

b. Reconciliation of liabilities from financing activities (continued)

	January 1, 2017	Cash Flows	Non-Cash Changes			December 31, 2017
			Dividend declare	Foreign exchange	Others	
Short-term loans	230,293	262,175	-	(39,589)	-	452,879
Dividend payable	-	(868,524)	907,383	(38,859)	-	-
Long-term liabilities	3,439,109	(1,440,377)	-	(3,607)	499,945	2,495,070
Bonds payable	9,772,656	625,000	-	(11,783)	-	10,385,873
Total liabilities from financing activities	13,442,058	(1,421,726)	907,383	(93,838)	499,945	13,333,822

48. FINANCIAL ASSETS AND LIABILITIES

a. Financial instruments category and fair value measurements

The following tables from to the Group's financial assets and liabilities by category:

Financial Assets					
		FVTPL	FVTOCI	Amortized Cost	Total
<u>September 30, 2020 (unaudited)</u>					
Cash and cash equivalents		-	-	10,206,405	10,206,405
Restricted cash		-	-	180,798	180,798
Short-term investments		267,652	-	23,302	290,954
Other investments		16,259	-	-	16,259
Long-term investments		559,162	-	1,546	560,708
Trade receivables		-	-	3,405,896	3,405,896
Due from the Government		-	-	4,203,663	4,203,663
Other receivables		-	-	1,066,644	1,066,644
Other non-current assets		-	-	1,567,964	1,567,964
Total Financial Assets		843,073	-	20,656,218	21,499,291
<u>December 30, 2019</u>					
Cash and cash equivalents	-	-	6,770,194	-	6,770,194
Restricted cash	-	-	182,129	-	182,129
Short-term investments	20,955	364,634	6,995	-	392,584
Other investments	-	85,834	-	-	85,834
Long-term investments	-	-	1,540	607,008	608,548
Trade receivables	-	-	3,511,811	-	3,511,811
Due from the Government	-	-	6,689,595	-	6,689,595
Other receivables	-	-	1,140,562	-	1,140,562
Other non-current assets	-	-	1,570,928	-	1,570,928
Total Financial Assets	20,955	450,468	19,873,754	607,008	20,952,185
<u>December 31, 2018</u>					
Cash and cash equivalents	-	-	9,123,488	-	9,123,488
Restricted cash	-	-	108,915	-	108,915
Short-term investments	20,534	202,195	2,470	-	225,199
Other investments	-	80,171	-	-	80,171
Long-term investments	-	15,991	1,530	532,370	549,891
Trade receivables	-	-	3,280,545	-	3,280,545
Due from the Government	-	-	4,758,409	-	4,758,409
Other receivables	-	-	884,936	-	884,936
Other non-current assets	-	-	1,150,911	-	1,150,911
Total Financial Assets	20,535	298,357	19,311,204	532,370	20,162,465

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48. FINANCIAL ASSETS AND LIABILITIES (continued)

a. Financial instruments category and fair value measurements (continued)

The following tables from to the Group's financial assets and liabilities by category: (continued)

Financial Assets					
	Fair value through profit or loss	Available for sale	Loan and receivable	Held to maturity	Total
December 31, 2017					
Cash and cash equivalents	-	-	6,429,163	-	6,429,163
Restricted cash	-	-	119,671	-	119,671
Short-term investments	24,898	208,894	15,490	-	249,282
Other investments	-	27,328	-	-	27,328
Long-term investments	-	16,196	1,523	533,314	551,033
Trade receivables	-	-	2,715,420	-	2,715,420
Due from the Government	-	-	2,155,739	-	2,155,739
Other receivables	-	-	877,251	-	877,251
Other non-current assets	-	-	1,294,372	-	1,294,372
Total Financial Assets	24,898	252,418	13,608,629	533,314	14,419,259

Other Financial Liabilities				
	September 30, 2020	December 31,		
		2019	2018	2017
Short-term loans	(1,410,603)	(1,285,420)	(4,353,356)	(452,879)
Trade payables	(2,843,810)	(4,665,133)	(3,688,587)	(3,964,131)
Due to the Government	(1,758,873)	(1,736,442)	(2,002,825)	(1,831,246)
Accrued expenses	(2,604,550)	(2,566,635)	(1,914,535)	(1,769,605)
Long-term liabilities	(3,516,488)	(2,150,359)	(2,243,466)	(2,495,070)
Other payables	(398,109)	(671,505)	(411,054)	(474,910)
Bonds payable	(15,001,539)	(12,614,493)	(11,094,096)	(10,385,873)
Other non-current payables	(639,483)	(477,877)	(149,426)	(70,139)
Total Financial Liabilities	(28,173,455)	(26,167,864)	(25,857,345)	(21,443,853)

The Company

The Company entered into a foreign exchange and derivative agreement with BNI, Mandiri, and BRI in order to hedge againsts exchange rate risks. The notional amount for the nine-month period ended September 30, 2020 and the years ended December 31, 2019, 2018, and 2017 were US\$455,000, US\$210,000, US\$570,000, and US\$355,000, respectively.

The fair value of these financial liabilities is estimated using appropriate valuation techniques with inputs that are not based on observable market data.

The Company hedges the changes in the fair value of its liability due to risks of the foreign exchange rate fluctuations between Indonesian rupiah and US dollar. The net changes in the fair values of the above derivatives instruments for the nine-month period ended September 30, 2020 and the years ended December 31, 2019, 2018, and 2017 were US\$1,239, US\$1,932, US\$3,044, and US\$847, respectively.

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48. FINANCIAL ASSETS AND LIABILITIES (continued)

b. Offsetting financial assets and liabilities

The following financial instruments are subject to offsetting, enforceable master netting arrangements and similar agreement:

	Gross amount of recognized financial assets	Gross amount of recognized financial assets set off in the statement of financial position	Net amount of financial assets presented in the statement of financial position	Related amounts not set off in the statement of financial position		Net amount
				Financial instruments	Cash collateral received	
September 30, 2020 (unaudited)						
Financial Asset						
- Trade receivable	3,404,441	1,455	3,405,896	-	-	3,405,896
Financial Liabilities						
- Trade payable	2,842,355	1,455	2,843,810	-	-	2,843,810
December 31, 2019						
Financial Asset						
- Trade receivable	3,660,919	(149,108)	3,511,811	-	-	3,511,811
Financial Liabilities						
- Trade payable	4,814,241	(149,108)	4,665,133	-	-	4,665,133
December 31, 2018						
Financial Asset						
- Trade receivable	3,376,731	(96,186)	3,280,545	-	-	3,280,545
Financial Liabilities						
- Trade payable	3,784,773	(96,186)	3,688,587	-	-	3,688,587
December 31, 2017						
Financial Asset						
- Trade receivable	2,776,278	(60,858)	2,715,420	-	-	2,715,420
Financial Liabilities						
- Trade payable	4,024,989	(60,858)	3,964,131	-	-	3,964,131

For financial assets and liabilities subject to enforceable master netting arrangements or similar arrangements above, each agreement between the Group and the counterparty allows for net settlement of the relevant financial assets and liabilities when both choose to settle on a net basis. In the absence of such an election, financial assets and liabilities will be settled on gross basis, however, each party to the master netting agreement or similar agreement will have the option to settle all such amounts on a net basis in the event of default of the other party.

49. RISK MANAGEMENT POLICY

The Group has various business activities, which expose it to various potential risks. The Group's overall risk management program focuses on minimising potential adverse effects on the financial performance of the Group.

Risk management is carried out by the Group's Board of Directors, specifically the Risk Management Committee ("the Committee"), Risk Management Unit and Risk Taking Unit to identify, assess, mitigate and monitor the risks of the Group. The Committee provides principles for overall risk management, including business risk and financial risk.

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49. RISK MANAGEMENT POLICY (continued)

a. Business risks

The Group's business activities are exposed to a variety of business risks (upstream and downstream) which are as follows:

- i. The Group is subject to the control of the Government and there is no guarantee that the Government will always act in the Group's best interest, The Group also derives certain benefits from being a state-owned entity, and the Group cannot guarantee that any or all of these benefits will continue.
- ii. The Group is subject to audit by SKK Migas, BPK, DGT and/or the Government, The outcome of the assessment may result in claims against the Group or reduce claims against the Government that have already been recognized by the Group.
- iii. The Group is dependent on joint venture partners and third party independent contractors in connection with exploration and production operations and to implement the Group's development programs.
- iv. The Group's crude oil, natural gas and geothermal reserves estimates are uncertain and may prove to be inaccurate over time or may not accurately reflect actual reserves levels, or even if accurate, technical limitations may prevent the Group from retrieving these reserves.
- v. The Group is dependent on management's ability to develop existing reserves, replace existing reserves and develop additional reserves.
- vi. A substantial part of the Group's revenues is derived from sales of subsidised certain fuel (BBM) products by the Government.

b. Financial risk

Financial risk includes market, credit and liquidity risks.

i. Market risk

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices.

The market risk factors are as follows:

(i) Foreign exchange risk

Group revenues are determined by the movement of MOPS, which will be paid separately by the public and the Government of Indonesia in the form of subsidised fuel products and LPG products.

Regulations in Indonesia require transactions to be made in Indonesian rupiah, while most of the operating costs particularly for the procurement of crude oil and oil products are made in US dollar, which can lead to foreign exchange risks for cash and cash equivalents, trade receivables, due from the Government, trade payables, short-term loans, due to the Government and long-term liabilities.

The Group naturally mitigates foreign exchange risks through the effective management of its cash flows.

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49. RISK MANAGEMENT POLICY (continued)

b. Financial risk (continued)

i. Market risk (continued)

(i). Foreign exchange risk (continued)

Sensitivity analysis

A strengthening (weakening) of the Indonesian rupiah against the US dollar would have increased (decreased) equity and profit or loss by the amounts shown below. This analysis is based on foreign currency exchange rate variances that were considered to be reasonably possible at the reporting date. The analysis assumes that all other variables, in particular interest rates, remain constant and excludes any impact on forecasted sales and purchases.

	Strengthening		Weakening	
	Equity	Profit or loss	Equity	Profit or loss
September 30, 2020 (unaudited)				
IDR (1% movement)	154,170	152,439	(151,117)	(149,420)
December 30, 2019				
IDR (1% movement)	109,859	108,001	(107,684)	(105,863)
December 31, 2018				
IDR (3% movement)	364,017	358,908	(342,813)	(338,001)
December 31, 2017				
IDR (3% movement)	272,198	267,015	(256,342)	(251,461)

(ii) Commodity price risk

The volatility in prices of crude oil, natural gas and refined products and the uncertainty of market dynamics for oil and gas could adversely affect the Group's business, financial conditions and results of the Group's operations.

The Group's profitability is significantly affected by the prices of, and demand for, crude oil, natural gas and refined products, the difference between the cost price of crude oil, the costs of exploring for, developing, producing, transporting and selling crude oil, gas and refined products. The international and domestic markets for crude oil and refined products are fluctuative, and have recently been characterized by significant price fluctuations. The fluctuation of the market prices of crude oil, natural gas and refined products is subject to a variety of factors beyond the Group's control.

The Group engage in derivative transaction for commodity and product prices are determined based on market prices.

The Group mitigates the risk by commodity procurement management using the Crude Oil Management System ("COMS") to acquire competitive crude prices to support production of petroleum products with the most optimum results.

The Group also participates in physical commodity contracts in the normal course of business. These contracts are not derivatives and are measured at cost. In this case, the Group is not exposed to commodity price risk because the price has been determined at the date of purchase.

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49. RISK MANAGEMENT POLICY (continued)

b. Financial risk (continued)

i. Market risk (continued)

(iii) Cash flow and fair value interest risk

The Group is exposed to cash flows and fair value interest rate risk due to its financial assets and liabilities position, mainly to maintain cash flows in order to meet the needs of operational and capital expenditure.

Assets and liabilities with floating rates expose the Group to cash flows interest rate risk, Financial assets and liabilities with fixed rates expose the Group to fair value interest rate risk.

The Group has established a centralised treasury and continuously monitors movements of LIBOR, SIBOR, JIBOR and other borrowing rates prevailing in the market and conducts negotiations to get the most profitable interest rates before making placement of funds or conducts negotiation with lenders if the borrowing rates become uncompetitive compared to prevailing rates in the market.

The Group may use loan facilities provided by national banks such as BNI, BRI, Bank Mandiri, as well as foreign private banks.

At the reporting date, the Group's financial assets and liabilities with floating rates, fixed rates and those that were non-interest bearing were as follows:

September 30, 2020 (unaudited)					
	Floating rate		Fixed rate		Non-interest bearing
	Maturity less than one year	Maturity more than one year	Maturity less than one year	Maturity more than one year	
Assets					
Cash and cash equivalents	7,490,067	-	2,711,935	-	4,403
Restricted cash	175,189	-	5,609	-	-
Short-term investments	-	-	201,485	-	89,469
Trade receivables	-	-	-	-	3,405,896
Due from the Government	-	-	-	2,570,953	1,632,710
Other receivables	-	-	-	-	1,066,644
Other investments	-	-	-	-	16,259
Long-term investments	-	427,977	-	-	132,731
Other non-current assets	-	-	-	-	1,567,964
Total financial assets	7,665,256	427,977	2,919,029	2,570,953	7,916,076
Liabilities					
Short-term loans	(1,410,603)	-	-	-	-
Trade payables	(1,609)	-	-	-	(2,842,201)
Due to the Government	-	-	(28,048)	(774,536)	(956,289)
Accrued expenses	-	-	-	-	(2,604,550)
Other payables	-	-	(801)	-	(397,308)
Long-term liabilities	(144,905)	(1,419,741)	(730,319)	(1,215,046)	(6,477)
Bonds payable	-	-	-	(15,001,539)	-
Other non-current payables	-	(19,261)	-	(60,555)	(559,667)
Total financial liabilities	(1,557,117)	(1,439,002)	(759,168)	(17,051,676)	(7,366,492)

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49. RISK MANAGEMENT POLICY (continued)

b. Financial risk (continued)

i. Market risk (continued)

(iii) Cash flow and fair value interest risk (continued)

December 31, 2019						
	Floating rate		Fixed rate		Non-interest bearing	Total
	Maturity less than one year	Maturity more than one year	Maturity less than one year	Maturity more than one year		
Assets						
Cash and cash equivalents	4,202,272	-	2,562,036	-	5,886	6,770,194
Restricted cash	163,318	-	18,811	-	-	182,129
Short-term investments	-	-	167,875	-	224,709	392,584
Trade receivables	-	-	-	-	3,511,811	3,511,811
Due from the Government	-	-	-	3,313,801	3,375,794	6,689,595
Other receivables	-	-	-	-	1,140,562	1,140,562
Other investments	-	-	-	-	85,834	85,834
Long-term investments	-	352,551	-	109,205	146,792	608,548
Other non-current assets	-	-	-	-	1,570,928	1,570,928
Total financial assets	4,365,590	352,551	2,748,722	3,495,495	9,989,827	20,952,185
Liabilities						
Short-term loans	(1,285,420)	-	-	-	-	(1,285,420)
Trade payables	(1,560)	-	-	-	(4,663,573)	(4,665,133)
Due to the Government	-	-	(26,363)	(796,029)	(914,050)	(1,736,442)
Accrued expenses	-	-	-	-	(2,566,635)	(2,566,635)
Other payables	-	-	-	-	(671,505)	(671,505)
Long-term liabilities	(529,201)	(1,440,845)	(51,230)	(128,310)	(773)	(2,150,359)
Bonds payable	-	-	-	(12,614,493)	-	(12,614,493)
Other non-current payables	-	(30,564)	-	-	(447,313)	(477,877)
Total financial liabilities	(1,816,181)	(1,471,409)	(77,593)	(13,538,832)	(9,263,849)	(26,167,864)

December 31, 2018						
	Floating rate		Fixed rate		Non-interest bearing	Total
	Maturity less than one year	Maturity more than one year	Maturity less than one year	Maturity more than one year		
Assets						
Cash and cash equivalents	5,055,925	-	4,063,316	-	4,247	9,123,488
Restricted cash	21,344	-	87,571	-	-	108,915
Short-term investments	-	-	133,107	-	92,092	225,199
Trade receivables	-	-	-	-	3,280,545	3,280,545
Due from the Government	-	-	-	2,924,148	1,834,261	4,758,409
Other receivables	-	-	-	-	884,936	884,936
Other investments	-	-	-	-	80,171	80,171
Long-term investments	-	391,307	-	14,989	143,595	549,891
Other non-current assets	-	-	-	-	1,150,911	1,150,911
Total financial assets	5,077,269	391,307	4,283,994	2,939,137	7,470,758	20,162,465
Liabilities						
Short-term loans	(4,353,356)	-	-	-	-	(4,353,356)
Trade payables	(2,235)	-	-	-	(3,686,352)	(3,688,587)
Due to the Government	-	-	(25,247)	(795,082)	(1,182,496)	(2,002,825)
Accrued expenses	-	-	-	-	(1,914,535)	(1,914,535)
Other payables	-	-	-	-	(411,054)	(411,054)
Long-term liabilities	(361,855)	(1,718,777)	(58,985)	(103,071)	(778)	(2,243,466)
Bonds payable	-	-	-	(11,094,096)	-	(11,094,096)
Other non-current payables	-	-	-	-	(149,426)	(149,426)
Total financial liabilities	(4,717,446)	(1,718,777)	(84,232)	(11,992,249)	(7,344,641)	(25,857,345)

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49. RISK MANAGEMENT POLICY (continued)

b. Financial risk (continued)

i. Market risk (continued)

(iii) Cash flow and fair value interest risk (continued)

	December 31, 2017					
	Floating rate		Fixed rate		Non-interest bearing	Total
	Maturity less than one year	Maturity more than one year	Maturity less than one year	Maturity more than one year		
Assets						
Cash and cash equivalents	2,775,175	-	3,645,636	-	8,352	6,429,163
Restricted cash	75,243	-	44,428	-	-	119,671
Short-term investments	-	-	151,454	-	97,828	249,282
Trade receivables	-	-	-	-	2,715,420	2,715,420
Due from the Government	-	-	-	663,114	1,492,625	2,155,739
Other receivables	-	-	-	-	877,251	877,251
Other investments	-	-	-	-	27,328	27,328
Long-term investments	-	391,307	-	20,268	139,458	551,033
Other non-current assets	-	-	-	-	1,294,372	1,294,372
Total financial assets	2,850,418	391,307	3,841,518	683,382	6,652,634	14,419,259
Liabilities						
Short-term loans	(452,879)	-	-	-	-	(452,879)
Trade payables	-	-	-	-	(3,964,131)	(3,964,131)
Due to the Government	-	-	(24,680)	(780,627)	(1,025,939)	(1,831,246)
Accrued expenses	-	-	-	-	(1,769,605)	(1,769,605)
Other payables	-	-	-	-	(474,910)	(474,910)
Long-term liabilities	(319,607)	(1,963,742)	(50,412)	(158,948)	(2,361)	(2,495,070)
Bonds payable	-	-	-	(10,385,873)	-	(10,385,873)
Other non-current payables	-	(5,083)	-	-	(65,056)	(70,139)
Total financial liabilities	(772,486)	(1,968,825)	(75,092)	(11,325,448)	(7,302,002)	(21,443,853)

A change of 40 basis points in floating interest rates at the reporting date would have affected income before tax by the amounts shown below. This analysis assumed that all other variables, in particular foreign currency rates, remain constant.

Effect in:	+20 bp increase	-20 bp decrease
Income before tax	4,410	(4,410)
Cash flows sensitivity - net	4,410	(4,410)

ii. Credit risk

The Group has significant credit risk from unpaid receivables, cash and cash equivalents and investments in debt securities. In most transactions, the Group uses banks and financial institutions that are independently assessed with a rating of AAA, AA+, AA, AA- and A+, A, and A-.

For the Group's credit sales, the Group applied a standard operating procedure for credit approval mechanism. With such practice, some portion of the Group's credit sales has been secured with a collateral/bank guarantee. For other credit sales without collateral/bank guarantee, the Group ensured that credit scoring, credit limit evaluation and credit approval were performed and provided prior to any sales to the customer.

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49. RISK MANAGEMENT POLICY (continued)

b. Financial risk (continued)

ii. Credit risk (continued)

The Group also has a Credit Management System to monitor the usage of credit limits and automatic blocking facility in the case of no payment starting from seven days after the maturity date. The Group will impose penalty for overdue payments in some sales contracts based on the result of each customer's credit evaluation.

(i) Third parties and related parties

Financial assets neither past due nor impaired

The credit quality of the Group's financial assets that are neither past due nor impaired, was assessed by referencing external credit ratings PT Pemeringkat Efek Indonesia ("Pefindo") or to historical information about counterparty default risk rates, as follows:

	As of September 30, 2020 (unaudited)	December 31, 2019	2018	2017
Cash and cash equivalents				
Rated				
Rating AAA	8,140,055	5,259,230	7,285,583	5,654,815
Rating AA+	1,523,080	949,988	1,139,349	426,347
Rating AA	116,441	86,871	50,028	26,770
Rating AA-	9,439	146	3,528	2,581
Rating A+	-	103	1,381	31,699
Rating A	10,734	5,135	20,380	147,282
Rating A-	-	27,794	21,472	-
Not rated	406,656	440,927	601,767	139,669
Total	10,206,405	6,770,194	9,123,488	6,429,163
Restricted cash				
Rated				
Rating AAA	178,613	145,845	104,230	107,688
Rating A+	-	-	-	5
Rating A	-	-	-	224
Rating A-	-	462	462	-
Not rated	2,185	35,822	4,223	11,754
Total	180,798	182,129	108,915	119,671

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49. RISK MANAGEMENT POLICY (continued)

b. Financial risk (continued)

ii. Credit risk (continued)

(i) Third parties and related parties (continued)

Financial assets neither past due nor impaired (continued)

The credit quality of the Group's financial assets that are neither past due nor impaired, was assessed by referencing external credit ratings PT Pemeringkat Efek Indonesia ("Pefindo") or to historical information about counterparty default risk rates, as follows: (continued)

	As of September 30, 2020 (unaudited)	December 31, 2019	2018	2017
Short-term investments				
Rated				
Rating AAA	71,231	70,181	25,332	19,022
Rating AA+	7,903	7,981	1,027	1,145
Rating AA	2,041	3,635	4,109	10,108
Rating AA-	695	2,904	3,129	3,085
Rating A+	3,404	3,561	-	-
Rating A	5,375	5,904	5,357	3,522
Rating A-	-	2,516	2,330	749
Rating BB+	-	-	-	-
Rating BBB+	-	-	-	1,870
Rating BBB	-	-	3,887	-
Rating BBB-	-	-	41,948	44,149
Not rated	200,305	295,902	138,080	165,632
Total	290,954	392,584	225,199	249,282
Long-term investments				
Rated				
Rating AAA	532	560	2,597	7,198
Rating AA	4,357	6,125	5,897	6,320
Rating BBB-	4,950	4,950	4,950	4,950
Rating BB+	-	-	-	-
Not rated	705	755	552	221
Total	10,544	12,390	13,996	18,689
Trade receivables				
Third parties				
> US\$10,000 - Good credit history	-	1,231,671	1,335,703	945,008
< US\$10,000	-	751	362	726
Related parties	-	526,000	675,922	251,453
Total	-	1,758,422	2,011,987	1,197,187
Other receivables				
Third parties				
> US\$10,000 - good credit histories	-	860,190	661,979	570,683
< US\$10,000	-	51	31	82
Related parties	-	178,822	148,777	253,389
Total	-	1,039,063	810,787	824,154
Other assets				
Third parties	-	185,505	80,287	80,349
Related parties	-	53,825	54,228	152,791
Total	-	239,330	134,515	233,140

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49. RISK MANAGEMENT POLICY (continued)

b. Financial risk (continued)

ii. Credit risk (continued)

(i) Third parties and related parties (continued)

Financial assets that are past due but not impaired

	As of September 30, 2020 (unaudited)	December 31, 2019	2018	2017
Trade receivables				
- Less than 3 months	-	603,148	431,868	227,439
- 3 - 6 months	-	10,008	61,194	212,778
- 6 - 12 months	-	24,980	21,138	10,231
- 12 - 24 months	-	1,859	11,040	1,201
- > 24 months	-	15,459	11,561	2,194
Total	-	655,454	536,801	453,843
Other receivables				
Third parties				
- Less than 3 months	-	52,298	44,359	33,568
- 3 - 6 months	-	1,597	1,699	642
- 6 - 12 months	-	1,367	872	160
- 12 - 24 months	-	3,331	10,674	524
- > 24 months	-	3,646	5,476	921
Total	-	62,239	63,080	35,815
Related parties				
- Less than 3 months	-	70	9	141
- 3 - 6 months	-	98	7	2
- 6 - 12 months	-	3,344	49	1,332
- 12 - 24 months	-	71	15	68
- > 24 months	-	67	24	11
Total	-	3,650	104	1,554
Other assets				
Third parties	-	-	-	90,995
Related parties	-	10,732	10,679	-
Total	-	10,732	10,679	90,995

Trade receivables

Trade receivables from third parties and related parties that are past due but not impaired at the reporting date relate to customers who have not had defaults in the past two years. Some of the trade receivables from these customers have also been secured with collateral/bank guarantee.

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49. RISK MANAGEMENT POLICY (continued)

b. Financial risk (continued)

ii. Credit risk (continued)

(i) Third parties and related parties (continued)

Financial assets that are impaired

	As of September 30, 2020 (unaudited)	2019	December 31, 2018	2017
Trade receivables				
- Current (not overdue)	1,945,135	567,379	502,949	771,132
- Less than 3 months	703,679	199,305	182,954	179,382
- 3 - 6 months	175,977	44,900	70,803	81,009
- 6 - 12 months	391,643	18,612	10,541	26,250
- 12 - 24 months	456,513	369,859	45,159	69,412
- > 24 months	199,267	181,458	180,082	195,558
	3,872,212	1,381,513	992,488	1,322,743
Impairment	(466,316)	(283,577)	(260,731)	(258,353)
Net	3,405,896	1,097,936	731,757	1,064,390
Other receivables				
Related parties				
- Less than 3 months	183,137	28	-	110
- 3 - 6 months	14	-	-	31
- 6 - 12 months	387	3	297	1
- 12 - 24 months	6	2	-	1
- > 24 months	1,426	1,437	1,426	1,434
	184,970	1,470	1,723	1,577
Third parties				
- Less than 3 months	846,575	36,583	6,169	5,651
- 3 - 6 months	2,330	207	673	4,613
- 6 - 12 months	11,753	507	975	6,734
- 12 - 24 months	22,449	562	8,362	4,112
- > 24 months	21,973	18,186	12,631	13,057
	905,080	56,045	28,810	34,167
	1,090,050	57,515	30,533	35,744
Impairment	(23,406)	(21,906)	(19,567)	(20,017)
Net	1,066,644	35,609	10,966	15,727
Other assets				
Related parties				
- Current (not overdue)	22,443	-	-	-
- 0 - 3 month	10,078	-	-	-
- 12 - 24 months	-	-	-	-
- > 24 months	17,677	18,919	18,190	19,394
Third parties				
- Current (not overdue)	196,280	-	-	-
- 12 - 24 months	-	1,383	9,165	-
- > 24 months	-	-	-	17,023
	246,478	20,302	27,355	36,417
Impairment	(19,179)	(20,302)	(27,355)	(36,417)
Net	227,299	-	-	-

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49. RISK MANAGEMENT POLICY (continued)

b. Financial risk (continued)

ii. Credit risk (continued)

(i) Third parties and related parties (continued)

Trade receivables

Trade accounts receivable from third parties and related parties as of September 30, 2020 amounting to US\$3,845,954 have been impaired amounting to US\$439,698, with the largest trade receivables from Indonesian Armed Forces/Ministry of Defense amounting to US\$557,504.

Other receivables

Other receivables from third parties and related parties as of September 30, 2020 amounting to US\$1,090,766 have been impaired by US\$24,123.

(ii) Government

Financial assets neither past due not impaired

	As of September 30, 2020 (unaudited)	December 31, 2019	2018	2017
The Company				
Receivables on revenue recognition from Disparity of Selling Price	2,570,953	5,451,285	2,924,148	-
Receivable from reimbursements of subsidy costs for LPG 3 kg cylinders	639,048	310,924	1,147,538	1,404,911
Receivable from reimbursements of subsidy for certain fuel (BBM) products	509,419	490,256	175,556	473,928
Receivables from marketing fees	72,489	72,489	72,489	49,902
Receivables from kerosene subsidies reimbursement	16,334	17,529	16,828	-
Kerosene conversion	-	839	10,626	-
Others	-	-	-	102
Sub total	3,808,243	6,343,322	4,347,185	1,928,843
Subsidiaries:				
PEP				
- Domestic Market Obligation ("DMO") fees	53,756	99,370	106,398	90,930
- Underlifting	3,670	32,040	18,942	-
- Gas price differential	10,930	-	-	-
PHE				
- DMO fees	30,413	27,261	15,414	25,859
- Underlifting	7,728	22,684	25,730	46,480
- Gas price differential	4,600	-	-	-
PEPC				
- Underlifting	316,019	202,563	224,904	174,563

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49. RISK MANAGEMENT POLICY (continued)

b. Financial risk (continued)

ii. Credit risk (continued)

(ii) Government (continued)

Financial assets neither past due not impaired (continued)

	As of September 30, 2020 (unaudited)	December 31, 2019	2018	2017
Subsidiaries: (continued)				
PHI				
- DMO fees	38,980	32,314	18,780	-
- Underlifting	1,224	2,530	1,056	-
- Gas price differential	589	-	-	-
Sub total	467,909	418,762	411,224	337,832
Total	4,276,152	6,762,084	4,758,409	2,266,675
Financial assets that are impaired				
The Company				
Receivables for marketing fees	72,489	72,489	-	-
Provision for impairment	(72,489)	(72,489)	-	(110,936)
	-	-	-	(110,936)
Total consolidated	4,276,152	6,762,084	4,758,409	2,155,739

iii. Liquidity risk

The amount of liquidity which the Group requires for its operations is uncertain and its operations may be adversely affected if the Group does not have sufficient working capital to meet its cash and operational requirements. This may occur as a result of, amongst other reasons, delays in the payment of the Government's subsidies.

The Group uses significant amounts of cash in its operations, especially to procure commodities and raw materials. In particular, one of its principal operating costs is the acquisition of feedstock for its refineries. Fluctuations in market prices for crude oil, natural gas and their refined products and fluctuations in exchange rates cause working capital and costs for the Group's upstream and downstream operations to be uncertain.

The Group funds its operations principally through cash flows from operations, a significant portion of which comprises sales, subsidy payments, working capital facilities (including bank overdrafts, L/C and revolving credit), and long-term bank loans. In accordance with the terms of PSO's assignment, the Group is required to submit its claims for subsidy to the Government at the end of each month for the subsidised fuel distributed in that month.

As of September 30, 2020, and December 31, 2019, 2018, and 2017 the Group has cash and cash equivalents in the amount of US\$10,206,405, US\$6,770,194, US\$9,123,488, and US\$6,429,163, respectively (Note 7). The Group manages liquidity risk by continuously monitoring forecasts and actual cash flows and matching the maturity profiles of trade receivables and trade payables.

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49. RISK MANAGEMENT POLICY (continued)

b. Financial risk (continued)

iii. Liquidity risk (continued)

The table below summarizes the maturity profile of the Group's financial liabilities based on cash flow on contractual undiscounted payments:

	Less than 1 year	Later than 1 year and not later than 5 years	Later than 5 years	Total
September 30, 2020 (unaudited)				
Financial liabilities				
Short-term loans	1,410,603	-	-	1,410,603
Trade payables	2,843,810	-	-	2,843,810
Due to the Government	999,189	304,062	590,482	1,893,733
Accrued expenses	2,610,789	-	-	2,610,789
Other payables	1,097,489	-	-	1,097,489
Long-term liabilities	1,004,386	1,986,533	556,675	3,547,594
Bonds payable	1,047,043	7,105,854	19,403,937	27,556,834
Other non-current payables	60,555	616,817	39,600	716,972
Total financial liabilities	11,073,864	10,013,266	20,590,694	41,677,824
December 31, 2019				
Financial liabilities				
Short-term loans	1,285,420	-	-	1,285,420
Trade payables	4,665,132	-	-	4,665,132
Due to the Government	954,233	494,789	441,609	1,890,631
Accrued expenses	2,566,635	-	-	2,566,635
Other payables	1,195,125	-	-	1,195,125
Long-term liabilities	458,850	1,315,141	431,302	2,205,293
Bonds payable	577,034	7,652,617	14,262,633	22,492,284
Other non-current payables	-	468,499	39,600	508,099
Total financial liabilities	11,702,429	9,931,046	15,175,144	36,808,619
December 31, 2018				
Financial liabilities				
Short-term loans	4,353,356	-	-	4,353,356
Trade payables	3,688,587	-	-	3,688,587
Due to the Government	1,211,056	262,428	531,845	2,005,329
Accrued expenses	1,914,535	-	-	1,914,535
Other payables	1,265,285	-	-	1,265,285
Long-term liabilities	457,547	1,546,772	343,001	2,347,320
Bonds payable	611,409	5,886,768	14,088,112	20,586,289
Other non-current payables	-	120,591	58,314	178,905
Total financial liabilities	13,501,775	7,816,559	15,021,272	36,339,606
December 31, 2017				
Financial liabilities				
Short-term loans	452,879	-	-	452,879
Trade payables	3,964,131	-	-	3,964,131
Due to the Government	1,115,606	255,460	460,501	1,831,567
Accrued expenses	1,769,605	-	-	1,769,605
Other payables	1,188,903	-	-	1,188,903
Long-term liabilities	400,609	1,306,342	844,763	2,551,713
Bonds payable	575,969	4,625,314	14,773,197	19,974,480
Other non-current payables	-	84,700	-	84,700
Total financial liabilities	9,467,702	6,271,816	16,078,461	31,817,978

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49. RISK MANAGEMENT POLICY (continued)

c. Capital Management

The Directors' policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. Capital consists of share capital, retained earnings, non-controlling interests and other equity components. The Board of Directors ensures the return on capital as well as the level of dividends.

The Group as an entity whose main business involves oil and gas monitors capital on the basis of the debt-to-equity ratio. Net debt is calculated as total interest bearing borrowings including short-term and long-term, while total capital is calculated from equity in the statement of consolidated statement of financial position. Weighted average interest expense on interest-bearing borrowings (excluding liabilities with imputed interest) for September 30, 2020 for USD and IDR were 4.87% and 7.18%, and for December 31, 2019, 2018, and 2017 (all in USD) were 5.28%, 5.17% and 4.68%.

The Group's certain financial ratios at the reporting date is as follows:

	September 30, 2020 (unaudited)	December 31, 2019	2018	2017
Total liabilities (interest bearing)	19,896,205	16,050,272	17,690,918	13,333,822
Total equity attributable to owners of the parent entity	27,421,803	28,834,806	27,648,324	25,160,226
Debt-to-equity ratio	72.56%	55.66%	63.99%	53.00%
Total own capital to total assets ratio	40.46%	42.85%	42.62%	43.69%
Return-on-equity ratio	-2.55%	9.08%	9.53%	10.15%

d. Fair value

The following are the Group's financial assets that were measured at fair value as of September 30, 2020 (unaudited):

	Level 1	Level 2	Level 3	Total
Financial assets				
Short-term investments	196,277	9,840	-	206,117
Other investments	45,048	704	-	45,752
Total financial assets	241,325	10,544	-	251,869

As of September 30, 2020, there were no transfers of fair value measurement between level 1, level 2 and level 3.

The table below shows the carrying amounts and fair values of long-term financial liabilities as of September 30, 2020, and December 31, 2019, 2018, and 2017:

	September 30, 2020 (unaudited)	
	Carrying Amount	Fair Value
Long-term liabilities (Note 21)	3,516,488	4,112,781
Bonds payable (Note 22)	15,001,379	16,737,766
Total financial assets	18,517,867	20,850,547

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49. RISK MANAGEMENT POLICY (continued)

d. Fair value (continued)

	December 31,					
	Carrying Amount			Fair Value		
	2019	2018	2017	2019	2018	2017
Long-term liabilities (Note 21)	2,150,359	2,243,466	2,495,070	2,211,272	2,345,024	2,497,512
Bonds payable (Note 22)	12,614,493	11,094,096	10,385,873	14,232,462	11,101,427	11,504,854
Total financial assets	14,764,852	13,337,562	12,880,943	16,443,734	13,446,451	14,002,366

The fair value of long-term liabilities is measured using the discounted cash flows based on the interest rate on the latest long-term liabilities of the Group. The fair value of bonds payable is determined by reference to market price at the reporting date.

50. SIGNIFICANT AGREEMENTS, COMMITMENTS AND CONTINGENCIES

a. Cooperation Contract commitment

In accordance with the Cooperation Contract, PT Pertamina EP shall relinquish minimum of 10% of the original contract area to the Government on or before the end of the tenth year from the effective date of the Cooperation Contract. On July 18, 2013, PT Pertamina EP relinquished 18,02% of initial working area to the Government.

PT Pertamina EP is required to pay a bonus to the Government amounting to US\$1,500 in 30 days after cumulative production of oil and gas reaches 1,500 MMBOE from the effective date of the Cooperation Contract. PT Pertamina EP's cumulative production of oil and gas up to September 30, 2020 has not yet reached 1,500 MMBOE.

On reporting date, PT Pertamina Hulu Energi had 15 exploration commitments in relation to PSC profit sharing contracts with commitments between US\$11,750 to US\$225,000 and 11 exploration commitments in relation to the Gross Split contract with a commitment amounting to US\$15,550 to US\$250,000.

PT Pertamina Hulu Indonesia has expenditure commitments and work plans with a commitment value between US\$141,300 to US\$703,000 for a period of six years from the effective date of the contract,

b. Capital commitments

The Group has capital expenditure commitments in the normal course of business. As of reporting date, the Group's unrealized total outstanding capital expenditure commitments amounting to US\$3,597,720.

c. Gas sale and purchase agreement

As of September 30, 2020, the Company through PT Pertamina EP has commitments to deliver gas totaling 1.043.208 MMSCF to various customers. The gas will be periodically delivered from 2020 until 2031.

As of September 30, 2020, the Company, through PHE, has various significant gas supply agreements with various customers, with gas volumes of each contract between 0.8 TBTU to 1,418 TBTU. The expiration of these agreements ranges from 2020 until 2031.

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50. SIGNIFICANT AGREEMENTS, COMMITMENTS AND CONTINGENCIES (continued)

c. Gas sale and purchase agreement (continued)

As of September 30, 2020, the Company through PHI, has significant gas sales and purchase agreement contracts with gas volumes from 0,78 TBTU to 130,22 TBTU. These contracts will expire in 2021-2025.

As of September 30, 2020, the Company, through PGN has 35 Gas Sales and Purchase Agreements ("GSA") with contract periods of 10 - 30 years, These contracts will expire from 2020 to 2037.

Based on Indonesian Presidential Regulation No. 40 year 2016 on Natural Gas Pricing and Regulation of the Minister of Energy and Mineral Resources of the Republic of Indonesia No. 40 year 2016 on Natural Gas Price for Specific Industries, the Company amended contracted gas prices in its gas sales agreements with the particular industry effective January 30, 2017.

d. LNG long-term purchase contract commitment

The Company signed a Long-Term LNG Purchase Contract with several sellers for LNG trading business, as follows:

Sellers	Date of Agreement	Periods	Minimum quantity (million tons per year)
Corpus Christi Liquefaction, LLC	March 20, 2015	2019-2040	0.5 - 1.5
Chevron Rapak, Ltd., Eni Rapak Limited, Tiptop Rapak Limited	November 21, 2016	2016-2021	0.06 - 0.42
Total Gas & Power Asia Private Limited	December 21, 2016	2020-2034	0.38 - 1,0
Eni Muara Bakau B.V., GDF SUEZ Exploration Indonesia B.V., PT Saka Energi Muara Bakau	February, 21 2017	2018-2024	0.5 - 1.4
Woodside Energy Trading Singapore Pte, Ltd,	June, 5 2017	Tranche A: 2019-2033 Tranche B: 2024-2038	0.07 - 0.57 0.5 - 1.07
Mozambique LNG1 Company Pte, Ltd,	February 13, 2019	2025-2044	1.0

Management has estimated the economic value of such contracts in accordance with the criteria stated in SFAS 57 regarding provisions, contingent liabilities and contingent assets for a onerous contract (Note 2ae) by considering several parameters including price, demand and discount rate as of the reporting date, An estimate of the economic value has been established, which is lower, compared to penalties if the company does not carry out the commitment according to the contract.

e. Transfer of 10% participating interest ("PI") to the regional government ("BUMD")

On December 19, 2017, PHE ONWJ and MUJ ONWJ signed a 10% PI transfer agreement at ONWJ PSC Block from PHE ONWJ to MUJ ONWJ, The agreement is effective on the date of receipt of approval from the Minister of Energy and Mineral Resources or on the date stipulated by MoEMR in his approval letter.

On May 17, 2018, the approval 10% of PI transfer in the ONWJ working area has been approved by the Minister of Energy and Mineral Resources through a Letter from the Minister of Energy and Mineral Resources to the Head of SKK Migas No, 2803/13/MEM,M/2018, Stated in the letter, the date of the transfer of PHE ONWJ to MUJ ONWJ is from the effective date of the Block ONWJ PSC.

On December 17, 2018, the PI transfer value was determined through a Letter from the Minister of Energy and Mineral Resources to the Head of SKK Migas No, 3149/12/MEM,M/2018, The transfer value is calculated from the BUMD's liability for the portion of the implementation guarantee (Performance Bond) for the implementation of a definite work commitment and the portion of the unrecovered cost payment by the new KKS Contractor to the old KKS Contractor with a value of US\$43,292.

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50. SIGNIFICANT AGREEMENTS, COMMITMENTS AND CONTINGENCIES (continued)

e. Transfer of 10% participating interest ("PI") to the regional government ("BUMD") (continued)

On September 19, 2018, PHM and PT Migas Mandiri Pratama Kutai Mahakam ("MMPKM") signed the Principal Agreements of the 10% Transfer Plan Participating Interest in the Mahakam Working Area, where the parties will hold more intensive discussions regarding the terms and conditions.

On July 17, 2019, PHM and MMPKM signed the 10% Transfer and Management Agreement on Interest Participation in Production Sharing Contracts in the Mahakam Working Area, which regulates compensation, financing mechanisms, returns and production sharing.

On September 12, 2019 transfer of 10% PI in the Mahakam working area was approved by the Minister of Energy and Mineral Resources through a Letter from the Minister of Energy and Mineral Resources to the Head of SKK Migas No. 371/13/MEM,M/2019, It is stated in the letter that the date of the transfer of PHM to MMPKM is from the effective date of the Mahakam Block KBH.

Starting from the date of transfer, production sharing payments that are part of MMPKM will be made by PHM every month, after deducting MMPKM's portion of KBH Mahakam's operating costs and other obligations in accordance with KBH, In the event that the share of MMPKM production in the current month does not meet the share of operating costs that must be paid by MMPKM, the underpayment of operating costs will be calculated in the following months.

To guarantee MMPKM revenues, the production share and operating costs of the MMPKM portion are calculated using a provisional percentage for the full year, If the accumulated operating costs that must be paid by MMPKM to PHM in one year exceeds the MMPKMM portion of the production share, PHM will provide an MMPKM payment of 1 US dollar (full amount) each month in the following year.

On August 7, 2018, PHE Siak and PT Riau Petroleum Siak agreed to sign the transfer and management agreement 10% of PI in accordance with Minister of Energy and Mineral Resources Regulation No. 37 of 2016 concerning Provisions on the 10% of PI Offer in the Oil and Gas Block, As of the date of this financial statements, the transfer has not been completed.

f. Lease of State Owned Property ("BMN")

The Minister of Finance Decree No. 92/KMK,06/2008 dated May 2, 2008 stipulates that the status of the assets previously owned by the former Pertamina Entity, which were not recognized in the opening balance sheet of Pertamina in accordance with the Minister of Finance Decree No. 23/KMK,06/2008, are State Owned Property ("BMN") for which the management of the assets is done by the Directorate General of State Assets ("DJKN").

On December 12, 2014, the Minister of Finance issued letter No. S-837/MK,06/2014 to SKK Migas which stated that the BMN lease is to be treated as refundable operating costs, As a follow up to the Minister of Finance's Letter, the Head of SKK Migas issued Letter No.SRT-1294/SKKO0000/2014/S4 dated December 30, 2014 states that basically SKK Migas can approve the imposition of BMN leases as an operating cost (cost recovery) as long as these assets are used in the Company's upstream oil and gas operations, Based on the result of BMN verification which have been reported to the Minister of Finance through the Letter of President Director of PT Pertamina (Persero) No,194/C00000/2011-S0 dated March 29, 2011, SKK Migas had opinion that the basis for leasing should be Rp6,630,929 million (revaluation value), which categorized equipment, buildings and other assets currently used by the Company.

Management believes that the contractual agreement relating to the BMN used must be recorded as a finance lease.

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50. SIGNIFICANT AGREEMENTS, COMMITMENTS AND CONTINGENCIES (continued)

f. Lease of State Owned Property ("BMN") (continued)

On September 20, 2016, the State Property Lease Agreement was signed between the Ministry of Finance of the Republic of Indonesia and PT Pertamina EP No, PRJ-3-MK, 6/2016 and No, 1307/EP0000/2016-SO ("Agreement") with a basis of imposition of BMN Lease of Rp6,630,929 million.

Based on the agreement, the Ministry of Finance of the Republic of Indonesia will not charge the lease fee for BMN not used by PT Pertamina EP since the BMN is not included in the scope of the Agreement.

The oil and gas assets of the former ONWJ PSC and DJKN which are currently owned by the DJKN are used by the ONWJ Gross Split PSC contractors based on lease scheme.

On January 16, 2018, PT PHE ONWJ and DJKN signed a Lease Agreement No, PRJ-1/KN/2018 for the lease period from January 19, 2017 to January 18, 2018 with lease cost of Rp225,603,000,000 (full amount). The lease period can be extended based on written request from PHE ONWJ to DJKN through SKK Migas.

On April 17, 2018 Lease Agreement no, PRJ-2/KN/2018 was signed by PT PHE ONWJ and DJKN for the lease period from January 19, 2018 to January 18, 2019 with a lease charge of Rp202,650,750,000 (full amount).

On June 18, 2019, the Minister of Finance issued Regulation No. 89/PMK.06/2019 on Management of State Owned Property Originating from the Implementation of Cooperation Contract of Upstream Oil and Gas Business Activities ("PMK 89/2019"). The Group calculated its lease liability under PMK 89/2019 up to September 30, 2020.

On September 28, 2020, the Minister of Finance issued Regulation No. 140/PMK.06/2020 on Management of Upstream Oil and Gas State Owned Property ("PMK 140/2020"), which repeals PMK 89/2019. Under PMK 140/2020, a new contractor, who is taking over the operation of upstream oil and gas BMN from a terminated/expired PSC through a new PSC (Kontraktor Alih Kelola), shall pay a utilization fee to the Government for the usage of such upstream oil and gas BMN. The utilization fee shall be in the form of (1) non-tax revenue as part of the signature bonus; (2) non-tax revenue as part of the sharing of oil and gas lifting; and/or (3) social economy value-added to the community surrounding the mining working area. For PSCs in which the Group acted as Kontraktor Alih Kelola, the Group assessed that there will be no lease liability for the period from the issuance of PMK 140/2020 as the Group has paid the utilization fee in the form of signature bonus.

g. Lease, Operation and Maintenance Agreement

- On January 25, 2012, PGN and Hoegh Lampung signed a lease, operation and maintenance agreement that is valid from the delivery date until 20 years after the delivery date.

On February 21, 2014, PT PGN LNG Indonesia ("PLI"), PGN and Hoegh Lampung signed a Novation Agreement on Amended and Restated Leases and Operations and Maintenance Agreements where PGN rights and obligations related to the above agreement were transferred to PLI. Through the novation agreement, Hoegh Lampung will provide the Lampung Floating Storage Regasification Terminal ("FSRT") and perform regasification process for 20 years with an option to extend for two periods of 5 years each.

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50. SIGNIFICANT AGREEMENTS, COMMITMENTS AND CONTINGENCIES (continued)

g. Lease, Operation and Maintenance Agreement (continued)

- On September 14, 2015, PT Kalimantan Jawa Gas ("KJG"), PLN, SEM, PT Bakrie & Brothers, Tbk, and PC Muriah Ltd, ("PCML") signed the Letter Agreement on the Application of Novation and Amendment of Gas Transportation Agreement ("GTA Kalija I") with KJG as Transporter, PLN as Offtaker, and PCML as Shipper, Based on the terms of the Gas Transportation Agreement, the Transporter agreed to provide gas transportation services from the Kepodang field to PLN's power plant facilities in Tambak Lorok.

The agreement is valid for 12 years from the start from the date of gas delivery, On June 8, 2017, PCML gave a notification regarding the force majeure regarding the Kepodang-Tambak Lorok Gas Transport Agreement.

h. Legal Case

Class action in enviromental issue at PHE ONWJ Block

Some of Banten Bay and Thousand Island residents have filed a lawsuit or a class action suit against the Company and PHE ONWJ for the impact of such oil spill. They request for compensation as oil spill from YYA-1 well had impacted their lives negatively. The class action has been registered at the Central Jakarta District Court. On August 18, 2020, the verdict was issued by the Central Jakarta District Court through letter No. 533/Pdt.G/2019/PN.Jkt.Pst which stated that the Company and PHE ONWJ committed unlawful acts but the compensation claims were considered vague so there were no financial consequences.

On November 26, 2020, the Company and PHE ONWJ has submitted a memory appeal against the decision of such Central Jakarta District Court ONWJ. As of the date of the financial statements, the Company and PHE ONWJ is still waiting for the decision of such appeal.

The YYA-1 well oil spill is also being investigated by Directorate of Special Crime ("Bareskrim Polri") based on an allegation of environmental pollution crime as stipulated in Law No. 32 of 2009 regarding Environmental Protection and Management. As of the date of the financial statements, there has been no further investigation by the Criminal Investigation Police and the West Java Regional Police. However, the Investigation Termination Order (SP3) for the Police Report has not yet been issued.

Alleged Criminal Related to PHE WMO's Operatorship

PHE WMO is the operator of West Madura Offshore ("WMO") PSC. The other contractors are PT Mandiri Madura Barat (MMB) and Kodeco Energy Co. Ltd. ("Kodeco").

In the oil and gas operations of WMO PSC, PHE WMO conducted exclusive operation (sole risk) which, in accordance with the WMO JOA, means that all rights and obligations from sole risk activities belong to PHE WMO. However, during the period from January 2013 until December 2016, Kodeco and MMB received revenues from such PHE WMO sole risk operations. Subsequently, such over allocated revenue was charged and collected by PHE WMO through monthly cash calls.

MMB claimed that there were overpaid cash calls for period from January 2013 until December 2016 totaling US\$16.4 million. MMB reported PHE WMO to Bareskrim Mabes Polri over criminal act.

Such police report has been followed up with investigation. In respect to that, and as a form of prudence, PHE WMO has requested a legal opinion from the Attorney General's Office of the Republic of Indonesia and requested the Audit Board of Indonesia (BPK) to conduct audit of this sole risk activities.

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50. SIGNIFICANT AGREEMENTS, COMMITMENTS AND CONTINGENCIES (continued)

h. Legal Case (continued)

Alleged Criminal Related to PHE WMO's Operatorship (continued)

In accordance with BPK's letter No. 175/XX/07/2019 dated July 23, 2019, PHE WMO returned US\$16.4 million to MMB. Subsequently, PHE WMO and MMB agreed to appoint an independent auditor to perform audit on the overpaid cash calls and over allocation of revenue from each party.

In January, February and April 2020, MMB issued letters to PHE WMO requesting adjustments on the exclusive operation ("EO") of US\$124 million and joint operation ("JO") of US\$195 million.

On April 15, 2020, PT Mandiri Madura Barat ("MMB") issued the litigation letter through a police report No. LB/B/0191/IV/2020/BARESKRIM. The last clarification with Bareskrim was in November 2020. The investigation was pending until February 2021, as per request from PHE WMO.

Following the additional claim from MMB re. EO and JO, PHE WMO and MMB have agreed to extend the scope of the audit (Evaluasi Bersama), including overpaid cash call, over allocation of revenue, EO and JO for the period 2011-2019.

The scope of audit has been agreed with the appointed external auditor (KPMG). The last outstanding point is related to the audit procedures, which are still subject on discussion between PHE WMO, MMB and KPMG.

As of the date of the completion of the financial statements, the clarification process on such report is on-going, which potentially terminate further process of the Report. PHE WMO's management believes that the Report relates to a civil dispute that should be resolved through deliberation or dispute resolution forum in arbitration in accordance with the Joint Operating Agreement (JOA) article 18.2.

Force majeure on Transportation Gas Agreement Kepodang - Tambak Lorok declaration by PC Muriah Ltd ("PCML").

On June 8, 2017, PCML gave a notification regarding the force majeure regarding the Kepodang Gas Transportation Agreement ("GTA") - Tambak Lorok, Due to the inability of PCML to fulfill the gas volume commitments in accordance with the GTA Kalija I, according to the provisions of GTA Kalija I, a ship-or-pay obligation arises which must be resolved by the party that caused the ship-or-pay, KJG has held deliberations with PCML related to ship-or-pay obligations in 2016 since the beginning of 2017, but until the end of 2017, PCML has not completed the ship-or-pay obligations, In addition, PCML also submits forceful claims according to the PCML letter, In response to the force majeure claim, KJG submitted a rejection letter dated June 13, 2017, where KJG noted that in accordance with the GTA Kalija I, the condition for force majeure was validated by an independent consultant appointed jointly by the parties which was then examined and approved by SKK Migas.

PCML has appointed Lemigas as an independent consultant to examine the force majeure, However, the KJG considers the appointment and results of the Lemigas report to be inconsistent with the provisions contained in the GTA Kalija I.

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50. SIGNIFICANT AGREEMENTS, COMMITMENTS AND CONTINGENCIES (continued)

h. Legal Case (continued)

Force majeure on Transportation Gas Agreement Kepodang - Tambak Lorok declaration by PC Muriah Ltd ("PCML"). (continued)

With the conditions of force majeure in accordance with GTA Kalija I not yet fulfilled, all parties' rights and obligations will continue to apply, particularly in relation to ship-or-pay, KJG has also requested the assistance of BPH Migas as a mediator for the ship-or-pay issue, BPH Migas invited the parties to the GTA Kalija I on March 20, 2018, and May 8, 2018, but PCML was absent at the two meetings, Considering KJG had made deliberation and mediation efforts, finally on August 29, 2018 KJG filed an arbitration suit for the fulfillment of ship-or-pay obligations for the year 2016-2018 as well as ship-or-pay obligations for the year 2019-2026 to the Hong Kong International Chamber of Commerce ("ICC"), PCML has stopped gas delivery on September 23, 2019 therefore since September 24, 2019 there has been no gas delivery through the KJG pipeline, Effective on December 13, 2019, KJG has terminated the GTA Kalija I through letter dated November 13, 2019, since KJG does not see good faith from PCML to continue and carry out its obligations in accordance with those set and agreed in the GTA Kalija I, In relation to the termination, KJG has submitted a claim for compensation in the Statement of Claim dated 28 February 2020 to the ICC.

Management believes that the arbitration result will have a positive impact on the KJG, Arbitration is expected to be completed by the end of 2021.

i. The Public Service Obligation ("PSO") assignment to supply fuel products

The Company has a relationship with the Government for the assignment of PSO to supply certain fuel products (note 1a), The Company and the Government agreed to use Mean of Platts Singapore ("MOPS") as the basis for the market price of fuel projects use to calculate the amount of subsidies, Based on Presidential Regulation No, 43 of 2018 concerning Amendments to Presidential Regulation No, 191 of 2014 concerning the Supply, Distribution and Retail Selling Price of Oil Fuel (Perpres 43) in article 14 paragraph 10 it is stated that in the event that based on the results of the examination by the authorized auditor in 1 (one) fiscal year there is an excess / lack of acceptance of the Business Entity receiving the assignment as a result of the determination of the retail selling price of BBM as referred to in paragraph (1) and paragraph (8), the minister who administers government affairs in the field of state finance determines the policy of regulating excess / deficiency acceptance after coordinating with the Minister and the minister in charge of government affairs in the field of state-owned enterprises.

j. Reimbursement of investment costs for previous PSC contractors

The Minister of Energy and Mineral Resources Regulation No,26/2017, No,47/2017, No,24/2018 and No,46/2018 requires the new PSC contractor to reimburse certain investment costs spent by the previous PSC contractor that had not been recovered at the time the PSC expired, The amount to be replaced is based on verification and approval from SKK Migas, Based on the SRT-0665/SKKMA0000/2018/S4 letter dated August 13, 2018 from SKK Migas, the amount to be reimbursed by Pertamina Hulu Sanga-Sanga ("PHSS") to the previous Sanga-Sanga PSC contractor was US\$111,9 million, PHSS disagreed with such amount and is in process to obtain assistance from the relevant institutions to verify the reasonable amount to be paid, As of reporting date, the total investment costs to be reimbursed to the previous Sanga-Sanga PSC contractor had not been recognized.

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50. SIGNIFICANT AGREEMENTS, COMMITMENTS AND CONTINGENCIES (continued)

k. Mechanism of Trustee Borrowing Structure (“TBS”)

On June 13, 2019, PEPC through TBS obtained the following financing facilities for the development of the JTB project with a total facility of US\$1,846,400:

- a. The Jambaran-Tiung Biru Loan Agreement, which was signed by the Trustee, MUFG Bank Ltd, an Agent and Lender, with a total facility of US\$700,000 from Tranche A and US\$1,046,400 from Tranche B, This loan bears interest at LIBOR + applicable margin of 2,95% for Tranche A and LIBOR + applicable margin of 2,15% for Tranche B.
- b. The Jambaran-Tiung Biru Wakala Agreement, which was signed by the Trustee and MUFG Bank (Malaysia) Berhad as an Investment Agent, with a total facility of US\$40,000 from Tranche A and US\$60,000 from Tranche B, This loan bears interest at LIBOR + applicable margin of 2,95% for Tranche A and LIBOR + applicable margin of 2,15% for Tranche B .

However, in the Q1 of 2020 there was a cancellation of the contingent commitment so that the total facility was US\$1,679,940 as follows:

- a. The Jambaran-Tiung Biru Loan Agreement, which was signed by the HSBC Bank USA as Trustee, MUFG Bank Ltd, as an Agent and Lender, with a total facility of US\$636,865 from Tranche A and US\$952,022 from Tranche B, The loan bears interest at a rate of LIBOR + 2,95% for Tranche A and LIBOR + 2,15% for Tranche B.
- b. The Jambaran-Tiung Biru Wakala Agreement, which was signed by the Trustee and MUFG Bank (Malaysia) Berhad as an Investment Agent, with a total facility of US\$36,455 from Tranche A and US\$54,598 from Tranche B, The loan bears interest at a rate of LIBOR + 2,95% for Tranche A and LIBOR + 2,15% for Tranche B.

The Tranche A loan principal is repayable on a semi-annually basis with the first payment due on March 31, 2022 and the final payment due on March 31, 2034, The Tranche B loan principal is repayable every six months with the first payment due on the date March 31, 2022 and final payment will be due on March 31, 2029.

The outstanding bank loan as of reporting date is US\$606,000, The total interest expense and commitment fees incurred during the year is US\$15,086 and US\$9,506, respectively, The Company has complied with the covenants stipulated in the loan agreements, the Company recorded the remaining funds in the trustee's account as of reporting date as restricted cash.

l. RDMP project RU-V Balikpapan and Lawe Lawe project

The Company has entered into various contracts in relation to RDMP Project RU-V Balikpapan and Lawe Lawe project with outstanding total contracts amounts of US\$2,826,329 and Rp27,6 trillion, respectively.

As of September 30, 2020, the Company made advance payments to vendors amounted to US\$195,775 (note 16b).

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50. SIGNIFICANT AGREEMENTS, COMMITMENTS AND CONTINGENCIES (continued)

m. Provision for assets decommissioning and site restoration for PHM, PHSS, PHKT and PT Pertamina Hulu Energi OSES ("PHE OSES")

As discussed in Note 3,b,viii, the Group recognizes provision for ASR for all assets in the Group's PSC areas, except for the following subsidiaries, for which the extent of decommissioning and site restoration liabilities are still being clarified with the Government:

- a. PHM, PHSS and PHKT: Provisions for ASR are recognized for assets constructed during the current PSC terms;
- b. PHE OSES : Provision for ASR are recognized for assets that are currently being used by the PHE OSES.

As of the completion date of these consolidated financial statements, the discussions with the Government are still ongoing.

n. Rate for utilization of Badak LNG Plant for Sales Contracts of Western Buyers ("WBX") and Regas

The Minister of Finance through the DJKN, in Letter No,S-355/MK,6/2017 dated December 29, 2017 regarding approval for the utilization of state property in the form of Badak LNG Plant Assets for Natural Gas from Post-2017 Mahakam Working Area, gives approval to PHM to utilize the Badak LNG plant for gas processing from Mahakam working area by paying a utilization tariff of US\$0,22/MMBtu, excluding operating and maintenance costs and capital expenditure ("Letter S-355/2017").

However, Letter No, S-355/2017 is not in line with the prior approval of the Minister of Finance in letter No S-651/MK,6/2011 regarding Utilization and Optimization of Badak LNG Plant Assets for the Mahakam WK Gas dated October 20, 2011 to the President Director of PT Pertamina (Persero) ("Letter S-651/2011"), item 3,a in the letter stated that the Minister of Finance approved the use of assets without leasing to contractors PSC who were still bound in LNG sales contracts (Vico, Total EP, and Chevron), concerning that gas sales contracts had been signed by the Government and gas producers in the past.

Exception to the Letter S-651/2011 are given to PSC contractors whose sales contracts have been signed before the issuance of Letter S-651/2011 (including sales contracts of WBX and Regas), At the time the letter was issued, no contractor has been appointed by the Government for the Mahakam working area post 2017, Considering the current stipulation of the Mahakam working area contract effective January 1, 2018, the PHM believes that the PHM is also entitled to exemption from utilization rates as it continues to supply LNG for sales contracts of WBX (until 2020) and Regas (until 2022).

Therefore, since the issuance of the Letter No, S-355/2017, PHM, with the approval of SKK Migas, requests the exemption from the Badak LNG plant utilization tariff to the Minister of Finance for the WBX and Regas sales contract with the following considerations:

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50. SIGNIFICANT AGREEMENTS, COMMITMENTS AND CONTINGENCIES (continued)

n. Rate for utilization of Badak LNG Plant for Sales Contracts of Western Buyers ("WBX") and Regas (continued)

- WBX and Regas sales contracts are signed by the Government and gas producers in the past, where the Minister of Finance through Letter S-651/2011 once provided fee waivers for the utilization costs of the Badak LNG plant;

- Fulfillment of WBX and Regas sales contracts is the Government's assignment to PHM as the operator of the post-2017 Mahakam working area as an implementation of the Government's commitment to buyers (based on Letter of Intent, dated March 26, 2010, regarding Upstream Oil and Gas Business Activities in the Mahakam Block and the letter of Director General of Oil and Gas No. 16777/15/DJM,B/2012, November 22, 2012, regarding Guaranteed LNG Supply for FSRU West Java Post-2017), The Government appointed PHM as a contractor for the post-2017 Mahakam working area on April 14, 2015, and as the consequence, The PHM required to continue supply to Pertamina that act as the seller of the State and contractor for the fulfillment of the WBX and Regas LNG sales contracts (based on the Mahakam LNG Development Agreement dated June 26, 2018 and the Marketing, Sales, Supply and Handling Sales Liabilities Agreement for LNG Sales from the Mahakam Working Area to Western Buyers on August 9, 2018);

- a. The BMN rates charged on these sales contracts is included the economic of the contract price at the time of signing of the sales contract
- b. The renegotiation of the sales price of the sales contract (due to additional costs of utilizing the Badak LNG plant) is not allowed under the sales contract, If so, the buyer will potentially terminate the contract; and
- c. The Imposition of tariffs for utilizing Badak LNG plant is not in line with the Government Regulation No.27/2014 principle stipulates that the utilization scheme can only be applied to a BMN that has not been used optimally, The Badak LNG Plant, since its operation in 1977 to date, is still being optimally used for upstream oil and gas business activities by the Government and contractors.

The dispute amounts for the utilization of the Badak LNG plant in relation to WBX and Regas sales contracts is:

- § US\$29,139 Mahakam PSC portion or US\$13,713 PHM portion (47,0588%) in 2018.
- § US\$29,863 Mahakam PSC portion or US\$11,711 PHM portion (39,2157%) in 2019; and.
- § US\$12,373 Mahakam PSC portion or US\$5,337 PHM portion (43.1373%) for the shipping period from January 2020 through June 2020.

The negotiation process between PHM and the Government is still ongoing. PHM and SKK Migas have also sought legal opinion from the Junior Attorney General for Civil and State Administration Affairs in relation to this matter, whose opinion has not been issued as of the completion of these financial statements.

Based on the above circumstances, the Group does not accrue the costs of utilizing the Badak LNG plant in the consolidated financial statements for September 30, 2020 and December 31, 2019.

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51. EVENTS AFTER THE REPORTING PERIOD

Crude oil price volatility

As of the time of the completion date of the consolidated financial statements there were unusual world market conditions as a result of the COVID-19 pandemic which have an impact on the volatility of crude oil prices. In addition, the impact of the COVID-19 pandemic on the global economy, including Indonesia, among others are decline in economic growth, decline in capital markets, increase in credit risk, including delays in payments by customers, and depreciation of foreign exchange rates.

Group had certain oil and gas assets, inventories and financial assets, including receivables from related parties and long-term LNG contracts, which were vulnerable to low oil prices, decreased demand, and decreased customers' ability to settle the Group receivables, as an impact of the COVID-19 pandemic, however, these events are only indicative (non-adjusting events) that occur after the financial reporting date, so it does not impact on conclusions regarding the recoverable amount of the Group's assets as of reporting date.

Management will always maintain a portfolio in business diversification to anticipate price volatility and reduce its impact. Management always analyses the movements of oil and commodity prices and their effects on the cost structure. Management prepares strategic and financial planning with various scenarios with considering the aspects of macroeconomic parameters. These plans are periodically tested for relevance and validity, in order to maintain the strength of financial position to anticipate of dynamic market prices.

Additional loan drawdown for JTB project development

From 1 October 2020 to 28 January 2021, PEPC has made additional loan drawdown from the financing facilities for JTB project development amounting to US\$154 million (full amount).

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PT PERTAMINA (PERSERO)

(a state-owned company incorporated in the Republic of Indonesia with limited liability)

US\$20,000,000,000

Global Medium Term Note Program

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BNP PARIBAS Citigroup Crédit Agricole CIB Mandiri Securities

MUFG

SMBC Nikko

**Société Générale
Corporate & Investment
Banking**

February 3, 2021