IMPORTANT NOTICE

THIS OFFERING IS AVAILABLE ONLY TO INVESTORS WHO ARE EITHER (1) BOTH QUALIFIED INSTITUTIONAL BUYERS UNDER RULE 144A AND QUALIFIED PURCHASERS AS DEFINED IN THE INVESTMENT COMPANY ACT OF 1940, AS AMENDED OR (2) NON-U.S. PERSONS OUTSIDE OF THE UNITED STATES UNDER REGULATION S IN RELIANCE ON THE U.S. SECURITIES ACT OF 1933, AS AMENDED

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

NOTHING IN THIS ELECTRONIC TRANSMISSION CONSTITUTES AN OFFER OF SECURITIES FOR SALE IN THE UNITED STATES OR ANY OTHER JURISDICTION WHERE IT IS UNLAWFUL TO DO SO. 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 STATE OF THE UNITED STATES OR OTHER JURISDICTION. THE SECURITIES MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED WITHIN THE UNITED STATES, OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS (AS DEFINED IN REGULATION S UNDER THE SECURITIES ACT ("**REGULATION S**")) EXCEPT PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND APPLICABLE STATE OR LOCAL SECURITIES LAWS.

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

Confirmation of your Representation: In order to be eligible to view the Offering Memorandum or make an investment decision with respect to the securities, investors must be either (1) both Qualified Institutional Buyers ("**QIBs**") (within the meaning of Rule 144A under the Securities Act) and Qualified Purchasers ("**QPs**") as defined in the United States Investment Company Act of 1940, as amended or (2) non-U.S. persons outside the United States in reliance on Regulation S under the Securities Act. The Offering Memorandum is being sent at your request and by accepting the e-mail and accessing the Offering Memorandum, you will be deemed to have represented to us that (1) you and any customers you represent are either (a) both QIBs and QPs or (b) non-U.S. persons outside of the United States and that the electronic mail address that you gave us and to which the Offering Memorandum has been delivered is not located in the United States, its territories, its possessions and other areas subject to its jurisdiction and (2) you consent to delivery of the Offering Memorandum by electronic transmission.

IF ANY PERSON HOLDING AN INTEREST IN THE SECURITIES (AS DEFINED BELOW) IS NEITHER (1) A QIB WHO IS ALSO A QP AT THE TIME OF ACQUIRING THE SECURITIES NOR (2) A NON-U.S. PERSON OUTSIDE THE UNITED STATES, AS DEFINED IN REGULATION S UNDER THE SECURITIES ACT, THE RELEVANT ISSUER MAY REGARD THE TRANSACTION WITH SUCH PERSON AS NULL AND VOID AND OF NO EFFECT. IN SUCH CIRCUMSTANCES, SUCH PERSON MAY BE FORCED TO TRANSFER OR SELL SUCH SECURITIES TO A PERMITTED TRANSFEREE MEETING THE REQUIREMENTS SET FORTH UNDER THE CAPTION "*TRANSFER RESTRICTIONS*" IN THIS OFFERING MEMORANDUM.

To the fullest extent permitted by law, none of the Arranger (as defined below) or the Dealers (as defined in the Offering Memorandum) accept any responsibility for the contents of the Offering Memorandum or for any other statements made or purported to be made by the Arranger or any Dealer or on their behalf in connection with the Issuers or the Guarantor (each as defined in the Offering Memorandum) or the issue and offering of any securities. The materials relating to the offering of securities to which the Offering Memorandum relates do not constitute, and may not be used in connection with, an offer or solicitation in any place where offers or solicitations are not permitted by law. If a jurisdiction requires that the offering be made by a licensed broker or dealer and the underwriters or any affiliate of the underwriters is a licensed broker or dealer in that jurisdiction, the offering shall be deemed to be made by the underwriters or such affiliate on behalf of the relevant Issuer in such jurisdiction.

The Offering Memorandum has been sent to you in an electronic form. You are reminded that documents transmitted via this medium may be altered or changed during the process of electronic transmission and consequently none of the Issuers, the Guarantor, Standard Chartered Bank (the "**Arranger**"), any Dealer, any person who controls the Arranger or any Dealer, any director, officer, employee or agent of the Issuers, the Guarantor, the Arranger or any Dealer, or affiliate of any such person accepts any liability or responsibility whatsoever in respect of any difference between the Offering Memorandum distributed to you in electronic format and the hard copy version available to you on request from the Arranger or the Dealers.

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

OFFERING MEMORANDUM

THAI OIL PUBLIC COMPANY LIMITED

(registered in the Kingdom of Thailand as a public company with limited liability)

THAIOIL TREASURY CENTER COMPANY LIMITED

(registered in the Kingdom of Thailand as a private company with limited liability)

US$3,679,000,000 Global Medium Term Note Program

Under the US$3,679,000,000 Global Medium Term Note Program described in this Offering Memorandum (the "**Program**"), each of Thai Oil Public Company Limited (the "**Company**") and Thaioil Treasury Center Company Limited (the "**Treasury Center**"), subject to compliance with all relevant laws, regulations and directives, may from time to time issue medium term notes or perpetual securities. Each Series (as defined in "*Summary of the Program*") of notes shall be issued either by (i) the Company (in its capacity as issuer, an "**Issuer**") (the "**Direct Issuance Notes**"); or (ii) the Treasury Center (in its capacity as issuer, an "**Issuer**", and together with the Company in its capacity as issuer, the "**Issuers**"); in the case of (ii), the notes shall be unconditionally and irrevocably guaranteed by the Company (in its capacity as guarantor, the "**Guarantor**") (the "**Guaranteed Notes**" and, together with the Direct Issuance Notes, the "**Notes**"). Each Series of perpetual securities shall be issued either by (i) the Company (in its capacity as Issuer) (the "**Direct Issuance Perpetual Securities**", and together with the Direct Issuance Notes, the "**Direct Issuance Securities**"); or (ii) the Treasury Center (in its capacity as Issuer); in the case of (ii), the perpetual securities shall be unconditionally and irrevocably guaranteed by the Company (in its capacity as Guarantor) (the "**Guaranteed Perpetual Securities**", (a) together with the Guaranteed Notes, the "**Guaranteed Securities**" and (b) together with the Direct Issuance Perpetual Securities, the "**Perpetual Securities**"). The Perpetual Securities may rank as senior obligations (the "**Senior Perpetual Securities**") or subordinated obligations (the "**Subordinated Perpetual Securities**") of the relevant Issuer. The Notes and the Perpetual Securities are together referred to as the "**Securities**".

Securities may only be issued in registered form. The aggregate nominal amount of Securities outstanding will not at any time exceed US$3,679,000,000 (or its equivalent in other currencies, subject to any duly authorized increase). The Securities may be issued on a continuing basis to one or more of the Dealers specified under "*Summary of the Program*" or any additional Dealer appointed under the Program from time to time by the Company or the Treasury Center (each a "**Dealer**" and together the "**Dealers**"), which appointment may be for a specific issue or on an ongoing basis. References in this Offering Memorandum to the "relevant Dealer" shall, in the case of an issue of Securities being (or intended to be) purchased by more than one Dealer, be to all Dealers agreeing to purchase such Securities.

Subject to the relevant Terms and Conditions, the guarantee of Guaranteed Securities (the "**Guarantee**"), other than in relation to Subordinated Perpetual Securities, constitutes a direct, unconditional, unsecured and unsubordinated obligation of the Guarantor, ranking at least *pari passu* with all other present and future unsecured and unsubordinated obligations of the Guarantor, save for such obligations as may be preferred by provisions of law that are both mandatory and of general application. In order to comply with applicable requirements of Thai law, the Indenture (as defined in "*Summary of the Program*") provides that the Guarantor's maximum liability under the Guarantee will be capped at an amount equal to (i) in the case of a Series of Guaranteed Notes, 125% of the outstanding aggregate principal amount of the relevant Series of Guaranteed Notes outstanding as of the Issue Date or the issue date of any further Guaranteed Notes issued in accordance with Condition 19 (*Further Issuance*) of the Terms and Conditions of the Notes and consolidated and forming a single series therewith or (ii) in the case of a Series of Guaranteed Perpetual Securities, 150% of the aggregate principal amount of the relevant Series of Guaranteed Perpetual Securities (the "**Maximum Guaranteed Amount**"). See "*Risk Factors – Risks Relating to the Guarantee.*"

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 Securities that are agreed at or prior to the time of issue thereof to be so listed on the SGX-ST. Such permission will be granted when such Securities have been admitted to the Official List of the SGX-ST. Unlisted Series of Securities may also be issued pursuant to the Program. The relevant Pricing Supplement in respect of any Series of Securities will specify whether or not such Securities will be listed on the SGX-ST (or any other stock exchange). There is no assurance that an application to the SGX-ST for the listing of the Securities of any Series will be approved. Admission to the Official List of the SGX-ST and quotation of any Securities on the SGX-ST is not to be taken as an indication of the merits of the Issuers, the Guarantor, their respective subsidiary companies (if any), their respective associated companies (if any) or such Securities. The SGX-ST assumes no responsibility for the correctness of any of the statements made, opinions expressed or reports contained herein.

The Securities of each Series to be issued in registered form and which are 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**") ("**Unrestricted Securities**") will initially be represented by a registered global certificate (each an "**Unrestricted Global Certificate**") without interest or distribution coupons, which may, on the relevant issue date, be (a) in the case of a Series intended to be cleared through Euroclear Bank SA/NV ("**Euroclear**") and/or Clearstream Banking S.A. ("**Clearstream**"), deposited with a common depositary on behalf of Euroclear and Clearstream or (b) in the case of a Series intended to be cleared through The Depository Trust Company ("**DTC**"), registered in the name of Cede & Co. as nominee for DTC or (c) in the case of a Series intended to be cleared through a clearing system other than, or in addition to, Euroclear, Clearstream and/or DTC, or delivered outside a clearing system, deposited or registered as agreed among the relevant Issuer (in respect of each Series of Guaranteed Securities), the Guarantor and the relevant Dealer. Securities that are sold in the United States to investors who are both "qualified institutional buyers" (each, a "**QIB**") within the meaning of Rule 144A ("**Rule 144A**") under the Securities Act and "qualified purchasers" (each, a "**QP**") as defined in the United States Investment Company Act of 1940, as amended (the "**U.S. Investment Company Act**") ("**Restricted Securities**") will initially be represented by a registered global certificate (each a "**Restricted Global Certificate**" and, together with the relevant Unrestricted Global Certificate, the "**Global Certificates**"), without interest coupons, which may be deposited on the relevant issue date with a custodian (the "**DTC Custodian**") for, and registered in the name of Cede & Co. as nominee for, DTC or with a common depositary on behalf of Euroclear and Clearstream. The provisions governing the exchange of interests in Global Certificates for individual Note Certificates in registered form are described in "*Summary of Provisions Relating to the Securities while in Global Form*."

The Securities and the Guarantee have not been, and will not be, registered under the Securities Act or the securities laws of any other jurisdiction. Subject to certain exceptions, the Securities and the Guarantee may not be offered or sold within the United States or to, or for the account of benefit of, U.S. persons. Accordingly, the Securities and the Guarantee may be offered and sold (i) in the United States (as defined in Regulation S) in registered form only to persons who are both QIBs and QPs in reliance on the exemption from the registration requirements of the Securities Act provided by Rule 144A and the exemption from the registration requirements of the U.S. Investment Company Act provided by Section 3(c)(7) of that act, and/or (ii) outside the United States to non-U.S. persons in offshore transactions in reliance on Regulation S under the Securities Act. Any Series of Securities and the Guarantee may be subject to additional selling restrictions. The applicable Pricing Supplement in respect of such Series of Securities will specify any such restrictions. See "*Subscription and Sale*" and the applicable Pricing Supplement.

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

Investing in Securities issued under the Program involves certain risks and may not be suitable for all investors. See "*Risk Factors*" beginning on page 11 for a discussion of factors that you should consider carefully before investing in the Securities.

Arranger

Standard Chartered Bank

Dealers

BofA Securities	**BNP PARIBAS**	**Deutsche Bank**
HSBC	**Mizuho**	**Standard Chartered Bank**

The date of this Offering Memorandum is January 5, 2026.

NOTICE TO INVESTORS

This Offering Memorandum is being furnished by us on a confidential basis in connection with an offering exempt from the registration requirements under the Securities Act, solely for the purpose of enabling a prospective investor to consider the purchase of the Securities. The Securities may be offered in reliance upon the exemptions from registration under the Securities Act. **The Securities have not been and will not be registered under the U.S. Securities Act or any state securities laws in the United States. Neither the Issuers nor the Guarantor are or is registered, nor will they register, under the U.S. Investment Company Act, and investors will not be entitled to the benefits of the U.S. Investment Company Act. Subject to certain exceptions, the Securities may not be offered or sold within the United States or to any national, resident or citizen of the United States. Pursuant to this Offering Memorandum, the Securities may not be offered or sold in the United States or to, or for the account or benefit of, U.S. persons as defined in Regulation S under the U.S. Securities Act, except that the Securities may be offered or sold to (a) persons who are both (i) "qualified institutional buyers," as defined in Rule 144A under the U.S. Securities Act and (ii) "qualified purchasers," as defined in the U.S. Investment Company Act, in reliance on the exemption from the registration requirements of the U.S. Securities Act provided by Rule 144A and the exemption from the registration requirements of the U.S. Investment Company Act provided by Section 3(c)(7) of that act and (b) non-U.S. persons in offshore transactions in reliance on Regulation S. Prospective investors are hereby notified that sellers of the Securities may be relying on the exemption from the provisions of Section 5 of the Securities Act provided by Rule 144A.** Each purchaser of the Securities will be deemed to have made certain acknowledgments, representations and agreements regarding the Securities and the offer, sale, reoffer, pledge or other transfer of the Securities. See "*Transfer Restrictions*."

Each Series (as defined herein) of Notes will be issued on the terms set out herein under "*Terms and Conditions of the Notes*" and each Series of Perpetual Securities will be issued on the terms set out herein under "*Terms and Conditions of the Perpetual Securities*", each as amended and/or supplemented by the Pricing Supplement specific to such Series. This Offering Memorandum must be read and construed together with any amendments or supplements hereto and, in relation to any Series of Securities, must be read and construed together with the relevant Pricing Supplement.

Distribution of this Offering Memorandum and any Pricing Supplement in whole or in part to any other person other than the prospective investor and any person retained to advise such prospective investor with respect to its purchase is unauthorized, and any disclosure of any of its contents, without our prior written consent, is prohibited. Each prospective investor, by accepting delivery of this Offering Memorandum and any Pricing Supplement, agrees to the foregoing and to make no photocopies of the whole or any part of this Offering Memorandum or any Pricing Supplement.

This Offering Memorandum and any Pricing Supplement do not constitute an offer to, and may not be used for the purpose of an offer to or a solicitation by, anyone in any jurisdiction or in any circumstances in which such an offer or solicitation is not authorized or is unlawful. No action has been or will be taken to permit a public offering of the Securities in any jurisdiction where action would be required for that purpose. The Securities may not be offered or sold, directly or indirectly, and neither this Offering Memorandum nor any Pricing Supplement may be distributed in any jurisdiction, except in accordance with the legal requirements applicable in such jurisdiction.

No person has been authorized to give any information or to make any representation other than those contained in this Offering Memorandum or any Pricing Supplement, and any information or representation not contained in this Offering Memorandum or any Pricing Supplement must not be relied upon as having been authorized by us, Standard Chartered Bank as the arranger (the "**Arranger**") or BNP PARIBAS, Deutsche Bank AG, Singapore Branch, The Hongkong and Shanghai Banking Corporation Limited, Merrill Lynch (Singapore) Pte. Ltd. and Mizuho Securities Asia Limited (together with the Arranger, the "**Dealers**") of the Program. Neither the delivery of this Offering Memorandum or any Pricing Supplement nor any sale of the Securities pursuant to the Program 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 Arranger, the Dealers, the Trustee or the Agents (in such capacity) (each as defined herein), and no responsibility or liability is accepted by any thereof, as 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 Issuers, the Guarantor or the Securities, their distribution or their future performance. The Arranger and the Dealers

accordingly disclaim all and any liability whether arising in tort or contract or otherwise (save as referred to above) which they might otherwise have in respect of any such information.

Neither this Offering Memorandum, any Pricing Supplement nor any other information supplied in connection with the Securities should be considered as a recommendation by us, the Arranger, the Dealers, the Trustee or the Agents (each as defined herein) that any recipient of this Offering Memorandum or any Pricing Supplement should purchase any of the Securities. Each investor contemplating purchasing any Securities should make its own independent investigation of our business, financial condition and affairs, and its own appraisal of our creditworthiness.

To the best of its knowledge, having made all reasonable enquiries, each of the Company and the Treasury Center confirms that (i) this Offering Memorandum (as may be supplemented from time to time) contains all information with respect to the Issuers, the Guarantor and the Securities which are material in the context of the offering of the Securities under the Program; (ii) the statements contained herein (as may be supplemented from time to time) relating to the Issuers, the Guarantor and the Securities are true and accurate in all material respects and not misleading; (iii) the opinions and intentions expressed in this Offering Memorandum (as may be supplemented from time to time) with regard to the Issuers and the Guarantor are honestly held, have been reached after considering all relevant circumstances and are based on reasonable assumptions; and (iv) there are no other facts in relation to the Issuers, the Guarantor or the Securities the omission of which would, in the context of the offering of the Securities under the Program, make any statement in this Offering Memorandum (as may be supplemented from time to time) misleading in any material respect.

NEITHER THE PROGRAM NOR THE SECURITIES HAVE 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 HAS ANY OF THE FOREGOING AUTHORITIES PASSED UPON OR ENDORSED THE MERITS OF ANY OFFERING OF THE SECURITIES 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 any Series of Securities, the Dealer(s) (if any) named as the stabilizing manager(s) (or persons acting on behalf of any stabilizing manager(s)) (the "**Stabilizing Manager(s)**") in the relevant Pricing Supplement may over-allot the Securities or effect transactions with a view to supporting the market price of the Securities at a level higher than that which might otherwise prevail for a limited period after the issue date of the Securities. However, there is no obligation on such Stabilizing Manager(s) to do this. Such stabilizing, if commenced, may be discontinued at any time, and must be brought to an end after a limited period. Such stabilizing shall be in compliance with all applicable laws, regulations and rules.

DISCLOSURE OF INVESTORS IN COMPLIANCE WITH THAI LAW REQUIREMENTS

The Office of the Securities and Exchange Commission of Thailand (the "**Office of the Thai SEC**") will require the Dealers to disclose the identity of investors in the Securities in accordance with applicable regulation.

NOTICE TO PROSPECTIVE INVESTORS IN THE UNITED KINGDOM

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

MIFID II PRODUCT GOVERNANCE / TARGET MARKET

The Pricing Supplement in respect of any Securities may include a legend entitled "MiFID II Product Governance" which will outline the target market assessment in respect of the Securities and which channels for distribution of the Securities are appropriate. Any person offering, selling or recommending the Securities (a "**distributor**") should take into consideration such 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 Securities (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 Securities is a manufacturer in respect of such Securities, but otherwise neither the Arranger 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 Securities may include a legend entitled "UK MiFIR Product Governance" which will outline the target market assessment in respect of the Securities and which channels for distribution of the Securities are appropriate. Any distributor should take into consideration such target market assessment; however, a distributor subject to the UK MiFIR product governance rules set out in 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 Securities (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 Securities is a manufacturer in respect of such Securities, but otherwise neither the Arranger nor the Dealers nor any of their respective affiliates will be a manufacturer for the purpose of the UK MIFIR Product Governance Rules.

PRIIPs / IMPORTANT – EEA RETAIL INVESTORS

If the Pricing Supplement in respect of any Securities includes a legend entitled "Prohibition of Sales to EEA and UK Retail Investors", the Securities 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 means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of MiFID II; or (ii) a customer within the meaning of Directive (EU) 2016/97 (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. Consequently, no key information document required by Regulation (EU) No 1286/2014 (as amended the "**PRIIPs Regulation**") for offering or selling the Securities or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Securities or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

PRIIPs / IMPORTANT – UK RETAIL INVESTORS

If the Pricing Supplement in respect of any Securities includes a legend entitled "Prohibition of Sales to UK Retail Investors", the Securities 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 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 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. 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 Securities or otherwise making them available to retail investors in the UK has been prepared and therefore offering or selling the Securities or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.

PRODUCT CLASSIFICATION PURSUANT TO SECTION 309B OF THE SECURITIES AND FUTURES ACT 2001 OF SINGAPORE

The Pricing Supplement in respect of any Securities may include a legend entitled "Singapore Securities and Futures Act Product Classification" which will state the product classification of the Securities pursuant to Section 309B(1) of the Securities and Futures Act 2001 of Singapore, as modified or amended from time to time (the "**SFA**"). If applicable, the relevant Issuer will make a determination and provide the appropriate written notification to "relevant persons" in relation to each issue about the classification of the Securities being offered for the purposes of Section 309B(1)(a) and Section 309B(1)(c) of the SFA.

NOTICE TO RESIDENTS OF THAILAND

THE OFFERING OF EACH ISSUE OF THE SECURITIES OUTSIDE THAILAND HAS BEEN OR WILL BE APPROVED BY THE OFFICE OF THE THAI SEC. HOWEVER, SUCH APPROVAL DOES NOT CONSTITUTE A CERTIFICATION BY THE OFFICE OF THE THAI SEC, THE SECURITIES AND EXCHANGE COMMISSION OF THAILAND OR THE CAPITAL MARKET SUPERVISORY BOARD OF THAILAND (INDIVIDUALLY OR TOGETHER, THE "THAI SEC") AS TO THE ACCURACY AND COMPLETENESS OF ANY INFORMATION CONTAINED IN THIS OFFERING MEMORANDUM, NOR DOES IT REPRESENT ANY ASSURANCE AS TO THE VALUE OR PRICE OF THE SECURITIES. THE SECURITIES HAVE NOT BEEN, AND WILL NOT BE, APPROVED BY THE OFFICE OF THE THAI SEC TO BE OFFERED IN THAILAND. THEREFORE, THE OFFERING, SALE AND TRANSFER OF THE SECURITIES IN THAILAND AT ANY TIME IS NOT LEGAL, AND DOCUMENTS RELATING TO THE OFFERING OF THE SECURITIES, AS WELL AS INFORMATION CONTAINED HEREIN, MAY NOT BE CIRCULATED OR DISTRIBUTED IN THAILAND, OR USED IN CONNECTION WITH ANY OFFER OR INVITATION FOR SUBSCRIPTION OR SALE OF THE SECURITIES IN THAILAND.

NOTICE TO CAPITAL MARKET INTERMEDIARIES AND PROSPECTIVE INVESTORS PURSUANT TO PARAGRAPH 21 OF THE HONG KONG SFC CODE OF CONDUCT

Prospective investors should be aware that certain intermediaries in the context of certain offerings of the Securities pursuant to the Program (each such offering, a "**CMI Offering**"), including certain Dealers, may be "capital market intermediaries" ("**CMIs**") subject to Paragraph 21 of the Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission (the "**SFC Code**"). This notice to prospective investors is a summary of certain obligations the SFC Code imposes on such CMIs, which require the attention and cooperation of prospective investors. Certain CMIs may also be acting as "overall coordinators" ("**OCs**") for a CMI Offering and are subject to additional requirements under the SFC Code. The application of these obligations will depend on the role(s) undertaken by the relevant Dealers in respect of each CMI Offering.

Prospective investors who are the directors, employees or major shareholders of the Issuers, the Guarantor, a CMI or its group companies would be considered under the SFC Code as having an association ("**Association**") with the Issuers, the Guarantor, the CMI or the relevant group company. Prospective investors associated with the Issuers, the Guarantor or any CMI (including its group companies) should specifically disclose this when placing an order for the relevant Securities and should disclose, at the same time, if such orders may negatively impact the price discovery process in relation to the relevant CMI Offering. Prospective investors who do not disclose their Associations are hereby deemed not to be so associated. Where prospective investors disclose their Associations but do not disclose that such order may negatively impact the price discovery process in relation to the relevant CMI Offering, such order is hereby deemed not to negatively impact the price discovery process in relation to the relevant CMI Offering.

Prospective investors should ensure, and by placing an order prospective investors are deemed to confirm, that orders placed are *bona fide*, are not inflated and do not constitute duplicated orders (i.e. two or more corresponding or identical orders placed via two or more CMIs). A rebate may be offered by the relevant Issuer to all private banks for orders they place (other than in relation to Securities subscribed by such private banks as principal whereby it is deploying its own balance sheet for onward selling to investors), payable upon closing of the relevant CMI Offering based on the principal amount of the Securities distributed by such private banks to investors. Private banks are deemed to be placing an order on a principal basis unless they inform the CMIs otherwise. As a result, private banks placing an order on a principal basis (including those deemed as placing an order as principal) will not be entitled to, and will not be paid, the rebate. Details of any such rebate will be set out in the applicable Pricing Supplement or otherwise notified to prospective investors. If a prospective investor is an asset management arm affiliated with any relevant Dealer, such prospective investor should indicate when placing an order if it is for a fund or portfolio where the relevant Dealer or its group company has more than 50% interest, in which case it will be classified as a "proprietary order" and subject to appropriate handling by CMIs in accordance with the SFC Code and should disclose, at the same time, if such "proprietary order" may negatively impact the price discovery process in relation to the relevant CMI Offering. Prospective investors who do not indicate this information when placing an order are hereby deemed to confirm that their order is not a "proprietary order". If a prospective investor is otherwise affiliated with any Dealer, such that its order may be considered to be a "proprietary order" (pursuant to the SFC Code), such prospective investor should indicate to the relevant Dealer when placing such order. Prospective investors who do not indicate this information when placing an order are hereby deemed to confirm that their order is not a "proprietary order". Where prospective investors disclose such information but do not disclose that such "proprietary order" may negatively impact the price discovery process in relation to the relevant CMI Offering, such "proprietary order" is hereby deemed not to negatively impact the price discovery process in relation to the relevant CMI Offering.

Prospective investors should be aware that certain information may be disclosed by CMIs (including private banks) which is personal and/or confidential in nature to the prospective investor. By placing an order, prospective investors are deemed to have understood and consented to the collection, disclosure, use and transfer of such information by the relevant Dealers and/or any other third parties as may be required by the SFC Code, including to the Issuers and the Guarantor, any OCs, relevant regulators and/or any other third parties as may be required by the SFC Code, it being understood and agreed that such information shall only be used for the purpose of complying with the SFC Code, during the bookbuilding process for the relevant CMI Offering. Failure to provide such information may result in that order being rejected.

SERVICE OF PROCESS AND ENFORCEMENT OF CIVIL LIABILITIES

The Company is a public limited liability company and the Treasury Center is a private limited liability company, both organized under the laws of Thailand. Substantially all of our directors and officers (and our auditors) are residents of Thailand and a substantial portion of our assets and the assets of our officers and directors are located in Thailand. As a result, it may not be possible for investors to effect service of process on us or such persons outside Thailand, or to enforce against us or such persons in Thai courts judgments obtained in courts outside Thailand predicated upon civil liabilities of ours or such persons, including any judgment predicated upon United States federal securities laws. We have been advised by Baker & McKenzie Ltd., our Thai counsel, that a judgment or order obtained in a court outside Thailand would not be enforced as such by the courts of Thailand, but such judgment or order in the discretion of the courts of Thailand may be admitted as evidence of any obligation in new proceedings instituted in the courts of Thailand, which would consider the issue on the evidence before it. Thus, to the extent that investors succeed in bringing legal actions against us outside Thailand, their available remedies and any recovery in Thai proceedings may be limited.

CERTAIN DEFINED TERMS AND CONVENTIONS

As used in this Offering Memorandum, unless the context otherwise requires, the terms "we," "us," "our," "Group," and "Thai Oil" refer to Thai Oil Public Company Limited and its consolidated subsidiaries (including the Treasury Center). The terms "Company" and "Treasury Center" refer to each of Thai Oil Public Company Limited and Thaioil Treasury Center Company Limited, respectively, on a standalone basis, unless the context requires otherwise.

In this Offering Memorandum, references to an "Issuer" or the "relevant Issuer" shall be either to the Company or the Treasury Center in their respective capacities as issuers under the Program, as the context requires, and references to the "Issuers" shall be to each Issuer collectively. References to the "Guarantor" shall be to the Company in its capacity as guarantor in respect of each Series of Guaranteed Securities.

The term "PTT" refers to PTT Public Company Limited and "PTT Group" refers to all the group companies under PTT, which include us and "OR" refers to PTT Oil and Retail Business Public Company Limited. The terms "TPX" or "Thai Paraxylene" refers to Thai Paraxylene Company Limited, "Thai Lube Base" refers to Thai Lube Base Public Company Limited and "GPSC" refers to Global Power Synergy Public Company Limited.

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 "THB," "Baht" and "Thai Baht" are to the legal currency of the Kingdom of Thailand and references to "S$" are to Singaporean dollars, the legal currency of Singapore. Unless otherwise specified or the context otherwise requires, all references to "Thai" or "Thailand" are references to the Kingdom of Thailand. All references to the "Government" or "Thai government" herein are references to the Government of the Kingdom of Thailand. 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 of Technical Terms*" contained elsewhere in this Offering Memorandum.

PRESENTATION OF FINANCIAL AND OTHER INFORMATION

Exchange Rate Information

We publish our financial statements and financial information in Baht. Solely for convenience, this Offering Memorandum contains translations of certain Baht amounts into U.S. dollars at the exchange rate of THB32.33 = US$1.00, unless otherwise indicated, which was the weighted-average interbank exchange rate announced by the Bank of Thailand ("**BOT**") as of September 30, 2025. The weighted-average interbank exchange rate announced by the BOT as of December 30, 2025 was THB31.53 = US$1.00. These translations should not be construed as representations that the Baht amounts represent such U.S. dollar amounts or could be, or could have been, converted into U.S. dollars at the rates indicated or at all. See "*Exchange Rate Information*" for further information regarding the rates of exchange between the Thai Baht and the U.S. dollar.

Presentation of Financial Information

This Offering Memorandum contains our audited financial statements as of and for the year ended December 31, 2023, including comparative information presented as corresponding figures as of and for the year ended December 31, 2022; our audited financial statements as of and for the year ended December 31, 2024, including comparative information presented as corresponding figures as of the for the year ended December 31, 2023; and our unaudited interim financial information as of and for the nine months ended September 30, 2025, including comparative information presented as corresponding figures as of and for the nine months ended September 30, 2024. These financial statements and financial information have been prepared in accordance with Thai Financial Reporting Standards ("**TFRS**"), which is aligned with, but not identical to, International Financial Reporting Standards ("**IFRS**"). See "*Summary of Certain Significant Differences Between TFRS and IFRS.*"

Except as otherwise indicated or the context otherwise requires, financial information in this Offering Memorandum is presented on a consolidated basis.

Rounding

Rounding adjustments have been made in calculating some of the financial 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-TFRS Financial Measures

This Offering Memorandum includes certain non-TFRS financial measures for Thai Oil, including EBITDA, EBITDA margins and other related ratios, and certain non-TFRS operating measures for Thai Oil, including, but not limited to, utilization rates, adjusted gross profit margin, gross integrated margin, product-to-feedstock margin and operating cash cost, which are supplemental measures of our performance and liquidity that are not required by, or presented in accordance with, TFRS or IFRS and should not be considered as an alternative

to net income, operating income or any other performance measures derived in accordance with TFRS or IFRS or as an alternative to cash flow from operating activities or as a measure of liquidity. In addition, EBITDA, the EBITDA related ratios and the other operating measures are not standardized, hence a direct comparison between companies using such a term may not be possible.

Certain Operating Data

This Offering Memorandum contains certain operating data for Thai Oil, including distillation intake capacity, nameplate capacity and capacity utilization rates for our plants. The nameplate capacity with respect to other petrochemical products refers to the announced capacity of our plants based on technology licenses and/or production rates guaranteed by the construction contractor, as adjusted by upgrades or improvements. Capacity utilization rates refer to the actual total production expressed as a percentage of nameplate capacity during the relevant period.

AVAILABLE INFORMATION

While any Securities remain outstanding, we shall, during any period in which we are not subject to and in compliance with the reporting requirements of Section 13 or 15(d) of the U.S. Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), nor 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 and any prospective purchaser of a Security 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

We have included statements in this Offering Memorandum which contain words or phrases such as "will," "would," "aim," "is likely," "expect," "will continue," "anticipate," "estimate," "intend," "plan," "contemplate," "seek," "target," "propose," "future," "objective," "goal," "project," "should," "can," "could," "may" and similar expressions or variations of such expressions, that are "forward-looking statements." Although our management believes that its expectations as reflected by such forward-looking statements are reasonable based on information currently available to it, actual results may differ materially from those suggested by the forward-looking statements due to certain risks or uncertainties associated with our expectations with respect to, but not limited to:

- fluctuations in prices of refinery and petrochemical products or feedstock;
- continued availability of capital and financing;
- interest rates and foreign exchange rates;
- value added tax and other taxes and duties;
- our fixed obligations;
- our competitive environment;
- the financial health of our principal offtake and other domestic refinery and petrochemical customers;
- the extension or renewal of our feedstock, offtake, utility and other contractual arrangements;
- general economic and business conditions and refined petroleum and petrochemical demand and supply in Thailand, Asia and the countries and regions in which we conduct our business;
- technical difficulties in the operation of our plants reducing expected levels of output and efficiency, including unplanned plant shutdowns;

- delays, cost overruns, shortages in materials or labor, defects in design or construction or other problems with construction of our proposed plant expansions;
- receipt of Government approvals and licenses for our other proposed plant expansions;
- our ability to successfully grow through strategic acquisitions and joint ventures;
- the cyclical and highly competitive nature of our business;
- significant capital expenditures required for plant maintenance;
- our ability to realize anticipated synergies and cost savings;
- our dependence on principal customers and feedstock suppliers, including PTT;
- unanticipated future regulatory restrictions in the refinery and/or petrochemical industry;
- liability for remedial actions under environmental regulations;
- political, economic and social developments in Thailand, Asia, the Middle East and the countries and regions in which we conduct our business;
- the cost and availability of adequate insurance coverage; and
- other factors beyond our control.

For a further discussion of the factors that could cause our actual results to differ, see the discussion under "*Risk Factors*." The risks described in the "*Risk Factors*" section in this Offering Memorandum are not exhaustive. Other sections of this Offering Memorandum describe additional factors that could adversely affect our business, financial condition or results of operations. No assurances can be given that such expectations will prove to be correct. Moreover, we operate in a very competitive and rapidly changing environment. New risk factors emerge from time to time and it is not possible for us to predict all such risk factors, nor can we assess the impact of all such risk factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. Given these risks and uncertainties, you should not place undue reliance on forward-looking statements as a prediction of actual results. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

HISTORICAL AND CURRENT MARKET AND INDUSTRY DATA

Historical and current market data used throughout this Offering Memorandum were obtained from internal company analyses, consultants' reports and industry publications. In particular, information has been provided by Platts, a division of McGraw-Hill Financial ("**Platts**"), Argus Media Limited ("**Argus**"), ICIS and IHS Global (Thailand) Limited. IHS Global (Thailand) Limited is part of S&P Global Commodity Insights, a business division of S&P Global Inc. ("**SPGCI**"). Industry surveys and publications generally state that the information contained therein has been obtained from sources believed to be reliable, but the accuracy and completeness of information contained in consultants' reports and industry publications is not guaranteed. Neither we nor the Arranger and Dealers have independently verified this market data. Similarly, internal company analyses, while believed by us to be reliable, have not been verified by any independent sources, and neither we nor any of the Arranger and Dealers make any representation as to the accuracy of such information. While we are not aware of any misstatements regarding any industry or similar data presented herein, such data involve risks and uncertainties and are subject to change based on various factors, including those discussed under the "*Risk Factors*" section in this Offering Memorandum. As a result, you should not place undue reliance on such information.

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ICIS data is subject to the methodology described on ICIS's website, and ICIS accepts no liability for commercial decisions based on any such data.

DOCUMENTS INCORPORATED BY REFERENCE

This Offering Memorandum should be read and construed in conjunction with each relevant Pricing Supplement. Copies of all such documents which are so deemed to be incorporated in, and to form part of, this Offering Memorandum will be available free of charge during usual business hours on any weekday (Saturdays and public holidays excepted) from the specified offices of the Paying Agent set out at the end of this Offering Memorandum.

TABLE OF CONTENTS

Page

SUMMARY OF THE PROGRAM 1
SUMMARY CONSOLIDATED FINANCIAL AND OTHER INFORMATION 7
RISK FACTORS 11
USE OF PROCEEDS 42
EXCHANGE RATE INFORMATION 43
CAPITALIZATION AND INDEBTEDNESS 44
SELECTED CONSOLIDATED FINANCIAL AND OTHER DATA 45
MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS 49
INDUSTRY OVERVIEW 81
CORPORATE HISTORY AND CORPORATE STRUCTURE 96
DESCRIPTION OF THE TREASURY CENTER 107
BUSINESS 108
MANAGEMENT 153
PRINCIPAL SHAREHOLDERS 170
FORM OF THE SECURITIES 171
TERMS AND CONDITIONS OF THE NOTES 173
TERMS AND CONDITIONS OF THE PERPETUAL SECURITIES 208
SUMMARY OF PROVISIONS RELATING TO THE SECURITIES WHILE IN GLOBAL FORM 248
FORM OF PRICING SUPPLEMENT OF THE NOTES 251
FORM OF PRICING SUPPLEMENT OF THE PERPETUAL SECURITIES 263
CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS 274
DESCRIPTION OF OTHER MATERIAL INDEBTEDNESS 277
TAXATION 281
CLEARANCE AND SETTLEMENT 288
SUBSCRIPTION AND SALE 292
TRANSFER RESTRICTIONS 300
ERISA CONSIDERATIONS 304
SUMMARY OF CERTAIN SIGNIFICANT DIFFERENCES BETWEEN TFRS AND IFRS 307
LEGAL MATTERS 309
INDEPENDENT AUDITORS 310
GLOSSARY OF TECHNICAL TERMS 311
INDEX TO THE FINANCIAL STATEMENTS F-1

SUMMARY OF THE PROGRAM

This summary must be read as an introduction to this Offering Memorandum and any decision to invest in the Securities should be based on a consideration of the Offering Memorandum as a whole, including any information incorporated by reference. Words and expressions defined in the "Terms and Conditions of the Notes" and the "Terms and Conditions of the Perpetual Securities" below or elsewhere in this Offering Memorandum have the same meanings in this summary.

Issuers	Thai Oil Public Company Limited (in respect of Direct Issuance Securities) and Thaioil Treasury Center Company Limited (in respect of Guaranteed Securities).
Guarantor (in respect of Guaranteed Securities)	Thai Oil Public Company Limited.
Legal Entity Identifiers	Thai Oil Public Company Limited: 549300HG5527UPZLTT69 Thaioil Treasury Center Company Limited: 549300NH03B9E8VGJR89
Guarantee	The Guarantor will, in respect of a Series of Guaranteed Securities, fully, irrevocably and unconditionally guarantee the due and punctual payment of premium (if any), interest and/or distribution in respect of or on, and all other amounts payable under, such Series of Guaranteed Securities (and any Additional Amounts), subject to the Maximum Guaranteed Amount and the amended and restated indenture dated June 11, 2020 (the "**Indenture**"), expressed to be payable by the Treasury Center. The Guarantor's maximum liability under the Guarantee will be capped at the Maximum Guaranteed Amount.
Program Size	Up to US$3,679,000,000 (or the equivalent in other currencies calculated as described in the Dealer Agreement (as defined in "*Subscription and Sale*")) outstanding at any time. The Issuers and the Guarantor may increase the amount of the Program in accordance with the terms of the Dealer Agreement.
Arranger	Standard Chartered Bank.
Dealers	BNP PARIBAS, Deutsche Bank AG, Singapore Branch, The Hongkong and Shanghai Banking Corporation Limited, Merrill Lynch (Singapore) Pte. Ltd., Mizuho Securities Asia Limited and Standard Chartered Bank and any other Dealer appointed from time to time by the Issuers or the Guarantor (as the case may be) either generally in respect of the Program or in relation to a particular Series of Securities.
Principal Paying Agent and Paying Agent	Citibank, N.A., London Branch.
Registrar and Transfer Agent	Citibank, N.A., London Branch.
Exchange Agent	Citibank, N.A., London Branch.
Trustee	Citicorp International Limited.
Method of Issue	The Securities will be issued on a syndicated or non-syndicated basis. The Securities 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 or distribution and their issue price), and intended to be interchangeable with all other Securities 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 date of interest or distribution and nominal amount of the Tranche, will be identical to the terms of other Tranches of the same Series) will be completed in the Pricing Supplement.
Clearing Systems	Euroclear, Clearstream and/or DTC and such other clearing system as shall be agreed between the relevant Issuer, (in respect of each Series of Guaranteed Securities) the Guarantor, the Trustee, the Agents and the relevant Dealer(s).
Form of the Securities	Securities may only be issued in registered form. Each Series of Securities that are sold outside the United States in reliance on Regulation S will, unless otherwise specified in the applicable Pricing Supplement, be represented by a Global Certificate (as defined in the "*Form of the Securities*"), which will be deposited on or about its issue date with a common depositary for, and registered in the name of a nominee of, Euroclear and Clearstream, or with a custodian for, and registered in the name of a nominee of, DTC for the accounts of Euroclear and Clearstream. With respect to all offers or sales by a Dealer of an unsold allotment or subscription, beneficial interests in a Global Certificate of such Series may be held only through Euroclear, Clearstream, DTC for the accounts of Euroclear and Clearstream. Regulation S Global Certificates will be exchangeable for Individual Certificates only upon the occurrence of an Exchange Event as described in "*Form of the Securities*." Each Tranche of Securities sold to persons who are both QIBs and QPs in compliance with Rule 144A and subject to the restrictions described in "*Transfer Restrictions*" and "*Subscription and Sale*" and the applicable Pricing Supplement will, unless otherwise specified in the applicable Pricing Supplement, be represented by a Rule 144A Global Certificate, which will be deposited on or about its issue date with a custodian for, and registered in the name of a nominee of, DTC. Rule 144A Global Certificates will be exchangeable for Individual Certificates only upon the occurrence of an Exchange Event as described in "*Form of the Securities*." Application will be made to have Global Certificates of any Series accepted for clearance and settlement through the facilities of DTC, Euroclear and/or Clearstream, as appropriate.
Currencies	Securities may be denominated in any currency or currencies, agreed between the relevant Issuer, (in respect of a Series of Guaranteed Securities) the Guarantor and the relevant Dealer(s) subject to compliance with all applicable legal and/or regulatory and/or central bank requirements. Payments in respect of Securities may, subject to such compliance, be made in and/or linked to, any currency or currencies other than the currency in which such Securities are denominated.
Denominations	Securities will be issued in such denominations as may be specified in the relevant Pricing Supplement, subject to compliance with all applicable legal and/or regulatory and/or central bank requirements.
Status of the Notes	The Notes will constitute direct, unconditional, unsubordinated and unsecured obligations of the relevant Issuer which will at all times rank *pari passu* among themselves and at least *pari passu* with all other present and future unsecured and unsubordinated obligations of the

	relevant Issuer, save for such obligations as may be preferred by provisions of law that are both mandatory and of general application.
Status of the Perpetual Securities	The Senior Perpetual Securities will constitute direct, unconditional, unsubordinated and unsecured obligations of the relevant Issuer which will at all times rank *pari passu* among themselves and at least *pari passu* with all other present and future unsecured and unsubordinated obligations of the relevant Issuer, save for such obligations as may be preferred by provisions of law that are both mandatory and of general application. The Subordinated Perpetual Securities constitute unsecured obligations of the Issuer which will at all times rank *pari passu* among themselves and with any obligations of the Issuer which rank, or is expressed to rank, *pari passu* with the Subordinated Perpetual Securities. The rights and claims of the Securityholders and in respect of the Subordinated Perpetual Securities are subordinated as provided in the Terms and Conditions of the Perpetual Securities. See "*Terms and Conditions of the Perpetual Securities – Status*".
Status of the Guarantee	In the case of the Notes, the Guarantee constitutes a direct, unconditional, unsubordinated and unsecured obligation of the Guarantor and will rank at least *pari passu* with all other present and future unsecured and unsubordinated obligations of the Guarantor, save for such obligations as may be preferred by provisions of law that are both mandatory and of general application. In the case of Senior Perpetual Securities, the Guarantee constitutes a direct, unconditional, unsubordinated and (subject as provided above) unsecured obligation of the Guarantor which will at all times rank at least *pari passu* with all other present and future unsecured and unsubordinated obligations of the Guarantor, save for such obligations as may be preferred by provisions of law that are both mandatory and of general application. In the case of Subordinated Perpetual Securities, the Guarantee constitutes a direct, unconditional, unsecured and subordinated obligation of the Guarantor and will rank *pari passu* with any obligations of the Guarantor which rank, or are expressed to rank, *pari passu* with the Guarantee of the Subordinated Perpetual Securities. The rights and claims of the Securityholders and in respect of the Subordinated Perpetual Securities are subordinated as provided in Condition 4(b) of the Terms and Conditions of the Perpetual Securities. Notwithstanding anything to the contrary, the Guarantor's maximum liability under the Guarantee in respect of each Series of Guaranteed Securities will be capped at its respective Maximum Guaranteed Amounts.
Issue Price	Securities may be issued at their nominal amount or at a discount or premium to their nominal amount. Partly Paid Securities may be issued, the issue price of which will be payable in two or more installments.
Maturities.....	Any maturity, subject, in relation to specific currencies, to compliance with all applicable legal and/or regulatory and/or central bank requirements.

	Where Notes have a maturity of less than one year and either (a) the issue proceeds are received by the relevant Issuer in the United Kingdom or (b) the activity of issuing the Notes is carried on from an establishment maintained by the relevant Issuer in the United Kingdom, such Notes must: (i) have a minimum redemption value of £100,000 (or its equivalent in other currencies) and be issued only to persons whose ordinary activities involve them in 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 (ii) be issued in other circumstances which do not constitute a contravention of section 19 of the FSMA by the Issuers or the Guarantor.
Redemption.....	Securities may be redeemable at par or at such other Redemption Amount (detailed in a formula, index or otherwise) as may be specified in the relevant Pricing Supplement. Securities may also be redeemable in two or more installments on such dates and in such manner as may be specified in the relevant Pricing Supplement.
Optional Redemption.....	If specified in the relevant Pricing Supplement, Securities may be redeemed, and in the case of the Notes, before their stated maturity, at the option of the relevant Issuer (either in whole or in part) as described in Condition 10(c) (*Redemption and Purchase—Optional Redemption*) of the Terms and Conditions of the Notes and Condition 10(c) (*Redemption and Purchase – Optional Redemption*) of the Terms and Conditions of the Perpetual Securities.
Tax Redemption	Early redemption of Securities may be permitted for tax reasons as described in Condition 10(b) (*Redemption and Purchase—Optional Tax Redemption*) of the Terms and Conditions of the Notes and Condition 10(b) (*Redemption and Purchase – Optional Tax Redemption*) of the Terms and Conditions of the Perpetual Securities.
Redemption upon Accounting Event.....	If specified in the relevant Pricing Supplement, the Perpetual Securities may be redeemed at the option of the relevant Issuer if, as a result of any changes or amendments to Relevant Accounting Standard (as defined in the Terms and Conditions of the Perpetual Securities), the Perpetual Securities will not or will no longer be recorded as "equity" of the Issuer or the Guarantor (if applicable) pursuant to the Relevant Accounting Standard.
Interest or Distribution.....	Securities may or may not bear interest or distribution. Interest or distribution (if any) may accrue at a fixed rate or a floating rate or other variable rate or, in the case of Notes only, be index linked and the method of calculating interest or distribution may vary between the issue date and the maturity date of the relevant Series. All such information will be set out in the relevant Pricing Supplement.
Certain Covenants.....	Each of the Issuers and the Guarantor has covenanted in Condition 5 (*Certain Covenants*), with certain limitations and exceptions (including where if specified as "Not Applicable" in relation to the relevant Pricing Supplement relating to an issuance of Perpetual Securities), not to incur certain liens or consolidate, merge or sell all or substantially all of its property or assets unless certain conditions are satisfied.

Maximum Guaranteed Amount.....	In order to comply with applicable requirements of Thai law, the Guarantor's maximum liability under the Guarantee will be capped at an amount equal: (i) in the case of a Series of Guaranteed Notes, 125% of the aggregate principal amount of the relevant Series of Guaranteed Notes; or (ii) in the case of a Series of Guaranteed Perpetual Securities, 150% of the aggregate principal amount of the relevant Series of Guaranteed Perpetual Securities.
Increase in Interest or Distribution Rate Payable Upon the Occurrence of a Change of Control Triggering Event.....	The interest rate payable on the Notes will be subject to an increase of 1.25% upon the occurrence of a Change of Control Triggering Event. The distribution rate payable on the Perpetual Securities will be subject to an increase of 1.25% upon the occurrence of a Change of Control Triggering Event.
Cross Default	The Notes will contain a cross default provision as further described in Condition 13 (*Events of Default*) of the Terms and Conditions of the Notes.
Withholding Tax.....	See Condition 10(b) (*Redemption and Purchase — Optional Tax Redemption*) and Condition 12 (*Additional Amounts*) of the Terms and Conditions of the Notes and Condition 10(b) (*Redemption and Purchase – Optional Tax Redemption*) and Condition 13 (*Additional Amounts*) of the Terms and Conditions of the Perpetual Securities.
Listing and Trading	Application has been made to the SGX-ST for permission to deal in and for the listing and quotation of Securities 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 Securities may also be listed on such other or further stock exchange(s) as may be agreed between the relevant Issuer, (in respect of each Series of Guaranteed Securities) the Guarantor and the relevant Dealer in relation to each Series. Unlisted Series of Securities may also be issued pursuant to the Program. The relevant Pricing Supplement in respect of any Series of the Securities will specify whether or not such Securities will be listed and, if so, on which exchange(s) the Securities are to be listed. There is no assurance that an application to the Official List of the SGX-ST for the listing of the Securities of any Series will be approved. If approval in-principle is received from the SGX-ST in relation to the Securities of any Series to be listed on the SGX-ST, such Securities will be traded on the SGX-ST in a minimum board lot size of at least S$200,000 (or its equivalent in foreign currencies) following listing, for so long as such Securities are listed on the Official List of the SGX-ST and the rules of the SGX-ST so require. For so long as any Securities are listed on the SGX-ST and the rules of the SGX-ST so require, the Issuers and the Guarantor shall appoint and maintain a paying agent in Singapore, where such Securities may be presented or surrendered for payment or redemption, in the event that the Global Certificates representing such Securities are exchanged for Individual Certificates. In addition, in the event that the Global Certificates are exchanged for Individual Certificates, an announcement of such exchange will be made by or on behalf of the relevant Issuer and the Guarantor through the SGX-ST and such announcement will include all material information with respect to the

	delivery of the Individual Certificates, including details of the paying agent in Singapore.
Governing Law	The Securities, the Guarantee and the Indenture will be governed by, and construed in accordance with, the laws of the State of New York except that Conditions 4(b) and 14 of the Terms and Conditions of the Perpetual Securities applicable to the relevant Issuer and/or the Guarantor in respect of Subordinated Perpetual Securities (if applicable) shall be governed by and construed in accordance with the laws of the Kingdom of Thailand.
Rating	Securities issued under the Program may be rated or unrated, as specified in the applicable Pricing Supplement. A rating is not a recommendation to buy, sell or hold securities and may be subject to suspension, reduction, revision or withdrawal at any time by the assigning rating agency.
Selling Restrictions.....	For a description of certain restrictions on offers, sales and deliveries of Securities and on the distribution of offering materials in the United States of America, the European Economic Area, the United Kingdom, the PRC, Hong Kong, Japan, Singapore and Thailand, see "*Subscription and Sale*" below. In connection with the offering and sale of a particular Series of Securities, additional restrictions may be imposed which will be set out in the applicable Pricing Supplement.
Transfer Restrictions	There are restrictions on the transfer of Securities sold pursuant to Regulation S under the Securities Act prior to the expiration of the relevant distribution compliance period and on the transfer of Securities sold pursuant to Rule 144A under the Securities Act. See "*Transfer Restrictions*." The Securities may not, either directly or indirectly, be resold, pledged or otherwise transferred in Thailand.
Initial Delivery of Securities.....	On or before the issue date for each Series, the Global Certificate representing Securities may be deposited with a common depositary for Euroclear and Clearstream or registered in the name of a nominee of DTC and deposited on or about the issue date or any other clearing system or may be delivered outside any clearing system *provided that* the method of such delivery has been agreed in advance by the relevant Issuer, (in respect of each Series of Guaranteed Securities) the Guarantor, the Trustee, the Principal Paying Agent and the relevant Dealer(s). Securities that are to be credited to one or more clearing systems on issue will be registered in the name of, or in the name of a nominee or a sub-custodian for, such clearing systems.

SUMMARY CONSOLIDATED FINANCIAL AND OTHER INFORMATION

You should read the following summary consolidated financial information in conjunction with our consolidated financial statements and financial information, together with each of their related notes, "Presentation of Financial and Other Information," "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 and financial information have been prepared and presented in accordance with TFRS, which differs in certain respects from IFRS. See "Summary of Certain Significant Differences Between TFRS and IFRS."

Summary Consolidated Financial and Other Information

The following tables set forth our summary consolidated financial information as of and for the years ended December 31, 2022, 2023 and 2024, and as of and for the nine months ended September 30, 2024 and 2025.

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024	2025	
	(in millions, except otherwise indicated)						
	THB	THB	THB	US$	THB	THB	US$
Summary Consolidated Statement of Income Information:							
Revenue from sales	505,703.2	459,402.2	455,856.9	14,100.1	343,895.2	285,404.7	8,827.9
Subsidy from oil fuel fund	23,885.6	9,841.7	10,920.1	337.8	10,345.3	921.0	28.5
Total revenue	**529,588.8**	**469,243.9**	**466,777.0**	**14,437.9**	**354,240.5**	**286,325.7**	**8,856.3**
Cost of sales	(481,137.0)	(436,163.5)	(450,010.2)	(13,919.3)	(342,832.3)	(278,855.8)	(8,625.3)
Gross profit	**48,451.8**	**33,080.4**	**16,766.8**	**518.6**	**11,408.2**	**7,469.9**	**231.1**
Dividend income	80.5	200.8	269.1	8.3	268.1	282.5	8.7
Gain (loss) from financial instruments	(16,005.8)	(2,850.0)	360.4	11.1	130.5	(462.2)	(14.3)
Gain (loss) on exchange	(64.5)	212.8	52.5	1.6	539.6	17.3	0.5
Gain on repurchase of debentures	–	–	1,134.2	35.1	1,147.8	4,067.3	125.8
Gain on disposal of investments in associates	10,037.8	–	–	–	–	–	–
Gain on reclassification of investments	7,296.6	–	–	–	–	–	–
Other income	782.0	1,138.2	1,739.2	53.8	1,302.6	1,430.7	44.3
Selling and distribution expenses	(1,052.1)	(950.0)	(1,140.4)	(35.3)	(850.8)	(769.0)	(23.8)
Administrative expenses	(3,129.7)	(2,570.9)	(2,733.7)	(84.6)	(1,891.2)	(1,896.5)	(58.7)
Share of profit (loss) from investments in joint ventures and associates	(512.6)	83.8	(131.7)	(4.1)	(194.3)	6,469.9	200.1
Operating profit	**45,884.1**	**28,345.1**	**16,316.4**	**504.6**	**11,860.4**	**16,610.0**	**513.7**
Finance cost	(3,860.0)	(4,088.5)	(4,052.0)	(125.3)	(3,066.2)	(2,786.9)	(86.2)
Profit before income tax expense	**42,024.1**	**24,256.6**	**12,264.4**	**379.3**	**8,794.2**	**13,823.1**	**427.5**
Income tax expense	(8,917.9)	(4,671.7)	(2,283.4)	(70.6)	(1,560.6)	(1,672.6)	(51.7)
Profit for the year / period	**33,106.2**	**19,584.9**	**9,981.0**	**308.7**	**7,233.6**	**12,150.5**	**375.8**
Profit attributable to:							
Equity holders of the Company	32,668.1	19,443.2	9,958.6	308.0	7,191.9	12,126.1	375.1
Non-controlling interests of the subsidiaries	438.1	141.7	22.4	0.7	41.7	24.4	0.7
	33,106.2	**19,584.9**	**9,981.0**	**308.7**	**7,233.6**	**12,150.5**	**375.8**
Earnings per share (Baht)							
Basic earnings per share Profit attributable to equity holders of the Company	15.63	8.70	4.46	0.14	3.22	5.43	0.17

	As of December 31,				As of September 30,	
	2022	2023	2024		2025	
	(in millions, except otherwise indicated)					
	THB	THB	THB	US$	THB	US$
Summary Consolidated Statement of Financial Position Information:						
Cash and cash equivalents	43,576.1	28,431.6	29,042.4	898.3	28,072.2	868.3
Total current assets	153,828.2	125,371.3	112,221.8	3,471.1	100,397.8	3,105.4
Total non-current assets	290,752.7	294,621.4	296,788.6	9,180.0	294,078.2	9,096.1
Total assets	**444,580.9**	**419,992.7**	**409,010.4**	**12,651.1**	**394,476.0**	**12,201.5**
Total current liabilities	103,673.0	73,501.3	67,663.1	2,092.9	75,357.7	2,330.9
Total non-current liabilities	182,250.5	178,179.7	175,162.4	5,418.0	144,402.1	4,466.5

	As of December 31,				As of September 30,	
	2022	2023	2024		2025	
	(in millions, except otherwise indicated)					
	THB	THB	THB	US$	THB	US$
Total liabilities	**285,923.5**	**251,681.0**	**242,825.5**	**7,510.8**	**219,759.9**	**6,797.4**
Total shareholders' equity	158,657.4	168,311.7	166,184.9	5,140.3	174,716.1	5,404.1
Total liabilities and shareholders' equity	**444,580.9**	**419,992.7**	**409,010.4**	**12,651.1**	**394,476.0**	**12,201.5**

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024	2025	
	(in millions)						
	THB	THB	THB	US$	THB	THB	US$
Summary Consolidated Statement of Cash Flow Information:							
Net cash provided by operating activities	43,250.8	28,087.8	39,354.7	1,217.3	19,403.9	22,714.7	702.6
Net cash from (used) in investing activities	(9,049.1)	(19,691.9)	(14,008.6)	(433.3)	(9,750.2)	13,989.9	432.7
Net cash used in financing activities	(20,252.9)	(23,071.9)	(24,627.1)	(761.7)	(19,945.0)	(37,098.1)	(1,147.5)
Net increase (decrease) in cash and cash equivalents	**13,948.7**	**(14,676.1)**	**719.0**	**22.2**	**(10,291.3)**	**(393.4)**	**(12.2)**
Cash and cash equivalents at beginning of year / period	29,695.9	43,576.1	28,431.6	879.4	28,431.6	29,042.4	898.3
Effect of exchange rate changes	(68.5)	(468.5)	(108.2)	(3.3)	(473.7)	(576.8)	(17.8)
Cash and cash equivalents at end of year / period	**43,576.1**	**28,431.6**	**29,042.4**	**898.3**	**17,666.7**	**28,072.2**	**868.3**

Certain Other Financial and Operational Information

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024	2025	
	(in millions, except otherwise indicated)						
	THB	THB	THB	US$	THB	THB	US$
EBITDA Information:							
EBITDA[(1)]	37,187.3	35,453.4	22,026.1	681.3	15,469.1	11,638.0	360.0
EBITDA Margin[(2)]	7.4%	7.7%	4.8%	n/a	4.5%	4.1%	n/a

Notes:

(1) EBITDA means profit for the year / period excluding income tax expense, finance cost, share of profit (loss) from investments in joint ventures and associates, others, finance income, gain (loss) from financial instruments, gain (loss) on exchange, depreciation and amortization. EBITDA and the related ratios presented in this Offering Memorandum are supplemental measures of our performance that are not required by, or presented in accordance with, TFRS or IFRS. EBITDA is not a measurement of financial performance or liquidity under TFRS or IFRS, and should not be considered as an alternative to net income, operating income or any other performance measures derived in accordance with TFRS or IFRS, or as an alternative to cash flow from operating activities as a measure of liquidity. In addition, EBITDA as presented in this Offering Memorandum is not a standardized term. Therefore, a direct comparison between companies using such a term, or a direct comparison with Thai Oil's historical public disclosure, may not be possible.

(2) EBITDA margin means EBITDA divided by the sum of revenue from sales per statement of income.

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024	2025	
	(in millions, except otherwise indicated)						
	THB	THB	THB	US$	THB	THB	US$
Certain Financial Information and Ratios:							
Total Debt[(1)]	196,259.4	184,207.7	174,354.5	5,393.0	170,927.8	137,806.8	4,262.5
Net Debt[(2)]	152,683.2	149,831.5	134,616.8	4,163.8	145,969.1	104,645.6	3,236.8
Total Debt to EBITDA (times)[(3)]	5.3	5.2	7.9	n/a	8.9[(7)]	7.6[(7)]	n/a
Net Debt to EBITDA (times)[(4)]	4.1	4.2	6.1	n/a	7.6[(8)]	5.8[(8)]	n/a
EBITDA-to-interest coverage ratio (times)[(5)]	9.6	8.7	5.4	n/a	5.0	4.2	n/a
Net Debt to Equity (times)[(6)]	1.0	0.9	0.8	n/a	0.9	0.6	n/a

Notes:

(1) Total debt means the sum of short-term loans, the current portion of long-term loans from financial institutions, the current portion of debentures, the current portion of lease liabilities, the long-term loans from financial institutions, net of current portion, long-term loans from a third party, debentures, net of current portion, and lease liabilities, net of current portion.

(2) Net debt means total debt less (i) cash and cash equivalents and (ii) short-term investments per statement of financial position.

(3) Calculated from total debt divided by EBITDA.

(4) Calculated from net debt divided by EBITDA.

(5) Calculated from EBITDA divided by finance cost per statement of income.

(6) Calculated from net debt divided by equity per statement of financial position.

(7) Calculated as total debt divided by annualised EBITDA. Annualised EBITDA is calculated by a rolling period of EBITDA for 12 consecutive months.

(8) Calculated as net debt divided by annualised EBITDA. Annualised EBITDA is calculated by a rolling period of EBITDA for 12 consecutive months.

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024	2025	
	(in millions, except otherwise indicated)						
	THB	THB	THB	US$	THB	THB	US$
Profit for the year/period	33,106.2	19,584.9	9,981.0	308.7	7,233.6	12,150.5	375.8
Add/(Deduct)							
Income tax expense	8,917.9	4,671.7	2,283.4	70.6	1,560.6	1,672.6	51.7
Finance cost	3,860.0	4,088.5	4,052.0	125.3	3,066.2	2,786.9	86.2
Share of profit / loss from investments in joint ventures and associates	512.6	(83.8)	131.7	4.1	194.3	(6,469.9)	(200.1)
Others[1]	(16,814.9)	34.7	(1,423.9)	(44.0)	(1,415.1)	(4,408.9)	(136.4)
Finance income	(367.8)	(785.8)	(1,316.7)	(40.7)	(981.6)	(1,020.2)	(31.6)
Gain / Loss from financial instruments	164.5	356.5	265.2	8.2	271.0	987.5	30.5
Gain / Loss on exchange	64.5	(212.8)	(52.5)	(1.6)	(539.6)	(17.3)	(0.5)
Depreciation and amortization	7,744.3	7,799.5	8,105.9	250.7	6,079.7	5,956.8	184.2
EBITDA[2]	**37,187.3**	**35,453.4**	**22,026.1**	**681.3**	**15,469.1**	**11,638.0**	**360.0**

Notes:

(1) Others comprise dividend income, gain on disposal of investments, gain (loss) on disposal of other assets, gain (loss) on write off of other assets, gain on change in status of investments, modification gain (loss) - financial instruments, expected credit loss - accounts receivable, loss on impairment of other assets, insurance claim, gain on lease modification, gain on lease termination, gain on repurchase of debentures, cost of incident and other non-recurring items.

(2) EBITDA means profit for the year / period excluding income tax expense, finance cost, share of profit (loss) from investments in joint ventures and associates, others, finance income, gain (loss) from financial instruments, gain (loss) on exchange, depreciation and amortization. EBITDA and the related ratios presented in this Offering Memorandum are supplemental measures of our performance that are not required by, or presented in accordance with, TFRS or IFRS. EBITDA is not a measurement of financial performance or liquidity under TFRS or IFRS, and should not be considered as an alternative to net income, operating income or any other performance measures derived in accordance with TFRS or IFRS, or as an alternative to cash flow from operating activities as a measure of liquidity. In addition, EBITDA as presented in this Offering Memorandum is not a standardized term. Therefore, a direct comparison between companies using such a term, or a direct comparison with Thai Oil's historical public disclosure, may not be possible.

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024	2025	
	(in millions, except otherwise indicated)						
	THB	THB	THB	US$	THB	THB	US$
Certain Operational Information:							
Adjusted gross profit (loss)[1] from							
Oil refining	48,971.9	32,548.8	15,029.1	464.9	12,085.6	8,989.3	278.0
Aromatics and LAB	1,818.1	3,727.4	4,989.5	154.3	3,924.6	2,030.8	62.8
Lube base oil	4,023.9	3,080.6	2,506.1	77.5	1,430.0	2,583.3	79.9
Integrated profit (loss)							
Integrated intake (thousand bpd)[2]	296.9	310.2	306.9	—	304.7	284.2	—
Average foreign exchange rate (THB/US$)[3]	35.2	35.0	35.4	—	35.9	33.3	—
Gross integrated margin (US$ per barrel)[4]	**14.3**	**9.8**	**5.6**	**—**	**5.8**	**5.3**	**—**
Integrated cash cost (US$ per barrel)[5]	**2.8**	**2.6**	**2.5**	**2.5**	**2.3**	**2.8**	**2.8**

Notes:

(1) Adjusted gross profit (loss) is the sum of gross profit or loss under TFRS, non-feedstock related cost of goods sold and service rendered, depreciation and operating expenses, foreign currency exchange gains or losses, net realizable value adjustments and other income.

(2) Integrated intake, measured in thousands of barrels per day, is calculated based on our oil refinery's crude oil and feedstock intake, our petrochemical plants' feedstock import and our lube base oil refinery's long residue import.

(3) Average foreign exchange rate is calculated based on the daily average selling rate of foreign exchange published by the BOT.

(4) Gross integrated margin is calculated by taking the integrated profit (loss), as divided by the total integrated intake, and further adjusted to take into account the foreign exchange rates.

(5) Integrated cash cost is a measure of operating expenses and includes plant operating expenses, selling expenses, administrative expenses and finance costs excluding non-recurring items. Our integrated cash cost comprised operating expenses of US$2.8/bbl, US$2.6/bbl, US$2.5/bbl, US$2.3/bbl and US$2.8/bbl and finance costs of US$1.9/bbl, US$1.9/bbl, US$1.9/bbl, US$1.7/bbl and US$2.2/bbl for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, respectively.

See "*Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Metrics for our Group*" for further details in relation to calculation of the gross margin from production, gross integrated margin and integrated cash cost.

RISK FACTORS

Investing in the Securities issued under the Program involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information set out in this Offering Memorandum, including the consolidated financial statements and consolidated financial information and the related notes included elsewhere in this Offering Memorandum, before deciding whether to invest in the Securities issued under the Program.

The risks and uncertainties described below are not the only ones that may affect us or the Securities issued under the Program. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, may also become important factors that adversely affect our business. In general, investing in securities of issuers in emerging market countries such as Thailand involves risks not typically associated with investing in the securities of companies in countries with more developed economies. To the extent any information below relates to the Thai government or Thai macroeconomic data, such information has been extracted from official Thai government publications or other third-party sources and has not been independently verified by us.

This Offering Memorandum also contains forward-looking statements that involve risks and uncertainties. Our actual results of operations could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks described below and elsewhere in this Offering Memorandum. You should also consider the information provided below in connection with the forward-looking statements in this Offering Memorandum and the disclaimer regarding forward-looking statements at the beginning of this Offering Memorandum.

Risks Relating to Our Business

Cyclicality in the refining and petrochemical industries may result in reduced volumes or operating margins, and volatile margins in the refining and petrochemical industries and uncertainty regarding the global economic recovery could have a material adverse effect on us in the future.

Our historical operating results reflect in part the volatile and cyclical nature of the refining and petrochemical industries and may not be indicative of our future performance. Historically, the refining and petrochemical industries have experienced alternating periods of tight supply, resulting in increased prices and profit margins, followed by periods of substantial capacity addition, resulting in oversupply and reduced prices and profit margins. Our financial results are primarily dependent on factors beyond our control which affect the margins between the prices of our refined petroleum, petrochemical and lube base oil products and the cost to acquire crude oil and other feedstock. Future volatility may negatively affect our results of operations, since the margin between products and feedstock prices may decrease below the amount needed for us to generate net cash flow sufficient for our needs. Specific factors that may affect our refining, petrochemical and lube base oil margins and financial performance include:

- aggregate demand for crude oil, refined petroleum products and petrochemical products, which is influenced by factors such as general economic conditions, weather patterns, government energy policy, market sentiment and consumption trends, which are each influenced by external factors beyond our control;

- accidents, interruptions in transportation, inclement weather or other events that cause unscheduled shutdowns or otherwise adversely affect our refinery, plants, machinery, pipelines or equipment, or those of our suppliers or customers;

- increases in the cost (as a result of inflationary pressures or otherwise) or availability to us of crude oil and other feedstock due to shortages and related transportation costs without corresponding increases in the price of refined petroleum products or petrochemical products;

- aggregate refining capacity and utilization rate as well as petrochemical and lube base oil products production capacity in Thailand, the Asia-Pacific region and worldwide;

- unexpected changes in the refined petroleum product or petrochemical products pricing mechanism;

- unexpected changes in fuel specifications required by environmental laws and regulations, without being able to pass on the cost of complying with these specifications to our customers in the form of increases in the prices of refined petroleum products or petrochemical products;

- rulings, judgments or settlements in litigation and other legal matters, including unexpected environmental remediation or compliance costs at our facilities in excess of any reserves, and claims of personal injury;

- our ability to implement our planned capital projects or to realize the benefits expected from those projects;

- worldwide political conditions, including those in oil producing regions such as the Middle East, Russia, Ukraine and Asia, sanctions and international trade policies including the United States-China trade wars, tariffs and other trade barriers;

- price, availability and acceptance of substitute petroleum products or petrochemical products, such as biojet;

- adoption of or modifications to environmental, taxation and other laws and regulations in Thailand and abroad;

- the outbreak of viruses or other severe communicable diseases, including the Coronavirus ("**COVID-19**") and severe acute respiratory syndrome (SARS); and

- fluctuations in the value of the Baht against the U.S. dollar.

As a result of the foregoing factors, our gross refining margins and cash flows may be constrained and our ability to service our debt obligations may be adversely affected.

In addition, we are unable to predict with certainty future supply and demand balances, market conditions and other factors that may affect operating margins. We may reduce production at or leave idle a facility or a particular unit at a facility for an extended period of time, discontinue a product line because of an oversupply of a particular product and/or a lack of demand for that particular product, or high feedstock prices that make production uneconomical, which may have a material adverse effect on our results of operations.

Furthermore, we expect that challenging global economic conditions such as the continued uncertainty regarding economic recovery and slowdown, geopolitical conflicts, international trade restrictions, high inflation in many advanced economies, and interest rate actions by central banks worldwide to combat inflation will be a key factor that impacts the growth of the demand for refining and petrochemical products. For example, the slowdown in economic growth in China has partly contributed to instability in the prices for crude oil used in our refinery as well as our petroleum and petrochemical products. We expect that a weak economic outlook will continue to affect the overall demand for petroleum and petrochemical products, including in Thailand. If economic and market conditions domestically and globally in Europe, the United States, China and other key markets are uncertain or deteriorate, the demand for our products or operating margins for refined petroleum and petrochemical products could decline. Such a decline could have a material adverse effect on our business, operating results and financial condition.

In addition, the awareness of energy conservation, change of energy consumption trend, technological advancements, the development fuel-efficient vehicles, the increasing use of alternative fuel vehicles, such as vehicles that use electricity, hydrogen, natural gas or other alternative energies, instead of the vehicles or cars with combustion engine, the policy on the reduction of greenhouse gas emission and the energy conservation measures in future, including advancements energy saving technology, may negatively impact the demand in the consumption of vehicle gas, petroleum products and our petrochemical products. Such impact could have an adverse effect on our business in long-term.

Fuel competes with other sources of energy, the costs of which are competitive with the cost of petroleum products. A certain number of vehicle manufacturers, industrial manufacturers and electric generator manufacturers have developed more efficient engines, hybrid engines, alternative clean energy with fuel cells or complete combustion fuel. Furthermore, the development of advanced technologies, changes in regulations and the significant changes in the demand of the consumers to use the alternative energy, will result in a decrease of the demand in our petroleum products. Moreover, the concentration on electric vehicle or other alternative energies, such as, hydrogen and natural gas, may materially change the spending habits of the consumers or may result in the use of other fuels or may result in the newly competitive pressure in business. We may be impacted by a decrease of the demand in fuel oil resulting from such changes, and such changes could have a material adverse effect on our business, operating results and financial condition.

Fluctuations in market prices of crude oil and other feedstock, as well as refined petroleum products or petrochemical products, may affect our results of operations.

The market prices of crude oil and other feedstock have been and are expected to continue to be volatile and are subject to a variety of factors that are beyond our control. These factors, among others, include:

- global and regional events and circumstances, as well as political developments, geopolitical tensions and instability in petroleum producing regions, such as the Middle East and Asia;
- the ability of the Organization of Petroleum Exporting Countries ("**OPEC**") and other petroleum-producing nations to set and maintain production levels and therefore influence market prices;
- market prices and supply and demand of crude oil, feedstock, natural gas, refined petroleum products and substitute energy sources;
- level of business activity in the derivatives uses for our products;
- discoveries of low-cost feedstock in new geographical areas;
- change in product and process technologies;
- tariffs and other domestic and foreign government regulations with respect to oil and energy industries in general;
- significant events, including accidents and/or natural disasters that affect our production capacity;
- the level and scope of activity of oil speculators;
- weather conditions and seasonality; and
- overall global, regional and domestic economic conditions, including the slowdown in China's economic growth and inflationary environments.

Since we acquire our crude oil in the spot market or under indefinite contracts that contain variable pricing provisions, we are subject to the day-to-day fluctuations in crude oil prices, as well as the demand and supply balance for refined petroleum products. Generally, an increase or decrease in the price of crude oil may result in a corresponding increase or decrease in the price of our refined petroleum products. However, there is an approximately one to two-month-lag-time from our purchase of crude oil and other feedstock to our sale of refined petroleum products produced from these feedstock. Price level changes during the period between purchasing our crude oil and other feedstock and our selling the refined petroleum products from such feedstock could have a material adverse effect on our profit margins and could have a significant effect on our business, financial condition and results of operations. In addition, there can be no assurance that the price of refined petroleum products will increase in the same proportion as the price of crude oil, or at all. Any inability to pass on increases in the market price of crude oil and other feedstock may have a material adverse effect on our financial condition, the effectiveness of our commodity hedging activities and results of operations.

World crude oil prices decreased from 2023 to 2024, with the price of Dubai crude oil fluctuating between US$70.3 per barrel and US$96.8 per barrel in 2023, averaging at US$79.6 per barrel in 2024 and decreased to US$71.3 per barrel in the nine months ended September 30, 2025, according to Platts. This was primarily attributable to several factors, including increasing supply from OPEC and alliances (OPEC+) and non-OPEC countries, declining oil demand growth following slower economic growth after the U.S. imposed reciprocal tariff to many countries and geopolitical tensions in Middle East and Russia-Ukraine which have created crude price volatility. The average price of unleaded gasoline 95 (which we used as a benchmark for the price of platformate) was US$115.1 per barrel in the year ended December 31, 2022 and subsequently decreased to US$98.8 per barrel in the year ended December 31, 2023, decreased to US$93.0 per barrel in the year ended December 31, 2024 and decreased to US$81.1 per barrel for the nine months ended September 30, 2025. The average price of HSFO (which we use as a benchmark for the price of long residue) was US$82.1 per barrel in the year ended December 31, 2022 and subsequently decreased to US$71.9 per barrel in the year ended December 31, 2023, increased to US$74.0 per barrel in the year ended December 31, 2024 and decreased to US$69.2 per barrel for the nine months ended September 30, 2025. We also maintain inventories of crude oil and refined products, as required under Thai law, and the value of such inventories are subject to fluctuations in market prices. Any

increase in the price of crude oil may increase our short-term financing or working capital needs. Although we have not recently experienced difficulties in securing trade financing for working capital requirements, any such difficulties in securing short-term financing on favorable terms may have a material adverse effect on our financial condition and results of operations.

We are heavily dependent on our relationship with PTT and PTT Group as our supplier, customer and major shareholder. Any changes in these relationships may materially and adversely affect us.

PTT, our major shareholder owning 45.03% of our shares as of October 9, 2025, is Thailand's national and largest integrated oil and gas company and is also engaged in the petrochemical production, petroleum refining, petrochemical trading and refined petroleum product retail marketing businesses in Thailand.

PTT is our principal feedstock supplier. We joined PTT Group's collaboration initiative to procure 100% of our feedstock from PTT. For the year ended December 31, 2024, we sourced 100.0% and 100.0% of our crude oil and natural gas feedstock, respectively, under feedstock supply agreements with PTT. For the nine months ended September 30, 2025, we sourced 100.0% and 100.0% of our crude oil and natural gas feedstock, respectively, under feedstock supply agreements with PTT. Our natural gas supply agreement with PTT is a definite term -term agreement, while the Product Offtake and Crude Oil Supply Agreement ("**POCSA**") with PTT and PTT Oil and Retail Business Public Company Limited ("**OR**") is an indefinite term contract, under which the price for purchases of crude oil and other feedstock are negotiated on an arm's length basis by reference to benchmark market prices, under which our feedstock costs may increase from time to time. See "*Business—Our Business Units and Products—Oil Refining*." PTT also supplies natural gas to our refinery and power plants under gas sale contracts with similar market-based terms. There can be no assurance that PTT will be able to procure crude oil, natural gas and other feedstock at the quantities we require and also at prices which we believe is reasonable, or at all.

We have historically entered into short and long term crude oil supply contracts with other major oil companies, such as Shell Thailand and Star Fuels Marketing Limited ("**SFL**"), and procure feedstock from short-term suppliers and on the spot market. Our reliance on these short-term suppliers and spot market purchases increases during periods when PTT or other long-term suppliers experience interruptions or shutdowns which impact their ability to supply feedstock, or when our demand for feedstock exceeds historical norms. Since 2022, we have intended to procure up to 100% of our crude oil supply from PTT. However, if we are unable to do so and any of the short-term suppliers decline to supply us with feedstock on mutually agreeable terms and prices, or if PTT or other long-term suppliers fail to supply us with feedstock pursuant to the terms of the relevant agreements or we fail to negotiate an extension or renewal of such contracts on terms acceptable to us, or at all, we may be unable to procure feedstock and be required to purchase feedstock from other short term suppliers or increase our spot market purchases, either of which may be more costly.

We also rely on PTT for certain borrowings to manage our liquidity. We also have uncommitted inter-company borrowing and lending agreements with PTT to support our working capital. For further information, see and *"Certain Relationships and Related Party Transactions—Transactions—Borrowings*."

OR accounted for 40.5% and 38.5% of our total revenue from sales and service for our refined petroleum and lube base oil products in the year ended December 31, 2024 and for the nine months ended September 30, 2025, respectively.

As a result, we will be affected by a reduction in or loss of sales to OR or changes in its financial condition or operations. There can be no assurance that OR will continue to purchase our products in quantities historically purchased, or at all. If OR is unable to purchase our products, or otherwise ceases or suspends its purchases, and we cannot find other customers to offtake those quantities in bulk, our revenues, margins and cash flows may be adversely affected.

We generally make sales to OR under an indefinite term offtake agreements with minimum offtake commitments. Our inability to successfully negotiate renewals of such offtake agreements with OR on terms that are mutually acceptable, or the failure of OR to comply with the terms of the existing offtake agreements, could have a material adverse effect on our business, financial condition, results of operations and prospects. OR sells certain of the products it purchases from us to other end-user customers and any changes in the demand for our products from end-user customers may affect future levels of offtake commitments by OR and adversely affect our business and results of operations.

PTT holds interests in IRPC Public Company Limited ("**IRPC**") and PTT Global Chemical Company Limited ("**PTTGC**"). Each of IRPC and PTTGC also sells refined petroleum, petrochemical and lube base oil products to PTT and other customers in the Thai domestic market and in the international markets.

PTT could have the ability to control our management and administration, in particular, the nomination of directors to be appointed by the annual general meeting of shareholders and the nomination of certain executive officers to be appointed by the board of directors. At present, five of our non-independent directors are currently directors or executive officers of PTT or a PTT Group company. In addition, the Thai government, as a major shareholder of PTT, may influence us to pursue certain of its macroeconomic and social policies, which may not be in your or our best interest. We cannot assure you that conflicts of interest among the Thai government, PTT, ourselves, our respective associated companies and our directors and executive officers will always be resolved in a manner not adverse to your or our interests. Our directors and executive officers may face potential conflicts of interest in fulfilling their responsibilities as such individuals may also hold positions in PTT and our competitors.

There can be no assurance that we or PTT will be able to resolve any potential conflict, or that, if such conflicts were resolved, we would not receive a more favorable resolution if it were dealing with an unaffiliated party. We have adopted a Code of Conduct for our directors and executive officers that includes provisions designed to address such conflicts of interest. However, we cannot assure you that conflicts of interest among ourselves and our directors and executive officers, on the one hand, and the PTT Group and its directors and executive officers, on the other hand, will always be resolved in a manner not adverse to our interests or your interests as holders of the Securities issued under the Program.

We benefit from our relationship with PTT in a number of important respects. As the principal refiner of the PTT Group, we are able to benefit from PTT's market position, expertise and customer base. We believe that PTT's position as our principal feedstock supplier and principal offtake customer provides important stability to our business. Our membership within the PTT Group also provides us with significant economies of scale, competitive purchase terms and conditions, business opportunities and group synergies. Certain of our agreements contain termination or amendment clauses in the event PTT reduces its shareholding in our Company. Under a number of our outstanding loan agreements and Thai Baht debentures, an event of default is deemed to occur if PTT, directly and indirectly, owns less than 45.0% of our issued share capital.

We cannot assure you that PTT will continue its current level of shareholding in us, or at all, or that PTT will continue to provide support to us. If PTT reduces its shareholding in us or ceases to provide us with support, or if any of our material feedstock or offtake agreements with PTT were terminated, our business, cash flow, financial condition, results of operations and prospects could be materially adversely affected.

We are dependent on foreign sources for our supply of crude oil and other feedstock, in particular from the Middle East, and any disruption in our supply of crude oil and other feedstock could reduce our margins and materially adversely affect our results of operations.

The main raw material used in our production process is crude oil and we are dependent on crude oil being readily available to satisfy substantially all of our production needs. We are capable of processing a wide range of crude oil, including crude oil from the Middle East, Asia (excluding Thailand), other foreign sources and Thailand, although our choice of feedstock at any time depends on relative prices and yields. We consume crude oil from both foreign and domestic sources and acquire crude oil through a combination of long-term purchase contracts, indefinite term purchase contracts and spot market purchases. In 2024, crude oil originally sourced from the Middle East, Thailand, Asia (excluding Thailand), and other foreign sources accounted for, by volume, 92.1%, 5.8%, 1.9% and 0.2% of our total crude oil consumption, respectively. For the nine months ended September 30, 2025, crude oil originally sourced from the Middle East, Thailand, Asia (excluding Thailand), other foreign sources accounted for, by volume, 91.0%, 5.1%, 4.0% and 0.0% of our total crude oil consumption, respectively. The supply of imported crude oil and other feedstock is subject to a variety of factors that are beyond our control, including the political or economic instability or armed conflict in petroleum producing regions, in particular in the Middle East and Russia, government regulations with respect to oil and energy industries in those regions, sanctions, import tariffs and other restrictions, weather conditions and overall economic conditions in those regions. Although we have not experienced any significant difficulties in obtaining crude oil and other feedstock to satisfy our production requirements to date, there can be no assurance that we will continue to have an adequate supply of feedstock, primarily crude oil, available to our refinery to sustain our current level of refining operations at acceptable prices and on satisfactory terms. If we are unable to obtain an adequate supply of crude oil and other feedstock or are only able to obtain such volumes at unfavorable prices or terms, our margins and our results of

operations would likely be materially adversely affected. See "*Business—Our Business Units and Products—Oil Refining*."

A significant interruption in our operations, which may be caused by effects beyond our control, will reduce our production and materially and adversely affect our business.

The majority of our production facilities are located at the Sriracha Complex and substantially all of our revenues are derived from the sales of our products produced at such production facilities. Refining, transporting and storing crude oil and other feedstock, as well as other operational activities involving the refined petroleum products, petrochemical products and other products we produce involve many significant risks and hazards that could result in fires, explosions, pipeline leaks and ruptures, chemical spills, remediation complications, discharges or releases of hazardous substances or gases or other environmental risks, storage tank leaks, and other unexpected or dangerous conditions or accidents. Our operations are also subject to mechanical failures, malfunctions, interruptions and equipment shutdowns. In such situations, undamaged refinery processing units or other production facilities may be dependent on or interact with damaged sections of our refinery or other facilities and, accordingly, are also subject to being shut down. If such events occur, our production capacity may be materially and adversely affected. If our refinery or other facilities are forced to shut down for a significant period of time, this would have a material adverse effect on our earnings, results of operations, financial condition and cash flows, particularly if such event was not adequately covered by our insurance. In addition, many of these operating and other risks may cause personal injury and loss of life, severe damage to or destruction of property and equipment and environmental damage, and may result in loss of permits or licenses, suspension of operations and the imposition of civil or criminal penalties.

Our business and operating results are vulnerable to interruption by events outside of our control that may affect our plants or facilities in Thailand or the facilities of our suppliers and customers. Possible disruptions include, among others: earthquakes, fire, tsunami, volcanic activity, flooding, epidemics, power loss, telecommunications failures, political instability, military conflict and uncertainties arising from terrorist attacks, the economic consequences of military action or terrorist activities and associated political instability, and the effect of heightened security concerns on domestic and international travel and commerce. Floods and other events beyond our control can harm our business, financial condition and results of operation by causing, among other things, production stoppages, the incurrence of significant costs, including, but not limited to, supply chain shortages or reduced demand for our products due to the impact on our customers or supply chains.

While we try to ensure that our factories are well designed, safely operated and properly maintained, events outside of our control outlined above or other risks may significantly interrupt our operations, cause loss of revenue, increase maintenance costs and cause damage in the future, whether directly or indirectly, as a result of industrial accidents, severe weather or other natural disasters, terrorist attacks or other causes. This could materially and adversely affect our business, financial condition and results of operations.

Failures in the information technology systems, data and cyber security, or telecommunications systems can adversely impact our operations and reputation.

Our operations depend on information technology and communications systems and services. Interruptions or malfunctions affecting these systems and/or their infrastructure, as a result of obsolescence, technical failures, natural disasters, and/or human errors and sabotage, may harm or disrupt its business and adversely affect our operations and reputation. Moreover, cybersecurity and information security failures, either due to external acts, such as malware, cyber-espionage, cyber-attacks and cyber-terrorism; or internal ones, such as negligence or misuse by employees or our partners, may also adversely impact our reputation, relationships with our stakeholders and results of operations. Additionally, authorized third-party information technology systems to which we have limited control and visibility over could be compromised and used to gain access or introduce malware to our systems. Such events could result in significant financial losses, legal or regulatory violations, reputational harm and legal liabilities, which could materially and adversely affect our business, financial condition and results of operations.

We depend on a small number of customers for a significant portion of our net sales of petroleum products.

We sell our refined petroleum products mainly in the domestic market to major oil companies, including OR, Bangchak Corporation Public Company Limited, Shell Thailand, and SFL which accounted for, by total sales volume, 32.1%, 0.4%, 3.7% and 1.6%, respectively, of our refined petroleum products in the year ended December 31, 2024, and 33.6%, 0.4%, 3.2%, and 1.7% respectively, of our total sales volume in the nine months

ended September 30, 2025. In particular, PTT and OR accounted for, by volume, 33.3%, 33.8%, 32.1%, 32.1% and 33.6% of our refined petroleum products in 2022, 2023 and 2024 and in the nine months ended September 30, 2024 and 2025, respectively. See "*Business—Our Business Units and Products—Oil Refining*." As a result of our dependence on this small number of customers, we may be affected by changes in their financial condition or operations or their demand for our products. We have supported the growth of other independent offtake customers to capture the growing demand in Thailand and such offtake customers continue to be a growing portion of our sales. We also seek to expand our customer base both in the domestic and international markets, including traders and end users, to accommodate sales fluctuations to our major offtake customers.

We expect to continue to sell a substantial portion of our production to these major oil companies and maintain or expand our sales to other independent offtake customers, traders and users. We cannot assure you that any of our offtake customers will not encounter resale, marketing or financial difficulties or that they will be able to continue to purchase our refined petroleum products in quantities historically purchased, or at all.

We are exposed to antitrust and competition laws and to the risk of changes in these laws or in the interpretation and enforcement of these laws.

We are subject to the Trade Competition Act B.E. 2560 (2017) (collectively with the subordinate regulations issued pursuant to the act, the "**TCA**"). The TCA regulates competition and has provisions on: (i) the prohibited conduct of dominant business operators (abuse of dominance); (ii) the supervision of mergers and acquisitions that substantially lessen competition, or mergers and acquisitions which may cause monopoly or result in a dominant position in a market; (iii) the joint conduct of business operators which monopolize, reduce, or restrict competition; (iv) unfair trade practices; and (v) agreements with business operators in foreign countries without appropriate justification that cause serious harm to Thai economy and consumers. Violations of the TCA may result in criminal or administrative punishments or both.

Under the TCA, a "dominant business operator" means: (a) a business operator that has, in a market in the past year, 50.0 per cent. or more market share and at least THB1 billion or (b) a business operator which, in the previous year in a market, is one among the top three business operators with a combined market share of 75.0 per cent. or more (provided that the business operator itself has not less than 10 per cent. market share) and which has turnover of at least THB1 billion. We may be considered as a dominant business operator under the TCA in some business sectors, and would be restricted from engaging in conduct which the TCCT considers to be abuse of dominance, in addition to being restricted from engaging in unfair trade practices.

Prior approval from the Trade Competition Commission of Thailand (the "**TCCT**"), an independent regulatory body responsible for ensuring compliance with the TCA, could be required for certain of our acquisition of, or merger or amalgamation with other businesses or when we become a target of such transaction involving Thai assets and businesses. For certain other transactions, filings to the TCCT post-completion of a transaction could be required.

The TCCT has broad powers under the TCA to order that a business which has violated or which the TCCT reasonably believes has violated the TCA cease, stop or rectify its actions. Since the enactment of the TCA in 2017, the TCCT has actively enforced the TCA. Out of all the provisions under the TCA, the TCCT has most often applied the unfair trade practice provision. To date, there has been over 150 merger filings made to the TCCT.

Although we believe that our operations are not in breach of the TCA, there is no assurance that the TCCT will view our operations as being in compliance with the TCA. Given a relatively small volume of precedent in Thailand, it is unclear how the TCA will be enforced in future and what additional measures the TCCT may subsequently issue. We cannot assure you that compliance with or enforcement under the TCA will not result in a material and adverse effect on our business, financials, or results of operations and prospects. Additionally, the TCA may discourage or prevent acquisition of interests or takeover, any potential offeror and other parties will need to consider regulatory obligations in various jurisdictions which may involve significant time and cost.

Compliance with, and changes to, environmental, health and safety, tax and other laws and regulations may adversely affect our results of operations and our financial condition.

Environmental

Due to the nature of our business, we are subject to extensive and increasingly stringent environmental codes, rules, laws and regulations, both domestic and international. Some of these laws and regulations require

our facilities to operate under permits, licenses, authorizations or certificates that are subject to renewal or modification. Any amendments or modifications to these laws and regulations and permits may require us to install pollution control equipment and to implement changes to our operations to limit the impact or potential impact on the environment, health and safety. A violation of these laws, codes, rules and regulations or permit conditions can result in substantial fines, criminal sanctions, permit revocations and facility shutdowns.

We have incurred, and expect to continue to incur, operating costs and capital expenditures to comply with the environmental laws and regulations to which we are subject. While we believe we are in compliance in all material respects with all applicable environmental laws and regulations, our operations may nevertheless give rise to liabilities and may require us to incur costs to remedy the damage caused. Environmental regulations in Thailand and other countries in which we operate have become increasingly stringent in recent years, and this trend is likely to continue. Changes to environmental laws and regulations, their interpretations or enforcement may require us to make additional capital expenditures or incur additional operating expenses in order to maintain our current operations, curtail our production activities or take other actions that could have a material adverse effect on our financial condition, results of operations and cash flow. See "*Business—Environment, Sustainability and Corporate Social Responsibility.*" In addition, we may be unable to sell any refined petroleum or other products if they fail to meet new specifications. If we fail to meet environmental requirements, we may also be subject to administrative, civil and criminal proceedings by governmental authorities, as well as civil proceedings by environmental groups and other individuals, which could result in substantial fines and penalties against us as well as orders that could limit or halt our operations. These changes could also limit the availability of our funds for other purposes, which could adversely affect our business, financial condition, results of operations and cash flows.

Environmental clean-up and remediation costs of our sites and environmental litigation could pose reputational and other risks that could adversely affect our cash flow, results of operations and financial condition. For instance, on September 3, 2023, an incident at the Single Buoy Mooring of our refinery resulted in an oil spill during discharge operations. We compensated affected parties and incurred costs for environmental remediation and related expenses arising from the incident and recognized THB75.0 million as administrative expenses for the year ended December 31, 2024. In 2024, we received insurance compensation totaling THB84.8 million. In 2025, we received additional insurance compensation related to this incident totaling THB99.7 million. On June 6, 2025, a crude oil spill occurred at the Single Buoy Mooring no.2 of our refinery. We undertook a response operation and worked with both government and private sector agencies to clean up the oil sheen. We have made insurance claims with respect to this incident; however, our policies are subject to limits, deductibles and exclusions, and insurers may dispute coverage or delay payment. We may seek to challenge such determinations or pursue claims against insurers, which could result in us incurring additional expenses and there can be no assurance of a favorable outcome. We may also incur additional clean-up and remediation costs, and we may be subject to litigation, governmental investigations, penalties or third-party claims arising from this incident.

To date, we have not been subject to any litigation, investigations or any material fines and penalties with respect to environmental and related matters. However, there can be no assurance that we will not become involved in future litigation, investigation, claim, suit or other proceedings or be held responsible in any such future litigation or proceedings, whereby the costs could be material.

Health and Safety

Our business involves the handling, manufacture and use of substances and compounds that may be considered toxic or hazardous within the meaning of environmental, health and safety laws. As a result, we may face liability for alleged personal injury, property damage or product defects due to exposure to chemicals or other hazardous substances at our plants or chemicals that we manufacture, handle, own or sell. Concerns regarding the quality and safety of products may also expose us to the risk of legal claims, regulatory actions and reputational harm. While we have not experienced such claims to date, future incidents could significantly impact our reputation, business performance, financial stability and cash flow.

We also incur and expect to continue to incur capital and operating costs to comply with health and safety laws and regulations in Thailand and other countries in which we operate. In addition, new laws and regulations, stricter enforcement of, or changes to, existing laws and regulations, the discovery of previously unknown health and safety hazards or the implementation of more stringent quality standards could in the future require us to incur costs, or affect our production or revenues, in ways that may have an adverse effect on our financial condition or results of operations. We cannot assure you that material capital expenditures, costs, or operating expenses beyond those currently anticipated will not be required under applicable health and safety laws and regulations, or that

developments with respect to such laws and regulations will not adversely affect our production or revenues. See "*Business—Risk Management and Safety*."

Tax and Other Laws and Legal and Business Environment

Our operations and our operating results may also be impacted by changes in the legal and business environments in which we operate, and as such, we may be required to take any action or to comply with the governmental policies or regulations which may be changed from time to time, as well as the outcome of government investigations, tax disputes and audits, tax assessments and legal proceedings. Also, as a result of new laws and regulations or other factors, we could be required to curtail or cease certain operations. Changes that impact the business environment include changes in electricity supply and tariffs, such as the tariffs applicable to end-user customers, product specification, pricing intervention, changes in accounting standards, changes in environmental laws, changes in tax laws or tax rates, changes in economic sanctions law, and changes affecting the rights, privileges and conditions under our Board of Investment of Thailand ("**BOI**") investment promotion certificates, including any change to the interpretation and/or position of the BOI and/or the Thailand Revenue Department with regards to any tax privileges received under the BOI investment promotion certificate. See "*Business—Investment Promotion*" and "*Business—Environment, Sustainability and Corporate Social Responsibility*." These changes could have a significant adverse financial impact on our future operations and the way we conduct, or if we conduct, business, particularly if such changes require significant capital investment, create additional liability or impose fines and penalties on us. There is no guarantee that we will be able to comply with these changes, make changes to our existing operations or services, develop new technologies, products or services, or otherwise react promptly to meet the demand of these changes in the legal and business environments in serving our customers. Failing to do so could have an adverse effect on our business, financial condition and results of operations.

Government intervention in our pricing decision and requirements in our production may adversely affect our results of operations and our financial condition. The Thai government may intervene, from time to time, to regulate the prices we charge for our products. Government intervention in our product pricing may result in losses incurred by us. In July 2017, the National Energy Policy Council ("**NEPC**") resolved to fully deregulate LPG business by abolishing the administered prices for natural gas separation plants, oil refineries, aromatics plants, as well as LPG imports; cancelling the determination of the ex-refinery LPG price (while assigning the Energy Policy and Planning Office ("**EPPO**") to publish a reference price for benchmarking domestic LPG retail prices); eliminating the oil fuel fund contributions or compensations across the LPG value chain; and cancelling the announced wholesale LPG price at gas terminals, thereby dismantling the price cap and subsidy system. These measures became effective on August 1, 2017. Therefore, LPG wholesale price is no longer subject to the ex-refinery-controlled price and remains floating, subject to global energy market conditions. According to this deregulation policy, the wholesale price of petroleum products in Thailand was based on an ex-refinery price on import parity basis which must be in accordance with the ex-refinery price in Singapore's market (LPG Cargo Price as notified by Platt's Spot Cargo) plus the quality maintenance expense, transportation fee, insurance fee, ocean losses and handling and relevant taxes which are excise tax, VAT, local tax, and legal reserves as required by the oil fuel fund and energy conservation and promotion fund. However, pursuant to the resolution of the Energy Policy Administration Committee (EPAC), the LPG pricing benchmark shall transition from the LPG Cargo to the Saudi Aramco Contract Price (CP), effective January 6, 2026. Although the LPG price is currently based on market conditions and the Thai Government no longer intervenes in ex-refinery pricing decision, the government is substantially able to control the price by determining, from time to time, relevant taxes, especially legal reserve to be paid or payments to be received from the relevant funds. The aforementioned issue is under consideration by the relevant parties. We will reasonably evaluate and consider the issue, taking into account the domestic conditions for the oil refinery industry and society, with a view to not have the issue significantly affect our business, financial condition and results of operations. However, the Thai government may enforce a legal measure to limit the gross refining margin (GRM) or request oil refineries to contribute to the oil fuel fund to reduce the oil prices for the public. Such measures may affect us during such enforcement period.

In respect of the prices of diesel, petrol and gasohol products, the Thai government may intervene to regulate the prices by subsidizing the price, or increasing the levies and/or the contribution rate to the oil fuel fund in order to stabilize domestic retail prices of such products and alleviate the effects of the rise of world market prices to encourage the use of alternative fuel, such as ethanol, and to mitigate the costs of living of consumers as well as the operating costs of business operators in Thailand. We cannot assure you that the Thai government will not intervene in our pricing decisions in the future, especially if crude oil prices in the market increase or fluctuate significantly. Such pricing intervention may materially and adversely affect our business, financial condition and results of operations.

Pursuant to the Fuel Trade Act B.E. 2543 (2000), as amended, the Thai government may from time to time increase oil reserves requirements as a percentage of a refiner's annual throughput. Effective March 1, 2024, the Department of Energy Business ("**DOEB**") increased the oil reserves required to be held by petroleum refiners like us from 5% to 6% of annual crude oil throughput of such refiner. This change resulted in an increase in our working capital costs and handling costs. The legal reserve requirement for liquefied petroleum gas was also increased from 1% to 2%, effective from January 2022. We cannot assure you that the DOEB or any other government body will not revise the regulatory requirements to increase the minimum ratio of oil and natural gas reserves and impose such requirements in the future.

Failure to obtain, renew or maintain the permits, approvals, licenses, authorizations or leases required to operate our businesses may have an adverse effect on our business, financial condition, results of operations and prospects.

We require permits, approvals, licenses, authorizations and leases to operate our business and/or to construct and operate our plants. For example, in the course of operating our business, we are frequently required to obtain environmental impact assessment approvals, and to comply with license requirements, rules, laws and regulations with respect to oil trading, fuel control, oil refinery operations, port operations, power generation, hazardous substances, construction permit, fire prevention, safety and environmental protection. Health and environmental impact assessment approvals, if required, for any new projects are time-consuming, uncertain and may impact the feasibility of our planned projects. From time to time, we may be required to renew permits, approvals and leases or to obtain new permits, approvals and leases. There can be no assurance that the relevant authorities will issue any such permits, approvals and leases in the time frame anticipated by us, or at all. Failure to obtain such approvals, permits and leases may subject us to fines, suspensions, or disruption to our operations and construction, which may materially and adversely affect our business, results of operations and financial condition.

Our insurance coverage may not adequately protect us against possible risk of loss.

We carry physical loss or damage to our refinery and business interruption insurance which covers loss of gross profit as a consequence of fire, explosion, electrical damage, machinery breakdown, natural catastrophes, and fuel and/or power shortages. We also carry third-party liability insurance and marine open cargo insurance for all our commercial operating plants, as well as insurance coverage for our projects under construction, especially for the Clean Fuel Project (the "**CFP**"). We carry constructional all-risk insurance, including delay in start-up, third-party liability insurance and project cargo insurance. As of September 30, 2025, the sum insured in respect of such physical loss or damage insurance, business interruption insurance was US$7,655 million with combined single limit at US$1,815 million per occurrence, and sum insured of third-party liability insurance was US$50 million any one occurrence/unlimited in the annual aggregate, the sum insured in respect of marine open cargo was US$8,294 million with limit of liability of US$310 million per shipment, the sum insured in respect of the CFP was US$5,613 million, and the sum insured in respect of CFP cargo was US$479 million with limit of liability of US$15 million per shipment.

In addition, we carry insurance coverage for directors and officer's liability to protect our directors, officers, and senior managers against claims arising from their decisions and action taken, environmental liability insurance to protect the company against claims arising from pollution condition. We also carry policies for minor property, automobile, office equipment, electronic equipment such as computer and notebook insurance, and personal accident insurance for all of our employees.

Effective November 1, 2025, we also maintain a political violence insurance policy covering terrorism and war or civil war, with a limit of US$150 million. Any terrorist attack that results in damage to our infrastructure or that of our customers could cause interruption to parts of our business and materially and adversely affect our financial condition and results of operations.

While we believe that we maintain insurance coverage in amounts consistent with industry norms in Thailand, including deductibles and coverage amounts, if we suffer a material uninsured loss or any insured loss suffered by us significantly exceeds our insurance coverage, our business, financial condition and results of operations may be materially and adversely affected. In addition, our insurance policies do not cover any penalties or fines or other payments owed to the Thai government resulting from any of these risks. Although we believe that the Thai government does not have a history of levying material fines in the petroleum refining industry, we cannot assure you that the Thai government would not do so in the future. See "*Business—Insurance*."

Our operations consume large amounts of electricity, industrial water, steam and other utilities, and shortages, supply disruptions or substantial increases in the price of such utilities could adversely affect our business.

The successful operation of our plants depends on an uninterrupted and timely supply of electricity, steam, industrial water and other utilities. Accordingly, we are at risk, in the event of a disruption, in the supply of any of these utilities. Prolonged blackouts or disruptions caused by accidents or natural disasters such as floods, droughts, earthquakes or tsunamis could also substantially disrupt our production, directly or indirectly. For example, we experienced a power disruption in March 2005, where a short circuit in one gas turbine triggered an unplanned shutdown in another gas turbine and a shutdown of our waste heat boilers. With our backup power generation systems and spared steam reserve, the processing units in our refinery were able to resume operations within a few hours and the incident had minimal impact on our overall operations. We also experienced a shortage of water supply during the water crisis in 2005. Future disruptions could materially and adversely affect our operating results and financial condition. Many factors, such as the supply and demand for electricity, general economic conditions, changes in government policies, political instability and global weather conditions, including natural disasters, may affect the availability and prices of these utilities. These risks may be exacerbated given the geographic concentration of our facilities. Additional prolonged substantial increases in the price of these utilities could have a material and adverse effect on the costs of operating our plants and would negatively affect our gross margins unless we are able to fully pass on the additional expense to our consumers.

Our business is capital intensive and our expansion plans have significant capital expenditures and financing requirements, which are subject to a number of risks and uncertainties. In addition, our planned expansion projects and integration of any future acquisitions may not be completed as planned, or at all.

The refining and petrochemical industries are capital intensive. Our ability to maintain and increase our revenues and net profits is partially dependent upon continued capital spending, including investing in, constructing, upgrading and maintaining our facilities. In addition, we continuously monitor developments in the refining and petrochemical products markets in Thailand, Southeast Asia, East Asia and elsewhere for opportunities to expand into new businesses or invest in derivative uses of our refinery and petrochemical production. Any future expansion of our business, including our planned expansion projects and investments, will require additional capital expenditures and/or financings, which may be substantial.

The board of directors approves our capital expenditures on an annual basis. The board of directors approved the incurrence of capital expenditures of up to THB56,420 million (US$1,736 million), until the year ending December 31, 2029. In particular, our board of directors on June 29, 2018 and our shareholders on August 27, 2018 approved the investment of approximately US$4,825 million in the CFP. The CFP involves the construction of new production units, with the aim of improving our production and energy efficiency, oil refinery capacity and refining capabilities, and reducing environmental impact. We expect to fund the significant investment in the CFP through our cash reserves, cash flow from our future business operations, long-term loans and debt instruments. We engaged a consortium comprising of PSS Netherlands B.V. (in its capacity as Offshore Contractor) and an unincorporated joint venture of Samsung E&A (Thailand) Co., Ltd., Petrofac South East Asia Pte. Ltd., and Saipem Singapore Pte. Ltd. (in its capacity as Onshore Contractor) (collectively, the "**Consortium**"), through a comprehensive construction contract for the engineering, procurement and construction for CFP in October 2018 (as amended) (the "**EPC Contract**").

The construction of the CFP was expected to be completed by the first quarter of 2023. However, following delays in the execution of the work under the EPC Contract, the board of directors meeting no. 4/2022 resolved to approve the Company's execution of an amendment agreement to the EPC Contract with the Consortium in the best interest of the Company and to enable the CFP to be completed. Under such amendment agreement, the budget of the CFP was increased by approximately US$550 million or approximately THB18,165 million equivalent, and the time for completion was extended by 24 months in accordance with the EPC Contract. Thereafter, while the Hydrodesulfurization Unit 4 or HDS-4 construction was successfully completed and commenced test-run for the production of Euro 5 Standard diesel in February 2024, in time for the Thai Government's policy of enforcing Euro 5 Standard diesel which came into effect in early 2024, the Consortium continuously failed to pay overdue payments to its subcontractors working on the CFP. This resulted in work stoppages or reduction of workforce, causing the construction of the CFP in accordance with the EPC Contract to be delayed.

Subsequently, at a meeting of the board of directors held on December 19, 2024, the board of directors approved an increase of the investment cost of the CFP and approved the convening of an Extraordinary General Meeting of Shareholders no. 1/2025 of the Company which was held on February 21, 2025, to propose an increase

in the investment cost in the CFP, and an increase in interest during construction, causing the total investment value of the CFP to be approximately THB241,472 million or approximately US$7,151 million[1] equivalent and the total estimated interest expenses during construction to be approximately THB37,216 million or approximately US$1,078 million equivalent[2]. The additional investment will be used for the construction of the CFP, procurement of remaining equipment and materials and payment of other expenses related to the development of the CFP, including advisory fees, to support the completion of the CFP. See "*Business—Clean Fuel Project*."

In April 2025, the EPC Contract was terminated. The Company is continuing the construction of the CFP and is targeting to complete construction of the CFP in the third quarter of 2028. A consultant with expertise and experience to enhance efficiency in engineering, procurement and construction management has been engaged to support the Company in managing each stage of the CFP until completion. The remaining work of the CFP will be performed by contractors that the Company will engage who have proven capabilities and experience in large-scale construction projects to ensure that all remaining work on the CFP will be successfully completed in accordance with the Company's plan.

In addition, our board of directors on July 23, 2021 approved our direct investment (through a rights offering) (the "**CAP Share Acquisition Transaction**") in PT Chandra Asri Petrochemical Tbk (later renamed PT Chandra Asri Pacific Tbk) ("**CAP**") of up to US$1,183 million for up to 15.38% of total outstanding shares of CAP. We have invested 15.00% in CAP's total issued shares in September 2021 with the total investment value of not exceeding US$913.0 million or THB29,798.0 million[3], and will acquire the remaining 0.38% of CAP's total issued shares with the total investment value of not exceeding US$270.0 million or approximately THB8,928 million[4], subject to certain conditions (including the development and construction of a petrochemical plant of CAP2), including the Final Investment Decision ("**FID**") in 2022. If the FID has not been obtained within 5 years from the completion of the first acquisition of the newly issued shares, the investment value will not exceed US$3.9 million or THB129 million[2]. In the event that we acquire the remaining 0.38% of CAP's total issued shares, it will be recorded as an investment in associates.

CAP is the largest complex petrochemical business operator in Indonesia and is the premier petrochemical producer which has fully-integrated plants and supporting facilities in the Republic of Indonesia. CAP is also the market leader in the production of olefins products, PE and PP in Indonesia. We believe that this investment meets a number of our key strategic objectives, including providing a jumpstart into the Olefins value chain and instantly upgrading our LPG and Naphtha value propositions while avoiding adding new capacity and minimizing our required investment amount in existing facilities. The CAP investment also provides us a gateway into Indonesia, a strategic market with growing demand and a shortfall in supply, via partnership with reputable and experienced local Indonesians and Thais. Our strategic investment will be used to fund the development and construction of a new plant adjacent ("**CAP2**") to CAP's existing plant which will double CAP's petrochemical capacity and be configured for flexible feedstock. Following their FID in 2022, CAP2 is expected to be completed in 2026 and this expansion plan already has strong support from the Indonesia government, including EIA approval and a 20 + 2 year ongoing corporate income tax holiday. We expect this investment to create immediate financial benefits such as higher share of profit from a diversified income source and secured demand for our feedstock from our supply agreement. The completion of CAP2 is expected to result in additional benefits, including nearly doubling our annual share of profit and margin improvement from operational synergies between CAP's existing facility and CAP2. As of December 31, 2024, we held 15.0% of the shares in CAP through PT TOP Investment Indonesia ("**TII**"). We have delegated three representatives to serve as the directors in CAP's board of directors, out of a total of 13 directors. In addition, we also delegated our two executives to serve as the members of CAP's board of commissioners, out of a total of eight commissioners. The investment in CAP is classified as an investment in associate and the profit contribution from CAP is realized as our share of profit of joint ventures and associates.

Our actual capital expenditures and financing needs may be significantly higher or lower than our planned amounts due to various factors, including, among others, unplanned cost overruns and additional capital expenditure which might be approved by the board of directors in the next fiscal years, our ability to generate

[1] The exchange rate of THB33.77 per US$1.00 was calculated based on the weighted average of the applicable foreign exchange rates for each approval period.

[2] The exchange rate of THB34.52 per US$1.00 was calculated based on the weighted average of the applicable foreign exchange rates for each approval period.

[3] The exchange rate of THB32.6 to US$1.00, as of September 2021.

[4] The exchange rate of THB33.1 to US$1.00, as of July 2021.

sufficient cash flows from operations and our ability to obtain adequate external financing for our planned capital expenditures.

In addition, we cannot assure you whether, or at what cost, our capital expenditures that relate to planned or other possible expansion projects (including the CFP) or investments (including the CAP Share Acquisition Transaction) will be completed as scheduled or at all, or that these projects will be successful if completed. The timing and cost of completion of these projects will depend on a number of factors, including the cost and availability of financing and changes in general economic conditions in Thailand and elsewhere, our intended significant export markets or changes in our expansion plans. The completion of these projects may also be adversely affected by uncertainties commonly associated with large construction and expansion projects, including shortages or changes in prices of equipment or materials, defects in design or construction, lack of environmental approvals, adverse weather conditions, natural disasters, accidents and unforeseen circumstances and problems. Any of these uncertainties may cause delays in completion of all or part of the planned projects and increases in related investment costs. Moreover, we are subject to risks relating to misconduct committed by third parties such as contractors or service providers. Such misconduct could include, but is not limited to, engaging in misrepresentation or fraudulent, deceptive or otherwise improper activities, such as offering bribes, or otherwise not complying with applicable laws. Although we have established policies and procedures designed to screen our third parties and respond to such behavior, there can be no assurance that third parties will not engage in misconduct. Any or all of the above problems could materially harm our reputation, business and operating results.

As part of our growth strategy, we may consider inorganic growth opportunities (such as the CAP Share Acquisition Transaction) and may in the future make additional strategic acquisitions or enter into strategic partnerships to diversify our business or expansion our production capacity and further penetrate existing or new markets. We may not be able to identify and properly evaluate appropriate investment opportunities, continue to acquire businesses on satisfactory terms, successfully integrate acquired businesses into our operations or operate such business profitably. Failure to achieve the desired level of synergies from any investments or acquisitions (including the CAP Share Acquisition Transaction) could have a material adverse effect on our business, financial condition, results of operations and prospects.

Certain investments may be made either through newly established companies, through joint ventures or through associated companies. We sometimes find it necessary to provide financial support to such entities to alleviate difficulties such as weak financial condition in the startup stage or otherwise to ensure our strategic goals are met. In some cases, these entities may encounter a lack of liquidity from unexpected circumstances during the course of operation and require financial support from shareholders. We cannot assure you that our associated companies will not have further financial difficulties that may require further financial assistance from us or result in us taking on impairment charges with respect to our investments in such companies, any of which could have an adverse effect on our financial condition and results of operations. Further, we cannot assure you that we will not provide financial assistance to certain associated companies by increasing our equity interests in such associated companies above 50.0% or otherwise acquire control or joint control of these associated companies, in which case we will be required, under TFRS to consolidate the financial accounts of such companies from the date of acquiring control, which may in turn have an adverse effect on our consolidated financial condition.

Our existing and future financing may place restrictions on our operations

Our existing debt financing instruments contain a number of covenants that could limit our ability to, among others, incur additional indebtedness, pay dividend or distributions or sell substantially all of our assets. The terms of our debt financing instruments may restrict our current and future operations and could adversely affect our ability to finance our future operations or capital needs. In addition, complying with these covenants may make it more difficult for us to successfully execute our business strategy and compete against companies who are not subject to such restrictions. Moreover, any additional funding we will need to raise in order to make our planned capital expenditures which, if met by way of additional debt financing, may place restrictions on us, may, among other things:

- increase our vulnerability to general adverse economic and industry conditions;
- limit our ability to pursue growth plans;
- limit our ability to raise additional debt financing;

- require us to dedicate a substantial portion of cash flow from operations to payments on our debt, thereby reducing the availability of our cash flow to fund capital expenditures, working capital requirements and other general corporate purposes; and/or

- limit our flexibility in planning for, or reacting to, changes in our business and its industry, either through the imposition of restrictive financial or operational covenants or otherwise.

If we incur additional debt, even in a refinancing transaction, the aforementioned risks that we face with respect to our indebtedness could intensify. Furthermore, we cannot assure you that we will be able to obtain additional financing when needed on commercially acceptable terms or at all. Any difficulties we face in accessing financing on acceptable terms and conditions could have a material adverse effect on our business, financial condition, results of operations and prospects.

The refining, petrochemical and lube base oil industries are highly competitive.

The refining industry is highly competitive with respect to the sale of refined petroleum products in the Thai domestic, regional and global markets. Our principal competitors include other major domestic petroleum refiners as well as other global refiners who export products into the regional and domestic markets in the refined petroleum products business. We compete for available supplies of crude oil and other feedstock and for outlets of our refined petroleum products. Domestic petroleum refiners, including us, increased refining capacity in the 1990s and the 2000s without a corresponding increase in demand for refined petroleum products, which has resulted in overcapacity for several major refined petroleum products. In 2021, there was an excess supply in the Thai domestic market of certain refined petroleum products, such as gasoline, diesel, jet and fuel oil, petrochemical products, such as paraxylene and benzene, and high-quality lube base oil (Gr.1) products. Continued imbalance in the supply and demand for certain refined petroleum, petrochemical and lube base oil products in the domestic market could cause pricing pressure in the domestic market and force suppliers, including us, to sell their excess production in the traditionally lower margin export markets, which may have a material adverse effect on our operating margins and results of operations. We do not have any retail business and therefore are dependent upon others to sell our refined petroleum, petrochemical and lube base oil products into the retail market. Three of our domestic competitors have both refining and marketing operations and may be better positioned to sell their products in the domestic market. Some of our competitors who sell into the markets to which we export may be able to drive down product prices if they have costs lower than ours and their export quantities are sufficiently large to influence market prices. Furthermore, some of our competitors may have greater financial, technological and other resources than ours, and may be in a better position to withstand changes in market conditions. Our competitors may also be able to respond more quickly to new or emerging technologies and changes in customer requirements than us.

Competition in the Thai domestic and international markets for refined petroleum products is based primarily on price, which is adjusted to account for product specifications and transportation costs. Furthermore, revenues from the refining business are subject to significant fluctuations as a result of global oil prices and other related factors that influence the price of refined petroleum products. As a result, we may not be able to pass on price increases to our customers. We may also face increased competition if our competitors increase their throughput or refining capacity in the future.

We face competition for the acquisition, development and production of refined petroleum and petrochemical products in Thailand and abroad, and for the capital to finance such activities, including from companies that may have greater financial and other resources. Our ability to enter into commercial arrangements with customers will be dependent upon the continuity of our close working relationships with them, as well as with our joint venture partners, the status of PTT as the primary purchaser of our products in Thailand under POCSA, and our ability to consummate transactions in a highly competitive environment.

In addition, we compete with other industries that provide alternative means to satisfy the energy and fuel requirements of our offtake customers, such as natural gas, coal and renewable energy sources. If we are unable to compete effectively with these competitors, both within and outside our industry, our financial condition and results of operations, as well as our business prospects, could be materially and adversely affected. See "*Business—Competition*."

Our power generation businesses rely on a single supplier for the supply of natural gas.

PTT is our only supplier and distributor of natural gas. PTT delivers natural gas to us, TOP SPP and GPSC through its gas pipeline system under long-term natural gas sale agreements. Any disruption in the supply

of natural gas to TOP SPP and GPSC by PTT could adversely affect the operating results of TOP SPP and GPSC, which could have a material and adverse effect on our business, financial condition and results of operations.

We may not be successful in developing new businesses

We have invested in developing new businesses and new production plants, including the solvent, ethanol and Olefins production businesses. The start-up and initial operations of new production plants are typically affected by adjustment and other operational challenges which can delay the commencement of full production, require production slowdown or shut downs, and result in higher than expected production costs. The risk that any of these circumstances may occur is higher where, as in our case, we have limited trained staff and management with experience in the ethanol and Olefins production businesses, whether on our own or together with joint venture partners. These production plants will use a design and production process that is different from our existing plants. We cannot provide assurance that we will be successful in developing our new businesses, achieve our growth strategies or that we would recover our investments or that these businesses would generate positive returns.

We may be exposed to interest rate fluctuations.

As of September 30, 2025, 17.4% of our total long-term borrowings were floating rate obligations. Interest rates have recently been at historically low levels, but we cannot assure you that interest rates will remain at such low levels. A significant increase in prevailing interest rates could substantially increase our borrowing costs with respect to our existing floating rate obligations or any new floating rate borrowings or any borrowings at higher fixed interest rates, which could materially and adversely affect our financial condition and results of operations. See "*Management's Discussion and Analysis of Financial Condition and Results of Operations—Quantitative and Qualitative Disclosures Regarding Market Risks—Interest Rate Risk.*"

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

As of September 30, 2025, we had approximately 2,091 full-time employees in our operations, approximately 16.5% of whom were members of the Thai Oil voluntary labor union. We believe our relationship with the union has been good and in the past 40 years we have never experienced a work stoppage as a result of labor disagreements. However, we cannot assure you that our good relationship with the union will continue. A labor disturbance at our refinery or plants could have a material adverse effect on our operations. See "*Business—Employees*."

We depend on the expertise of our senior management and skilled personnel.

We are dependent on our senior management for setting our strategic direction and managing our business, which are crucial to our success. Furthermore, our continued success also depends upon our ability to attract and retain a large group of experienced professionals, including skilled engineers, technicians, and sales and marketing personnel in our existing and future planned product lines. We have been successful in the past in attracting qualified managers and key personnel, and we have invested significant resources in training our personnel. However, our business could suffer if we lose the services of a number of key personnel and are not able to recruit quality replacements. Shortages of trained engineers, technicians and managers may make it more difficult or costly for us to hire adequate numbers of such personnel in the future. If we fail to attract and retain qualified personnel, our business and prospects may be materially and adversely affected.

We may be subject to legal, arbitral, government or regulatory proceedings, investigations, actions or suits that could be time consuming and costly, require significant amounts of management time and result in the diversion of significant operational resources.

We may be involved in lawsuits, arbitral, governmental or regulatory proceedings, investigations, actions, claims or suits, whether incidental to the ordinary course of our business or otherwise. These matters are inherently unpredictable. Any actual, pending, contemplated or threatened proceedings, investigations, actions, claims or suits against us, whether meritorious or not, could be time consuming and costly, require significant amounts of management time and result in the diversion of significant operational resources. The cost of defending any proceedings, investigations, actions, claims or suits against us or their ultimate resolution may harm our business, reputation and operating results. See "*Business—Legal Proceedings*."

For example, on February 19, 2025, Samsung E&A (Thailand) Co., Ltd. and Saipem Singapore Pte. Ltd. (together, the "**Claimants**"), members of the Consortium, with whom the Company entered into the EPC Contract

for the CFP, commenced arbitration proceedings against the Company at the Singapore International Arbitration Centre (the "**EPC Arbitration**"). The EPC Arbitration arose from a dispute concerning the Company's enforcement of the security provided by the Consortium under the EPC Contract in an amount of approximately THB12,339 million or US$358 million[5] following breaches by the Consortium of certain obligations under the EPC Contract. The Claimants have alleged that the Company's enforcement of such security was premature and improper, and sought damages for losses which are yet to be particularized. The Company considers that the Claimants' claims are without merit and on March 25, 2025, the Company filed its response to defend such claims and bring counterclaims against the Claimants. As of the date of this Offering Memorandum, the EPC Arbitration is ongoing, the Claimants' damages have not yet been particularized and the outcome and timing of the resolution are uncertain. An adverse decision in the EPC Arbitration could require repayment of amounts enforced and/or damages, which could materially and adversely affect our business, reputation and operating results.

Trade disputes, geopolitical instability or war may adversely impact global economies, which could have an adverse impact on our operations.

Trade disputes, geopolitical instability or war may adversely impact global economies. As of 2025, persistent trade tensions between the U.S. and China, coupled with the ongoing war in Ukraine, and renewed conflict in the Middle East, have contributed to global market uncertainty and geopolitical instability. Governmental policies of developed economies, such as the U.S., have a substantial effect on emerging markets, and the consequences of a trade war among developed countries, like that between the U.S. and China, could further contribute to the adverse economic and political conditions of emerging and other developed economies and impact the price of crude oil. While it is difficult for us to predict the effect of such trade wars and heightened geopolitical and economic instability on our business, they could lead to currency devaluation, economic and political turmoil and market volatility, which could have a material adverse effect on our business, financial condition and results of operations.

Climate change and climate change legislation and regulatory initiatives could result in increased operating costs and decreased demand for the oil and natural gas that we produce.

Climate change, the costs that may be associated with its effects, and the regulation of greenhouse gas (or GHG) emissions have the potential to affect our business in many ways, including increasing the costs to provide our products and services, reducing the demand for and consumption of our products and services (due to change in both costs and weather patterns), and the economic health of the regions in which we operate, all of which can create financial risks. In addition, legislative and regulatory responses related to GHG emissions and climate change may increase our operating costs and create uncertainty in the level of expenditure required to comply with such laws and regulations. Demand for oil and gas products may also be impacted by regulatory incentives, including those for alternative fuel and power choices. See also "*—Compliance with, and changes to, environmental, health and safety, tax and other laws and regulations may adversely affect our results of operations and our financial condition*."

Moreover, experts believe climate change poses potential physical risks, including an increase in sea level and changes in weather conditions, such as an increase in changes in precipitation and extreme weather events, which may impact the availability and costs of materials and natural resources, sources and supply of energy, physical risks, among others. In addition, warmer winters as a result of global warming could also decrease demand for natural gas in such geographical location. To the extent that such unfavorable weather conditions are exacerbated by global climate change or otherwise, our operations may be adversely affected to a greater degree than we have previously experienced, including increased delays and costs. However, the uncertain nature of changes in extreme weather events (such as increased frequency, duration, and severity) and the long period of time over which any changes would take place make any estimations of future financial risk to our operations caused by these potential physical risks of climate change unreliable. Moreover, the regulation of GHGs and the physical impacts of climate change in the areas in which we, our customers and the end-users of our products operate could adversely impact our operations and the demand for our products. Lastly, consumer preference may shift towards new forms of energy, such as renewables, which may dampen the demand of our products.

[5] Calculated as the weighted average of THB34.39 to US$1.00 and THB35.21 to EUR1.00 as of January 16, 2025 and includes foreign exchange gains.

Risks Relating to the Treasury Center as an Issuer

The Treasury Center has limited assets and is dependent on intercompany loans from the Company and its subsidiaries.

The Treasury Center is a subsidiary of the Company and is its designated corporate treasury center. As an Issuer (in the case of Guaranteed Securities), it will on-lend the proceeds from the sale of any Guaranteed Securities issued under the Program to the Company or its subsidiaries. The Treasury Center will depend on payments from these inter-company loans and other similar loans to provide it with funds to meet its obligations under Guaranteed Securities issued under the Program, including payments of principal, interest or distribution thereon. The Treasury Center has limited assets. See "*Description of the Treasury Center*". The Treasury Center's material liabilities will be Guaranteed Securities issued under the Program and other securities. As such, it will be dependent upon payments under intercompany loans to make any payments due on Guaranteed Securities issued under the Program. Should any of the companies to which the Treasury Center lends be unable to fund their payments under their respective loans, then the Treasury Center may be unable to meet its obligations under Guaranteed Securities issued under the Program.

Risks Relating to Thailand

Most of our assets and operations are located in Thailand and we are subject to economic, legal and regulatory uncertainties in Thailand.

Most of our assets and operations, including our headquarters, are located in Thailand. Consequently, we are subject to political, legal and regulatory conditions in Thailand that differ in certain significant respects from those prevailing in other countries with more developed economies. There is no assurance that the Thai economy will meet current projections or improve in the future. Any downturn in the Thai economy could have a material adverse effect on our business, financial condition, results of operations and prospects and the market price of the Securities issued under the Program. Furthermore, prior Thai governments have, in the past, intervened in the Thai economy and occasionally made significant changes in policy including, among other things, foreign exchange control, policies concerning wage and price controls (including price controls on LPG), capital controls and limits on imports, at times partially reversing such policies soon after the new policies were announced. See "*—Risks Relating to Our Business—Compliance with, and changes to environmental, health and safety, tax and other laws and regulations may adversely affect our results of operations and our financial condition*."

Our businesses and operations in Thailand are subject to the changing economic conditions prevailing from time to time in Thailand. From 1996 to 1998, Thailand's gross domestic product ("**GDP**") growth slowed significantly in relation to historical levels and the country entered a recession. Since 1999, Thailand's economy has been recovering, recording positive GDP growth each year until the global economy began to worsen in 2008. According to the National Economic and Social Development Council of Thailand, Thailand's GDP grew by 2.5% in 2022, 2.0% in 2023 and 2.5% in 2024. However, the continued prospects for the global and regional economy are uncertain. The demand for energy is generally correlated with GDP, and a contraction in Thailand's GDP could lead to a reduction in the demand for energy, which could have a material adverse effect on our business, financial condition, results of operations and prospects. There is no assurance that the Thai economy will meet current projections or improve in the future. Any instability or economic downturn in Thailand could have a material adverse effect on our business, financial condition, results of operations and prospects and the market price of the Securities issued under the Program.

From 1996 to 1998, international credit rating agencies, including Moody's, Fitch and Standard & Poor's, lowered Thailand's sovereign rating as well as various Thai corporate debt ratings. Although in the past, certain credit rating agencies have warned that Thailand's credit rating may be downgraded due to political uncertainties and the weakening of the fiscal economic condition, with increased stability of the Thai economy in the previous year, there was corresponding improvement in rating outlooks given by certain credit rating agencies. As of September 30, 2025, Thailand's sovereign foreign currency long-term debt was rated "Baa1" with a negative outlook by Moody's, "BBB+" with a negative outlook by Fitch and "BBB+" with a stable outlook by Standard & Poor's. However, there can be no assurance that there will be no further change to Thailand's credit rating in the future. Any lowering of the credit ratings for Thai sovereign debt may make it more expensive for us to obtain additional debt financing for our working capital and capital expenditures, which could have an adverse effect on our financial condition.

Additionally, prior Thai governments have, in the past, intervened in the Thai economy and occasionally made significant changes in policy. Policy changes made by the Thai government and the BOT have included the

imposition (and subsequent reversal) of a one-year 30% unremunerated reserve requirement on foreign exchange inflows, under which any foreigner buying stock in Thailand had to place an extra non-interest-bearing deposit. There is no assurance that the Thai government will not in the future re-impose restrictive foreign exchange controls that may affect the outward remittance of funds, including interest, distribution or other payments payable on the Securities under the Program. Our business, financial condition, results of operations and prospects and the market price of the Securities issued under the Program may be adversely affected by future changes in Thai government policies.

Political conditions in Thailand will have a direct impact on our business and the market price of the Securities issued under the Program.

Our business, financial condition, results of operations and prospects may be influenced in part by the ongoing political situation in Thailand, which has been unstable from time to time. Changes in government, political unrest and protests, as well as the instability of a coalition government, could result in the delay or curtailment of economic reforms in Thailand and decrease confidence in the government, the economy and the financial performance of companies from Thailand generally.

Following the 2023 general election, a coalition government was formed. Two prime ministers from the leading party of the government coalition were removed from office by Constitutional Court judgments on August 14, 2024 and August 29, 2025. On September 7, 2025, a new prime minister was appointed after forming a minority coalition; the new cabinet was endorsed by Thailand's King Maha Vajiralongkorn on September 19, 2025. According to a statement by the Election Committee of Thailand following the dissolution of the Parliament, Thailand is set to hold parliamentary elections on February 8, 2026.

No assurances can be made regarding political disruptions in the future. Any change to the political situation may affect the legal and regulatory framework under which we operate. Any changes in the legal and regulatory environment in Thailand may materially and adversely affect our business, financial condition, results of operations and prospects.

Continued violence in southern Thailand could adversely affect our business, financial condition, results of operations and prospects.

Since 2004, there have been a large number of casualties and injuries arising from violence particularly in southern Thailand, including, recently, the fatal attacks in April and May 2015 in Phuket and Yala, respectively, and a series of bombings in August 2016 in Hua Hin, Surat Thani, Phuket and Trang. Continued violence could lead to widespread unrest in Thailand or a major terrorist incident in Thailand similar to those in other parts of Southeast Asia. If the security condition deteriorates and violence spreads to the northern provinces of Thailand, our business, financial condition, results of operations and prospects may be materially and adversely affected.

We may be adversely affected by terrorist attacks and international and regional instability.

Political events in the Middle East, including future terrorist attacks against targets in the Middle East, Southeast Asia or other regions, rumors or threats of terrorist attacks or war, actual conflicts involving the Middle East and trade disruptions, all of which may affect our suppliers or customers who are principally located in Thailand, may adversely affect our operations. In addition, there have been bombing incidents in Bangkok in recent years, and further bombings or other violent acts may occur in the future. For example, in August 2015, a bombing incident at the Erawan Shrine in Bangkok killed approximately 20 and injured many more. Similarly, the bombings in certain areas of Bangkok in August 2019 caused injuries and destruction to property. Violent acts arising from, and leading to, instability and unrest as well as political or economic developments related to these crises could adversely affect the Thai economy and the global economy and could have a material adverse effect on our business, financial condition, results of operations and prospects.

We face risks related to public health epidemics in Thailand or elsewhere.

Our business could be materially and adversely affected by the outbreak of public health epidemics, or the fear of such an outbreak, in Thailand or elsewhere. In April 2009, an outbreak of the H1N1 virus, commonly referred to as "swine flu," occurred in Mexico and spread to other countries, including Thailand. In 2004, an outbreak of the H5N1 viruses, also known as "bird flu," occurred in Southeast Asia and other regions, resulting in hundreds of deaths worldwide, and significantly affecting Southeast Asia's economy. Vietnam, a regional neighbor of Thailand, reported two human fatalities caused by bird flu in January 2012. Since the beginning of 2012, there have been reports on the outbreak of the viral hand, foot and mouth disease in Thailand and other neighboring countries, including several confirmed human cases and deaths, particularly among children. Also,

since the beginning of 2019, there have been reports on the outbreak of dengue fever in many areas throughout Thailand. In late December 2019, a novel strain of coronavirus, known as the COVID-19 was reported to have surfaced in Wuhan, China. In 2022, public health authorities and governments at local, national, and international levels implemented various measures in response to the COVID-19 pandemic, including restrictions on travel, voluntary and mandatory quarantines, reductions of nonessential personnel reporting into workplaces, and restrictions on business activities. The COVID-19 pandemic led to sharp decline in economic activity, increased unemployment and lower commodity prices, including for oil and gas products. If the outbreak of any of these viruses or other severe viruses, including severe acute respiratory syndrome, or "SARS," were to occur again and become widespread in Thailand or increase in severity, it could have an adverse effect on economic activity in Thailand, and could materially and adversely affect our business, financial condition and results of operations. Any future public health epidemics in Thailand or elsewhere could materially and adversely affect our business, financial condition, results of operations and prospects.

We may be adversely affected by the fluctuations in the value of the Baht against foreign currencies, particularly with the depreciation of the Baht against the U.S. dollar.

Substantially all of our revenues and crude oil and feedstock costs are denominated in U.S. dollars and translated into Baht for inclusion in our financial statements and financial information. As a result, fluctuations in the value of the Baht against the U.S. dollar may adversely affect our financial condition and results of operations.

Any depreciation of the Baht against foreign currencies, primarily the U.S. dollar, materially affects our results of operations because, among other things, it causes:

- an increase in the amount of Baht required by us to purchase crude oil and other raw materials and equipment and services, such as transportation from overseas sources, which are denominated primarily in U.S. dollars;

- an increase in the amount of Baht required by us to make interest and principal payments on our foreign currency-denominated debt, which totaled an amount equivalent to approximately THB76,291.9 million and accounted for approximately 63.7% of our total debt as of September 30, 2025; and

- foreign exchange translation losses on our foreign currency-denominated debt.

Adverse economic conditions in Thailand incidental to the depreciation of the value of the Baht could increase energy prices in Thailand, increase prices of crude oil and other feedstock used in our refining process and reduce overall demand for our products and those of our customers. The effects on us of any significant depreciation of the Baht are mitigated by our domestic sales that are directly linked to the U.S. dollar and our export sales that are denominated in U.S. dollars.

Any appreciation of the Baht against foreign currencies, primarily the U.S. dollar, may adversely affect our results of operations because, among other things, it causes an increase in our income taxes due to foreign exchange translation gains on our income.

From the beginning of 2022 to December 2025, the value of the Baht against the U.S. dollar fluctuated between a low of THB30.97 on December 26, 2025 to a high of THB38.46 on October 20, 2022, and from the beginning of 2025 to December 31, 2025, the value of Baht against the U.S. dollar fluctuated between a low of THB30.97 on December 26, 2025 to a high of THB34.98 on April 9, 2025. We cannot assure you that the value of the Baht will not decline or continue to fluctuate significantly against the U.S. dollar or other currencies in the future. Our petroleum product export transactions accounted for approximately 4.2%, 3.6%, 3.9%, 3.8% and 3.7% of our net sales for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, respectively. Although we have in the past been able to pass on to our customers a majority of the increases in raw material costs due to the depreciation of the Baht, there can be no assurance that we will be able to continue to do so in the future.

We have adopted a policy to minimize the effects of foreign currency fluctuations on our gross refining margins and product-to-feedstock margins with foreign currency borrowings so as to create a natural hedge. We also enter into short term forward contracts and currency swaps to manage exposure to fluctuations in foreign currencies on short term trade payables and receivables.

As of September 30, 2025, our total foreign currency-denominated indebtedness amounted to THB76,291.9 million (US$2,359.8 million), and it is possible that a substantial portion of our capital expenditures for future expansion programs may be incurred and/or financed in foreign currencies. Any depreciation in the Baht against the U.S. dollar would increase our finance costs, and there can be no assurance that we would be able to generate revenue increases sufficient to offset such increased finance costs. As a result, fluctuations in the value of the Baht against other foreign currencies may adversely affect our business, financial condition, results of operations and prospects.

Thailand is subject to potential sanctions from other countries which may impact its economy.

In April 2015, the EU gave a yellow card warning to Thailand for the failure to address illegal, unreported and unregulated fishing in compliance with the EU illegal, unreported and unregulated fishing regulation; the yellow card warning was lifted on January 18, 2019. On June 18, 2015, the ICAO "red flagged" Thailand for failing to solve significant safety concerns on applicable ICAO standards; the red flag status was lifted in October 2017. With regards to human trafficking, Thailand was placed in Tier 3 on the 2015 U.S. annual report on Trafficking in Persons issued by the State Department of the United States for the failure to fully comply with the minimum standards for the elimination of trafficking, and not making significant efforts to do so. This status was upgraded to the Tier 2 watchlist in 2016 and to Tier 2 in 2019. In 2021, Thailand was downgraded to Tier 2 watchlist. While certain of these sanctions or statuses have been lifted, there can be no assurance that such sanctions, other sanctions or statuses will not be imposed against Thailand in the future. Any sanction against Thailand or the failure to comply with such international standards may have a material adverse effect on the Thai economy, which may in turn have a material adverse effect on the Group's business, financial condition, results of operations and prospects.

Risks Relating to the Perpetual Securities

Perpetual Securities may be issued for which investors have no right to require redemption, which may expose Perpetual Securityholders to indefinite holding periods and potential permanent capital loss.

Perpetual Securities may be issued under the Program. The Perpetual Securities are perpetual and have no fixed final maturity date. Perpetual Securityholders have no right to require the relevant Issuer to redeem Perpetual Securities at any time, and an investor who acquires Perpetual Securities may only dispose of such Perpetual Securities by sale. Perpetual Securityholders who wish to sell their Perpetual Securities may be unable to do so at a price at or above the amount they have paid for them, or at all. Therefore, holders of Perpetual Securities should be aware that they may be required to bear the financial risks of an investment in Perpetual Securities for an indefinite period of time.

If specified in the relevant Pricing Supplement, Perpetual Securityholders may not receive distribution payments if the relevant Issuer elects not to pay all or a part of a distribution under the terms and conditions of the Perpetual Securities.

If Distribution Deferral is specified in the relevant Pricing Supplement, the relevant Issuer may, at its sole discretion, elect not to pay any scheduled distribution on the Perpetual Securities in whole or in part for any period of time (subject to certain conditions, if any). The relevant Issuer is subject to certain restrictions in relation to the declaration or payment of distributions on its Junior Securities and its Parity Securities and the redemption and repurchase of its Junior Securities and its Parity Securities in the event that it defers or does not pay a distribution in whole or in part on the scheduled due date thereof. The relevant Issuer is not subject to any limit as to the number of times or the amount with respect to which the relevant Issuer can elect not to pay or defer distributions under the Perpetual Securities. Under such Perpetual Securities, the relevant Issuer may, at its sole discretion, and at any time, elect to pay distribution but there is no assurance that the relevant Issuer will do so, and distributions which are not paid in whole or in part may remain unpaid for an indefinite period of time. Any non-payment of a distribution in whole or in part in compliance with the terms of the Perpetual Securities shall not constitute a default for any purpose. Any election by the relevant Issuer not to pay a distribution in whole or in part, will likely have an adverse effect on the market price of the Perpetual Securities. In addition, as a result of the potential non-cumulative distribution feature of the Perpetual Securities (if Non-Cumulative Deferral is specified in the relevant Pricing Supplement) and the relevant Issuer's ability to elect not to pay distribution in whole or in part, the market price of the Perpetual Securities may be more volatile than the market price of other debt securities on which original issue discount or interest accrues that are not subject to such election not to pay and may be more sensitive generally to adverse changes in the Group's financial condition.

If specified in the relevant Pricing Supplement, the Perpetual Securities may be redeemed at the relevant Issuer's option on the date(s) specified in the relevant Pricing Supplement or on the occurrence of certain other events.

The Perpetual Securities are perpetual securities and have no fixed redemption date. If specified in the relevant Pricing Supplement, the Perpetual Securities may be redeemed at the option of the relevant Issuer on certain date(s) specified in the relevant Pricing Supplement at the relevant Optional Redemption Amount (Call) (together with distribution (including any Arrears of Distribution and any Additional Distribution Amount)) (each as defined in the Terms and Conditions of the Perpetual Securities). In addition, if specified in the relevant Pricing Supplement, the relevant Issuer may, at its option, redeem the Perpetual Securities in whole, but not in part, on any Distribution Payment Date, or any time as specified in the Terms and Conditions of the Perpetual Securities, upon the occurrence of certain other events. See "*Terms and Conditions of the Perpetual Securities–Redemption and Purchase*".

The date on which the relevant Issuer elects to redeem the Perpetual Securities may not accord with the preference of individual Perpetual Securityholders. This may be disadvantageous to Perpetual Securityholders in light of market conditions or the individual circumstances of the holder of Perpetual Securities. In addition, such redemption could also occur when prevailing interest rates are lower than the Rate of Distribution on the Perpetual Securities, and accordingly, an investor may not be able to reinvest the redemption proceeds in comparable securities at an effective distribution rate at the same level as that of the Perpetual Securities.

If specified in the relevant Pricing Supplement, resettable Fixed Rate Perpetual Securities may be issued which are subject to market risk.

If specified in the relevant Pricing Supplement, the relevant Issuer may issue Perpetual Securities that bear interest at a fixed rate, subject to the periodic resetting of Rates of Distribution at intervals and on terms specified in the relevant Pricing Supplement. A holder of such Fixed Rate Perpetual Securities may be particularly exposed to the risk that the price of such securities falls as a result of changes in the market interest rates, which typically change on a daily basis. As the market interest rate changes, the price of such Fixed Rate Perpetual Securities also changes, but in the opposite direction. If the market interest rate increases, the price of such Fixed Rate Perpetual Securities would typically fall. If the market interest rate falls, the price of such Fixed Rate Perpetual Securities would typically increase. Perpetual Securityholders should be aware that movements in these market interest rates can adversely affect the price of such Fixed Rate Perpetual Securities and can lead to losses for the Perpetual Securityholders if they sell the securities. In addition, a holder of securities with a fixed interest rate that will be reset during the term of the securities is exposed to the risk of fluctuating interest rate levels and uncertain interest income.

Further, the relevant Pricing Supplement may provide that the Rates of Distribution may be periodically reset by reference to a benchmark (for example, the U.S. treasury rate), which may be affected by changes in the relevant benchmark's laws and regulations. Interest rates or other types of rates and indices which are deemed to be "benchmarks" are the subject of national and international regulatory guidance and proposals for reform. Some of these reforms are already effective whilst others are still to be implemented. These reforms may cause such benchmarks to perform differently from the past, to disappear entirely, or have other consequences which cannot be predicted. Any such consequence could have a material adverse effect on the relevant Perpetual Securities.

If specified in the relevant Pricing Supplement, the Perpetual Securities may be redeemed in the occurrence of an Accounting Event (as described in the "Terms and Conditions of the Perpetual Securities").

No assurance can be given as to the future classification of the Perpetual Securities from an accounting perspective. If alternative changes are proposed and implemented, the current accounting classification of financial instruments applicable to the relevant Issuer and/or the Guarantor such as the Perpetual Securities as "equity" may change and this may result in the occurrence of an Accounting Event (as described in the "*Terms and Conditions of the Perpetual Securities*"). If specified in the relevant Pricing Supplement, in such an event, the relevant Issuer may have the option (subject to certain conditions) to redeem the Perpetual Securities.

There are limited remedies for default under the Perpetual Securities.

The Issuer will not be obliged to pay any scheduled distribution on its scheduled due date if the relevant Issuer validly elects not to pay all or a part of that distribution pursuant to the Terms and Conditions of the Perpetual Securities. Notwithstanding any of the provisions relating to non-payment defaults, if the Issuer or the Guarantor (if applicable) fails to make payment in respect of the Perpetual Securities when due, and, in each case,

subject to the Terms and Conditions of the Perpetual Securities, the Issuer and the Guarantor (if applicable) shall be deemed to be in default under the Indenture and the Perpetual Securities and the Trustee may, (i) in respect of the Senior Perpetual Securities, institute, prove in or file a claim in any legal proceedings (including, for the avoidance of doubt, bankruptcy, reorganisation or winding-up proceedings) against the Issuer and/or the Guarantor; or (ii) in respect of the Subordinated Perpetual Securities, institute, prove in or file claim in bankruptcy, reorganisation or winding-up proceedings against the Issuer and/or the Guarantor.

In addition, if the relevant Issuer is subject to a rehabilitation proceeding under Thai law, the Subordinated Perpetual Securityholders and Perpetual Securityholders would very likely be bound to accept whatever reorganization plan prepared by the plan preparer, regardless of whether or not such plan is favorable or fair to the Perpetual Securityholders, without any right to vote against such plan, in accordance with the Thai Bankruptcy Act B.E. 2483 (A.D. 1940).

There is uncertainty on whether certain terms of the Perpetual Securities will be enforceable.

Section 655 of the Civil and Commercial Code of Thailand provides that, with certain exceptions, overdue interest shall not bear interest unless the parties to an agreement validly agree in writing that, in the event that interest is overdue for a period of at least one year, the overdue interest will be added to the principal and shall itself bear interest. If "Cumulative Deferral" and "Additional Distribution" is set out in the relevant Pricing Supplement, any amount of Distribution validly deferred pursuant to the Terms and Conditions of the Perpetual Securities will constitute Arrears of Distribution and each amount of Arrears of Distribution will bear interest from and including the date which is a Distribution Payment Date falling 12 months from the date on which it is first deferred and will bear interest as if it constituted the principal of the Perpetual Securities at the prevailing Distribution Rate. There is some uncertainty as to whether such Arrears of Distribution would be deemed to be "due" at the point of time of first deferral, as a matter of Thai law. If a Thai court interprets that the Arrears of Distribution is not deemed to be "due" at such point of first deferral, Condition 10(c)(iii) of the Terms and Conditions of the Perpetual Securities may not be enforceable under Thai law, which may result in the Perpetual Securityholders' inability to receive the interest on any amount of Arrears of Distribution. Even though the Terms and Conditions of the Perpetual Securities are governed by New York law (save for the provisions relating to subordination and non-payment of the Perpetual Securities), the position under Thai law may be relevant to Condition 10(c)(iii) of the Terms and Conditions of the Perpetual Securities if, at the point of enforcement of judgment in Thailand, a Thai court considers that the term is against public order or good morals in Thailand.

The relevant Issuer may raise or redeem other capital which affects the price of the Perpetual Securities.

The relevant Issuer may raise additional capital through the issue of other securities or other means. There is no restriction, contractual or otherwise, on the amount of securities or other liabilities which the relevant Issuer may issue or incur and which rank senior to, or *pari passu* with, the Perpetual Securities. The issue of any such securities or the incurrence of any such other liabilities or the redemption of any such securities may reduce the amount (if any) recoverable by holders of Perpetual Securities on a relevant legal proceeding of the relevant Issuer, and may increase the likelihood of a deferral of distribution under the Perpetual Securities. The issue of any such securities or the incurrence of any such other liabilities or the redemption of any such securities might also have an adverse impact on the trading price of the Perpetual Securities and/or the ability of holders of Perpetual Securities to sell their Perpetual Securities.

The Subordinated Perpetual Securities are subordinated obligations.

The obligations of the relevant Issuer under the Subordinated Perpetual Securities will constitute unsecured and subordinated obligations of the relevant Issuer. In the event of the Winding-Up of the relevant Issuer, the Holders' right to any payment under the Subordinated Perpetual Securities shall be limited to the Issuer's remaining assets, after its payment to the other preferred or secured creditors and ordinary creditors, but shall be ranked *pari passu* with the right of holders of any obligations of the Issuer which rank, or is expressed to rank, *pari passu* with the Subordinated Perpetual Securities and shall be ranked at a higher level of priority than that of any class of the Issuer's share capital or any obligations of the Issuer which rank, or is expressed to rank, junior to the Subordinated Perpetual Securities, including, for the avoidance of doubt, the holders of Senior Perpetual Securities and/or Notes. In the event of a shortfall of funds or a winding-up, there is a real risk that an investor in the Subordinated Perpetual Securities will lose all or some of its investment and will not receive a full return of the principal amount or any unpaid Arrears of Distribution, Additional Distribution Amounts or accrued distribution.

In addition, subject to the limit on the aggregate principal amount of Securities that can be issued under the Program (which can be amended from time to time by the relevant Issuer without the consent of the Securityholders), there is no restriction on the amount of unsubordinated securities or other liabilities which the relevant Issuer may issue or incur and which rank senior to, or pari passu with, the Subordinated Perpetual Securities. The issue of any such securities or the incurrence of any such other liabilities may reduce the amount (if any) recoverable by holders of Subordinated Perpetual Securities on a Winding-Up of the relevant Issuer and/or may increase the likelihood of a non-payment of distribution under the Subordinated Perpetual Securities.

Risks Relating to the Structure of a Particular Issue of Securities

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

Securities subject to optional redemption by us.

An optional redemption feature is likely to limit the market value of Securities. During any period when we may elect to redeem Securities, the market value of those Securities generally will not rise substantially above the price at which they can be redeemed. This may also be true prior to any redemption period. We may be expected to redeem Securities when our cost of borrowing is lower than the interest rate on the Securities. 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 or distribution rate on the Securities being redeemed and may only be able to do so at a lower rate. Potential investors should consider reinvestment risk in light of other investments available at that time.

Partly Paid Securities.

We may issue Securities where the issue price is payable in more than one instalment. Failure to pay any subsequent instalment on a Partly Paid Security could result in an investor losing all of its investment.

Variable Rate Securities with a multiplier or other leverage factor.

Securities with variable interest or distribution 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.

Securities carrying an interest or distribution rate which may be converted from fixed to floating interest rates, and vice-versa.

Fixed/Floating Rate Securities may bear interest or distribution 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 or distribution rate will affect the secondary market and the market value of such Securities 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 Securities may be less favorable than then prevailing spreads on comparable Floating Rate Securities tied to the same reference rate. In addition, the new floating rate at any time may be lower than the rates on other Securities. If we convert from a floating rate to a fixed rate, the fixed rate may be lower than then prevailing rates on its Securities.

Securities with floating interest or distribution 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.

Regulation of benchmarks may lead to future reforms or discontinuation.

The Euro Interbank Offered Rate ("**EURIBOR**") and other interest rates or other types of rates and indices which are deemed to be benchmarks have been subject to significant regulatory scrutiny and legislative intervention in recent years. This relates not only to creation and administration of benchmarks, but, also, to the use of a benchmark rate. In the European Union ("**EU**"), for example, Regulation (EU) No. 2016/1011, as amended (the "**EU Benchmarks Regulation**") applies to the provision of, contribution of input data to, and the use of, a benchmark within the EU, subject to certain transitional provisions. Similarly, Regulation (EU) No. 2016/1011 as it forms part of domestic law of the United Kingdom by virtue of the European Union

(Withdrawal) Act 2018, as amended (the "**UK Benchmarks Regulation**") applies to the provision of, contribution of input data to, and the use of, a benchmark within the UK, subject to certain transitional provisions.

Legislation such as the EU Benchmarks Regulation or the UK Benchmarks Regulation, if applicable, could have a material impact on any Securities linked to EURIBOR or another benchmark rate or index. For example, if the methodology or other terms of the benchmark are changed in the future in order to comply with the terms of the EU Benchmarks Regulation or UK Benchmarks Regulation or other similar legislation, or if a critical benchmark is discontinued or is determined to be by a regulator to be "no longer representative". Such factors could, among other things, have the effect of reducing or increasing the rate or level or may affect the volatility of the published rate or level of the benchmark. They may also have the effect of discouraging market participants from continuing to administer or contribute to certain "benchmarks", trigger changes in the rules or methodologies used in certain "benchmarks", or lead to the discontinuance or unavailability of quotes of certain "benchmarks".

Although EURIBOR has subsequently been reformed in order to comply with the terms of the EU Benchmarks Regulation, it remains uncertain as to how long it will continue in its current form, or whether it will be further reformed or replaced with the Euro Short Term Rate ("**€STR**") or an alternative benchmark.

The elimination of EURIBOR or any other benchmark, or changes in the manner of administration of any benchmark, could require or result in an adjustment to the interest calculation provisions of the Terms and Conditions of the Notes and the Terms and Conditions of the Perpetual Securities, or result in adverse consequences to holders of any Securities linked to such benchmark (including Floating Rate Securities whose interest rates are linked to EURIBOR or any other such benchmark that is subject to reform). Furthermore, even prior to the implementation of any changes, uncertainty as to the nature of alternative reference rates and as to potential changes to such benchmark may adversely affect such benchmark during the term of the relevant Securities, the return on the relevant Securities and the trading market for securities (including the Securities) based on the same benchmark.

Interest rate "fallback" arrangements may lead to Securities performing differently or the effective application of a "fixed rate".

If a relevant benchmark (including any page on which such benchmark may be published (or any other successor service)) becomes unavailable or a Benchmark Event (as defined in the Terms and Conditions of the Notes and the Terms and Conditions of the Perpetual Securities) occurs, the Terms and Conditions of the Notes and the Terms and Conditions of the Perpetual Securities provide for certain fallback arrangements. Such fallback arrangements include the possibility that the rate of interest or distribution (as applicable) could be set by reference to a successor rate or an alternative rate and that such successor rate or alternative reference rate may be adjusted (if required) in order to reduce or eliminate, to the extent reasonably practicable in the circumstances, any economic prejudice or benefit (as applicable) to investors arising out of the replacement of the relevant benchmark, although the application of such adjustments to the Floating Rate Securities may not achieve this objective.

Any such changes may result in the Floating Rate Securities performing differently (which may include payment of a lower rate of interest or distribution (as applicable)) than if the original benchmark continued to apply. Moreover, due to the uncertainty concerning the availability of successor rates and alternative reference rates and the involvement of an Independent Adviser (as defined in the Terms and Conditions of the Notes and the Terms and Conditions of the Perpetual Securities) in certain circumstances, the relevant fallback provisions may not operate as intended at the relevant time. Additionally, in certain circumstances, the ultimate fallback of rate of interest or distribution (as applicable) for a particular Interest Period or Distribution Period (as applicable) may result in the rate of interest or distribution (as applicable) for the last preceding Interest Period or Distribution Period (as applicable) being used, which may result in the effective application of a fixed rate for Floating Rate Securities based on the rate which was last observed on the Relevant Screen Page.

Any such consequences could have a material adverse effect on the value of and return on any such Floating Rate Securities. Investors should consult their own independent advisers and make their own assessment about the potential risks arising from the possible cessation or reform of certain reference rates in making any investment decision with respect to any Floating Rate Securities linked to or referencing a benchmark.

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.

Index Linked Notes.

We may issue Notes with principal or interest determined by reference to an index or formula, to changes in the prices of securities or commodities, to movements in currency exchange rates or other factors (each, a "**Relevant Factor**"). Each potential investor should be aware that:

- the market price of such Notes may be volatile and may be linked to factors other than our credit;
- they may receive no interest;
- payment of principal or interest may occur at a different time or in a different currency than expected;
- they may lose all or a substantial portion of their principal;
- a Relevant Factor may be subject to significant fluctuations that may not correlate with changes in interest rates, currencies or other indices;
- if a Relevant Factor is applied to Notes in conjunction with a multiplier greater than one or contains some other leverage factor, the effect of changes in the Relevant Factor on principal or interest payable likely will be magnified; and
- the timing of changes in a Relevant Factor may affect the actual yield to investors, even if the average level is consistent with their expectations.

In general, the earlier the change in the Relevant Factor, the greater the effect on yield. The historical experience of an index should not be viewed as an indication of the future performance of such index during the term of any Index Linked Notes. Accordingly, each potential investor should consult its own financial and legal advisers about the risk entailed by an investment in any Index Linked Notes and the suitability of such Notes in light of its particular circumstances.

Dual Currency Securities.

We may issue Securities with principal, interest or distribution payable in one or more currencies which may be different from the currency in which the Securities are denominated. Each potential investor should be aware that:

- the market price of such Securities may be volatile;
- they may receive no interest or distribution;
- payment of principal, interest or distribution may occur at a different time or in a different currency than expected; and
- the amount of principal payable at redemption may be less than the nominal amount of such Securities or even zero.

Securities payable in more than one installment.

We may issue Securities where the issue price is payable in more than one instalment. Failure by a potential investor to pay a subsequent instalment of Partly Paid Securities may result in it losing all of its investment.

Risks Relating to the Guarantee

Certain provisions under the Guarantee may not be enforceable against the Guarantor in a Thai court.

A judgment of a foreign court will not be enforced by a Thai court but may, at the sole discretion of the court, be admissible as evidence in an action in a Thai court. Therefore, even if the Trustee and the Holders have already obtained a judgment against the Guarantor in a foreign country, the Trustee and the Holders would still

have to bring another action against the Guarantor in a Thai court. As the Guarantee is governed by New York law, in order for the Trustee and the Holders to enforce the Guarantee against the Guarantor in a Thai court, the Trustee and the Holders would be required to prove New York law to the satisfaction of the Thai court and such New York law must not be considered to be contrary to the public order or good morals of the people of Thailand. If the Thai court deems that the provisions of the Guarantee which the Trustee and the Holders are looking to enforce are contrary to the public order or good morals of the people of Thailand, such provisions will not be enforceable against the Guarantor. See "*—Thai guarantee law has imposed certain limitations and requirements which may adversely affect the Trustee and the Holders' ability to enforce their rights under the Guarantee fully.*"

Thai guarantee law has imposed certain limitations and requirements which may adversely affect the Trustee and the Holders' ability to enforce their rights under the Guarantee fully.

Even though the Trustee and the Holders may have certain rights as provided in the Guarantee, such rights may be limited under Thai guarantee law or not fully enforceable if certain procedure are not strictly followed. For instance, if an Event of Default (as defined under the "*Terms and Conditions of the Notes*") or an Enforcement Event (as defined under the *"Terms and Conditions of the Perpetual Securities"*) shall occur and be continuing, the Trustee and the Holders may declare, among other things, the principal amount of the Securities and accrued and unpaid interest or distribution due and payable. However, under Thai guarantee law, the Guarantor may (in its absolute sole discretion) determine either to (i) pay in full the principal amount, together with accrued and unpaid interest or distribution to the date of payment or (ii) pay any amount under the Guaranteed Securities in accordance with the original payment schedule as if the Event of Default (in respect of the Notes) or an Enforcement Event (in respect of the Perpetual Securities) and acceleration had not occurred. If the Guarantor opts to make the payment in accordance with the original payment schedule rather than making the full payment in one lump sum, payment under the Guaranteed Securities will not be accelerated. In such a scenario, the Maximum Guaranteed Amount might not be sufficient to service the interest payable for the remaining term of the Guaranteed Securities and principal repayment at maturity (see "*—The Trustee and the Holders may not be able to recover any debt in excess of the Maximum Guaranteed Amount*").

Thai guarantee law does not allow parties to contract out of the right of recourse of the guarantor against the debtor for principal and interest discharged by the guarantor including for losses and damages suffered or incurred by the guarantor by reason of its guarantee upon making partial payment under the underlying obligations. Therefore, the Guarantor is able to take immediate recourse against the Issuer to the extent of any principal or interest discharged by it (whether in full or in part) and for losses and damages suffered or incurred by it by reason of its Guarantee.

Thai guarantee law mandatorily releases the Guarantor from its obligations under the Guarantee if the Trustee or the Holders has granted the Issuer an extension of time to perform its obligations without consent of the Guarantor. Any pre-consent by the Guarantor in any agreements to any an extension of time to perform the Issuer's obligations granted by the Trustee or the Holders is unenforceable.

In order to enforce the Guarantee against the Guarantor, the Trustee and the Holders have to strictly comply with the requirements and procedures provided under the Thai guarantee law, some of which are still not definitively established. Failure to do so could limit the amounts recoverable under the Guarantee.

Thai guarantee law requires that a creditor must send a written notice to a guarantor within 60 days of the date of the debtor's default, failing which the creditor shall not have the right to any interest or compensation that accrues after such 60-day period. Furthermore, the creditor shall not have the right to demand payment from the guarantor before such written notice reaches the guarantor. Therefore, if the Trustee or Holders gives a notice of default to the Guarantor later than 60 days from the date of the default, the Trustee and the Holders will not have the right to claim from the Guarantor interest, costs, damages or expenses payable following such 60-day period. In addition, Thai guarantee law uses the term "default" which has not been definitely established particularly whether it would include both monetary and a non-monetary breach of an agreement by the debtor, without it being required to constitute a typical "event of default" where usually a remedy period or grace period or a percentage voting requirement of creditors is accorded to. Therefore, it is easier for the Issuer to trigger monetary and non-monetary breaches of the Indenture than an occurrence of an Event of Default. If the Thai court takes the view that a default includes payment and non-payment default, and if the Trustee or Holders fails to give a notice of such default to the Guarantor within 60 days from the date of the default, the Trustee and the Holders will not be entitled to claim from the Guarantor interest, costs, damages or expenses payable following such 60-day period.

The Trustee and the Holders may not be able to recover any debt in excess of the Maximum Guaranteed Amount.

In accordance with the terms of the Guaranteed Securities under the Indenture, the Guarantor's obligations are limited to a Maximum Guaranteed Amount in respect of each Series of Guaranteed Securities. Unpaid principal, premium (if any), interest or distribution on the relevant Series of Guaranteed Securities may end up being greater than the Maximum Guaranteed Amount and, as a result, the Trustee or Holders may not be able to recover amounts in excess of the Maximum Guaranteed Amount from the Guarantor or the Issuer.

The obligations of the Guarantor under the Guarantee will be released and discharged upon the obligations of the Issuer under the Indenture and the Securities having been extinguished.

Under Thai guarantee law, following the extinguishment of the obligations of the Issuer under the Indenture and the Securities by any cause whatsoever, the Guarantor will be released from its obligations under the Guarantee, regardless of whether the obligations of the Issuer may have subsequently revived or been reinstated for whatever reasons. Although there are no precedents in interpreting this provision of law, if all amounts payable by the Issuer under the Indenture and the Securities have been fully satisfied by the Issuer, but the Trustee and/or the Holders are subsequently ordered by any competent authority to return all or portion of such sum to the Issuer or its creditors for whatever reasons, it is likely that the Trustee and/or the Holders will no longer have any right of recourse against the Guarantor under the Guarantee for such returned amount because the obligations of the Guarantor under the Guarantee will have already been released and discharged when the obligations of the Issuer under the Indenture and the Securities have been fully satisfied.

In such event, the rights of the Trustee and the Holders to recover in full any amounts claimed against the Guarantor under the Guarantee may be materially and adversely affected.

Risks Relating to the Securities and the Guarantee Generally

The Securities and the Guarantee are unsecured obligations.

The Securities and the Guarantee are unsecured obligations of the Issuers and the Guarantor, respectively. The repayment of the Securities and payment under the Guarantee may be adversely affected if:

- the Issuers or the Guarantor enters into bankruptcy, liquidation, reorganization or other winding-up proceedings;
- there is a default in payment under either of the Issuers' or the Guarantor's future secured indebtedness or other unsecured indebtedness; or
- there is an acceleration of any of the Issuers' or the Guarantor's indebtedness.

If any of these events were to occur, the Issuers' or the Guarantor's assets may not be sufficient to pay amounts due on the Securities or the Guarantee.

Outward remittance of payments under the Indenture.

The purchase and remittance of foreign currency by the Guarantor for the payment under the Guarantee is subject to applicable exchange control regulations. In principle, approval given by an authorized agent of the BOT, which includes all commercial banks in Thailand, must be obtained immediately prior to outward remittance of the proceeds from the Guarantee. The authorized agent of the BOT has the discretion to deny or impose conditions on any approval or remittance and may require relevant documents and evidence to be filed with it in connection with any application made to it. There can be no assurance that the BOT will not exercise further discretion nor impose any conditions or restrictions which may affect or delay the outward remittance of the proceeds from the Guarantee.

The Securities may not be a suitable investment for all investors.

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

- have sufficient knowledge and experience to make a meaningful evaluation of the relevant Securities, the merits and risks of investing in the relevant Securities and the information contained or incorporated by reference in this offering memorandum or any applicable supplement;

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

- have sufficient financial resources and liquidity to bear all of the risks of an investment in the relevant Securities, including where principal, interest or distribution is payable in one or more currencies, or where the currency for principal, interest or distribution payments is different from the potential investor's currency;

- understand thoroughly the terms of the relevant Securities and be familiar with the behavior of any relevant indices and financial markets; and

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

Some Securities are complex financial instruments. Sophisticated institutional investors generally do not purchase complex financial instruments as stand-alone investments. They purchase complex financial instruments as a way to reduce risk or enhance yield with an understood, measured and appropriate addition of risk to their overall portfolios. A potential investor should not invest in Securities which are complex financial instruments unless it has the expertise (either alone or with the help of a financial advisor) to evaluate how the Securities will perform under changing conditions, the resulting effects on the value of such Securities and the impact this investment will have on the potential investor's overall investment portfolio. Investors may also be subject to investment laws that constrain their ability to invest in the Securities. Investors should consult their own legal advisors before making an investment in the Securities.

Securities issued under the Program have no current active trading market and may trade at a discount to their initial offering price and/or with limited liquidity.

Securities issued under the Program will be new securities which may not be widely distributed and for which there is currently no active trading market (unless in the case of any particular Tranche, such Tranche is to be consolidated with and form a single series with a Tranche of Securities which is already issued). If the Securities are traded after their initial issuance, they may trade at a discount to their initial offering price, depending upon prevailing interest rates, the market for similar securities, general economic conditions and our financial condition. If the Securities are trading at a discount, investors may not be able to receive a favorable price for their Securities, and in some circumstances investors may not be able to sell their Securities at all, at their fair market value or at prices that will provide them with a yield comparable to similar investments that have a developed secondary market. Illiquidity may have a severely adverse effect on the market value of the Securities. In addition, the ability of the Dealers to make a market in the Securities (if applicable) may be impacted by changes in regulatory requirements applicable to the marketing, holding and trading of, and issuing quotations with respect to, the Securities. Accordingly, we cannot assure you as to the development or liquidity of any trading market, or that disruptions will not occur, for any particular Tranche of Securities.

Foreign exchange rate risks and exchange controls may result in investors receiving less interest, distribution or principal than expected.

We will pay principal, interest or distribution on the Securities in the currency specified in the relevant Pricing Supplement (the "**Specified Currency**"). This presents certain risks relating to currency conversions if an investor's financial activities are denominated principally in a currency or currency unit (the "**Investor's Currency**") other than the Specified Currency. These include the risk that exchange rates may significantly change (including changes due to devaluation of the Specified Currency or revaluation of the Investor's Currency) and the risk that authorities with jurisdiction over the Investor's Currency may impose or modify exchange controls. An appreciation in the value of the Investor's Currency relative to the Specified Currency would decrease (a) the Investor's Currency equivalent yield on the Securities, (b) the Investor's Currency equivalent value of the principal payable on the Securities and (c) the Investor's Currency equivalent market value of the Securities. Government and monetary authorities may impose (as some have done in the past) exchange controls that could

adversely affect an applicable exchange rate. As a result, investors may receive less interest, distribution or principal than expected, or no interest or principal.

Changes in market interest rates may adversely affect the value of Fixed Rate Securities.

We expect that the trading price of Fixed Rate Securities will depend on a variety of factors, including, without limitation, the interest rate environment. Each of these factors may be volatile, and may or may not be within our control. If interest rates, or expected future interest rates, rise during the term of the Fixed Rate Securities, the trading price of the Fixed Rate Securities will likely decrease. Because interest rates and interest rate expectations are influenced by a wide variety of factors, many of which are beyond our control, we cannot assure you that changes in interest rates or interest rate expectations will not adversely affect the trading price of the Fixed Rate Securities.

The credit ratings assigned to the Securities may not reflect all risks and may be lowered or withdrawn.

One or more independent credit rating agencies may assign credit ratings to an issue of Securities and/or the Program. The ratings may not reflect the potential impact of all risks related to structure, market, additional factors discussed in this "*Risk Factors*" section, and other factors that may affect the value of the Securities and/or the Program. Furthermore, we cannot assure you that a given credit rating will remain in effect for any period of time or that such rating will not be lowered, suspended or withdrawn. A downgrade or potential downgrade in a rating may reduce the number of investors in the Securities and adversely affect the price and liquidity of the Securities. A credit rating is not a recommendation to buy, sell or hold securities and may be revised or withdrawn by the rating agency at any time.

The right to receive payments on the Securities is junior to certain tax and other liabilities preferred by law.

The Securities will be subordinated to certain liabilities preferred by law such as claims of the Government of Thailand on account of taxes, certain liabilities owed to employees and certain liabilities incurred in the ordinary course of our business. In particular, in the event of bankruptcy, liquidation or winding up, our assets will be available to pay obligations on the Securities only after all liabilities that rank senior to these Securities have been paid. In the event of a bankruptcy, liquidation or winding up, there may not be sufficient assets remaining, after paying amounts relating to such proceedings, to pay amounts due on the Securities.

The book-entry registration system of the Securities may reduce the liquidity of any secondary market for the Securities and may limit the receipt of payments by the beneficial owners of the Securities.

Because transfers of interests in the global certificates to be issued in the offering can be effected only through book entries at DTC with respect to the global certificates to be issued in reliance on Rule 144A and only through book entries at Clearstream, Euroclear in the case of the global certificates to be issued in reliance on Regulation S, for the accounts of their respective participants, the liquidity of any secondary market for global certificates may be reduced to the extent that some investors are unwilling to hold Securities in book-entry form in the name of a DTC, Clearstream or Euroclear. The ability to pledge interests in the global certificates may be limited due to the lack of a physical certificate. Beneficial owners of global certificates may, in certain cases, experience delay in the receipt of payments of principal and interest since such payments will be forwarded by the paying agent to DTC, Clearstream or Euroclear, as applicable, who will then forward payment to their respective participants, who (if not themselves the beneficial owners) will thereafter forward payments to the beneficial owners of the interests in the global certificates. In the event of the insolvency of DTC, Clearstream, Euroclear or any of their respective participants in whose name interests in the global certificates are recorded, the ability of beneficial owners to obtain timely or ultimate payment of principal, interest and distribution on global certificates may be impaired.

The Securities are governed by the laws of the State of New York.

The Terms and Conditions of the Notes and the Terms and Conditions of the Perpetual Securities (save for the provisions relating to subordination and non-payment of the Perpetual Securities) are governed by the laws of the State of New York. No assurance can be given as to the impact of any possible judicial decision or change the laws of the State of New York or administrative practice after the date of the issue of the Securities.

Non-enforceability of non-Thai judgments may limit your ability to recover damages from us in Thai courts. We are incorporated in Thailand, certain of our directors and executives are residents of Thailand and the majority of their assets are located in Thailand. As a result, it may be difficult for you to effect service of process

upon, or enforce judgments obtained in courts outside of Thailand against, us or our directors or executives in Thailand.

Under Thai law, judgments entered by a foreign court are not automatically enforceable in Thailand. Any judgment or order obtained from a court outside Thailand would not be enforced as such by the courts of Thailand, but may be admitted as evidence in fresh proceedings instituted in the courts of Thailand, which would consider the issue on the basis of the evidence put before it. In addition, if any proceedings take place in the courts of Thailand for the enforcement of civil claims which are expressed to be governed by laws other than those of Thailand, the choice of such law will be recognized only to the extent such law is proven to the satisfaction of the courts of Thailand and is not considered contrary to public order and good morals of the people of Thailand. To the extent investors in our shares are entitled to bring legal actions against us or any of our directors or executives, they may be limited in their remedies, and any recovery in any Thai proceeding will be subject to the discretion of the relevant court.

The bankruptcy or liquidation laws of Thailand and other local bankruptcy or liquidation laws may differ significantly from those of other jurisdictions with which the holders of the Securities are familiar.

Because the Issuer and the Guarantor are incorporated under the laws of Thailand, any bankruptcy or liquidation proceeding relating to us would likely involve Thai bankruptcy or liquidation laws, the procedural and substantive provisions of which may differ significantly from comparable provisions of the local bankruptcy or liquidation laws of jurisdictions with which the holders of the Securities are familiar. For example, the courts of Thailand may not recognize the jurisdiction of the courts of foreign countries. Any order or judgment of a court in the foreign jurisdiction may not be enforceable outside of that jurisdiction. You should analyse the risks and uncertainties carefully before you invest in the Securities. In a Thai insolvency proceeding, claims under a Tranche of Subordinated Perpetual Securities would rank below senior unsecured claims (including those granted preferential status by law, such as government claims for taxes, certain employee liabilities and certain obligations arising in the ordinary course of business) and could result in minimal or no recovery for such holders, as Thai insolvency laws prioritize secured and preferred creditors over subordinated ones.

The Securities are subject to transfer restrictions.

The Securities will not be registered under the Securities Act or any state securities laws and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons, except (i) in reliance on the exemption provided by Rule 144A to persons who are both qualified institutional buyers as defined in Rule 144A and qualified purchasers as defined in the U.S. Investment Company Act, (ii) to certain persons in offshore transactions in reliance on Regulation S, or pursuant to another exemption from, or (iii) in another transaction not subject to, the registration requirements of the Securities Act and in accordance with applicable state securities laws. For a further discussion of the transfer restrictions applicable to the Securities, see "*Subscription and Sale*" and "*Transfer Restrictions*."

Holders of the Securities will rely on DTC, Euroclear and Clearstream procedures.

Securities issued under the Program will be represented on issue by one or more Global Certificates that may be deposited with a common depositary for Euroclear and Clearstream or may be deposited with a nominee for DTC (each as defined under "*Form of the Securities*"). Except in the circumstances described in each Global Certificate, investors will not be entitled to receive Securities in definitive form. Each of DTC, Euroclear and Clearstream and their respective direct and indirect participants will maintain records of the beneficial interests in each Global Certificate held through it. While the Securities are represented by a Global Certificate, investors will be able to trade their beneficial interests only through the relevant clearing systems and their respective participants.

While the Securities are represented by Global Certificates, we will discharge our payment obligation under the Securities by making payments through the relevant clearing systems for distribution to their accountholders. A holder of a beneficial interest in a Global Certificate must rely on the procedures of the relevant clearing system and its participants to receive payments under the relevant Securities. We have no responsibility or liability for the records relating to, or payments made in respect of, beneficial interests in any Global Certificate.

Holders of beneficial interests in a Global Certificate will not have a direct right to vote in respect of the Securities so represented. Instead, such holders will be permitted to act only to the extent that they are enabled by the relevant clearing system and its participants to appoint appropriate proxies. There can be no assurance that

procedures implemented for the granting of such proxies will be sufficient to enable such holders to vote on any matters on a timely basis.

The Notes may be issued with original issue discount for U.S. federal income tax purposes.

The Notes may be issued with original issue discount ("**OID**") for U.S. federal income tax purposes. If the Notes are issued with OID for U.S. federal income tax purposes, a U.S. holder (as defined under "*Taxation—United States Federal Income Taxation*") of such a Note generally will be required to include such OID in gross income (as ordinary income) on an annual basis under a constant yield accrual method regardless of their regular method of accounting for U.S. federal income tax purposes. As a result, such U.S. holders will generally include any OID in income in advance of the receipt of cash attributable to such income. See "*Taxation—United States Federal Income Taxation*."

We will follow the applicable corporate disclosure standards for debt securities listed on the Official List of the SGX-ST, which standards may be different from those applicable to companies in certain other countries.

We will be subject to reporting obligations in respect of any Securities to be listed on the Official List of the SGX-ST. The disclosure and corporate governance standards imposed by the SGX-ST may be different from those imposed by securities exchanges in other countries or regions such as the United States, the United Kingdom or Thailand. We are also subject to disclosure and ongoing reporting requirements as a listed company in Thailand. Investors should be cautioned, however, that the level of information that is available may not correspond to the level to which investors in the Securities are accustomed.

Securityholders may suffer erosion in the return on their investments due to inflation.

Securityholders may suffer erosion in the return on their investments due to inflation. Securityholders would have an anticipated rate of return based on expected inflation rates on the purchase of the Securities. An unexpected rise in inflation could reduce the actual returns to Securityholders.

USE OF PROCEEDS

The net proceeds from an issue by the Company of a Tranche of Securities will be used by us for general corporate purposes.

The net proceeds from an issue by the Treasury Center of a Tranche of Securities will be applied by the Treasury Center for general corporate purposes, including, but not limited to, on-lending to entities within the Group.

If, in respect of any particular issue, there is a particular identified use of proceeds, this will be stated in the applicable Pricing Supplement.

EXCHANGE RATE INFORMATION

The following table sets forth, for the periods indicated, the means of the average buying (transfer) rates and the average selling rates published by the Bank of Thailand. The average buying (transfer) rates and average selling rates are calculated by averaging the foreign exchange counter rates quoted by commercial banks registered in Thailand. No representation is made that the Baht or U.S. dollar amounts set forth herein and referred to elsewhere in this Offering Memorandum could have been, or could be, converted into U.S. dollars or Baht, as the case may be, at the rates indicated, at any particular rates, or at all.

	Exchange rates			
	Low	**High**	**Average[(1)]**	**Period end**
	(THB per US$)			
2020	29.8040	33.0903	31.4092	30.0371
2021	29.8646	33.9223	32.1155	33.4199
2022	32.1379	38.3380	35.2036	34.5624
2023	32.6907	37.1430	34.7839	34.2233
2024	32.2914	37.1002	35.2096	33.9879
2025	31.0694	34.7938	32.8045	31.5826
July	32.1789	32.7022	32.4435	32.7022
August	32.2958	32.7892	32.4555	32.3113
September	31.6598	32.3812	32.0016	32.2993
October	32.3338	32.8122	32.5545	32.3442
November	32.2037	32.5758	32.3978	32.2037
December	31.0694	32.0699	31.5568	31.5826

(1) Annual averages were calculated by using the average of the exchange rates on the last day of each month during the relevant year. Monthly averages or average for a period are calculated by using mean of the average of the daily rates during the relevant month or period.

CAPITALIZATION AND INDEBTEDNESS

The following table sets forth as of September 30, 2025, our capitalization and indebtedness, which has been derived from and should be read in conjunction with our unaudited interim consolidated financial information as of and for the nine months ended September 30, 2025 included elsewhere in this Offering Memorandum.

	As of September 30, 2025	
	(in millions)	
	THB	US$
Long-term debt		
Long-term loans from financial institutions, net of current portion	11,899.7	368.1
Debentures, net of current portion	102,318.7	3,164.8
Lease liabilities, net of current portion	17,206.1	532.2
Total long-term debt, net of current portion	131,424.5	4,065.1
Shareholders' equity		
Issued and paid-up share capital	22,338.4	690.9
Share premium on ordinary shares	10,698.7	330.9
Other deficits	(4,338.9)	(134.2)
Retained earnings		
Appropriated - Statutory reserve	2,315.1	71.6
Appropriated - Other reserves	244.5	7.6
Unappropriated	151,199.5	4,676.8
Other components of shareholders' equity	(10,453.5)	(323.3)
Equity attributable to owners of the Company	172,003.8	5,320.3
Non-controlling interests of the subsidiaries	2,712.3	83.9
Total shareholders' equity	174,716.1	5,404.1
Total capitalization(1)	306,140.6	9,469.2

Note:

(1) Total capitalization is equal to the sum of total long-term debt, net of current portion and total shareholders' equity.

On November 17, 2025, the Company established a new subsidiary, TOP Infra Company Limited, in which the Company holds 51% of the total shares and a subsidiary of PTT Tank Terminal Company Limited holds the remaining 49%. The 49% interest held by PTT Tank Terminal Company Limited, amounting to THB18,409 million, will be presented as non-controlling interests within shareholders' equity in our consolidated financial statements.

Other than as set forth above, there has been no material change in our capitalization and indebtedness since September 30, 2025.

SELECTED CONSOLIDATED FINANCIAL AND OTHER DATA

You should read the following selected consolidated financial data in conjunction with our consolidated financial statements and financial information, together with each of their related notes, "Presentation of Financial and Other Information," and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this Offering Memorandum. Our consolidated financial statements and financial information have been prepared and presented in accordance with TFRS, which differs in certain respects from IFRS. See "Summary of Certain Significant Differences Between TFRS and IFRS."

Selected Consolidated Financial and Other Information

The following tables set forth our selected consolidated financial information as of and for the years ended December 31, 2022, 2023 and 2024, and as of and for the nine months ended September 30, 2024 and 2025.

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024	2025	
	(in millions, except otherwise indicated)						
	THB	THB	THB	US$	THB	THB	US$
Selected Consolidated Statement of Income Information:							
Revenue from sales	505,703.2	459,402.2	455,856.9	14,100.1	343,895.2	285,404.7	8,827.9
Subsidy from oil fuel fund	23,885.6	9,841.7	10,920.1	337.8	10,345.3	921.0	28.5
Total revenue	**529,588.8**	**469,243.9**	**466,777.0**	**14,437.9**	**354,240.5**	**286,325.7**	**8,856.3**
Cost of sales	(481,137.0)	(436,163.5)	(450,010.2)	(13,919.3)	(342,832.3)	(278,855.8)	(8,625.3)
Gross profit	**48,451.8**	**33,080.4**	**16,766.8**	**518.6**	**11,408.2**	**7,469.9**	**231.1**
Dividend income	80.5	200.8	269.1	8.3	268.1	282.5	8.7
Gain (loss) from financial instruments	(16,005.8)	(2,850.0)	360.4	11.1	130.5	(462.2)	(14.3)
Gain (loss) on exchange	(64.5)	212.8	52.5	1.6	539.6	17.3	0.5
Gain on repurchase of debentures	–	–	1,134.2	35.1	1,147.8	4,067.3	125.8
Gain on disposal of investments in associates	10,037.8	–	–	–	–	–	–
Gain on reclassification of investments	7,296.6	–	–	–	–	–	–
Other income	782.0	1,138.2	1,739.2	53.8	1,302.6	1,430.7	44.3
Selling and distribution expenses	(1,052.1)	(950.0)	(1,140.4)	(35.3)	(850.8)	(769.0)	(23.8)
Administrative expenses	(3,129.7)	(2,570.9)	(2,733.7)	(84.6)	(1,891.2)	(1,896.5)	(58.7)
Share of profit (loss) from investments in joint ventures and associates	(512.6)	83.8	(131.7)	(4.1)	(194.3)	6,469.9	200.1
Operating profit	**45,884.1**	**28,345.1**	**16,316.4**	**504.6**	**11,860.4**	**16,610.0**	**513.7**
Finance cost	(3,860.0)	(4,088.5)	(4,052.0)	(125.3)	(3,066.2)	(2,786.9)	(86.2)
Profit before income tax expense	**42,024.1**	**24,256.6**	**12,264.4**	**379.3**	**8,794.2**	**13,823.1**	**427.5**
Income tax expense	(8,917.9)	(4,671.7)	(2,283.4)	(70.6)	(1,560.6)	(1,672.6)	(51.7)
Profit for the year / period	**33,106.2**	**19,584.9**	**9,981.0**	**308.7**	**7,233.6**	**12,150.5**	**375.8**
Profit attributable to:							
Equity holders of the Company	32,668.1	19,443.2	9,958.6	308.0	7,191.9	12,126.1	375.1
Non-controlling interests of the subsidiaries	438.1	141.7	22.4	0.7	41.7	24.4	0.7
	33,106.2	**19,584.9**	**9,981.0**	**308.7**	**7,233.6**	**12,150.5**	**375.8**
Earnings per share (Baht)							
Basic earnings per share							
Profit attributable to equity holders of the Company	15.63	8.70	4.46	0.14	3.22	5.43	0.17

	As of December 31,				As of September 30,	
	2022	2023	2024		2025	
	(in millions, except otherwise indicated)					
	THB	THB	THB	US$	THB	US$
Selected Consolidated Statement of Financial Position Information:						
Cash and cash equivalents	43,576.1	28,431.6	29,042.4	898.3	28,072.2	868.3
Total current assets	153,828.2	125,371.3	112,221.8	3,471.1	100,397.8	3,105.4
Total non-current assets	290,752.7	294,621.4	296,788.6	9,180.0	294,078.2	9,096.1
Total assets	**444,580.9**	**419,992.7**	**409,010.4**	**12,651.1**	**394,476.0**	**12,201.5**
Total current liabilities	103,673.0	73,501.3	67,663.1	2,092.9	75,357.7	2,330.9
Total non-current liabilities	182,250.5	178,179.7	175,162.4	5,418.0	144,402.1	4,466.5
Total liabilities	**285,923.5**	**251,681.0**	**242,825.5**	**7,510.8**	**219,759.9**	**6,797.4**

	As of December 31,				As of September 30,	
	2022	2023	2024		2025	
	(in millions, except otherwise indicated)					
	THB	THB	THB	US$	THB	US$
Total shareholders' equity	158,657.4	168,311.7	166,184.9	5,140.3	174,716.1	5,404.1
Total liabilities and shareholders' equity	**444,580.9**	**419,992.7**	**409,010.4**	**12,651.1**	**394,476.0**	**12,201.5**

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024	2025	
	(in millions)						
	THB	THB	THB	US$	THB	THB	US$
Selected Consolidated Statement of Cash Flow Information:							
Net cash provided by operating activities	43,250.8	28,087.8	39,354.7	1,217.3	19,403.9	22,714.7	702.6
Net cash from (used) in investing activities	(9,049.1)	(19,691.9)	(14,008.6)	(433.3)	(9,750.2)	13,989.9	432.7
Net cash used in financing activities	(20,252.9)	(23,071.9)	(24,627.1)	(761.7)	(19,945.0)	(37,098.1)	(1,147.5)
Net increase (decrease) in cash and cash equivalents	**13,948.7**	**(14,676.1)**	**719.0**	**22.2**	**(10,291.3)**	**(393.4)**	**(12.2)**
Cash and cash equivalents at beginning of year / period	29,695.9	43,576.1	28,431.6	879.4	28,431.6	29,042.4	898.3
Effect of exchange rate changes	(68.5)	(468.5)	(108.2)	(3.3)	(473.7)	(576.8)	(17.8)
Cash and cash equivalents at end of year / period	**43,576.1**	**28,431.6**	**29,042.4**	**898.3**	**17,666.7**	**28,072.2**	**868.3**

Certain Other Financial and Operational Information

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024	2025	
	(in millions, except otherwise indicated)						
	THB	THB	THB	US$	THB	THB	US$
EBITDA Information:							
EBITDA[(1)]	37,187.3	35,453.4	22,026.1	681.3	15,469.1	11,638.0	360.0
EBITDA Margin[(2)]	7.4%	7.7%	4.8%	n/a	4.5%	4.1%	n/a

Notes:

(1) EBITDA means profit for the year / period excluding income tax expense, finance cost, share of profit (loss) from investments in joint ventures and associates, others, finance income, gain (loss) from financial instruments, gain (loss) on exchange, depreciation and amortization. EBITDA and the related ratios presented in this Offering Memorandum are supplemental measures of our performance that are not required by, or presented in accordance with, TFRS or IFRS. EBITDA is not a measurement of financial performance or liquidity under TFRS or IFRS, and should not be considered as an alternative to net income, operating income or any other performance measures derived in accordance with TFRS or IFRS, or as an alternative to cash flow from operating activities as a measure of liquidity. In addition, EBITDA as presented in this Offering Memorandum is not a standardized term. Therefore, a direct comparison between companies using such a term, or a direct comparison with Thai Oil's historical public disclosure, may not be possible.

(2) EBITDA margin means EBITDA divided by the sum of revenue from sales per statement of income.

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024	2025	
	(in millions, except otherwise indicated)						
	THB	THB	THB	US$	THB	THB	US$
Certain Financial Information and Ratios:							
Total Debt[(1)]	196,259.4	184,207.7	174,354.5	5,393.0	170,927.8	137,806.8	4,262.5
Net Debt[(2)]	152,683.2	149,831.5	134,616.8	4,163.8	145,969.1	104,645.6	3,236.8
Total Debt to EBITDA (times)[(3)]	5.3	5.2	7.9	n/a	8.9[(7)]	7.6[(7)]	n/a
Net Debt to EBITDA (times)[(4)]	4.1	4.2	6.1	n/a	7.6[(8)]	5.8[(8)]	n/a
EBITDA-to-interest coverage ratio (times)[(5)]	9.6	8.7	5.4	n/a	5.0	4.2	n/a
Net Debt to Equity (times)[(6)]	1.0	0.9	0.8	n/a	0.9	0.6	n/a

Notes:

(1) Total debt means the sum of short-term loans, the current portion of long-term loans from financial institutions, the current portion of debentures, the current portion of lease liabilities, the long-term loans from financial institutions, net of current portion, long-term loans from a third party, debentures, net of current portion, and lease liabilities, net of current portion.

(2) Net debt means total debt less (i) cash and cash equivalents and (ii) short-term investments per statement of financial position.

(3) Calculated from total debt divided by EBITDA.

(4) Calculated from net debt divided by EBITDA.

(5) Calculated from EBITDA divided by finance cost per statement of income.

(6) Calculated from net debt divided by equity per statement of financial position.

(7) Calculated as total debt divided by annualised EBITDA. Annualised EBITDA is calculated by a rolling period of EBITDA for 12 consecutive months.

(8) Calculated as net debt divided by annualised EBITDA. Annualised EBITDA is calculated by a rolling period of EBITDA for 12 consecutive months.

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024	2025	
	(in millions, except otherwise indicated)						
	THB	THB	THB	US$	THB	THB	US$
Profit for the year/period	33,106.2	19,584.9	9,981.0	308.7	7,233.6	12,150.5	375.8
Add/(Deduct)							
Income tax expense	8,917.9	4,671.7	2,283.4	70.6	1,560.6	1,672.6	51.7
Finance cost	3,860.0	4,088.5	4,052.0	125.3	3,066.2	2,786.9	86.2
Share of profit / loss from investments in joint ventures and associates	512.6	(83.8)	131.7	4.1	194.3	(6,469.9)	(200.1)
Others[1]	(16,814.9)	34.7	(1,423.9)	(44.0)	(1,415.1)	(4,408.9)	(136.4)
Finance income	(367.8)	(785.8)	(1,316.7)	(40.7)	(981.6)	(1,020.2)	(31.6)
Gain / Loss from financial instruments	164.5	356.5	265.2	8.2	271.0	987.5	30.5
Gain / Loss on exchange	64.5	(212.8)	(52.5)	(1.6)	(539.6)	(17.3)	(0.5)
Depreciation and amortization	7,744.3	7,799.5	8,105.9	250.7	6,079.7	5,956.8	184.2
EBITDA[2]	**37,187.3**	**35,453.4**	**22,026.1**	**681.3**	**15,469.1**	**11,638.0**	**360.0**

Notes:

(1) Others comprise dividend income, gain on disposal of investments, gain (loss) on disposal of other assets, gain (loss) on write off of other assets, gain on change in status of investments, modification gain (loss) - financial instruments, expected credit loss - accounts receivable, loss on impairment of other assets, insurance claim, gain on lease modification, gain on lease termination, gain on repurchase of debentures, cost of incident and other non-recurring items.

(2) EBITDA means profit for the year / period excluding income tax expense, finance cost, share of profit (loss) from investments in joint ventures and associates, others, finance income, gain (loss) from financial instruments, gain (loss) on exchange, depreciation and amortization. EBITDA and the related ratios presented in this Offering Memorandum are supplemental measures of our performance that are not required by, or presented in accordance with, TFRS or IFRS. EBITDA is not a measurement of financial performance or liquidity under TFRS or IFRS, and should not be considered as an alternative to net income, operating income or any other performance measures derived in accordance with TFRS or IFRS, or as an alternative to cash flow from operating activities as a measure of liquidity. In addition, EBITDA as presented in this Offering Memorandum is not a standardized term. Therefore, a direct comparison between companies using such a term, or a direct comparison with Thai Oil's historical public disclosure, may not be possible.

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024	2025	
	(in millions, except otherwise indicated)						
	THB	THB	THB	US$	THB	THB	US$
Certain Operational Information:							
Adjusted gross profit (loss)[1] from							
Oil refining	48,971.9	32,548.8	15,029.1	464.9	12,085.6	8,989.3	278.0
Aromatics and LAB	1,818.1	3,727.4	4,989.5	154.3	3,924.6	2,030.8	62.8
Lube base oil	4,023.9	3,080.6	2,506.1	77.5	1,430.0	2,583.3	79.9
Integrated profit (loss)							
Integrated intake (thousand bpd)[2]	296.9	310.2	306.9	—	304.7	284.2	—
Average foreign exchange rate (THB/US$)[3]	35.2	35.0	35.4	—	35.9	33.3	—
Gross integrated margin (US$ per barrel)[4]	**14.3**	**9.8**	**5.6**	**—**	**5.8**	**5.3**	**—**
Integrated cash cost (US$ per barrel)[5]	**2.8**	**2.6**	**2.5**	**2.5**	**2.3**	**2.8**	**2.8**

Notes:

(1) Adjusted gross profit (loss) is the sum of gross profit or loss under TFRS, non-feedstock related cost of goods sold and service rendered, depreciation and operating expenses, foreign currency exchange gains or losses, net realizable value adjustments and other income.

(2) Integrated intake, measured in thousands of barrels per day, is calculated based on our oil refinery's crude oil and feedstock intake, our petrochemical plants' feedstock import and our lube base oil refinery's long residue import.

(3) Average foreign exchange rate is calculated based on the daily average selling rate of foreign exchange published by the BOT.

(4) Gross integrated margin is calculated by taking the integrated profit (loss), as divided by the total integrated intake, and further adjusted to take into account the foreign exchange rates.

(5) Integrated cash cost is a measure of operating expenses and includes plant operating expenses, selling expenses, administrative expenses and finance costs excluding non-recurring items. Our integrated cash cost comprised operating expenses of US$2.8/bbl, US$2.6/bbl, US$2.5/bbl, US$2.3/bbl and US$2.8/bbl and finance costs of US$1.9/bbl, US$1.9/bbl, US$1.9/bbl, US$1.7/bbl and US$2.2/bbl for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, respectively.

See "*Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Metrics for Our Group*" for further details in relation to calculation of the gross margin from production, gross integrated margin and integrated cash cost.

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

The following financial condition and results of operations discussion and analysis are based upon the consolidated financial statements of Thai Oil and should be read in conjunction with the selected financial and operating data presented in "Selected Consolidated Financial and Other Data" and the consolidated financial statements of Thai Oil and the notes thereto as of and for the year ended December 31, 2023, including comparative information presented as corresponding figures as of and for the year ended December 31, 2022, and the consolidated financial statements of Thai Oil and the notes thereto as of and for the year ended December 31, 2024, including comparative information presented as corresponding figures as of and for the year ended December 31, 2023, and the unaudited interim consolidated financial information of Thai Oil and the notes thereto as of and for the nine months ended September 30, 2025, including comparative information presented as corresponding figures as of and for the nine months ended September 30, 2024, included elsewhere in this Offering Memorandum.

The financial statements presented in this Offering Memorandum are presented in accordance with TFRS, which differs in certain material respects from IFRS. For a description of certain differences between TFRS and IFRS, see "Summary of Certain Significant Differences Between TFRS and IFRS."

Investors are advised that any evaluation of Thai Oil's business should be made with reference to the information contained in this Offering Memorandum under the heading "Risk Factors."

Overview

We are the flagship refiner of PTT Group and we maintain our position as a highly efficient and competitive refinery, in order to be the principal petroleum refinery and to meet the energy demand of Thailand. We also explore opportunities by extending our value chain toward businesses with high-value products, where such expansion aligns with our strategies, knowledge, resources and technologies. The value chain expansion aims to increase the product value from petroleum business to petrochemical business in the Asia region, especially in the countries with high domestic demand. We are one of the leading integrated refining and petrochemical companies listed on the Stock Exchange of Thailand. We currently own and operate the largest single-site complex refinery in Thailand measured by nameplate capacity of crude distillation unit ("**CDU**"), which is integrated with our petrochemical platform. As of September 30, 2025, we had a refining nameplate capacity of approximately 275,000 bpd of crude oil and other feedstock, representing approximately 22.1% of the total refining nameplate capacity in Thailand, according to the EPPO. For the year ended December 31, 2024 and the nine months ended September 30, 2025, our refinery processed crude oil and other feedstock represented approximately 31.4% and 29.2%, respectively, of the total processed feedstock in Thailand for the periods, according to the DOEB. As of September 30, 2025, we also had a petrochemical production nameplate capacity of approximately 838,000 tons per year, a hydrocarbon solvent production nameplate capacity of approximately 214,000 tons per year, a linear alkyl benzene ("**LAB**") production nameplate capacity of approximately 120,000 tons per year and a lube base oil nameplate capacity of approximately 267,015 tons per year. We are the principal refiner for the PTT Group. PTT and OR are also our principal offtake customers for our refined petroleum and petrochemical products and PTT is our principal feedstock supplier. We also sell our refining and petrochemical products to other customers, both in Thailand and internationally.

Our core businesses can be divided into eight units: oil refinery, aromatics and LAB, lube base oil refinery, power generation, solvent and chemicals, ethanol, olefins and other businesses, such as pipeline transportation and information technology services. Our refinery, aromatics and LAB and lube base oil business units integration allows us to achieve an overall higher margin. See "*Management's Discussion and Analysis of Financial Condition and Results of Operation—Key Metrics for Our Group—Gross Integrated Margin*."

Our revenue from sales and profit attributable to equity holders of the Company for the year ended December 31, 2022 amounted to THB505,703.2 million and THB32,668.1 million, respectively. Our revenue from sales and profit attributable to equity holders of the Company for the year ended December 31, 2023 amounted to THB459,402.2 million and THB19,443.2 million, respectively. Our revenue from sales and profit attributable to equity holders of the Company for the year ended December 31, 2024 amounted to THB455,856.9 million (US$14,100.1 million) and THB9,958.6 million (US$308.0 million), respectively. Our revenue from sales and profit attributable to equity holders of the Company for the nine months ended September 30, 2024 amounted to THB343,895.2 million and THB7,191.9 million, respectively. Our revenue from sales and profit attributable to equity holders of the Company for the nine months ended September 30, 2025 amounted to THB285,404.7 million (US$8,827.9 million) and THB12,126.1 million (US$375.1 million),

respectively. Revenue from sales for each of our business units for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025 are set forth in the table below.

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024	2025	
				(in millions)			
	THB	THB	THB	US$	THB	THB	US$
Business Unit							
Oil Refining	544,791.7	492,054.5	486,610.4	15,051.4	368,755.6	299,116.9	9,252.0
Aromatics and LAB	88,937.5	78,974.9	80,529.0	2,490.8	62,565.7	42,328.5	1,309.3
Lube Base Oil Refinery	27,773.5	25,315.0	25,737.7	796.1	19,140.7	15,753.8	487.3
Power Generation[1]	11,715.9	12,787.5	11,825.5	365.8	9,030.9	8,273.0	255.9
Solvent	22,585.3	19,381.2	19,724.2	610.1	15,185.6	12,171.7	376.5
Ethanol	1,796.1	1,879.0	1,681.4	52.0	1,334.9	763.0	23.6
Olefins	2.0	4.7	4.5	0.1	-	-	-
Others	6,646.7	7,068.0	7,350.4	227.4	5,246.5	5,015.5	155.1
Eliminations[2]	(198,545.5)	(178,062.6)	(177,606.2)	(5,493.5)	(137,367.7)	(98,017.7)	(3,031.8)
Total revenue from sales	**505,703.2**	**459,402.2**	**455,856.9**	**14,100.1**	**343,895.2**	**285,404.7**	**8,827.9**

Notes:

(1) Does not include GPSC income, which was reflected as share of profit of joint ventures and associates. The Company has completed the sale of GPSC shares on June 7, 2022. The Company currently holds 281,972,937 shares in GPSC, equivalent to 10.0% of GPSC's total shares and GPSC is no longer an associate of the Company.

(2) Eliminations relate to intra-Group sales.

We are listed on the SET under the stock code "TOP" with a market capitalization of THB78,742.7 million (US$2,435.6 million) as of September 30, 2025.

Key Factors Affecting Our Financial Condition and Results of Operations

Our results of operations are driven by various factors affecting the refining and petrochemical industries generally, including macroeconomic conditions, supply and demand in the petroleum refining, petrochemical and lube base oil industries, prices of feedstock, and foreign exchange rate fluctuations. Company-specific structural and operational factors also have an impact on our results of operations, including production volume and utilization at our refinery, petrochemical and base oil complex and our product mix. Set forth below are key drivers that have affected our historical results of operations, and are expected to continue to affect our future results of operations.

Macroeconomic Conditions

Our results of operations are directly affected by sales volume and selling prices of our products, which in turn are influenced by general macroeconomic conditions globally and in Thailand.

Worldwide political conditions, including those in oil producing regions such as the Middle East, Russia, Ukraine and Asia, sanctions and international trade policies including the United States-China trade wars, tariffs and other trade barriers, may affect our financial performance. Furthermore, challenging global economic conditions such as the continued uncertainty regarding economic recovery, geopolitical conflicts, international trade restrictions, high inflation in many advanced economies and interest rate actions by central banks worldwide will continue to be a key factor that impacts the growth of the demand for refining and petrochemical products.

In Thailand, our business, financial condition, results of operations and prospects may be influenced in part by the ongoing political situation in Thailand, which has been unstable from time to time. Political uncertainty, including potential changes in government or unrest could result in the delay or curtailment of economic reforms in Thailand and decrease confidence in the government, the economy and the financial performance of companies from Thailand generally. Also, in the longer term, government policies promoting renewable energy and energy efficiency are expected to gradually slow consumption of traditional petroleum products.

The aforementioned macroeconomic conditions globally and in Thailand may significantly impact our business operation, revenue, cash flow and financial position. *See "Risk Factors—Risks Relating to Our Business—Cyclicality in the refining and petrochemical industries may result in reduced volumes or operating margins, and volatile margins in the refining and petrochemical industries and uncertainty regarding the global economic recovery could have a material adverse effect on us in the future" and "Risk Factors—Risks Relating*

to Thailand—Political conditions in Thailand will have a direct impact on our business and the market price of the Securities issued under the Program."

Supply and Demand in the Petroleum Refining, Petrochemical and Lube Base Oil Industries

Global supply and demand conditions influence the price of crude oil, which in turn influences the prices of our refined petroleum products. Typically, as the supply for crude oil increases, the prices of crude oil feedstock and our refined petroleum products also decrease. The spreads between refined product prices and crude oil prices play a key role in determining refining margins, which typically fluctuate upon supply and demand of refined products, refinery capacity additions and refinery utilization globally.

The prices of refined petroleum products decreased as crude oil prices decreased from 2023 to 2024, which was primarily attributable to several factors, including increasing supply from OPEC and alliances ("**OPEC+**") and non-OPEC countries, declining oil demand growth following slower economic growth after U.S.-imposed reciprocal tariffs on many countries, and geopolitical tensions in Middle East and Russia-Ukraine which have created crude price volatility.

The average Dubai crude price in 2024 dropped to US$79.6 per barrel, decreasing from an average of US$82.1 per barrel in 2023, due to reduced demand for oil resulting from a global economic slowdown, particularly in the United States and China. In the United States, the unemployment rate continued to rise, while China's economy faced challenges, with low inflation rates indicating weak economic activity. However, crude oil prices were still supported by the decision of the OPEC+ to extend their production cuts until March 2026 to maintain market balance. Geopolitical conflicts in the Middle East and Eastern Europe remained a concern, tightening oil supply and supporting crude oil prices during the fourth quarter of 2023. For the nine months ended September 30, 2025, Dubai crude price averaged US$71.3 per barrel, a 13% decrease from the nine months ended September 30, 2024 due to the global economic slowdown caused by trade uncertainties and the pressure from increased production by OPEC+, which collectively raised output by 2.2 million barrels per day by September 2025.

In 2024, the spreads of jet and gas oil over Dubai crude oil prices decreased due to higher inventories and ample supply compared to 2023 and the easing of concerns over Russian gas oil supply, which continued to be available on the market. For the nine months ended September 30, 2025, the spreads of jet and gas oil over Dubai crude oil prices decreased slightly compared to the nine months ended September 30, 2024 due to U.S. trade policies that pressured industrial oil demand.

Margins in the petrochemical and lube base oil industries are strongly influenced by capacity utilization. Generally, as demand for petrochemical and lube base oil products approaches available supply, utilization rates rise, and prices and margins typically increase. Historically, this relationship has been highly cyclical due to fluctuations in supply resulting from the timing of new investments in capacity by producers and general economic conditions affecting the levels of demand.

The spread between paraxylene price and unleaded gasoline 95 price decreased slightly from US$198 per ton in 2023 to US$171 per ton in 2024 primarily due to lower than expected demand for winter clothing in the region and weak margins in downstream businesses such as PTA despite no new paraxylene plants commencing operations in 2024. The spread between paraxylene price and unleaded gasoline 95 price decreased from US$190 per ton for the nine months ended September 30, 2024 to US$146 per ton for the nine months ended September 30, 2025 reflecting still weak consumer confidence and high polyester inventories in China. The spread between benzene price and unleaded gasoline 95 price increased from US$58 per ton in 2023 to US$193 per ton in 2024, supported by low benzene inventories during the first three quarters of 2024, along with China's economic stimulus measures which boosted demand for electronics – particularly through the late year trade-in program – further driving up benzene demand. The spread between benzene price and unleaded gasoline 95 price decreased significantly from US$199 per ton for the nine months ended September 30, 2024 to US$86 per ton for the nine months ended September 30, 2025 primarily due to unprofitable benzene exports to the United States, weak demand amid maintenance shutdowns at downstream plants, persistently high benzene inventories in China, and the impact of U.S. tariff policy that continued to pressure benzene demand for derivative products. The spread between toluene price and unleaded gasoline 95 price in 2024 remained stable compared to 2023, supported by an improved benzene market, which led producers to increase toluene conversion into benzene. The spread between toluene price and unleaded gasoline 95 price decreased from US$61 per ton for the nine months ended September 30, 2024 to US$9 per ton for the nine months ended September 30, 2025, pressured by a weak gasoline market that kept toluene gasoline-blending demand low. See "*—Key Metrics by which We Measure Our Key*

Business Units—Key Metrics for Our Aromatics and LAB Business Unit—Product-to-Feedstock Market Price Spread."

The spread between lube base oil price (500SN) and high sulfur fuel oil ("**HSFO**") spread in 2024 remained stable in 2024 compared to 2023. Supply constraints were supported by a reduction in Japanese exports following the permanent closure of a Group 1 base oil refinery in Japan and annual scheduled maintenance at base oil production facilities throughout the year, which prevented significant market oversupply. Additionally, fuel oil prices, a key raw material cost for Group 1 base oil production, remained at levels similar to the previous year, limiting the decline in the Group 1 base oil spread compared to 2023. However, the market continued to face pressure from the startup of new Group 2 and 3 base oil plants in India, with a production capacity of 670,000 tons per year. Additionally, economic uncertainties in the region, particularly in China, also continued to limit base oil demand. The spread between lube oil price (500SN) and HSFO price increased slightly from US$525 per ton for the nine months ended September 30, 2024 to US$599 per ton for the nine months ended September 30, 2025, supported by ongoing supply constraints due to delays in the startup of new Group 2 and Group 3 base oil producers.

With regards to bitumen, which is produced as a by-product in the refining of the more profitable lube base oil, its spread over HSFO decreased from US$17 per ton in 2023 to US$(42) per ton in 2024, as demand in China had yet to fully recover due to continued economic slowdown. However, regional bitumen prices remained supported by tight supply, especially from Singapore-based bitumen producers. Moreover, increased infrastructure improvement, particularly in India and Indonesia, continued to provide support for bitumen demand. The spread between bitumen price and HSFO price increased from US$(55) per ton for the nine months ended September 30, 2024 to US$(21) per ton for the nine months ended September 30, 2025, driven by stronger demand from Vietnam and a decline in fuel oil prices, which serve as the main feedstock cost. However, regional demand remained limited due to unfavorable weather conditions at the beginning of the rainy season. Meanwhile, bitumen prices in the third quarter of 2025 declined compared to the third quarter of 2024, in line with lower crude oil prices. See "*—Key Metrics by which We Measure Our Key Business Units—Key Metrics for Our Lube Base Oil Business Unit—Product-to-Feedstock Market Price Spread*."

Prices of Feedstock

Feedstock costs are significant components of the operating costs of our oil refinery, aromatics and LAB and lube base oil businesses. Specifically, the production of refined petroleum products is dependent on the available supply of crude oil, while the costs of the feedstock required to produce aromatics and LAB products (principally platformate) and lube base oil products (principally long residue) are generally driven by the price of oil. The prices of our feedstock, the majority of which we obtain under supply contracts which have pricing terms based on market prices, are generally subject to frequent and significant fluctuations and are affected by a variety of factors, including local market demand conditions and the level of operations of other refineries in Thailand and in the Asia-Pacific region, changes in global economic conditions, the political situation in major oil-producing countries, global inventory levels and the availability of crude oil and other feedstock and refined petroleum products, seasonal demand fluctuations, transportation costs of crude oil and other feedstock and refined petroleum products, predicted and actual weather conditions, the availability and suitability of similar or alternative fuels, the extent of government regulation, particularly as it relates to environmental policy (including product specifications) and exchange rate fluctuations, particularly fluctuations in the value of the Baht against the U.S. dollar.

World crude oil prices decreased from 2023 to 2024, with the price of Dubai crude oil fluctuating between US$70.3 and US$96.8 per barrel, averaging at US$79.6 per barrel in 2024 and decreased to US$71.3 per barrel for the nine months ended September 30, 2025, according to Platts. The average price of unleaded gasoline 95 (which we used as a benchmark for the price of platformate) was US$98.8 per barrel in 2023 and subsequently decreased to US$93.0 per barrel in the year ended December 31, 2024 and to US$181.2 per barrel for the nine months ended September 30, 2025. The average price of HSFO (which we use as a benchmark for the price of long residue) was US$71.8 per barrel in 2023, and subsequently increased to US$74.0 per barrel in 2024 and decreased to US$69.4 per barrel for the nine months ended September 30, 2025.

Fluctuations in feedstock prices also affect the gross refining margin of our refinery and our lube base oil and aromatics and LAB product-to-feedstock margins, as there is a lag time between the time that we pay for crude oil and other feedstock and the time that we sell the resulting refined petroleum, petrochemical and lube base oil products. As a result, the gross refining margin of our refinery, our aromatics and LAB product-to-feedstock margin and lube base oil products-to-feedstock margin are affected by changes in feedstock prices between the date that such feedstock is accounted for as inventory and the date of sale of the resulting refined

petroleum, aromatics and lube base oil products. See "*—Key Metrics by which We Measure Our Business Units—Key Metrics for Our Refining Business Unit—Gross Refining Margin*," "*—Key Metrics by which We Measure Our Business Units—Key Metrics for Our Aromatics and LAB Business Unit—Product-to-Feedstock Margin*" and "*—Key Metrics by which We Measure Our Business Units—Key Metrics for Our Lube Base Oil Business Unit—Product-to-Feedstock Margin*."

Changes in feedstock prices also have a direct impact on our working capital needs. In general, increases in feedstock prices lead to an increase in our working capital needs, and vice versa.

To the extent we are unable to pass on to the customers the increases in the prices of our feedstock, our results of operations may be adversely impacted.

Product Mix

Our business, financial condition, results of operation and prospects are affected by our product mix, which is the mix of products we produce to meet the demand from our customers and optimize our sales and margins. Our product mix is driven by the types, quantities and market pricing of various refined petroleum, petrochemical, lube base oil and other products purchased by our customers. While we are able to make alterations to the mix of products that we produce, we cannot, however, solely refine or produce products with the highest selling prices or margins, as the refining and production process produces a variety of different product types in varying volumes. In formulating our product mix, we seek to maximize our overall gross profit margin while producing a mix of products that will match customer demand as closely as possible for any given period.

Our refinery's configuration allows us to process a variety of crude oil compared to less complex plants, while still producing high-value, clean fuels. Our current configuration is oriented towards maximizing middle distillates (hydrocracking) and routing platformate, by-product from the refining, to produce aromatics products, which typically have higher margin spreads compared to refined petroleum products such as unleaded gasoline 95 and gasohol, at our aromatics and LAB plants. Our feedstock flexibility allows us to manage our product mix for downstream products more effectively, as we are able to tailor our feedstock mix to produce the desired composition for our product mix more optimally.

Generally, we believe our feedstock slate is more flexible than those of our competitors that have less complex refineries and plants. Our refinery and production units are therefore able to take advantage of more cost-effective feedstock, as well as adjust to changes in market conditions, and we are able to benefit from optimization of our product mix, leading to incremental gross margin opportunities for our refinery and production units. See "*Business—Competitive Strengths—Strong Track Record of Operational Excellence and High Utilization Rate."*

Production Volume and Utilization

Our results of operations are materially influenced by the degree to which we utilize our assets in order to achieve maximum production volumes. The utilization rate of our production facilities affects our operating expenses on a per barrel or per metric ton basis. Higher utilization rates help spread our fixed operating expenses over a larger amount of products which reduces our unit cost of production. Generally, assuming that we are able to source appropriately priced feedstock, we believe that maximizing the utilization and capacity of our refinery allows us to maintain positive margins and cash flows, even during downturns in industry cycles or customer demand, more readily than some of our competitors who have higher production costs. The utilization rate of our aromatics plant in turn depends on the utilization of our refinery, which supplies the platformate feedstock required by our aromatics plant. The utilization of our refinery and production plants also depend on the margins which we can obtain for our various products, as we can alter our product mix to take advantage of fluctuating margins of our various products to maximize our profit as a group. We intend to achieve growth in production volume by improving utilization rates within the defined availability of our assets, improving availability of our assets by minimizing planned and unplanned facility shutdowns and improving the capacity of our assets through debottlenecking projects.

Our utilization rate is also impacted by the actual plant shutdown time for scheduled and unscheduled maintenance, including the time needed to gradually reduce production for the shutdowns and to resume full production following the shutdown.

The number and length of turnarounds (scheduled outages of a unit in order to perform necessary inspections and testing to comply with industry regulations and standards and to permit us to carry out any maintenance activities that may be necessary) carried out in any given period can impact operating results. We routinely schedule major turnaround maintenance for each refinery and plant every three to six years for periods

of approximately 21 to 30 days and on a staggered basis to minimize impact on our overall production. When possible, we seek to schedule the timing of turnarounds to coincide with periods of the scheduled shutdowns of suppliers and periods of relatively lower demand for the products of the relevant units.

For a discussion of the production volumes and the utilization rates of our various business units and the details of our plant shutdowns, see "*Business—Our Business Units and Products"* and *"Business—Refinery and Plant Maintenance*," respectively.

Foreign Exchange Rate Fluctuations

Our results of operations may be affected by both the transaction effects and translation effects of foreign currency exchange rate fluctuations between the U.S. dollar and the Baht. Most of our production costs come from crude oil or raw material imports, which require payment in U.S. dollars. On the other hand, while we receive a large proportion of our revenues from our sales of petroleum and aromatics and LAB products in Baht, the prices of such products are also closely linked to U.S. dollars. Therefore, substantially all of our revenues and expenses are directly linked to U.S. dollars and our revenues and expenses which are denominated in U.S. dollars are translated into Baht for inclusion in our financial statements. Variations in the value of the Baht can also affect profitability because of time differences for cost and sales transactions. Depreciation in the value of the Baht against the U.S. dollar tends to have a beneficial effect on our gross refining margins and product-to-feedstock margins. Conversely, appreciation in the value of the Baht against the U.S. dollar tends to have a detrimental effect on our gross refining margins and product-to-feedstock margins.

We engage in hedging activities, including forward contracts and currency swaps, to manage exposure to fluctuations in foreign currencies on our financial results. Our hedging activities are designed to reduce, but do not eliminate, the effects of foreign currency fluctuations. Factors that could affect the effectiveness of our hedging activities include accuracy of sales forecasts, volatility of currency markets and the availability of hedging instruments. We also incur U.S. dollar indebtedness to provide an indirect accounting hedge against the appreciation of the Baht against the U.S. dollar. For example, the gain resulting from the translation of our U.S. dollar indebtedness into Baht as the Baht appreciates against the U.S. dollar mitigates the impact on our gross refining margins and product-to-feedstock margins of an appreciation of the Baht.

Critical Accounting Estimates and Judgments

We have prepared our financial statements and financial information contained elsewhere in this Offering Memorandum in accordance with TFRS. Preparation of our financial statements requires our management to make estimates and judgments that affect the reported amount of our assets, liabilities, revenue and expenses, as well as the disclosure of our contingent assets and liabilities. Our management continually evaluates the estimates and judgments used in preparing the financial statements and financial information which are based on the management's historical experience and other factors, including the expectations of future events that are believed to be reasonable under the circumstances.

Our actual results may differ significantly under different assumptions or conditions. The accounting policies that we believe are the most critical to a full understanding and evaluation of our reported financial results are discussed below.

Allowance for diminution in value of inventories

Net realisable value is the estimate of the selling price in the ordinary course of business, less applicable variable selling expenses. Allowance is made, where necessary, for obsolete, slow-moving and defective inventories.

Goodwill

The initial recognition and measurement of goodwill, and subsequent impairment testing, require management to make estimates of cash flows to be generated by the asset or the cash-generating units and to choose a suitable discount rate in order to calculate the present value of those cash flows.

Investment in associate

Our management determined that the Group has significant influence on CAP and classified investment as an investment in associate, even though the Group only holds less than 20% of shares and voting rights. This is because we hold 15% of the shares in CAP through our subsidiary, TII. We have delegated representatives to

serve as the commissioners of CAP's board of commissioners and executives to serve as the members of CAP's board of directors. In addition, we also entered into the Feedstock Sale and Purchase Agreement with CAP.

Lease

Determining the lease term with extension and termination options - The Group as a lessee

In determining the lease term, our management is required to exercise judgement in assessing whether the Group is reasonably certain to exercise the option to extend or terminate the lease consideration all relevant facts and circumstances that create an economic incentive for the Group to exercise either the extension or termination option.

Estimating the incremental borrowing rate – The Group as a lessee

The Group cannot readily determine the interest rate implicit in the lease, therefore, our management is required to exercise judgement in estimating its incremental borrowing rate to discount lease liabilities. The incremental borrowing rate is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment.

Post-employment benefits under defined benefit plans and other long-term employee benefits

The obligation under the defined benefit plan and other long-term employee benefits plans is determined based on actuarial techniques. Such determination is made based on various assumptions, including discount rate, future salary increases rate, mortality rate and staff turnover rate.

Key Metrics by which We Measure Our Key Business Units

Key Metrics for Our Refining Business Unit

Capacity Utilization Rate

Our capacity utilization rate measures the utilization of our refinery and is the ratio of the crude oil feedstock input of our refinery against the refinery's total nameplate capacity of crude oil. Our capacity utilization rate is impacted by the potential incremental profitability of additional production and the availability of our production facilities. Our capacity utilization rate also takes into account shutdown time for scheduled and unscheduled maintenance, which includes the time necessary to gradually reduce production for the shutdowns and to recover to full production following the shutdowns. Our production is generally not subject to fluctuating demand and we generally seek to operate our refinery at its full capacity, as we are able to sell a large portion of our refined petroleum products from our refinery to OR under long-term offtake agreements. For the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, 33.3%, 33.8%, 32.1%, 32.1% and 33.6% of our total sales volume for our refinery products was derived from sales to OR, respectively. Our capacity utilization rates vary mainly due to periods of maintenance shutdowns and our plant optimization.

Our capacity utilization rate affects our operating expenses on a per barrel or per metric ton basis. Higher capacity utilization rates of our refinery reduce the unit cost of production as we are able to spread our fixed operating expenses over a larger amount of crude oil and other feedstock intake.

As of September 30, 2025, our refinery had a total nameplate capacity of approximately 275,000 barrels of crude oil per day. The capacity utilization rate of our refinery was 106.8%, 111.5%, 110.5%, 109.6% and 102.8% for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, respectively. See "*—Gross Refining Margin*."

Gross Refining Margin

Similar to other oil refineries, we measure the financial performance of our refinery operations with reference to our refining margins, as revenues from, and costs of, our refining operations do not necessarily, when viewed individually, indicate our financial performance. Prices for crude oil and refined petroleum products are subject to frequent and significant fluctuations. As a result, a refinery's revenues and cost of goods sold can vary significantly from period to period, even when the volume of crude oil purchased and refined petroleum products sold remain relatively constant. A refinery's revenues depend on refined petroleum product prices, currency

fluctuations and sales volume. The cyclicality of refined petroleum product prices results in high volatility of revenues from refining operations. Consequently, revenues from refining operations, viewed alone, are not indicative of an oil refining company's financial performance. Earnings and cash flow from refining are largely driven by gross refining margin, and a successful refinery strives to maintain its profit margins from year to year, notwithstanding fluctuations in the prices of crude oil and refined petroleum products.

Similar to other oil refineries, we use gross refining margin, which is quoted in U.S. dollars and expressed on a per barrel basis, to assess the margin for refining and converting a barrel of crude oil or feedstock into refined petroleum products. The gross refining margin for a given period is (i) the difference between (a) the value of refined products produced for such period and (b) the landed cost of crude oil and other feedstock, including the costs of energy used in the refining process, (ii) divided by the total intake of our refinery feedstock for such period.

Our gross refining margin has been and will continue to be affected by numerous factors including those listed below, some of which are beyond our control.

- *Fluctuations in the price of crude oil and refined petroleum products*. The difference between the cost of our crude oil feedstock and the prevailing global prices for refined petroleum products is the primary factor that impacts our gross refining margins. Prices for crude oil are subject to frequent fluctuations depending on the prevailing global prices for crude oil. Further, while crude oil costs in general are a function of supply and demand, there are many types and grades of crude oil and their relative prices vary depending on various factors, including physical properties and availability. Therefore, even if the volume of crude oil we have purchased remains constant, our costs of production may vary significantly from time to time. The prices for refined petroleum products are also subject to frequent and significant fluctuations. As a result, our revenue from refined petroleum products will vary over time even if our sale volume remains constant, resulting in corresponding variations in our gross refining margins. Prevailing global prices for crude oil may fluctuate in the same or different direction as the prevailing global prices for refined petroleum products.

- *Complexity and utilization of our refinery*. The complexity of the refinery's design and the utilization rate impact the gross refining margin. Thus, a complex refinery, such as ours, that can produce a higher percentage of the higher value light products and middle distillates from a barrel of crude oil will generally have a higher gross refining margin than a less complex facility. Higher capacity utilization rates reduce the unit cost of production and increase our gross refining margin. Our complex plant can process a variety of lighter/sweeter or heavier/sour crude oil. Fluctuations in the price of these feedstock may mean that at any time, it may be more profitable to process one particular type of feedstock. We can modify the proportion of feedstock we purchase (and process) to take advantage of such fluctuations to maximize our gross refining margin.

- *Source of feedstock and destination of products*. Gross refining margin is also affected by where the crude oil and other feedstock are sourced in addition to whether the refined petroleum products are ultimately sold domestically or abroad. For sourcing of crude oil and other feedstock, refineries located nearer the sources of their preferred crude oil and other feedstock would incur less cost for the transport of such feedstock. For product offtake, refineries located nearer the consumers generally incur less cost for product transportation and handling than those located further away. Transportation costs associated with the purchase of feedstock and sale of products have an impact on our gross refining margins.

- *Inventory accounting*. Our gross refining margins are affected by the way we account for the cost of our inventory. We maintain an inventory of crude oil and refined petroleum products, which we account for at the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs to complete and to make the sale.

- *Other factors*. Our gross refining margins are affected by other factors as well, including sales volumes which are influenced by factors such as demand for our products and utilization for our production facilities, fluctuations in foreign exchange rates, our ability to purchase the optimal blend of crude oil and other feedstock, utilities and energy costs, and our ability to produce products that match customer demand or to make special grade products for which the market is willing to pay a premium.

The average per barrel gross refining margins for our refinery were US$13.0, US$8.3, US$3.8, US$4.1 and US$3.5 for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, respectively. The decrease in our gross refining margin for the year ended December 31, 2023 compared to that for the year ended December 31, 2022 was largely attributable to significant declines in average selling prices. The decrease in our gross refining margin for the year ended December 31, 2024 compared to that for the year ended December 31, 2023 was due to a decline in gasoline, jet/kero, and diesel spreads over Dubai, resulting from increased supply from new refineries commencing operations. However, the contribution from the aromatic business rose due to increased benzene spread over unleaded gasoline 95, driven by lower benzene inventories in China during the first three quarters of 2024. Meanwhile, the contribution from the LAB business declined from reduced demand in the country. Additionally, the contribution from the lube business also dropped. The decrease in our gross refining margin for the nine months ended September 30, 2025 compared to that for the nine months ended September 30, 2024 was mainly attributable to the narrowing spreads between gasoline, jet/kero, and gasoil prices over Dubai crude price. See "*—Product Spread*" below.

The following table shows our gross refining margin and capacity utilization rates for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025:

	For the year ended December 31,			For the nine months ended September 30,	
	2022	**2023**	**2024**	**2024**	**2025**
Gross Refining Margin[1] (US$ per barrel)	13.0	8.3	3.8	4.1	3.5
Capacity Utilization Rate	106.8%	111.5%	110.5%	109.6%	102.8%

Note:

(1) Also known as Accounting GRM, which includes stock gain/loss.

Product Spread

We evaluate and monitor the profitability of our refined petroleum products by referring to the product spreads, which are the differences between average market benchmark prices of key refined petroleum products as measured against the market price of Dubai crude oil, and employing such data to determine and manage our product mix.

The price of Dubai crude oil in 2024 averaged US$79.6 per barrel, decreasing from the average price of 2023 of US$82.2 per barrel. The lower average crude price reflected the lower-than-expected demand for crude from the major consuming countries, particularly China and the United States.

The table below sets forth certain refined petroleum product prices to Dubai crude oil price spreads for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025.

	For the year ended December 31,			For the nine months ended September 30,	
	2022	**2023**	**2024**	**2024**	**2025**
	(in US$ per barrel)				
Product Spread[1]					
Diesel price[2]—Dubai crude oil price	39.2	24.3	16.6	17.2	16.2
Jet price—Dubai crude oil price	30.5	22.5	15.6	15.8	14.5
Unleaded gasoline 95 price—Dubai crude oil price	18.7	16.7	13.4	14.0	9.9
Fuel oil price[3]—Dubai crude oil price	(14.2)	(10.2)	(5.6)	(6.7)	(1.9)

Sources: Saudi Aramco, Platts

Notes:

(1) Calculated by subtracting the average monthly feedstock benchmark price for that period from the average monthly product market benchmark price for the year.

(2) Diesel prices represented are gasoil 0.001% sulfur grade prices.

(3) Fuel oil prices represented are fuel oil 180 CST 3.5% sulfur grade prices. While the margin for fuel oil is negative when compared to crude oil prices, fuel oil is produced only as a by-product of our refining process, which is focused on producing the more profitable diesel, jet and gasoline.

Nelson Complexity Index

The Nelson Complexity Index measures a refinery's upgrading capability, with the ratio representing the complexity of barrels divided by crude distillation nameplate capacity. A refinery higher on the Nelson Complexity Index is value higher relative to its peers due to its ability to produce more value-added products. As of September 30, 2025, our refinery's internally estimated Nelson Complexity Index rating was 9.8. We expect the CFP to improve the average complexity of our refinery from 9.8 to 12.0, based on our internal estimates using the methodology of the Nelson Complexity Index once it commences commercial operations.

Key Metrics for Our Aromatics and LAB Business Unit

Capacity Utilization Rate

Our aromatics and LAB plants are fully integrated with our refinery. As of September 30, 2025, our aromatics plant had a production nameplate capacity of approximately 527,000 tons of paraxylene per year, approximately 259,000 tons of benzene per year and approximately 52,000 tons of mixed xylenes per year. Our LAB plant had a nameplate capacity of approximately 160,600 tons of LAB per year.

We measure the capacity utilization rate of our aromatics and LAB plants based on our plants' combined realized output, divided by their nameplate capacities. Operational disruptions and shutdowns, both planned and unplanned, may result in a reduction in our capacity utilization rate.

The capacity utilization rate of our aromatics unit was 71.3%, 72.7%, 79.8%, 79.7% and 64.0%, while the capacity utilization rate for our LAB unit was 118.5%, 123.1%, 123.9%, 123.1% and 105.3% for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, respectively.

- The slight increase in our aromatics plant's capacity utilization rate for the year ended December 31, 2023 compared to that for the year ended December 31, 2022 was attributable to our internal optimization at Sriracha Complex. The increase in our aromatics plant's capacity utilization rate for the year ended December 31, 2024 compared to the year ended December 31, 2023 was attributable to our internal optimization at Sriracha Complex. The decrease in our aromatics plant's capacity utilization rate for the nine months ended September 30, 2025 compared to the nine months ended September 30, 2024 was attributable to a scheduled major turnaround at our main production units in the third quarter of 2025. Thus, as an integrated refinery, we shifted our production to produce products with higher margin.

- The increase in our LAB plant's capacity utilization rate for the year ended December 31, 2023 compared to that for the year ended December 31, 2022 was attributable to the capacity expansion in the second quarter of 2023 to maximize production capacity up to 147.8 KTA. The slight increase in our LAB plant's capacity utilization rate for the year ended December 31, 2024 compared to the year ended December 31, 2023 was attributable to our internal optimization. The decrease in our LAB plant's capacity utilization rate for the nine months ended September 30, 2025 compared to the nine months ended September 30, 2024 was attributable to a scheduled major turnaround at our main production units in the third quarter of 2025.

Product-to-Feedstock Margin

As revenues from, and costs of, our aromatics and LAB production operations do not necessarily, when viewed individually, indicate our financial performance, we assess the profitability of our aromatics and LAB plants by their product-to-feedstock margin. The product-to-feedstock margin for a given period is (i) the difference between (a) the total revenue from the sale of petrochemical products and by-products for such period and (b) the total cost of our petrochemical feedstock, which includes costs of transportation of such feedstock, (ii) divided by the total volume of feedstock used for petrochemical products for such period.

The average per platformate ton product-to-feedstock margins for our aromatics plant were US$12.2, US$49.7, US$66.5, US$70.4 and US$43.6 for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, respectively. The increase in our petrochemical product-to-feedstock margin for the year ended December 31, 2023 compared to that for the year ended December 31, 2022 was attributable to better aromatics spreads from lower unleaded gasoline 95 price after concerns about Russia-Ukraine tensions have lessened. The increase in our product-to-feedstock margin for the year ended December 31, 2024 compared to the year ended December 31, 2023 was primarily driven by a significant increase in benzene

spread over unleaded gasoline 95. The decrease in our product-to-feedstock margin for the nine months ended September 30, 2025 compared to the nine months ended September 30, 2024 was mainly attributable to weakening in spreads of paraxylene, benzene and toluene over unleaded gasoline 95. See "*—Product-to-Feedstock Market Price Spread*" below.

The following table shows our aromatics unit's average product-to-feedstock margin and aromatics and LAB capacity utilization rates for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025 determined on a non-consolidated basis.

	For the year ended December 31,			For the nine months ended September 30,	
	2022	**2023**	**2024**	**2024**	**2025**
Average Aromatics Product-to-Feedstock Margin (US$ per ton)[(1)]	12.2	49.7	66.5	70.4	43.6
Aromatics Utilization Rate	71.3%	72.7%	79.8%	79.7%	64.0%
LAB Utilization Rate	118.5%	123.1%	123.9%	123.1%	105.3%
GIM contribution from Aromatics and LAB (US$ per barrel)[(2)]	0.4	0.9	1.2	1.3	0.8

Notes:

(1) Calculated by dividing the difference between (a) the total revenue from the sale of aromatics products and by-products for such period and (b) the total cost of our aromatics feedstock, which includes costs of transportation of such feedstock, by the total volume of feedstock used to produce aromatics products, for the year.

(2) Calculated by dividing gross profit from the particular business segment by the total integrated intake.

Product-to-Feedstock Market Price Spread

We evaluate and monitor the profitability of aromatics products by referencing the product-to-feedstock market price spreads, which are the differences between average market benchmark prices of key aromatics products as measured against the market price of MOPS based unleaded gasoline 95, and employing such data to determine and manage our product mix.

The table below sets forth the prices of certain aromatics products to published benchmark gasoline price spreads for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025.

	For the year ended December 31,			For the nine months ended September 30,	
	2022	**2023**	**2024**	**2024**	**2025**
Product-to-Feedstock Market Price Spread[(1)]					
Paraxylene price (CFR Taiwan) — Unleaded gasoline 95	124.3	198.3	171.5	189.8	146.2
Benzene price (FOB Korea) — Unleaded gasoline 95	49.7	58.0	193.0	199.2	85.7
Toluene price (FOB Korea) — Unleaded gasoline 95	(21.4)	47.8	49.3	60.5	9.5

Source: Platts

Note:

(1) Calculated by subtracting the average monthly feedstock benchmark price for that period from the average monthly product market benchmark price for the relevant year or year, as applicable.

Key Metrics for Our Lube Base Oil Business Unit

Capacity Utilization Rate

Our capacity utilization rate is the measure of our lube base oil plants' utilization and is the ratio of our plants' combined realized output of our products, including lube base oil, bitumen, TDAE, slack wax, extract and by product of gasoil blend, divided by their nameplate capacity. Our capacity utilization rate is impacted by the potential incremental profitability of additional production and the availability of our production facilities. Our capacity utilization rate also takes into account shutdown time for scheduled and unscheduled maintenance, which includes the time necessary to gradually reduce production for the shutdowns and to recover to full production following the shutdowns.

Our capacity utilization rate affects our operating expenses on a per metric ton basis. Higher capacity utilization rates of our lube base oil plants reduce the unit cost of production as we are able to spread our fixed operating expenses over a larger amount of our lube base oil product output. The main domestic customers for our lube base oil products include OR, SFC Excellent and Bangchak.

As of September 30, 2025, our lube base oil plants had a nameplate capacity of approximately 267,015 tons per year of lube base oil, approximately 350,000 tons per year of bitumen and approximately 67,520 tons per year of TDAE. The capacity utilization rate of our lube base oil plants was 76.8%, 79.0%, 80.2%, 79.4% and 70.8% for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025. The increase in our lube base oil plant's capacity utilization rate for the year ended December 31, 2023 from the year ended December 31, 2022 was due to group optimization. The increase in our lube base oil plant's capacity utilization rate for the year ended December 31, 2024 from that of the year ended December 31, 2023 was due to group optimization. The decrease in our lube base oil plant's capacity utilization rate for the nine months ended September 30, 2025 from that of the nine months ended September 30, 2024 was due to planned major turnaround in the third quarter of 2025 which temporarily impacted the capacity utilization rate.

Product-to-Feedstock Margin

As revenues from, and costs of, our lube base oil production operations do not necessarily, when viewed individually, indicate our financial performance, we assess the profitability of our lube base oil plants by their product-to-feedstock margin. The product-to-feedstock margin for a given period is (i) the difference between (a) the total revenue from the sale of lube base oil products and by-products for such period and (b) the total cost of our lube base oil feedstock, which includes costs of transportation of such feedstock, (ii) divided by the total volume of feedstock used for lube base oil products for such period.

The average per MOPS based HSFO ton product-to-feedstock margins for our lube base oil plants were US$154.0, US$117.9, US$96.8, US$82.6 and US$137.9 for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, respectively. The decrease in our average lube base oil product-to-feedstock margin from the year ended December 31, 2023 compared to that for the year ended December 31, 2022 was attributable to lower base oil spread. The decrease in our average lube base oil product-to-feedstock margin from the year ended December 31, 2024 compared to that for the year ended December 31, 2023 was attributable to continued pressure on product spreads. The increase in our average lube base oil product-to-feedstock margin from the nine months ended September 30, 2025 compared to that for the nine months ended September 30, 2024 was attributable to improved spreads of base oil and bitumen over fuel oil. See "*—Product-to-Feedstock Market Price Spread*" below.

The following table shows our lube base oil product-to-feedstock margin and capacity utilization rates for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025 determined on a non-consolidated basis.

	For the year ended December 31,			For the nine months ended September 30,	
	2022	**2023**	**2024**	**2024**	**2025**
Average Product-to-Feedstock Margin (US$ per ton)[(1)]	154.0	117.9	96.8	82.6	137.9
Capacity Utilization Rate.....	76.8%	79.0%	80.2%	79.4%	70.8%
GIM contributed from Lube Base Oil[(2)].....	1.1	0.7	0.6	0.5	1.0

Notes:

(1) Calculated by dividing the difference between (a) the total revenue from the sale of lube base oil products and by-products for such period and (b) the total cost of our lube base oil feedstock, which includes costs of transportation of such feedstock, by the total volume of feedstock used for lube base oil products, for the relevant year.

(2) Calculated by dividing gross profit from the business segment by the total integrated intake.

Product-to-Feedstock Market Price Spread

We evaluate and monitor the profitability of lube base oil products by reference to the product-to-feedstock market price spreads, which are the differences between average market benchmark prices of key lube base oil products as measured against the market price of MOPS based HSFO, and employing such data to determine and manage our product mix.

The table below sets forth the prices of certain lube base oil products of various grades to MOPS based HSFO price spreads and the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025.

	For the year ended December 31,			For the nine months ended September 30,	
	2022	2023	2024	2024	2025
			(in US$ per ton)		
Product-to-Feedstock Market Price Spread[1]					
500SN (Ex-Tank Singapore)—HSFO[2]	677.1	547.7	535.6	524.8	599.1
150SN (Ex-Tank Singapore)—HSFO[2]	473.2	440.7	393.1	400.5	379.7
150BS (Ex-Tank Singapore)—HSFO[2]	836.2	745.5	841.5	828.1	931.0
Bitumen (FOB Asia)—HSFO[2]	15.2	17.4	(41.9)	(54.7)	(20.9)

Sources: ICIS, Argus, Platts

Notes:

(1) Calculated by subtracting the average monthly feedstock benchmark price for that period from the average monthly product market benchmark price for the relevant year.

(2) HSFO prices represented are fuel oil 180 CST 3.5% sulfur grade prices.

Key Metrics for Our Group

Gross Integrated Margin

Our three core business units, oil refining, aromatics and LAB production and lube base oil production are integrated, which allows us to achieve a higher profit margin on each barrel of feedstock processed. Therefore, we also use gross integrated margin, which is quoted in U.S. dollars and expressed on a per barrel of feedstock basis, to assess the margin for refining and converting a barrel of feedstock into our various products, including refined petroleum products, aromatics and LAB products and lube base oil and related by-products. The gross integrated margin for a given period is (i) the difference between (a) the value of refined petroleum products, aromatics and LAB products and lube base oil and related by-products produced for such period and (b) the landed cost of crude oil and other feedstock, including the costs of energy used in the refining and productions processes, (ii) divided by the total intake of our integrated feedstock for such period.

The following table shows (i) our adjusted gross profit or loss from our refinery, (ii) our adjusted gross profit or loss from our aromatics and LAB unit, and (iii) our adjusted gross profit or loss from our lube base oil unit, as well as the gross integrated margin for our Group, which is calculated on the basis of the abovementioned gross margins, for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025.

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024	2025	
			(in millions, except otherwise indicated)				
	THB	THB	THB	US$	THB	THB	US$
Certain Operational Information:							
Adjusted gross profit (loss)[1] from							
Oil refining	48,971.9	32,548.8	15,029.1	464.9	12,085.6	8,989.3	278.0
Aromatics and LAB	1,818.1	3,727.4	4,989.5	154.3	3,924.6	2,030.8	62.8
Lube base oil	4,023.9	3,080.6	2,506.1	77.5	1,430.0	2,583.3	79.9
Integrated profit (loss)							
Integrated intake (thousand bpd)[2]	296.9	310.2	306.9	—	304.7	284.2	—
Average foreign exchange rate (THB/US$)[3]	35.2	35.0	35.4	—	35.9	33.3	—
Gross integrated margin (US$ per barrel)[4]	14.3	9.8	5.6	—	5.8	5.3	—
Integrated cash cost (US$ per barrel)[5]	2.8	2.6	2.5	2.5	2.3	2.8	2.8

Notes:

(1) Adjusted gross profit (loss) is the sum of gross profit or loss under TFRS, non-feedstock related cost of goods sold and service rendered, depreciation and operating expenses, foreign currency exchange gains or losses, net realizable value adjustments and other income.

(2) Integrated intake, measured in thousands of barrels per day, is calculated based on our oil refinery's crude oil and feedstock intake, our petrochemical plants' feedstock import and our lube base oil refinery's long residue import.

(3) Average foreign exchange rate is calculated based on the daily average selling rate of foreign exchange published by the BOT.

(4) Gross integrated margin is calculated by taking the integrated profit (loss), as divided by the total integrated intake, and further adjusted to take into account the foreign exchange rates.

(5) Integrated cash cost is a measure of operating expenses and includes plant operating expenses, selling expenses, administrative expenses and finance costs excluding non-recurring items. Our integrated cash cost comprised operating expenses of US$2.8/bbl, US$2.6/bbl, US$2.5/bbl, US$2.3/bbl and US$2.8/bbl and finance costs of US$1.9/bbl, US$1.9/bbl, US$1.9/bbl, US$1.7/bbl and US$2.2/bbl for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, respectively.

As a measure of our operating performance, we believe that the most directly comparable TFRS measure to adjusted gross profit is gross profit.

The following tables show (i) our adjusted gross profit or loss from our refinery, (ii) our adjusted gross profit or loss from our aromatics and LAB unit, and (iii) our adjusted gross profit or loss from our lube base oil unit, respectively, for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025 and reconciles our gross profit under TFRS to our abovementioned adjusted gross profit or loss for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025.

Oil refining

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024	2025	
				(in millions of)			
	THB	THB	THB	US$	THB	THB	US$
Revenue from sales[1]	568,677.3	501,896.2	497,530.5	15,389.1	379,100.8	300,037.8	9,280.5
Cost of sales of goods	(526,994.3)	(477,488.2)	(490,182.4)	(15,161.8)	(374,777.0)	(298,442.8)	(9,231.1)
Gross profit (loss)	41,683.0	24,408.0	7,348.1	227.3	4,323.8	1,595.0	49.3
Revenue Hedging[2]	271.1	224.9	300.9	9.3	220.7	336.5	10.4
Depreciation and amortization[3]	3,765.9	3,318.5	3,348.6	103.6	2,498.6	2,318.5	71.7
Refinery operating expenses[4]	3,516.5	4,488.5	5,011.6	155.0	3,141.7	4,360.3	134.9
Gain/(loss) from foreign exchange	89.7	15.7	(1,013.5)	(31.3)	(363.4)	152.1	4.7
Adjustments of feedstock and products to net realizable value	(51.1)	20.2	(105.7)	(3.3)	2,048.3	207.1	6.4
Non-feedstock related cost of goods sold [5]	(311.4)	66.9	132.0	4.1	210.7	15.5	0.5
Business Restructuring[6]	–	–	–	–	–	–	–
Other income[7]	8.2	6.1	7.1	0.2	5.2	4.3	0.1
Adjusted gross refining profit (loss)	48,971.9	32,548.8	15,029.1	464.9	12,085.6	8,989.3	278.0

Notes:

(1) Revenue from sales by including subsidy from oil fuel fund.

(2) In 2021, we adopted a new accounting policy in accordance with TFRS 9. Both our finance cost and revenue are dollar-linked, and we record the impact of foreign exchange fluctuation to our revenue to other comprehensive income.

(3) Depreciation and amortization of the oil refinery.

(4) Including direct labor costs and land lease costs.

(5) Including selling expenses such as freight costs and pipeline expenses.

(6) We restructured our power business in 2020 and Thaioil Power was consequently absorbed into our refinery business.

(7) Tax compensation for exported products.

Aromatics and LAB

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024	2025	
				(in millions of)			
	THB	THB	THB	US$	THB	THB	US$
Revenue from sales	88,937.5	78,974.9	80,529.0	2,490.8	62,565.7	42,328.5	1,309.3
Cost of sales of goods	(89,488.9)	(77,386.8)	(77,699.6)	(2,403.3)	(60,188.3)	(41,809.0)	(1,293.2)
Gross profit	(551.4)	1,588.1	2,829.4	87.5	2,377.4	519.5	16.1
Depreciation and amortization[1]	1,248.7	1,117.5	1,122.2	34.7	840.7	824.4	25.5
Plant operating expenses[2]	973.7	964.1	1,005.6	31.1	736.8	751.0	23.2
Non-feedstock related cost of goods sold [3]	(346.3)	(375.7)	(383.7)	(11.9)	(308.5)	(220.3)	(6.8)
Other income[4]	165.5	163.5	153.6	4.8	77.2	17.0	0.5
Intra-Group sales of utilities to oil refinery[5]	327.9	269.7	262.3	8.1	200.9	139.2	4.3
Adjusted gross profit from Aromatics and LAB	1,818.1	3,727.4	4,989.5	154.3	3,924.6	2,030.8	62.8

Notes:

(1) Depreciation and amortization of Aromatics and LAB plants.

(2) Including direct labor costs.

(3) Including selling expenses such as freight costs and surveyor's fees and storage fees.

(4) Including tax compensation for exported products and derivatives gain/loss from commodity hedging.

(5) Including sales of steam and condensate water.

Lube Base Oil Refinery

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024	2025	
				(in millions)			
	THB	THB	THB	US$	THB	THB	US$
Revenue from sales	27,773.5	25,315.0	25,737.7	796.1	19,140.7	15,753.8	487.3
Cost of sales of goods	(24,376.3)	(22,767.9)	(23,849.7)	(737.7)	(18,174.4)	(13,648.7)	(422.2)
Gross profit	3,397.2	2,547.1	1,888.0	58.4	966.3	2,105.1	65.1
Depreciation and amortization[1]	142.8	194.7	202.8	6.3	153.9	164.6	5.1
Plant operating expenses[2]	534.4	382.9	461.3	14.3	336.7	336.8	10.4
Non-feedstock related cost of goods sold[3]	(94.3)	(96.5)	(103.4)	(3.2)	(72.1)	(66.4)	(2.1)
Intra-Group sales of utilities to oil refinery[4]	43.8	52.4	57.5	1.8	45.2	43.1	1.3
Adjusted gross profit from lube base oil	4,023.9	3,080.6	2,506.1	77.5	1,430.0	2,583.3	79.9

Notes:

(1) Depreciation of the lube base oil plant.

(2) Including direct labor costs.

(3) Including selling expenses such as freight costs.

(4) Including hot oil and condensate water.

Integrated Cash Cost

The integration of our three core business units also allows us to share our costs and lower our cost required to process each barrel of feedstock. Therefore, we also use our "integrated cash cost," which is measured on a per barrel of feedstock basis, to assess the cost required to refine and convert a barrel of feedstock into our various products, including refined petroleum products, aromatic products and lube base oil and related by-products. Our integrated cash cost for a given period is the aggregate of our various operating costs, including plant operating expenses, selling expenses, administrative expenses and finance costs, divided by the total volume of integrated feedstock used in our operations for such period.

Our average integrated cash costs were US$2.8/bbl, US$2.6/bbl, US$2.5/bbl, US$2.3/bbl and US$2.8/bbl, comprising operating expenses of US$1.9/bbl, US$1.9/bbl, US$1.9/bbl, US$1.7/bbl and US$2.2/bbl, and finance costs of US$0.9/bbl, US$0.7/bbl, US$0.6/bbl, US$0.6/bbl and US$0.6/bbl for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, respectively. Generally, non-recurring items are excluded from the calculation of integrated cash cost. We generally maintain our average integrated cash cost for the whole year at almost the same level each year. In 2023 and 2024, our average integrated cash costs slightly decreased because of higher integrated intake during the year due to no major maintenance shutdown.

Description of Certain Components of Our Results of Operations

Revenue from Sales

Our revenue from sales comprises revenue from sales of our refined petroleum products such as LPG, unleaded gasoline, platformate, diesel, jet fuel and fuel oil from our refinery, sales of our aromatics and LAB products comprising paraxylene, benzene, and LAB, sales of our lube base oil products comprising lube base oil, bitumen, TDAE, slack wax and extract, sales of electricity generated by our power generation plants, sales of our solvent products, sales of alternative energy products, including ethanol, starch and biogas and services provided by our energy services business unit.

Our sale prices for our refined petroleum products comprising revenue from sales of goods also include applicable excise and municipal taxes, which are pass-through items, and are paid to the relevant government authorities. Our service fees comprising our revenue from rendering of services exclude applicable taxes.

The following table sets out the revenue from sales of our various business units for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025.

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024	2025	
				(in millions)			
	THB	THB	THB	US$	THB	THB	US$
Business Unit							
Oil Refining	544,791.7	492,054.5	486,610.4	15,051.4	368,755.6	299,116.9	9,252.0
Aromatics and LAB	88,937.5	78,974.9	80,529.0	2,490.8	62,565.7	42,328.5	1,309.3
Lube Base Oil Refinery	27,773.5	25,315.0	25,737.7	796.1	19,140.7	15,753.8	487.3
Power Generation[1]	11,715.9	12,787.5	11,825.5	365.8	9,030.9	8,273.0	255.9
Solvent	22,585.3	19,381.2	19,724.2	610.1	15,185.6	12,171.7	376.5
Ethanol	1,796.1	1,879.0	1,681.4	52.0	1,334.9	763.0	23.6
Olefins	2.0	4.7	4.5	0.1	-	-	-
Others	6,646.7	7,068.0	7,350.4	227.4	5,246.5	5,015.5	155.1
Eliminations[2]	(198,545.5)	(178,062.6)	(177,606.2)	(5,493.5)	(137,367.7)	(98,017.7)	(3,031.8)
Total revenue from sales	**505,703.2**	**459,402.2**	**455,856.9**	**14,100.1**	**343,895.2**	**285,404.7**	**8,827.9**

Notes:

(1) Does not include GPSC income, which was reflected as share of profit of joint ventures and associates. The Company has completed the sale of GPSC shares on June 7, 2022. The Company currently holds 281,972,937 shares in GPSC, equivalent to 10.0% of GPSC's total shares and GPSC is no longer an associate of the Company.

(2) Eliminations relate to intra-Group sales.

Subsidy from Oil Fuel Fund

As required by our regulators, we collect and/or receive subsidies from our customers and submit it to our regulator and/or regulators for certain petroleum products. Subsidy rates vary from product to product and are periodically changed. Regulators use oil fuel fund to encourage and discourage the use of certain types of fuel and reduce impact of oil price volatility to end customers.

Cost of Sales of Goods

Our cost of sales of goods principally comprises (i) the cost of our raw materials such as crude oil, natural gas and other feedstock, which includes excise and municipal taxes and oil fund contributions on domestic sales revenues for our refined petroleum products, (ii) production expenses, which include internally produced fuels, purchased energy and other production expenses, and (iii) our operating costs in relation to our production support facilities such as our SBM and jetty services for plants in the Sriracha Complex as well as our operating costs in relation to our maintenance and engineering services and our safety, occupational health and environmental services. Our other expenses include depreciation of plant assets, utilities, direct labor costs and expenses in relation to shutdowns of our plants (other than major turnarounds). Expenses relating to major turnarounds of our refinery and plants are recorded as amortization expenses, which are also included in our cost of sales of goods and services.

The following table sets forth the cost of sales of goods for each business unit for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025.

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024	2025	
				(in millions of)			
	THB	THB	THB	US$	THB	THB	US$
Business Unit							
Oil Refining	526,994.3	477,488.2	490,182.4	15,161.8	374,777.0	298,442.8	9,231.1
Aromatics and LAB	89,488.9	77,386.8	77,699.6	2,403.3	60,188.3	41,809.0	1,293.2
Lube Base Oil Refinery	24,376.3	22,767.9	23,849.7	737.7	18,174.4	13,648.7	422.2
Power Generation	10,065.2	10,402.4	9,515.9	294.3	7,284.7	6,662.3	206.1
Solvent	20,801.6	17,816.7	17,998.7	556.7	13,867.1	10,985.1	339.8
Ethanol	1,624.5	1,830.9	1,676.0	51.8	1,266.8	728.0	22.5
Olefins	–	–	–	–	–	–	–
Others	6,701.7	6,780.8	6,996.8	216.4	4,987.2	4,776.1	147.7
Eliminations[1]	(198,915.5)	(178,310.3)	(177,908.9)	(5,502.9)	(137,713.2)	(98,196.2)	(3,037.3)
Total cost of sales of goods	**481,137.0**	**436,163.4**	**450,010.2**	**13,919.3**	**342,832.3**	**278,855.8**	**8,625.3**

Note:

(1) Eliminations relate to intra-Group sales.

Dividend Income

Our dividend income represents dividend income from investments in other related parties.

Net Gain (Loss) from Financial Instruments

Our net gain (loss) on financial instruments comprises gains or losses from our financial derivatives, which include commodity forward contracts entered into for purposes of hedging our exposure to commodity price fluctuations, foreign exchange forwards and interest rate swaps.

Gain (Loss) on Exchange

Our gain (loss) on exchange comprises both actual realized and unrealized gains (losses) from sales and purchases made in foreign currencies, costs and expenses paid in foreign currencies, and payments of interest in foreign currencies, as well as gains arising from the revaluation of our foreign currency assets and liabilities in line with fluctuations in exchange rates.

Gain (Loss) on Repurchase of Debentures

Our gain (loss) on repurchase of debentures comprises realized gains (losses) from the repurchase and cancellation of debentures issued by the Group.

Other Income

Our other income comprises interest income, export tax subsidy, revenues from services provided to subsidiary companies, land lease, single buoy mooring service fee, oil storage tank lease, revenue from disposal of scrap, gain on disposal of investments, gain from investment reclassification and others.

Gain on Disposal of Investment in Associate

On a disposal of an investment, the difference between the net disposal proceeds and the carrying amount (including gain or loss previously recognized in other comprehensive income by the associates to be reclassified to profit or loss in relation to the investment) is recognized to the profit or loss. When we dispose an investment partially, the carrying amount of the disposed part is determined by the weighted average method.

Gain on Reclassification of Investment

When the retained interest in a former associate is a financial asset, we measure the retained interest at fair value on initial recognition as a financial asset. The difference between the fair value of retained interest and the carrying amount of the investment at the date the equity method was discontinued is recognized in the profit or loss.

Selling and Distribution Expenses

Our selling and distribution expenses include our distribution, promotional, marketing expenses and our sales and marketing personnel expenses, which includes commissions paid to sales and marketing personnel. These expenses are generally tied to our sale levels.

Administrative Expenses

Our administrative expenses include advisory and legal fees, our administrative and supporting personnel expenses, depreciation and amortization of intangible assets, such as licenses and software, which are not accounted for under cost of sale and services, impairment loss on asset, loss from investment sold, loss on assets sold or write-offs and others, including premium fees paid for our hedging activities. These expenses are relatively stable and are generally not tied to our sale levels.

Share of Profit (Loss) from Investments in Joint Ventures and Associates

Our share of profit (loss) from investments in joint ventures and associates comprises our share of profit from investments in joint ventures and associates in proportion to our shareholding in such associates or joint ventures. Our share of profit from investments in joint ventures and associates mainly derives from our investments in PT Chandra Asri Pacific Tbk (formerly PT Chandra Asri Petrochemical Tbk).

Finance Costs

Our finance costs include interest and other financing expenses incurred from borrowings from financial institutions and other credit facilities and our Baht and U.S. dollar denominated debentures and notes, loan and lease liabilities. Our finance costs exclude interest during construction accrued in relation to the financing of certain qualifying assets, comprising primarily of our plants, as such interest is capitalized in accordance with TFRS.

Income Tax Benefit (Expense)

Income tax benefit (expense) consist of current and deferred tax expenses and benefits. Current tax is the expected tax payable or receivable on the taxable income or loss for the period, using tax rates enacted at the tax reporting date. Current tax includes any adjustment to tax payable in respect of previous years. Deferred tax is recognized in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes.

Consolidated Results of Operations — Period to Period Comparison

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024	2025	
	(in millions, except otherwise indicated)						
	THB	THB	THB	US$	THB	THB	US$
Summary Consolidated Statement of Income Information:							
Revenue from sales	505,703.2	459,402.2	455,856.9	14,100.1	343,895.2	285,404.7	8,827.9
Subsidy from oil fuel fund	23,885.6	9,841.7	10,920.1	337.8	10,345.3	921.0	28.5
Total revenue	529,588.8	469,243.9	466,777.0	14,437.9	354,240.5	286,325.7	8,856.3
Cost of sales	(481,137.0)	(436,163.5)	(450,010.2)	(13,919.3)	(342,832.3)	(278,855.8)	(8,625.3)
Gross profit	48,451.8	33,080.4	16,766.8	518.6	11,408.2	7,469.9	231.1
Dividend income	80.5	200.8	269.1	8.3	268.1	282.5	8.7
Gain (loss) from financial instruments	(16,005.8)	(2,850.0)	360.4	11.1	130.5	(462.2)	(14.3)
Gain (loss) on exchange	(64.5)	212.8	52.5	1.6	539.6	17.3	0.5
Gain on repurchase of debentures	–	–	1,134.2	35.1	1,147.8	4,067.3	125.8
Gain on disposal of investments in associates	10,037.8	–	–	–	–	–	–
Gain on reclassification of investments	7,296.6	–	–	–	–	–	–
Other income	782.0	1,138.2	1,739.2	53.8	1,302.6	1,430.7	44.3
Selling and distribution expenses	(1,052.1)	(950.0)	(1,140.4)	(35.3)	(850.8)	(769.0)	(23.8)
Administrative expenses	(3,129.7)	(2,570.9)	(2,733.7)	(84.6)	(1,891.2)	(1,896.5)	(58.7)
Share of profit (loss) from investments in joint ventures and associates	(512.6)	83.8	(131.7)	(4.1)	(194.3)	6,469.9	200.1
Operating profit	45,884.1	28,345.1	16,316.4	504.6	11,860.4	16,610.0	513.7
Finance cost	(3,860.0)	(4,088.5)	(4,052.0)	(125.3)	(3,066.2)	(2,786.9)	(86.2)
Profit before income tax expense	42,024.1	24,256.6	12,264.4	379.3	8,794.2	13,823.1	427.5
Income tax expense	(8,917.9)	(4,671.7)	(2,283.4)	(70.6)	(1,560.6)	(1,672.6)	(51.7)
Profit for the year / period	33,106.2	19,584.9	9,981.0	308.7	7,233.6	12,150.5	375.8
Profit attributable to:							
Equity holders of the Company	32,668.1	19,443.2	9,958.6	308.0	7,191.9	12,126.1	375.1
Non-controlling interests of the subsidiaries	438.1	141.7	22.4	0.7	41.7	24.4	0.7
	33,106.2	19,584.9	9,981.0	308.7	7,233.6	12,150.5	375.8
Earnings per share (Baht)							
Basic earnings per share							
Profit attributable to equity holders of the Company	15.63	8.70	4.46	0.14	3.22	5.43	0.17

Nine months ended September 30, 2025 Compared to Nine months ended September 30, 2024

Revenue from Sales

Our revenue from sales for the nine months ended September 30, 2025 was THB285,404.7 million (US$8,827.9 million) compared to our revenue from sales for the nine months ended September 30, 2024 of THB343,895.2 million, a decrease of THB58,490.5 million, or 17.0%. This decrease was primarily attributable to (i) a decline in integrated intakes, primarily due to the scheduled major turnaround of Crude Distillation Unit 3

("**CDU-3**") and other units in July and August 2025 resulting in lower sales volume and (ii) reduced product selling prices in line with the decline in crude oil prices.

Subsidy from Oil Fuel Fund

Subsidy from oil fuel fund decreased from THB10,345.3 million for the nine months ended September 30, 2024 to THB921.0 million (US$28.5 million) for the nine months ended September 30, 2025 primarily due to a decrease in subsidy on gasoil (diesel) and LPG.

Cost of Sales of Goods

Our cost of sales of goods for the nine months ended September 30, 2025 was THB278,855.8 million (US$8,625.3 million) compared to our cost of sales of goods for the nine months ended September 30, 2024 of THB342,832.3 million, a decrease of THB63,976.5 million, or 18.7%. This decrease was primarily attributable to the lower global crude oil price and decrease in sales volume.

Dividend Income

Our dividend income for the nine months ended September 30, 2025 was THB282.5 million (US$8.7 million), compared to our dividend income for the nine months ended September 30, 2024 of THB268.1 million, an increase of THB14.4 million, or 5.4%. This increase in dividend income was attributable to higher dividend from our investments.

Gain (Loss) from Financial Instruments

We had loss from financial instruments for the nine months ended September 30, 2025 of THB462.2 million (US$14.3 million) compared to our gain from financial instruments for the nine months ended September 30, 2024 of THB130.5 million. The net loss from financial instruments was mainly due to the loss on unwind of cross currency swap, partially offset by gain on mark-to-market of commodity hedging instruments.

Gain on Exchange

We recognized a gain on exchange of THB17.3 million (US$0.5 million) for the nine months ended September 30, 2025, compared to a gain on exchange of THB539.6 million for the nine months ended September 30, 2024. Our decrease in gain on exchange was primarily from the stronger appreciation of the Baht against the U.S. dollar for the nine months ended September 30, 2025 as compared to the nine months ended September 30, 2024.

Gain on Repurchase of Debentures

We recognized a gain on repurchase of debentures of THB4,067.3 million (US$125.8 million) for the nine months ended September 30, 2025, compared to a gain on repurchase of debentures of THB1,147.8 million for the nine months ended September 30, 2024. Our gain on repurchase of debentures was primarily from the repurchase of debentures at lower price and higher volume of repurchase than September 2024.

Other Income

Our other income for the nine months ended September 30, 2025 was THB1,430.7 million (US$44.3 million) compared to other income for the nine months ended September 30, 2024 of THB1,302.6 million, an increase of THB128.1 million, or 9.8%. This increase was primarily due to the receipt of insurance compensation related to oil spill incident and higher interest rates, mainly resulting from higher principal amounts.

Selling and Distribution Expenses

Our selling and distribution expenses for the nine months ended September 30, 2025 amounted to THB769.0 million (US$23.8 million) compared to our selling and distribution expenses for the nine months ended September 30, 2024 of THB850.8 million, a decrease of THB81.8 million, or 9.6%. This decrease was primarily due to a decrease in sales volume.

Administrative Expenses

Our administrative expenses for the nine months ended September 30, 2025 amounted to THB1,896.5 million (US$58.7 million) compared to our administrative expenses for the nine months ended September 30, 2024 of THB1,891.2 million, an increase of THB5.3 million, or 0.3%. The increase in administrative expenses was primarily due to the reclassification of depreciation expenses of Single Buoy Mooring ("**SBM**") back to cost of sales of goods followings its return to operation and the recognition of expenses related to an oil spill incident during the oil discharge at the SBM of our refinery on June 5, 2024.

Share of Profit (Loss) from Investments in Associates

Our share of profit from investments in associates for the nine months ended September 30, 2025 was THB6,469.9 million (US$200.1 million), primarily due to the recognized profit sharing from our investment in CAP resulting from the bargain purchase arising from business combination. Our share of loss from investments in associates for the nine months ended September 30, 2024 was THB194.3 million, primarily due to the recognized loss sharing from investment in CAP.

Finance Costs

Our finance costs for the nine months ended September 30, 2025 amounted to THB2,786.9 million (US$86.2 million) compared to our finance costs for the nine months ended September 30, 2024 of THB3,066.2 million, a decrease of THB279.3 million, or 9.1%. The decrease was primarily due to a decrease in loans from financial institutions and repurchase of debentures.

Income Tax Expenses

For the nine months ended September 30, 2025, our income tax expenses was THB1,672.6 million (US$51.7 million) and the effective tax rate was 12.1%. For the nine months ended September 30, 2024, our income tax expenses was THB1,560.6 million, and the effective tax rate was 17.7%.

The statutory tax rate for these periods was 20%. Our effective tax rate for the nine months ended September 30, 2025 and for the nine months ended September 30, 2024 was lower than the statutory rate mainly due to (i) the non-taxable income such as BOI-exempted income, dividends income and share of profit from associations and (ii) the adjustment of previous year tax.

Profit for the Period

As a result of the foregoing, our consolidated profit for the nine months ended September 30, 2025 was THB12,150.5 million (US$375.8 million) compared to our profit for the nine months ended September 30, 2024 of THB7,233.6 million, an increase of THB4,916.9 million, or 68.0%.

Year ended December 31, 2024 Compared to Year ended December 31, 2023

Revenue from Sales

Our revenue from sales for the year ended December 31, 2024 was THB455,856.9 million (US$14,100.1 million) compared to our revenue from sales for the year ended December 31, 2023 of THB459,402.2 million, a decrease of THB3,545.3 million, or 0.8%. This slight decrease was primarily attributable to (i) a decrease in integrated intakes due to the unplanned shutdown of Crude Distillation Unit 3 (CDU-3) for 13 days in January 2024 and the planned shutdown of Crude Distillation Unit 1 (CDU-1) and related units for 11 days in May 2024 and (ii) a decrease in selling prices of several products.

Subsidy from Oil Fuel Fund

Subsidy from oil fuel fund increased from THB9,841.7 million for the year ended December 31, 2023 to THB10,920.1 million (US$337.8 million) for the year ended December 31, 2024 primarily due to an increase in subsidy especially on gasoil (diesel) and LPG.

Cost of Sales of Goods

Our cost of sales of goods for the year ended December 31, 2024 was THB450,010.2 million (US$13,919.3 million) compared to our cost of sales of goods for the year ended December 31, 2023 of

THB436,163.5 million, an increase of THB13,846.7 million, or 3.2%. This slight increase was primarily attributable to the increase in excise tax rate especially from HSD, despite the lower of crude oil price.

Dividend Income

Our dividend income for the year ended December 31, 2024 was THB269.1 million (US$8.3 million), compared to our dividend income for the year ended December 31, 2023 of THB200.8 million, an increase of THB68.3 million, or 34.0%. This increase in dividend income was attributable to higher dividend from our investments.

Gain (Loss) from Financial Instruments

We had gain from financial instruments for the year ended December 31, 2024 of THB360.4 million (US$11.1 million) compared to our loss from financial instruments for the year ended December 31, 2023 of THB2,850.0 million. The net gain from financial instruments was mainly due to gain on mark-to-market of commodity hedging instruments in 2024.

Gain on Exchange

We recognized a gain on exchange of THB52.5 million (US$1.6 million) for the year ended December 31, 2024, compared to a gain on exchange of THB212.8 million for the year ended December 31, 2023. Our decrease in gain on exchange was primarily from the stronger appreciation of the Baht against the U.S. dollar compared to 2023.

Gain on Repurchase of Debentures

We recognized a gain on repurchase of debentures of THB1,134.2 million (US$35.1 million) for the year ended December 31, 2024, compared to nil for the year ended December 31, 2023. Our gain on repurchase of debentures for the year ended December 31, 2024 was primarily from the repurchase of debentures at lower price.

Other Income

Our other income for the year ended December 31, 2024 was THB1,739.2 million (US$53.8 million) compared to other income for the year ended December 31, 2023 of THB1,138.2 million, an increase of THB601.0 million, or 52.8%. This increase was primarily due to higher interest income, driven by increase in both interest rates and principal amounts and insurance compensation received in 2024 related to oil spill incident.

Selling and Distribution Expenses

Our selling and distribution expenses for the year ended December 31, 2024 amounted to THB1,140.4 million (US$35.3 million) compared to our selling and distribution expenses for the year ended December 31, 2023 of THB950.0 million, an increase of THB190.4 million, or 20.0%. This increase was primarily due to an increase in sales volume.

Administrative Expenses

Our administrative expenses for the year ended December 31, 2024 amounted to THB2,733.7 million (US$84.6 million) compared to our administrative expenses for the year ended December 31, 2023 of THB2,570.9 million, an increase of THB162.8 million, or 6.3%. The increase in administrative expenses was primarily due to reclassification of related depreciation expenses from cost of sales of goods including the recognition of related expenses in 2024 of an oil spill incident during the oil discharge at the SBM of our refinery on September 3, 2023.

Share of Profit (Loss) from Investments in Joint Ventures and Associates

Our share of loss from investments in joint ventures and associates for the year ended December 31, 2024 was THB131.7 million (US$4.1 million), primarily due to the recognized loss sharing from investments in CAP. Our share of profit from investments in joint ventures and associates for the year ended December 31, 2023 was THB83.8 million, primarily due to the recognized profit sharing from investment in Thai Petroleum Pipeline Co. Ltd. ("**Thappline**") and PTT Digital Solutions Co., Ltd. ("**PTTDG**") while also recognized loss sharing from CAP.

Finance Costs

Our finance costs for the year ended December 31, 2024 amounted to THB4,052.0 million (US$125.3 million) compared to our finance costs for the year ended December 31, 2023 of THB4,088.5 million, a slight decrease of THB36.5 million, or 0.9%, primarily due to lower interest rate on hedging instruments following the repayments of maturity bond.

Income Tax Expense

For the year ended December 31, 2024, our income tax expense was THB2,283.4 million (US$70.6 million) and the effective tax rate was 18.6%. For the year ended December 31, 2023, our income tax benefit was THB4,671.7 million, and the effective tax rate was 19.3%. The statutory tax rate for these periods was 20%. Our effective tax rates were lower than statutory rates mainly due to (i) the non-taxable income such as BOI-exempted income, dividends income and share of profit from associations and (ii) the adjustment of previous year tax.

Profit for the Year

As a result of the foregoing, our consolidated profit for the year ended December 31, 2024 was THB9,981.0 million (US$308.7 million) compared to our profit for the year ended December 31, 2023 of THB19,584.9 million, a decrease of THB9,603.9 million, or 49.0%.

Year ended December 31, 2023 Compared to Year ended December 31, 2022

Revenue from Sales

Our revenue from sales for the year ended December 31, 2023 was THB459,402.2 million compared to our revenue from sales for the year ended December 31, 2022 of THB505,703.2 million, a decrease of THB46,301.0 million, or 9.2%. This decrease was primarily attributable to lower product selling prices tracking with crude oil prices, while the products spread over Dubai crude fell almost across the board in line with slowdown of the global economy together with rising supply.

Subsidy from Oil Fuel Fund

Subsidy from oil fuel fund decreased from THB23,885.6 million for the year ended December 31, 2022 to THB9,841.7 million for the year ended December 31, 2023 primarily due to a decrease in subsidy on gasoil (diesel) and LPG.

Cost of Sales of Goods

Our cost of sales of goods for the year ended December 31, 2023 was THB436,163.5 million compared to our cost of sales of goods for the year ended December 31, 2022 of THB481,137.0 million, a decrease of THB44,973.5 million, or 9.3%. This decrease was primarily attributable to lower crude oil price.

Dividend Income

Our dividend income for the year ended December 31, 2023 was THB200.8 million, compared to our dividend income for the year ended December 31, 2022 of THB80.5 million, an increase of THB120.3 million, or 149.4%. This increase in dividend income was attributable to higher dividend from our investments.

Loss from Financial Instruments

We had loss from financial instruments for the year ended December 31, 2023 of THB2,850.0 million compared to our loss from financial instruments for the year ended December 31, 2022 of THB16,005.8 million. The net loss from financial instruments was due to loss on mark-to-market of commodity hedging instruments in 2023.

Gain (Loss) on Exchange

We recognized a gain on exchange of THB212.8 million for the year ended December 31, 2023, compared to a loss on exchange of THB64.5 million for the year ended December 31, 2022. Our net foreign exchange gain was primarily attributable to the appreciation of the Baht against the U.S. dollar, which resulted in unrealized transaction gain of U.S. dollar-denominated debentures.

Gain on Disposal of Investment in Associate

We recognized a gain on disposal of investment in associate of THB10,037.8 million for the year ended December 31, 2022 as a result of disposal of 10.78% shareholding in Global Power Synergy Public Company Limited ("**GPSC**").

Gain on Reclassification of Investment

We recognized a gain on reclassification of investment of THB7,296.6 million for the year ended December 31, 2022 as a result of the disposal of 10.78% shareholding in GPSC, the remaining 10% interest had no longer provided any significant influence and therefore had been reclassified from Investment in associate to financial assets measured at fair value through other comprehensive income.

Other Income

Our other income for the year ended December 31, 2023 was THB1,138.2 million compared to other income for the year ended December 31, 2022 of THB782.0 million, an increase of THB356.2 million, or 45.5%. This increase was primarily due to the higher interest income, including an increase in fixed deposits balances.

Selling and Distribution Expenses

Our selling and distribution expenses for the year ended December 31, 2023 amounted to THB950.0 million compared to our selling and distribution expenses for the year ended December 31, 2022 of THB1,052.1 million, a decrease of THB102.1 million, or 9.7%. This decrease was primarily due to lower transportation costs.

Administrative Expenses

Our administrative expenses for the year ended December 31, 2023 amounted to THB2,570.9 million compared to our administrative expenses for the year ended December 31, 2022 of THB3,129.7 million, a decrease of THB558.8 million, or 17.9%. This decrease in administrative expenses was primarily due to the recognition of an impairment loss of assets in year 2022.

Share of Profit (Loss) from Investments in Joint Ventures and Associates

Our share of profit from investments in joint ventures and associates for the year ended December 31, 2023 was THB83.8 million, primarily due to the recognized profit sharing from investment in Thappline and PTTDG while also recognized loss sharing from CAP. Our share of loss from investments in joint ventures and associates for the year ended December 31, 2022 of THB512.6 million was primarily due to the recognized loss sharing from investments in CAP.

Finance Costs

Our finance costs for the year ended December 31, 2023 amounted to THB4,088.5 million compared to our finance costs for the year ended December 31, 2022 of THB3,860.0 million, an increase of THB228.5 million, or 5.9%. The increase was primarily due to the recognition of full-year interest expenses on finance lease of time charter and to higher interest rate on hedging instruments from the Bank of Thailand's policy rate increase.

Income Tax Expense

For the year ended December 31, 2023, our income tax expense was THB4,671.7 million and the effective tax rate was 19.3%. For the year ended December 31, 2022, our income tax expense was THB8,917.9 million, and the effective tax rate was 21.2%. The statutory tax rate for these periods was 20%.

Our effective tax rate of December 31, 2023 was mainly a result of (i) the non-taxable income such as BOI-exempted income, dividends income and share of profit from associations that is not subject to tax and (ii) the adjustment of previous year tax. For December 31, 2022, our effective tax rate was mainly a result of (i) the non-taxable income such as BOI-exempted income, dividends income and share of profit from associations, (ii) the adjustment of previous year tax and (iii) tax profit on the sale of GPSC shares.

Profit for the Year

As a result of the foregoing, our consolidated profit for the year ended December 31, 2023 was THB19,584.9 million compared to our profit for the year ended December 31, 2022 of THB33,106.2 million, a decrease of THB13,521.3 million, or 40.8%.

Liquidity and Capital Resources

Our primary sources of funding have historically been cash flows from operating activities, financing transactions with financial institutions and capital market debenture offerings. Our principal uses of funds have been working capital, repayments of principal and interest on borrowings, capital expenditures, and payment of dividends to our shareholders. We believe that our future cash flows from operations, borrowing capacity and funds raised from our debt offerings will be sufficient to fund our planned capital expenditures and investments, debt maturities and working capital requirements through 2026. However, our liquidity and ability to obtain adequate financing to satisfy such activities may be limited by our financial condition and results of operations and the liquidity of international and domestic financial markets.

We have certain financial guidelines to monitor our financial position. This monitoring includes keeping our net debt to total shareholders' equity ratio at equal to or less than 1.0, and our net debt to EBITDA ratio at equal to or less than 2.5. However, this guideline can be flexible depending on our investment cycle and in time of volatile market activity. As of September 30, 2025, these ratios were 0.6 and 5.8, respectively. We also implement liquidity management guidelines under which we aim to maintain sufficient liquidity in cash or equivalents to meet our debt obligations. As of September 30, 2025, we had cash and cash equivalents and short-term investments of THB33,161.1 million (US$1,025.7 million). We invest any excess cash on hand in short term investments with consideration to liquidity risk and return.

The following table sets forth a summary of our consolidated cash flows information for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025.

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024	2025	
				(in millions)			
	THB	THB	THB	US$	THB	THB	US$
Summary Consolidated Statement of Cash Flow Information:							
Net cash provided by operating activities	43,250.8	28,087.8	39,354.7	1,217.3	19,403.9	22,714.7	702.6
Net cash from (used in) investing activities	(9,049.1)	(19,691.9)	(14,008.6)	(433.3)	(9,750.2)	13,989.9	432.7
Net cash used in financing activities	(20,252.9)	(23,071.9)	(24,627.1)	(761.7)	(19,945.0)	(37,098.1)	(1,147.5)
Net increase (decrease) in cash and cash equivalents	13,948.7	(14,676.1)	719.0	22.2	(10,291.3)	(393.4)	(12.2)
Cash and cash equivalents at beginning of year / period	29,695.9	43,576.1	28,431.6	879.4	28,431.6	29,042.4	898.3
Effect of exchange rate changes	(68.5)	(468.5)	(108.2)	(3.3)	(473.7)	(576.8)	(17.8)
Cash and cash equivalents at end of year / period	43,576.1	28,431.6	29,042.4	898.3	17,666.7	28,072.2	868.3

Net Cash from (used in) Operating Activities

Our net cash flows from operating activities includes cash generated from the principal revenue-generating activities and other activities that are not investing or financing activities, which mainly include the sale of goods and services, costs of sales of goods and services, realized foreign exchange gains and losses, actual administrative and selling expenses such as employee expenses and professional fees, and income tax expenses, whereby profit or loss is adjusted for the effects of transactions of a non-cash nature, deferrals or accruals of past or future operating cash receipts or payments, and items of income or expense associated with investing or financing cash flows.

Our net cash from operating activities for the nine months ended September 30, 2025 amounted to THB22,714.7 million (US$702.6 million) and was primarily attributable to profit before tax expenses of THB13,823.1 million (US$427.5 million), adjusted by a decrease in non-cash items before tax expenses of THB464.5 million (US$14.4 million). Additionally, cash inflows from changes in operating assets and liabilities amounted to THB14,171.9 million (US$438.4 million), while net tax payments totaled THB4,815.7 million (US$149.0 million).

Our net cash from operating activities for the year ended December 31, 2024 amounted to THB39,354.7 million (US$1,217.3 million) and was primarily attributable to our profit before income tax expenses of THB12,264.4 million (US$379.3 million), as adjusted by the reconciliation of depreciation and amortization of THB8,105.9 million (US$250.7 million), finance costs of THB4,052.0 million (US$125.3 million), a loss on hedging of forecasted revenue transaction of THB300.9 million (US$9.3 million), partially offset by a gain on repurchase of debentures of THB1,134.2 million (US$35.1 million), a reversal of reduction of inventory net realizable value of THB582.0 million (US$18.0 million) and dividends income of THB269.1 million (US$8.3 million). Changes in operating assets and liabilities also affected our operating cash flow and consisted primarily of a decrease in inventory of THB12,660.7 million (US$391.6 million) and an decrease in trade payables of THB1,358.1 million (US$42.0 million), partially offset by decrease of in other payables of THB153.6 million (US$4.8 million). These changes were mainly attributable to significant decreases in profit before income tax expenses in 2024.

Our net cash from operating activities for the year ended December 31, 2023 amounted to THB28,087.8 million and was primarily attributable to our profit before income tax expense of THB24,256.6 million, as adjusted by the reconciliation of depreciation and amortization of THB7,799.5 million, finance costs of THB4,088.5 million, a loss on hedging of forecasted revenue transaction of THB224.9 million, partially offset by dividend income of THB200.8 million. Changes in operating assets and liabilities also affected our operating cash flow and consisted primarily of an decrease in trade payables of THB23,967.4 million, an increase in trade receivables of THB2,531.6 million and a decrease in other payables of THB1,586.9 million, partially offset by a decrease in receivables from oil fuel fund of THB15,259.1 million and a decrease in inventories of THB2,742.8 million. These changes were mainly attributable to significant decreases in profit before income tax expenses in 2024.

Our net cash from operating activities for the year ended December 31, 2022 amounted to THB43,250.8 million and was primarily attributable to our profit before income tax expenses of THB42,024.1 million, as adjusted by the reconciliation of depreciation and amortization of THB7,744.3 million, finance costs of THB3,860.0 million, an unrealized loss on exchange of THB1,033.8 million, partially offset by a gain on disposal of investments in an associate of THB10,037.8 million and a gain on reclassification of investment of THB7,296.6 million. Changes in operating assets and liabilities also affected our operating cash flow and consisted primarily of an increase in trade payables of THB51,162.3 million, partially offset by an increase of inventories of THB16,324.6 million, an increase in receivables in oil fuel fund of THB12,316.0 million and an increase in trade receivables of THB5,430.1 million.

Net Cash from (used in) Investing Activities

Our net cash flows from/used in investing activities include interest and dividends received, sales and purchases of property, plant and equipment, equity investments and dispositions in businesses.

Our net cash from in investing activities was THB13,989.9 million (US$432.7 million) for the nine months ended September 30, 2025, primarily from proceeds related to the enforcement of security under the EPC contract of THB14,312.4 million (US$442.7 million) and short-term investments in financial assets of THB5,416.0 million (US$167.5 million), partially offset by cash payment for property, plant and equipment of THB6,214.6 million (US$192.2 million).

Our net cash used in investing activities was THB14,008.6 million (US$433.3 million) for the year ended December 31, 2024, primarily consisting of purchase of plant, property, and equipment of THB8,955.5 million (US$277.0 million) and repayment of short-term investments in financial assets of THB4,961.3 million (US$153.5 million), partially offset by dividends received of THB531.8 million (US$16.4 million).

Our net cash used in investing activities was THB19,691.9 million for the year ended December 31, 2023, primarily consisting of purchase of property, plant and equipment of THB14,503.6 million and repayment of short-term investments in financial assets of THB5,766.2 million, partially offset by dividends received of THB594.8 million and a decrease in deposits at a financial institution used as collateral of THB342.9 million.

Our net cash used in investing activities was THB9,049.1 million for the year ended December 31, 2022, primarily consisting of purchase of property, plant and equipment of THB31,929.2 million, partially offset by dividends received of THB841.3 million.

Net Cash from (used in) Financing Activities

Our net cash used in financing activities was THB37,098.1 million (US$1,147.5 million) for the nine months ended September 30, 2025, primarily attributable to the redemption and repurchase of debentures of THB16,827.2 million (US$520.5 million), net repayments of long-term loans from financial institutions of THB10,286.7 million (US$318.2 million), dividend paid to shareholders of THB3,350.6 million (US$103.6 million) and financial costs paid of THB4,647.1 million (US$143.7 million).

Our net cash used in financing activities was THB24,627.1 million (US$761.7 million) for the year ended December 31, 2024, primarily attributable to the repayment of short-term loans from financial institutions of THB12,634.4 million (US$390.8 million) and redemption and repurchase of debentures of THB10,302.6 million (US$318.7 million) and dividends paid to shareholders of THB8,823.0 million (US$272.9 million), partially offset by proceeds from short-term loans from financial institutions of THB12,184.4 million (US$376.9 million) and from long-term loans from financial institutions of THB7,054.1 million (US$218.2 million).

Our net cash used in financing activities was THB23,071.9 million for the year ended December 31, 2023, primarily attributable to the redemption of debentures of THB16,381.4 million and repayment of short-term loans from financial institutions of THB10,150.2 million, partially offset by proceeds from short-term loans from financial institutions of THB11,480.7 million and the issuance of debentures of THB10,000.0 million.

Our net cash used in financing activities was THB20,252.9 million for the year ended December 31, 2022, primarily attributable to repayment of long-term loans from financial institutions of THB17,862.9 million and short-term loans from financial institutions of THB16,358.4 million, partially offset by proceeds from short-term loans from institutions of THB17,325.1 million and the issuance of debentures of THB12,000.0 million.

We repaid existing borrowings and incurred new borrowings as we refinanced our indebtedness during the years ended December 31, 2022, 2023 and 2024 to take advantage of better financing terms.

Dividends

Our dividend policy is to pay at least 25 percent of the consolidated financial statements' net profit after deducting all types of reserves as defined in our regulations and in accordance with applicable laws. The actual dividend payout ratio may be different from the level indicated in our dividend policy.

In April 2022, we paid dividends for the year ended December 31, 2021 of THB2.6 per share to our shareholders totaling THB5,303.9 million. After a deduction of the interim dividend of THB0.6 per share which were paid to the shareholders in September 2021, the dividends remaining for distribution were THB2.0 per share, totaling THB4,080.0 million.

In April 2023, we paid dividends for the year ended December 31, 2022 of THB3.7 per share to our shareholders totaling THB8,265.2 million. After a deduction of the interim dividend of THB2.0 per share which were paid to the shareholders in November 2022, the dividends remaining for distribution were THB1.7 per share, totaling THB3,797.5 million.

In April 2024, we paid dividends for the year ended December 31, 2023 of THB3.4 per share to our shareholders totaling THB7,593.9 million. After a deduction of the interim dividend of THB0.65 per share which were paid to the shareholders in September 2023, the dividends remaining for distribution were THB2.75 per share, totaling THB6,142.5 million.

In April 2025, we paid dividends for the year ended December 31, 2024 of THB1.9 per share to our shareholders totaling THB4,244.3 million. After a deduction of the interim dividend of THB1.2 per share which were paid to the shareholders in September 2024, the dividends remaining for distribution were THB0.7 per share, totaling THB1,563.7 million.

In September 2025, our interim dividends for 2025 of THB0.8 per share, totaling THB1,787.1 million were paid to shareholders.

Capital Expenditures and Investment

Our capital expenditures and investment for the year ended December 31, 2024 and for the nine months ended September 30, 2025 were THB9,320.4 million (US$288.3 million) and THB6,408.6 million (US$198.2 million), respectively, which comprises our capital expenditures on the purchase of property, plant and

equipment and intangible assets. We have an investment policy under which we evaluate whether our investments are suitable. We examine each project on the basis of a number of qualitative and quantitative criteria, including (i) whether the proposed project would be a strategic fit and be in line with our Group's vision and mission; (ii) the proposed project's economic attractiveness; and (iii) whether the proposed project would maintain or enhance existing business value.

The following table sets forth our capital expenditures for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025.

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024	2025	
				(in millions of)			
	THB	THB	THB	US$	THB	THB	US$
Capital Expenditures[1]							
Purchase of property, plant and equipment.....	31,929.2	14,503.6	8,955.5	277.0	7,738.0	6,214.6	192.2
Purchase of intangible assets.....	159.6	96.3	364.9	11.3	287.0	194.0	6.0

Note

(1) Includes borrowing cost capitalized as cost of assets.

For the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, the majority of our capital expenditures were related to the construction of the CFP.

We have estimated planned capital expenditures of THB57,108.3 million (US$1,757.2 million) for 2026 to 2029.

The following table sets forth our currently planned capital expenditures for 2026 to 2029. Actual future capital expenditures may differ materially from our planned capital expenditures and investment requirements set out below, and our board of directors may also approve additional capital expenditures and investment in future.

	For the year ended December 31,			
	2026	2027	2028	2029
		(in millions of)		
	THB	THB	THB	THB
Planned capital expenditures				
CFP[1]	39,744.1	27,330.1	8,300.4	(20,129.9)
Other investments	1,403.6	241.9	217.9	-
Total planned capital investments and investment requirements[2]	41,147.7	27,572.1	8,518.4	(20,129.9)

Notes:

(1) The capital expenditures for CFP include the sale of the assets for the ownership transfer of Energy Recovery Unit (ERU). The annual general meeting of shareholders of 2019 held on April 10, 2019 has approved the sale of assets for the ownership transfer of ERU at the sale price of not exceeding US$757.02 million or not exceeding THB24,563 million.

(2) Excluding approximately US$40 million for annual maintenance.

The construction of the CFP was expected to be completed by the first quarter of 2023. However, following delays in the execution of the work under the EPC Contract, the board of directors meeting no. 4/2022 resolved to approve the Company's execution of an amendment agreement to the EPC Contract with the Consortium in the best interest of the Company and to enable the CFP to be completed. Under such amendment agreement, the budget of the CFP was increased by approximately US$550 million or approximately THB18,165 million equivalent, and the time for completion was extended by 24 months in accordance with the EPC Contract. Thereafter, while the Hydrodesulfurization Unit 4 or HDS-4 construction was successfully completed and commenced test-run for the production of Euro 5 Standard diesel in February 2024, in time for the Thai Government's policy of enforcing Euro 5 Standard diesel which came into effect in early 2024, the Consortium continuously failed to pay overdue payments to its subcontractors working on the CFP. This resulted in work stoppages or reduction of workforce, causing the construction of the CFP in accordance with the EPC Contract to be delayed.

Subsequently, at meeting of the board of directors held on December 19, 2024, the board of directors approved an increase of the investment cost of the CFP and approved the convening of an Extraordinary General Meeting of Shareholders no. 1/2025 of the Company which was held on February 21, 2025, to propose an increase in the investment cost in the CFP, and an increase in interest during construction, causing the total investment

value of the CFP to be approximately THB241,472 million or approximately US$7,151 million[6] equivalent and the total estimated interest expenses during construction to be approximately THB37,216 million or approximately US$1,078 million equivalent[7]. The additional investment will be used for the construction of the CFP, procurement of remaining equipment and materials and payment of other expenses related to the development of the CFP, including advisory fees, to support the completion of the CFP.

We expect that planned investments in various projects above will strengthen our competitive advantage. See "*Business*".

We plan to meet our capital expenditures requirements primarily from cash flow from operations and borrowings. We may also raise additional capital through the offering of equity, debt and other securities in the future. We may make additional capital investments as opportunities or needs arise. In addition, we may increase, reduce or suspend our planned capital expenditures for 2026 through 2029 or change the timing and use of our capital expenditures from what is currently planned in response to market conditions or for other reasons. We may be able to obtain tax benefits from the BOI for capital expenditures which are related to environmental projects. See "*Business—Investment Promotion*."

Financing Arrangements and Other Contractual Obligations

Indebtedness

The following table shows the outstanding amounts of our total consolidated short-term borrowings, long-term borrowings from financial institutions and debentures as of December 31, 2022, 2023 and 2024 and as of September 30, 2024 and 2025.

	As of December 31,				As of September 30,		
	2022	2023	2024		2024	2025	
			(in millions)				
	THB	THB	THB	US$	THB	THB	US$
Short-term loans from financial institutions	1,891.7	3,198.4	2,724.9	84.3	3,102.8	2,741.3	84.8
Current portion of long term loans from financial institutions[(1)]	2,884.1	3,060.9	3,776.7	116.8	3,465.1	846.5	26.2
Current portion of long term loans from related parties[(1)]	–	–	–	–	–	–	–
Current portion of debentures	17,317.5	7,000.0	1,399.9	43.3	–	1,399.9	43.3
Long term loans from financial institutions, net of current portion	19,806.6	16,034.5	19,225.9	594.7	20,686.3	11,899.7	368.1
Long term loans from third parties	216.4	191.4	178.9	5.5	178.9	–	–
Long term loans from related parties, net of current portion	–	–	–	–	–	–	–
Debentures	131,635.0	133,631.6	127,491.5	3,943.4	123,916.1	102,318.7	3,164.8
Total	**173,751.3**	**163,116.8**	**154,797.8**	**4,788.1**	**151,349.2**	**119,206.1**	**3,687.2**

Note:

(1) Current portion of long term loans from financial institutions and current portion of long term loans from related parties are loans which are due within 12 months.

Our internal treasury policy targets to maintain our indebtedness at levels such that our net debt (defined as total debt less cash and cash equivalents and short-term investment, where total debt means the sum of short-term borrowings, the current portion of long-term borrowings from financial institutions, the current portion of debentures, the non-current portion of long-term borrowings, the non-current portion of debentures and lease liabilities) to equity ratio is less than 1.0 times and our net debt to EBITDA ratio is less than 2.5 times.

As of September 30, 2025, THB511.7 million (US$15.8 million) of our total indebtedness of THB119,206.1 million (US$3,687.2 million) was secured indebtedness. As of September 30, 2025, our total Baht-denominated indebtedness amounted to THB44,050.4 million (US$1,362.5 million) and our total foreign currency-denominated indebtedness amounted to THB75,155.8 million (US$2,324.6 million). As of

[6] The exchange rate of THB33.77 per US$1.00 was calculated based on the weighted average of the applicable foreign exchange rates for each approval period.

[7] The exchange rate of THB34.52 per US$1.00 was calculated based on the weighted average of the applicable foreign exchange rates for each approval period.

September 30, 2025, our total fixed rate indebtedness amounted to THB98,941.0 million (US$3,060.3 million) and our total floating rate indebtedness amounted to THB20,265.1 million (US$626.9 million).

As of December 31, 2024, THB2,333.5 million (US$72.2 million) of our total indebtedness of THB154,797.8 million (US$4,788.1 million) was secured indebtedness. As of December 31, 2024, our total Baht-denominated indebtedness amounted to THB54,484.7 million (US$1,685.3 million) and our total foreign currency-denominated indebtedness amounted to THB100,313.2 million (US$3,102.8 million). As of December 31, 2024, our total fixed rate indebtedness amounted to THB123,838.3 million (US$3,830.5 million) and our total floating rate indebtedness amounted to THB30,959.5 million (US$957.6 million).

As of December 31, 2023, THB3,012.2 million of our total indebtedness of THB163,116.8 million was secured indebtedness. As of December 31, 2023, our total Baht-denominated indebtedness amounted to THB57,910.6 million and our total foreign currency-denominated indebtedness amounted to THB105,206.4 million. As of December 31, 2023, our total fixed rate indebtedness amounted to THB128,862.3 million and our total floating rate indebtedness amounted to THB34,254.5 million.

As of December 31, 2022, THB10,647.8 million of our total indebtedness of THB173,751.3 million was secured indebtedness. As of December 31, 2022, our total Baht-denominated indebtedness amounted to THB50,250.8 million and our total foreign currency-denominated indebtedness amounted to THB123,500.4 million. As of December 31, 2022, our total fixed rate indebtedness amounted to THB142,476.1 million and our total floating rate indebtedness amounted to THB31,275.2 million.

Contractual Obligations

The following table provides a maturity analysis of our material contractual obligations as of September 30, 2025.

	Expected cash payments due by period				
	Total	Less than 1 year	1 – 3 years	3 – 5 years	More than 5 years
			(in millions of)		
	THB	THB	THB	THB	THB
Contractual Obligations					
Short-term loans	2,741.3	2,741.3	–	–	–
Long-term loans	12,746.2	845.5	3,478.8	5,442.7	2,979.2
Debentures	103,718.6	1,399.9	8,099.7	30,541.9	63,677.1
Non-cancellable operating lease commitments	9.3	9.3	–	–	–

Off Balance Sheet Arrangements and Contingent Liabilities

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

Taxation

The prevailing corporate rate of income tax applicable to Thai companies generally is 20%. We enjoy certain investment promotion privileges from the BOI, which include certain tax privileges and exemptions. See "*Business—Investment Promotion*".

Our effective tax expense rates for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025 were 21.2%, 19.3%, 18.6%, 17.7% and 12.1%, respectively.

Inflation

According to the BOT, Thailand's annual overall inflation rates for the years ended December 31, 2022, 2023 and 2024 were 6.08%, 1.23% and 0.4%, respectively. We do not believe that inflation will have a material effect on our financial condition or results of operations.

Quantitative and Qualitative Disclosures Regarding Market Risks

We are exposed to a variety of financial risks, which are market risk (including foreign exchange risk and interest rate risk and price risk), credit risk and liquidity risk. Our overall risk management programme focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on our financial performance. We use derivative financial instruments to hedge certain exposures.

Risk management is integral to the whole of our business. We have a control system in place to create an acceptable balance between the cost of risks and the cost to manage the risks. The management continually monitors our risk management process to ensure that an appropriate balance between risk and control is achieved.

Where all relevant criteria are met, hedge accounting is applied to remove the accounting mismatch between the hedging instrument and the hedged item. This will effectively result in recognising interest expense at a fixed interest rate for the hedged floating rate loans and financial liabilities at the fixed foreign currency rate for the hedged liabilities.

Foreign Exchange Risk

We are exposed to foreign exchange risk from future commercial transactions, net monetary assets and liabilities that are denominated in a currency that is not the entity's functional currency.

We use forward foreign exchange contracts, cross currency swaps in a consistent manner and hedge on foreign currency proceeds to hedge and anticipated foreign exchange commitments and manage our foreign exchange risk arising from future commercial transactions. We are required to manage our foreign exchange risk against our functional currency. Foreign currency borrowings are swapped into the entity's functional currency using cross-currency swaps except where the foreign currency borrowings are repaid with cash flows generated in the same foreign currency. The purpose of these hedges is to mitigate the impact of movements in foreign exchange rates on assets and liabilities and our profit and loss account.

We hedge the foreign currency proceeds by hedging the fluctuations arisen from the foreign exchange rate occurring from the certain revenue in US dollar with the long-term loans which has the same currency as revenue occurred. Under our policy, the critical terms of the forwards and options must align with the hedged items.

We use a combination of forward foreign exchange contracts and cross-currency swaps to hedge our exposure to foreign currency risk. Under our policy, the critical terms of the forwards and options must align with the hedged items.

We only designate the spot component of forward foreign exchange contracts in hedge relationships. The spot component is determined with reference to relevant spot market exchange rates. The differential between the contracted forward rate and the spot market exchange rate is defined as the forward points and include currency basis spread fees. It is discounted based on time period of the contract where material.

The changes in the forward element of the forward foreign exchange contracts and foreign currency basis spreads that relate to hedged items are deferred in the costs of hedging reserve.

See "*Risk Factors—Risks Relating to Thailand—We may be adversely affected by the fluctuations in the value of the Baht against foreign currencies, particularly with the depreciation of the Baht against the U.S. dollar.*"

Commodity Price Risk

We also attempt to manage our exposure to commodity price fluctuations by selling a diversified portfolio of refined petroleum and petrochemical products. We have a high degree of integration in our operations which also assists us in managing the effect of such fluctuations.

We are exposed to fluctuations in the prices of crude oil and other feedstock as well as refined petroleum and petrochemical products. These fluctuations directly impact our net sales and costs of goods sold. However, the movement in crude oil prices does not necessarily have a direct long-term relationship to our net profit. The effect of changes in crude oil prices on our operating results is determined more by the rate at which the prices of refined petroleum and petrochemical products adjust to reflect such changes. Our sale prices for refined petroleum and petrochemical products are influenced by the prices of crude oil. Generally, an increase or decrease in the

price of crude oil may result in a corresponding increase or decrease in the price of refined petroleum and petrochemical products. The timing of the relative movement of the prices of crude oil and refined petroleum and petrochemical products, however, as well as the overall change in the prices of refined petroleum or petrochemical products, can affect our gross refining margins and could have significant impact on our refining operations and our earnings and cash flows.

We are exposed to seasonal fluctuations in the consumption of particular types of refined products. For example, the unit prices for some of our refined petroleum products, such as gasoline, are higher during the summer months because more gasoline is consumed in the United States during the summer driving season. The unit price for diesel also increases during the winter months as diesel is used as heating oil in the United States, Europe and North Asia. The demand in Thailand, in terms of sales volume, for diesel and gasoline is normally lower during the monsoon season in the third quarter each year.

We also maintain inventories of crude oil and refined petroleum and petrochemical products, the values of which are subject to fluctuations in market prices. Due to our legal reserve of stock, as of September 30, 2025, we held approximately 48 million barrels of crude oil, feedstock and oil product inventories. Consequently, our financial results are impacted by the effects of fluctuations in the market prices for crude oil and other feedstock and refined petroleum and petrochemical products. To the extent that crude oil and refined petroleum or petrochemical product prices rise in tandem, our gross profit would generally be positively affected, because we compute the gross profit as the excess of net sales (determined at the time of sale at the higher refined product prices) over the cost of sales (determined at the earlier time the crude oil is purchased at lower prices). Thus, a portion of the gross profit that we earn during a period of rising prices may be significantly attributable to the stock gain or the increase in prices during the period after we buy the crude oil and other feedstock and prior to the time we sell the refined petroleum or petrochemical products produced from such crude oil and other feedstock. However, during periods of rising crude oil and refined petroleum or petrochemical product prices, the cost of replenishing our crude oil inventories and, thus, our working capital requirements, are similarly rising. We generally experience the increased working capital requirements from higher crude oil prices sooner, and to a greater degree, than the benefits to our gross refining margin that may arise from selling refined petroleum or petrochemical products at higher prices. Moreover, depending on the rate and the duration of the increase of crude oil prices, and the degree to which crude oil prices increase compared to the increase in refined petroleum or petrochemical product prices, our gross refining margins may actually decline during periods of rising crude oil prices. During periods of declining crude oil prices, we generally experience the opposite effects. See "*Risk Factors—Risks Relating to Our Business—Fluctuations in market prices of crude oil and other feedstock, as well as refined petroleum products or petrochemical products, may affect our results of operations*."

Interest Rate Risk

We are exposed to interest rate risk resulting from fluctuations in interest rates on our short-term and long-term borrowings.

See "*Risk Factors—Risks Relating to Our Business—We may be exposed to interest rate fluctuations*." Upward fluctuations in interest rates increase the cost of new borrowings and the interest cost of our outstanding floating rate borrowings. As of September 30, 2025, our floating rate exposure on long-term borrowings was 17.4% of our total long-term borrowings. As of September 30, 2025, a 1.0% change in interest rates on our floating rate borrowings, which totaled THB20,253.9 million (US$626.5 million), would result in a change of approximately THB45.0 million of annualized interest expense, provided that the impact on our interest expense may decrease under our hedging contracts.

Credit Risk

Our credit risk arises from cash and cash equivalents, contractual cash flows of debt investments carried at fair value through profit or loss ("**FVPL**"), derivative financial instruments as well as credit exposures to customers, including outstanding receivables.

Risk Management

We manage our credit risk by categorising into level of risks. For banks and financial institutions, we only transact with those that are rated at least within investment grade accredited by a reliable independence credit rating agency.

For transaction with other customers, we will consider the credit rating accredited by a reliable independence credit rating agency. If the credit rating is not available, we assess the creditability of the customer

by considering its financial position, past experience and other factors. Individual credit limits are set based on these assessments and in accordance with credit limits set by the board of directors. The compliance with credit limits by customers is regularly monitored by line management.

We have no significant credit risk with any single counterparty or group of counterparties since we maintain business with large customers in petroleum and power industries and require good quality collateral for the rest.

Our investments in debt instruments are considered to be low risk investments. We regularly monitor the credit ratings of the investments for credit deterioration.

Security

For some trade receivables, we may obtain security in the form of guarantees or letters of credit which can be called upon if the counterparty is in default under the terms of the agreement.

Impairment of Financial Assets

We consider that impairment of financial assets does not have significant financial impact.

Other financial assets measured at amortized cost

Other financial assets measured at amortized cost include short-term investment where we consider that such short-term investment credit risk is low.

Debt investments

Debt investments are measured at amortised cost include other receivables and loans to related parties.

All of the debt investments at amortized cost and fair value other comprehensive income ("**FVOCI**") are considered to have low credit risk, and the loss allowance recognized during the year was therefore limited to 12 months expected losses. Management consider 'low credit risk' for listed bonds to be an investment grade credit rating with at least one major rating agency. Other instruments are considered to have low credit risk when they have a low risk of default and the issuer has a strong capacity to meet its contractual cash flow obligations in the near term.

Financial asset measured at FVPL

We are also exposed to credit risk in relation to debt investments that are measured at FVPL. The maximum exposure at the end of FY2024 was the carrying amount of these investments of THB685.9 million (THB721.8 million in 2023).

Liquidity Risk

Prudent liquidity risk management is through maintaining sufficient cash and the availability of funding through an adequate amount of committed credit facilities to meet obligations when due and to close out market positions. At the end of FY2024, we held deposits at call of THB29,042.4 million (THB28,431.6 million in 2023) that are expected to readily generate cash inflows for managing liquidity risk.

Due to the dynamic nature of the underlying businesses, our Treasury maintains flexibility in funding by maintaining availability under committed credit lines.

Management regularly monitors (i) rolling forecasts of our liquidity reserve (comprising the undrawn borrowing facilities) and (ii) cash and cash equivalents. In addition, our liquidity management policy involves projecting cash flows in major currencies and considering the level of liquid assets and monitoring balance sheet liquidity ratios and maintaining appropriate financing plans.

INDUSTRY OVERVIEW

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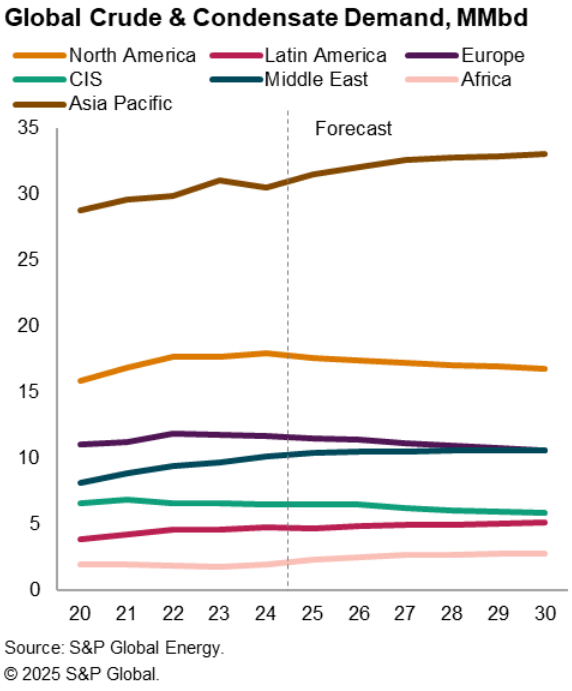
Oil Market

Crude Oil Market

Crude oil serves as a primary energy source and has significant implications for economic stability and geopolitical dynamics. As a fundamental fuel for transportation, heating, and electricity generation, crude oil underpins the operations of modern economies. The price of crude oil often serves as an indicator of global economic health; for example, rising prices may reflect increased demand and economic growth, while declining prices can signal economic slowdowns or an oversupply situation. Furthermore, geopolitical tensions, particularly in oil-rich regions such as Middle East and the Commonwealth of Independent States ("**CIS**"), will disrupt the supply chain and cause price volatility.

The table below shows the year-on-year real GDP growth forecast for selected countries and regions.

Country	2020	2021	2022	2023	2024	2025F	2026F	2027F	2028F	2029F	2030F
World	-2.9%	6.5%	3.4%	3.0%	2.8%	2.8%	2.7%	2.7%	2.7%	2.7%	2.6%
US	-2.1%	6.2%	2.5%	2.9%	2.8%	2.0%	2.2%	1.8%	1.6%	1.8%	1.7%
Europe	-5.7%	6.8%	3.9%	0.7%	1.2%	1.6%	1.4%	1.8%	1.9%	1.9%	1.8%
Asia Pacific	-0.7%	6.8%	3.5%	4.6%	4.1%	4.3%	3.9%	4.0%	3.9%	3.9%	3.7%
Mainland China	2.3%	8.6%	3.1%	5.4%	5.0%	5.0%	4.6%	4.5%	4.4%	4.4%	4.3%
Japan	-4.2%	2.8%	0.9%	1.2%	-0.2%	1.4%	0.7%	0.7%	0.8%	0.8%	0.8%
India	-5.8%	9.8%	7.7%	9.2%	6.5%	6.4%	6.2%	6.5%	6.5%	5.8%	5.2%
Thailand	-6.1%	1.6%	2.6%	2.0%	2.5%	2.0%	1.9%	2.5%	2.8%	2.8%	2.8%



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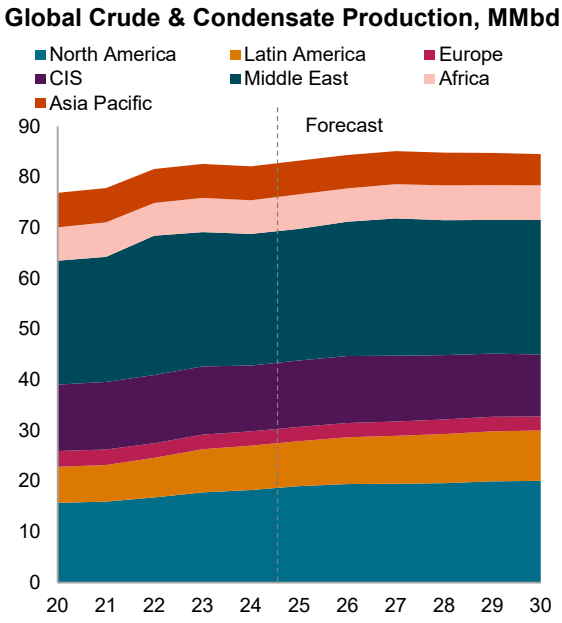

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Demand for crude oil and condensate is forecasted to reach 84.4 million barrels per day ("**MMbd**") in 2025, with a moderate rise expected to 84.7 MMbd by 2030. Asia Pacific is expected to spearhead this growth, driven by substantial expansions in refining capacities, especially in Mainland China and India. This region will account for 57% of the total increase in crude demand through 2030. Other regions contributing to growth include Africa, Middle East, and Latin America, where expansions in refinery capacities and increased crude runs are also taking place. Crude consumption in Direct Oil to Chemicals ("**DOTC**") is projected to grow, albeit at a moderate pace, over the next five years, especially in the Asia Pacific region and Middle East.

Uncertainty surrounding US "reciprocal" tariffs has subsided after previously driving market volatility. However, US trade policies continue to pose risks to Asia's trade and investment landscape. The unwinding of prior front-loading activities, higher US tariffs and lower global demand are expected to weigh on growth momentum in the remainder of 2025 and 2026, with accommodative monetary and fiscal policies mitigating some of the impact. Nevertheless, the Mainland China/US trade relationship is forecast to remain in place with a marginal level of economic and trade "decoupling".

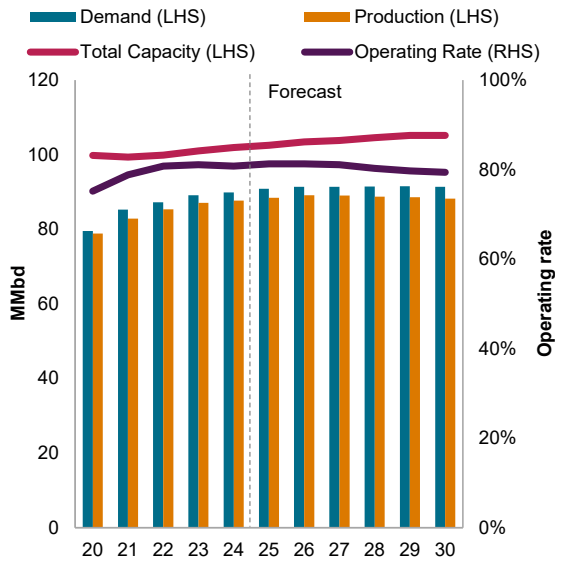
Crude oil and condensate demand in North America, Europe and CIS is projected to maintain its long-term downward trajectory, driven by softening regional demand and increasing competition in the export market. Refiners in Europe and the US are anticipated to encounter mounting challenges due to declining demand, the rise of large-scale refineries in the Atlantic basin, and increasing costs associated with emissions reduction compliance. These pressures are likely to result in accelerated refinery closures or reduced crude runs. Additionally, heightened sanctions on Russia will further strain its export market, leading to a reduction in crude runs and contributing to lower crude demand.

In terms of crude supply, the Americas are expected to lead global crude and condensate production growth over the next 5 years with additional contributions from Middle East. Russia continues to face limited investment, restricted access to capital and technology, and budget pressures from the war, leading to persistent declines throughout the forecast. Barrels under US sanctions, including Russian, Iranian and Venezuelan crudes, are projected to decrease by 2-3MMbd by 2030.

Global Refining Overview

Over 2020-24, global refining capacity has increased by 2.1 MMbd, representing a compound annual growth rate ("**CAGR**") of 0.5%. In contrast, demand has surged by 10.4 mbpd, reflecting a CAGR of 3.1%. Notably, 9 MMbd of this demand growth can be attributed to the post-COVID-19 recovery, following a decline in demand from 88 MMbd in 2019 to 79 MMbd in 2020. By 2024, global refining capacity and demand reached 102 MMbd and 89.9 MMbd, respectively.

Global Refined Products Supply & Demand



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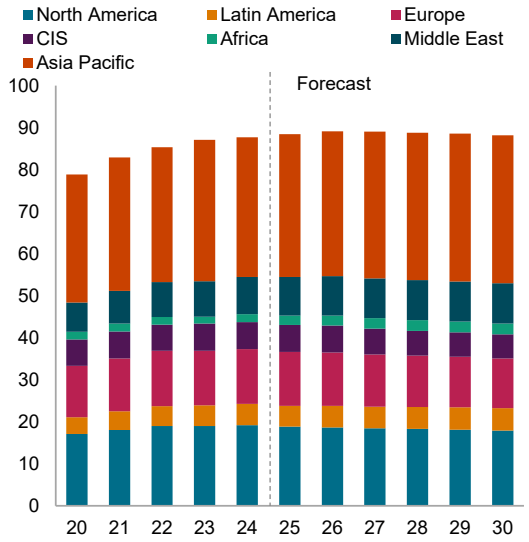
Global Refined Products Production by Region, MMbd



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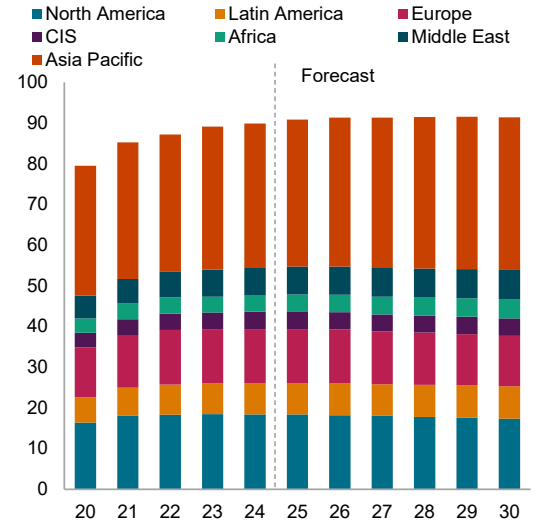
In 2024, the leading producing regions are Asia Pacific (37.9% of global production), North America (21.9%), and Europe (14.9%). In 2024, the top consuming regions are Asia Pacific (39.5% of global demand), North America (20.5%), and Europe (14.8%). Key net importers consist of Asia Pacific, South America, and Africa, while the primary net exporters are Middle East, North America, and the CIS.

Over the next five years, refinery capacity growth is expected to be concentrated in Asia Pacific and Middle East while refinery closure is expected to continue in Europe and North America. Significant investments in new, high-complexity refineries will primarily occur in Mainland China, India, and Middle East (Saudi Arabia

and the UAE), adding millions of barrels per day of capacity and shifting global refining hubs closer to demand centers. While Asia has seen substantial growth in refining capacity - particularly in Mainland China and India - its overall refined product balance masks underlying dependencies and vulnerabilities. Several Asian countries, especially in Southeast Asia (for example, the Philippines, Vietnam, and Indonesia), remain heavily reliant on imports. Asia Pacific alone accounts for about 50% of the refinery capacity addition over the next 5 years. New capacities were also added in Africa and Latin America in 2024-25 to support growing regional demand.

Global Refined Products Demand by Region, MMbd



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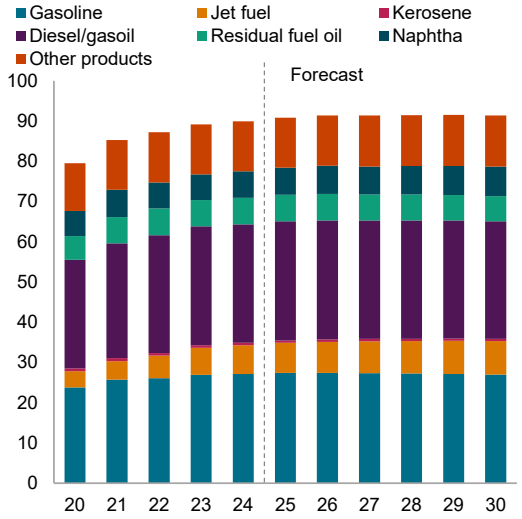
Global Refined Products Demand by Product, MMbd



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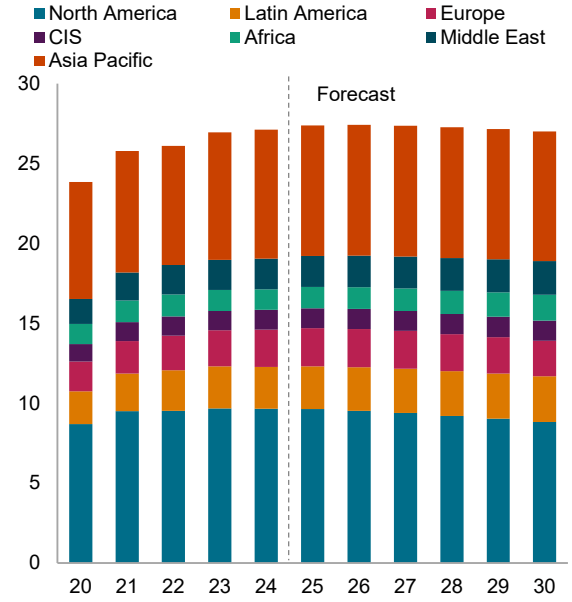
Between 2025 and 2030, significant demand growth is anticipated in Asia Pacific, Africa, Middle East and Latin America. Asia Pacific is expected to experience an increase of 1.3 MMbd in demand, while Africa, Middle East and Latin America are projected to add a combined total of 1.3 MMbd of demand. Other regions including North America and Europe are projected to see a combined decline of 2.1 MMbd over the same period.

In the Asia Pacific region, developed economies such as Japan and South Korea are expected to see moderate growth as they contend with aging populations and mature markets. In contrast, emerging economies, particularly in Southeast Asia (including Vietnam, Indonesia, and the Philippines), are poised for stronger growth driven by young populations, rising urbanization, and expanding middle classes. India's economy is projected to sustain significant momentum through advancements in manufacturing and digital transformation. On the other hand, demand for motor fuels in Mainland China has peaked, primarily due to substantial electrification in the transportation sector.

The push for net-zero commitments is inconsistent across Asia Pacific, with many governments lacking clear pathways to achieve these goals, despite stated targets. Many Southeast Asian regions face capital expenditure and financing constraints, and subsidy reform sees ongoing setbacks.

Global Gasoline Demand by Region, MMbd



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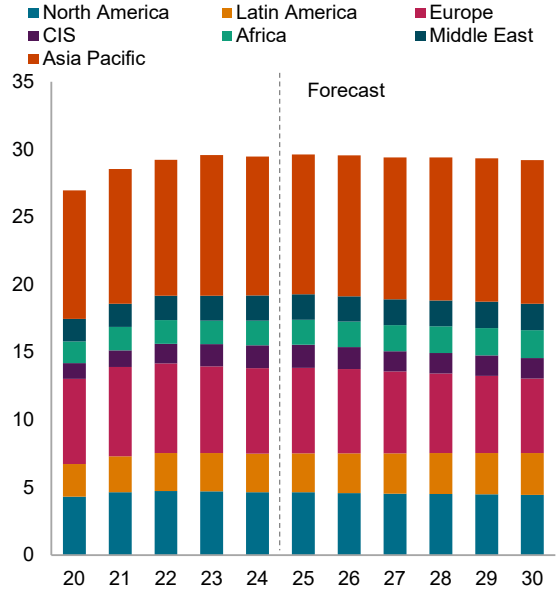
Global Diesel Demand by Region, MMbd



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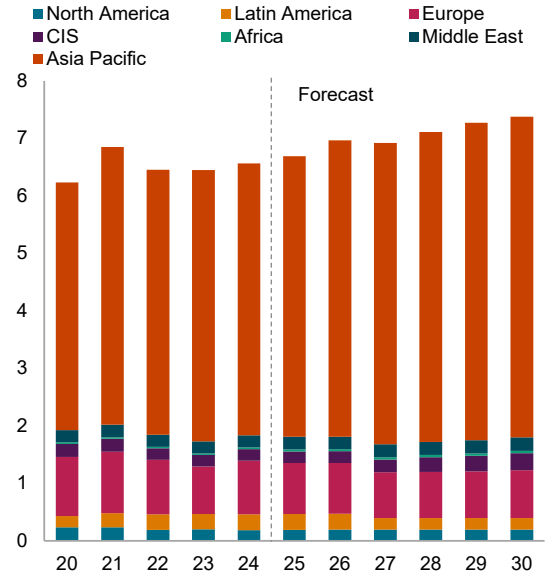
Global Naphtha Demand by Region, MMbd



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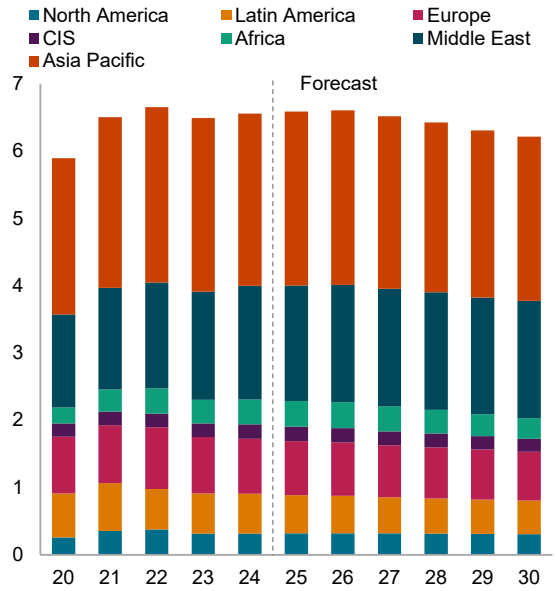
Global Fuel Oil Demand by Region, MMbd



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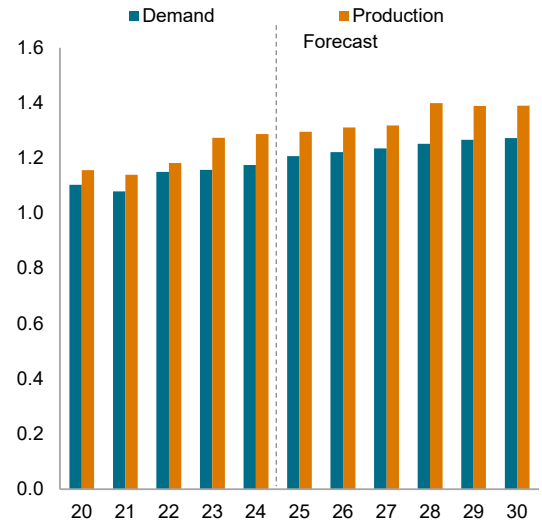
On a product basis, jet fuel and naphtha are projected to experience the highest demand increases, with jet fuel expected to grow by 839 thousand barrels per day ("**kbd**") (2.1% CAGR) and naphtha by 687 kbd (2.0% CAGR) between 2025 and 2030. Jet fuel demand is anticipated to remain robust through 2030, driven by increasing middle-class mobility, expanding tourism, and the absence of viable alternatives to fossil fuels in aviation. About 85% of global naphtha demand growth is expected to originate from the Asia Pacific region, primarily due to significant expansions in naphtha-fed cracker capacity in Northeast Asia. In contrast, demand for residual fuel oil is projected to decline by 372 kbd (-1.2% CAGR) over the same period. Energy transition policies will continue to diminish the stationary inland use of heavy fuel oil. While recent investments in power generation in the Middle East may offer some support, the overall heavy fuel oil market is expected to face further decline.

Over 2025-30, global demand growth for gasoline is projected to decline by 377 kbd (-0.3% CAGR). The decline in gasoline demand is primarily led by Mainland China and OECD markets, driven by greater efficiency and increased electrification. However, this decline will be somewhat offset by demand growth in Latin America, Middle East, Africa and other Asia. For diesel, demand growth is projected to reach a plateau during the 2030s, mainly driven by the shift in the European passenger car fleet, which is rapidly moving away from diesel amid gradually economic growth. Additionally, Mainland China is anticipated to experience reduced diesel demand as its trucking fleet transitions to alternatives such as LNG and electrification, following a peak in demand in 2023. In contrast, other regions in Asia Pacific (excluding Northeast Asia and Oceania), along with Africa and Latin America, are expected to be the strongest growth areas for diesel demand.

Thailand Refining Overview

In 2025, Thailand production and demand were at 1.3 MMbd and 1.2 MMbd respectively. Over 2025-30, demand is projected to grow by 65 kbd (1.1% CAGR). The country is a net exporter of refined products. Diesel, naphtha, and gasoline account for the bulk of refining production and products demand. The high production and demand of naphtha caters to Thailand's well-established petrochemicals industry. Most of Thailand's major refineries are located near Bangkok, the primary oil product center. They are already producing Euro 5-compliant diesel after the Euro 5 diesel mandate became effective on 1st Jan 2024. Thailand production will rise in 2028 when ThaiOil completes its Clean Fuel Project (CFP).

Thailand Refined Products Supply & Demand, MMbd



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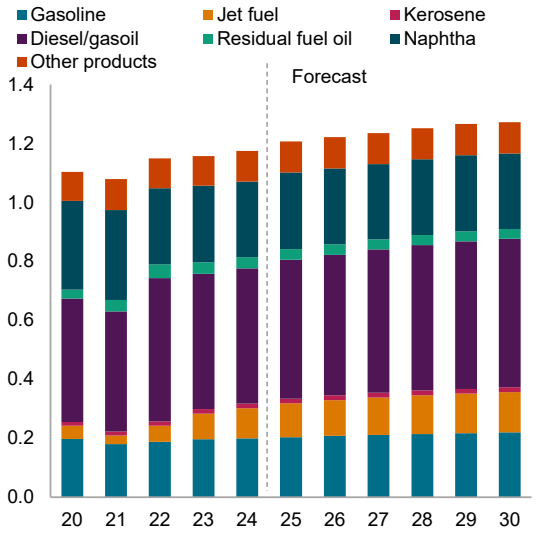
Thailand Refined Products Demand by Product, MMbd



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The Paraxylene Industry

Demand

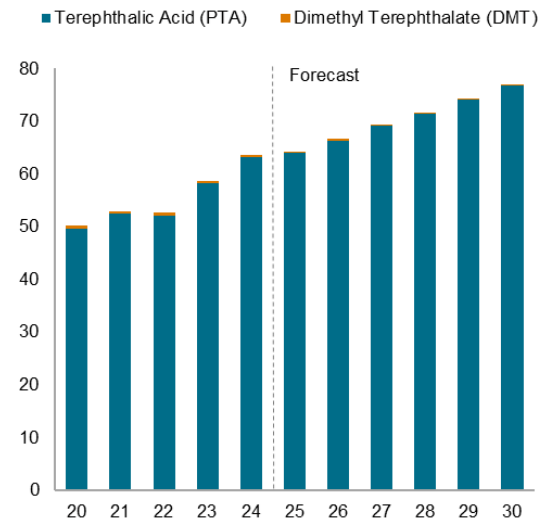
Paraxylene is an aromatic compound that is commonly derived from crude oil sources extracted from the mixed xylenes stream. Paraxylene is primarily used in the polyester chain for the production of purified terephthalic acid ("**PTA**"), which is used for the production of polyethylene terephthalate ("**PET**"). PET is subsequently used in the production of fibers, films, solid-state resins, and other consumables. The global demand for paraxylene is forecasted at 64.3 million metric tons in 2025 and expected to grow at a CAGR of 3.7% during 2025 to 2030.

Paraxylene and PTA consumption have remained heavily dominated by Asia, especially mainland China. The Chinese demand accounts for 76% of global demand in 2025 and expected to grow at a CAGR of 2.8% during 2025 to 2030. In Mainland China, significant development of the polyester chain has prompted the upstream development of PTA production units, resulting in further demand concentration in Mainland China and the rest of Asia.

Demand in Indian Subcontinent and Southeast Asia are expected to grow, driven by the development of the textile industries. The lower manpower costs have attracted many fiber and textile producers into the country. Paraxylene demand in those regions are expected to grow above 10% CAGR during 2025 to 2030.

Paraxylene demand in North America is forecasted to increase by 1.1% CAGR during 2025 to 2030, driven by increased PTA production in the United States. Europe is expected to have a decent growth during 2025 to 2030, although this is due to significant declines in the past five years due to declining downstream consumption of the product and reduced local capacity. Middle Eastern demand of paraxylene will continue to increase by 4.3% CAGR during 2025 to 2030 due to the substantial increase of PTA capacity anticipated in the region.

Global Paraxylene Demand by End Use, MMta



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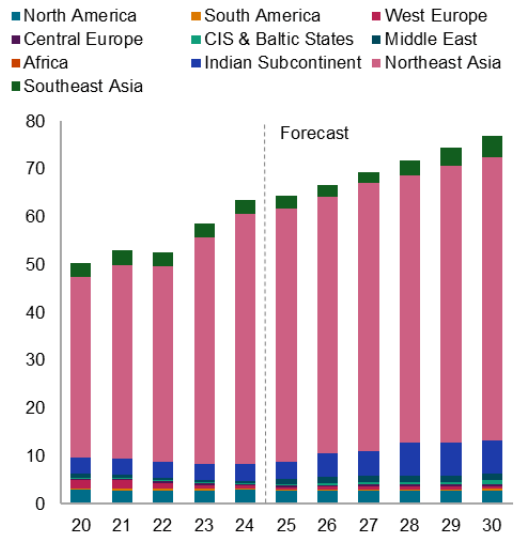
Global Paraxylene Demand by Region, MMta



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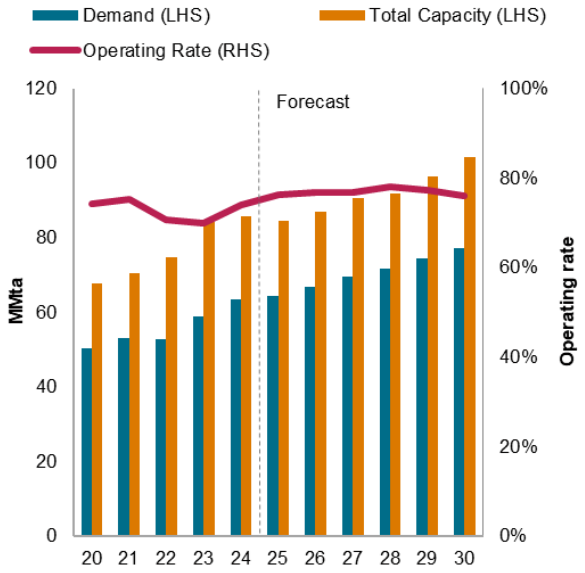
Supply

Global paraxylene capacity is forecasted at 84.5 million metric tons in 2025, and is expected to grow at a CAGR of 3.7% during 2025-30. Mainland China alone accounts for 52% of the global paraxylene capacity in 2025. The capacity share for China is expected to increase to 55% by 2030 due to anticipated new capacity addition in the country. Majority of new paraxylene projects in China are integrated with refineries and focus on petrochemicals, benefiting from economic scale and advanced technology. Southeast Asia and Indian Subcontinent are expected to add new paraxylene capacity with the intent to supply the increasing domestic demand and export their production. Their regional capacities are forecasted to increase by CAGR of 9.3% and 2.7%, respectively, during 2025 to 2030.

Global Paraxylene Supply & Demand



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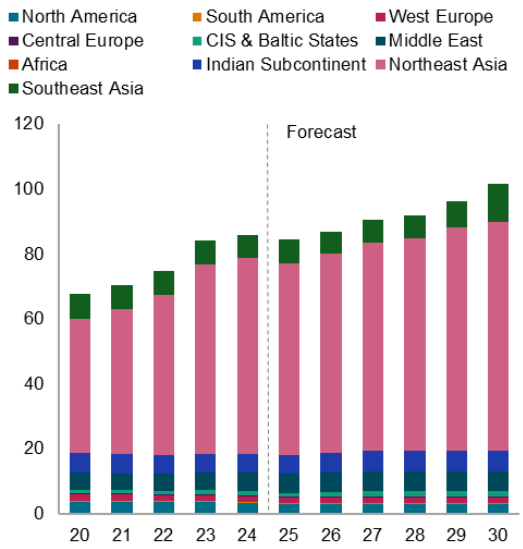
Global Paraxylene Capacity by Region, MMta



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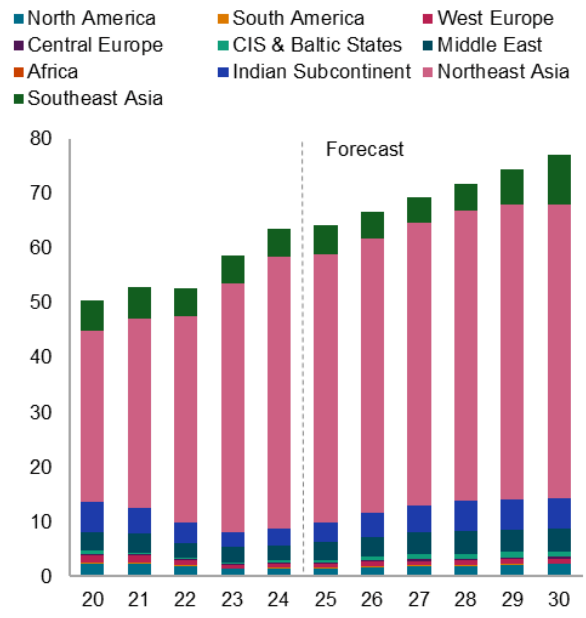
Global Paraxylene Production by Region, MMta



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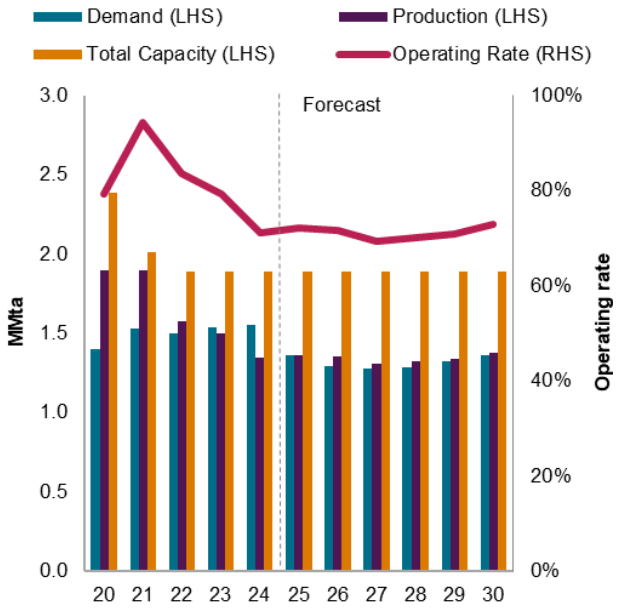
Thailand Supply & Demand

In 2025, Thailand paraxylene capacity is expected at 1.9 million metric tons, and is forecasted to remain unchanged during 2025 to 2030. Operating rates of paraxylene are projected at an average of 71% during 2025 to 2030. Thailand production and domestic demand are forecasted at 1.4 million metric tons and 1.4 million metric tons in 2025, respectively. Both production and demand are forecasted to remain relatively stable during 2025 to 2030. The largest producer in Southeast Asia is Thailand, with producers i.e., PTT Global Chemical and Thai Paraxylene. Recently, the Thai refining sector has been focusing more on raising its safety and environmental standards as well as improving its process efficiency rather than bringing new capacity onstream.

Thailand Paraxylene Supply & Demand



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The Benzene Industry

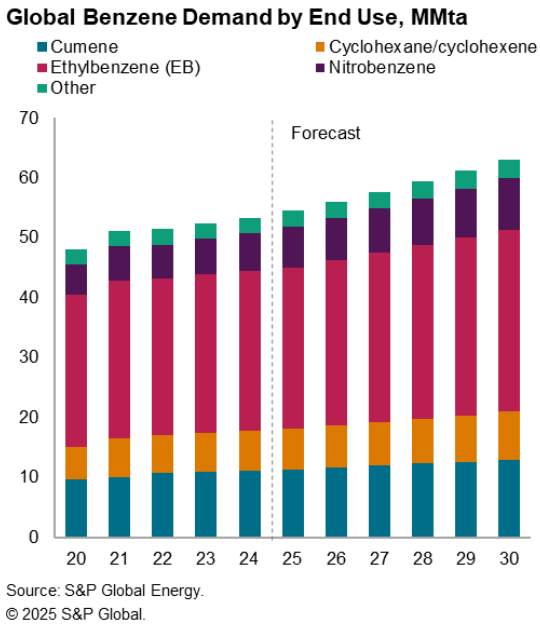
Demand

Benzene is an aromatic hydrocarbon, and one of the primary chemical building blocks for the petrochemical industry. Intermediate chemicals produced using benzene are used to produce a myriad of end-use products, including packaging containers, plastics components, fibers, tires, hoses, etc. Benzene can also be produced from coal. Since benzene is produced primarily as a by-product, benzene capacity is mostly feed-limited, and thus operating rates are less important a parameter than for other commodity chemicals.

Global demand for benzene is forecasted at 54.5 million metric tons in 2025 and is expected to grow at a CAGR of 3.0%, to reach 63.0 million metric tons by 2030. Benzene demand is primarily driven by the production of ethylbenzene (styrene), cumene (phenol), cyclohexane/cyclohexene (polyamide) and nitrobenzene (aniline). These derivatives account for more than 95% of benzene consumed globally.

Northeast Asia, particularly China, has been the largest consumer of benzene for many years, where the extensive manufacturing and consumer base have driven an increase in the production of a wide variety of polymers and chemicals. The performance of the Mainland Chinese economy will remain a vital driver for benzene consumption. In 2025, Northeast Asia is expected to account for 62% of global demand. Between 2025 and 2030, demand in the region is expected to grow from 33.6 million metric tons to reach 39.3 million metric tons, with a CAGR of 3.2%.

The other two major consuming regions are North America and West Europe with market shares of approximately 12% and 10%, respectively, in 2025. Demand of benzene in Southeast Asia and Indian Subcontinent will continue to grow at robust rate, primarily driven by further development of its chemicals and polymers market. The rapid pace of the regions' economic development and its large population base will ultimately prompt increasing requirements for durables and consumables.



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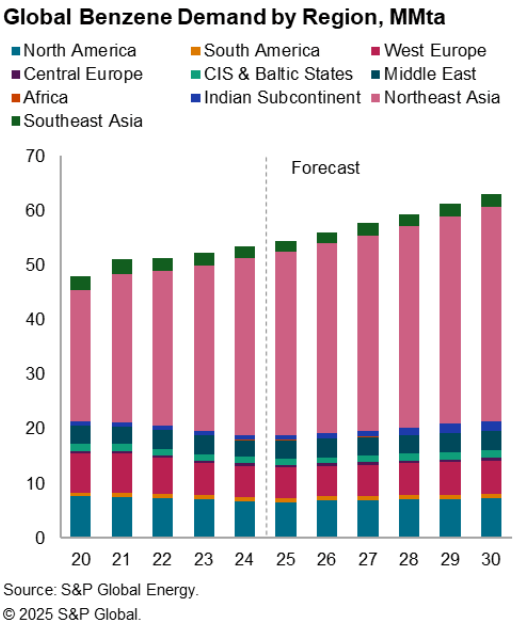

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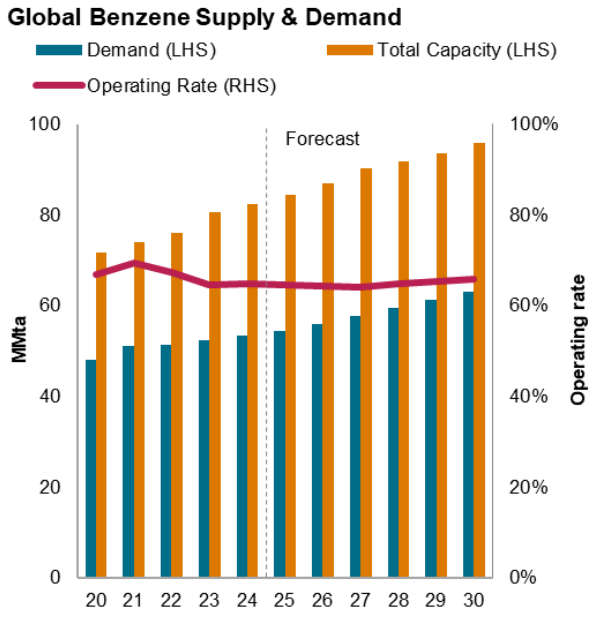
Supply

Global benzene capacity is forecasted at 84.5 million metric tons in 2025, and is expected to grow at a CAGR of 2.5% during 2025 to 2030. With 11.3 million metric tons of additional capacity due to come onstream by 2030, Mainland China is expected to remain the dominant contributor to global benzene supply growth, accounting for the vast majority of the forecast incremental capacity. The launch of several crude oil-to-aromatics complexes in Mainland China have greatly contributed to this new benzene supply over the past five years. In 2025, Northeast Asian, led by China, has the largest benzene capacity globally, accounting for 59% of the global total.

Benzene capacity in Southeast Asia and Indian Subcontinent will continue to increase, mainly to support their growing domestic demand and export markets. Mature regions such as West Europe, North America and Japan will continue to restructure their petrochemical industry, leading to further benzene capacity contraction in the long run.



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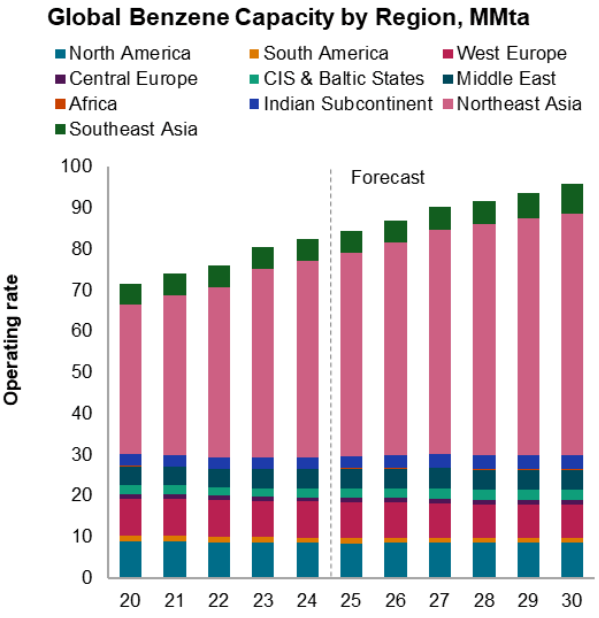

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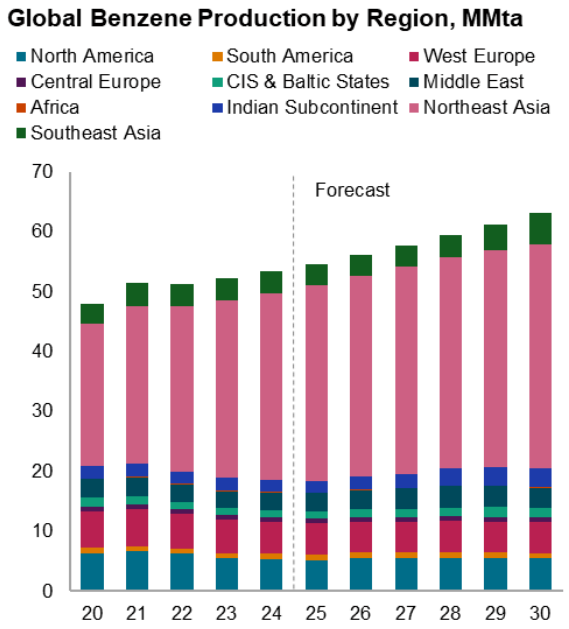

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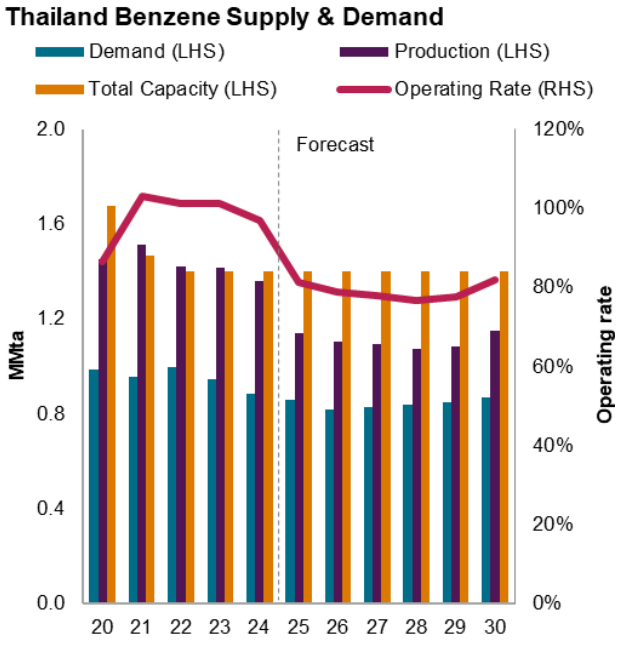
Thailand Supply & Demand

In 2025, Thailand benzene capacity is expected at 1.4 million metric tons, and is forecasted to remain unchanged during 2025 to 2030. Operating rates of benzene are projected at an average of 79% during 2025 to 2030. Thailand production and domestic demand are forecasted at 1.1 million metric tons and 0.9 million metric tons in 2025, respectively. Both production and demand are forecasted to remain relatively stable during 2025 to 2030. Thailand, together with Singapore, are the largest benzene producers in Southeast Asia. PTT Global Chemical and Thai Oil are the two largest benzene producers in the country.



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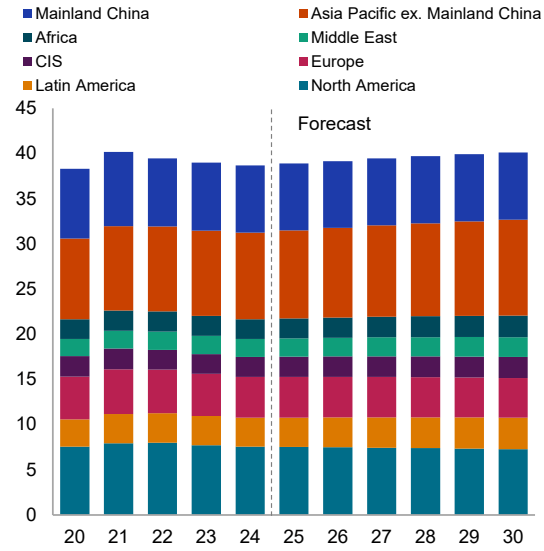
Lube Base Oil

Overview of the Lube Base Oil Industry

Lubricants are specialized materials designed to reduce friction, heat, and wear between moving surfaces in machinery, vehicles, and industrial equipment. By forming a protective film, lubricants minimize direct contact, extend component lifespan, dissipate heat, prevent corrosion, and help remove contaminants. They come in various forms, including oils (used in engines and gears) and greases (used in bearings and joints), and are essential across automotive, industrial, marine, aviation, and consumer applications.

Over the past two decades, global demand for lubricants has remained generally stable, with gradual increases occasionally interrupted by economic and geopolitical crises. While most lubricant categories are expected to see continued modest growth, demand for passenger car motor oil (PCMO) is projected to decline after 2025, influenced by factors such as China's economic slowdown, the rise of vehicle electrification, broader macroeconomic challenges, geopolitical instability, and policy uncertainty. In contrast, demand for heavy-duty engine oil (HDEO) continues to grow following post-Covid recovery.

Global Lubricants Demand, MMta



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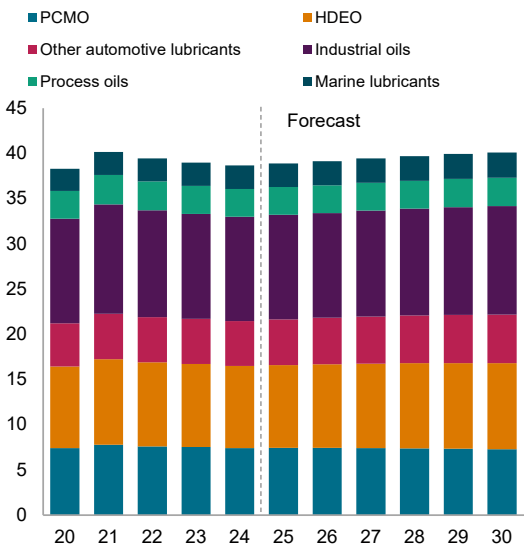
Global Lubricants Demand by Category, MMta



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Historically, Mainland China has been the primary driver of lubricants demand. However, the rapid adoption of electric vehicles (EVs) and an economic slowdown are anticipated to moderate its growth. Mature markets like North America and Europe are witnessing declining demand, largely due to high EV penetration and improvements in vehicle efficiency. In contrast, regions with lower EV adoption – such as Asia Pacific excluding Mainland China, CIS, Middle East, Africa, and Latin America – are seeing robust growth in lubricant demand.

Tightening product standards and rising quality requirements, especially in the PCMO segment, are driving increased demand for higher-quality base oils such as Group II, III, and IV. At the same time, demand for lower-quality Group I base oils is expected to decline as the industry shifts toward products that meet stricter performance and environmental criteria.

Base oils are the primary raw materials used in the production of lubricants, with their group classification indicating differences in quality, purity, and performance characteristics. Lubricants are formulated by blending base oils – often from different groups – with additives to achieve the specific properties required for various applications. As a result, the lubricant industry is increasingly shifting toward higher-quality base oils (Groups II, III, and IV) to meet stricter standards and enhanced performance requirements.

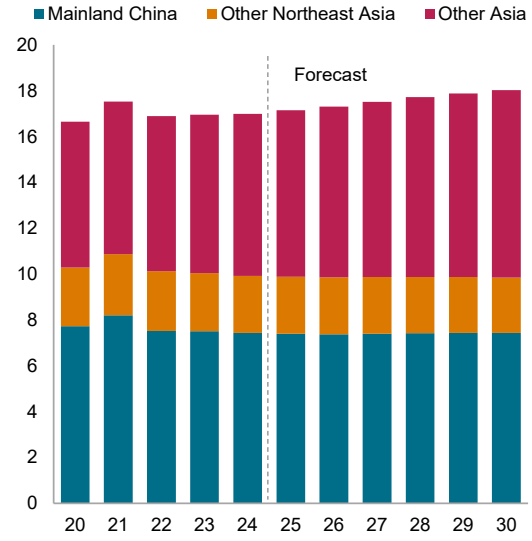
The table below outlines the classifications of Base Oils by API Groups:

API Group	Sulfur %wt	Saturates %	Viscosity Index
Group I	> 0.03	< 90	80 – 120
Group II	≤ 0.03	≥ 90	80 – 120
Group II+	≤ 0.03	≥ 90	110 – 120
Group III	≤ 0.03	≥ 90	≥ 120
Group III+	≤ 0.03	≥ 90	≥ 130
Group IV	All Polyalphaolefins (PAOs)		
Group V	All base stocks not in Group I – IV (naphthenics, non-PAO synthetics)		

Asia Lube Base Oil Demand

Mainland China, once the fastest-growing market for lubricants and now the world's largest consumer, is expected to see demand plateauing. Factors such as increasing lubricant efficiency, higher product quality, significant electric vehicle adoption, and economic challenges have resulted in demand for both passenger car and heavy-duty engine oils peaking in China.

Asia Lubricants Demand, MMta



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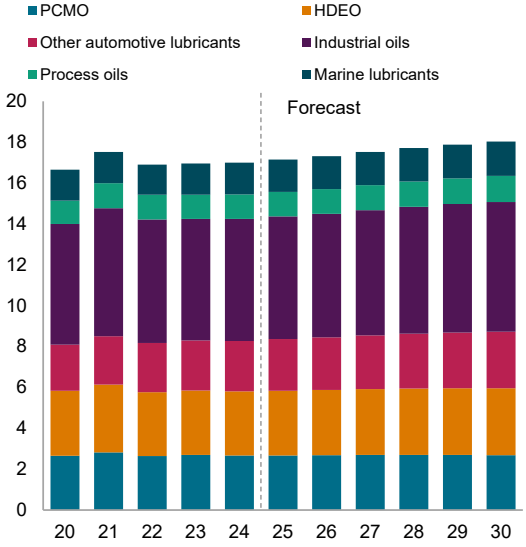
Asia Lubricants Demand by Category, MMta



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Lubricant demand in other Northeast Asian markets is projected to continue its long-term decline, mirroring trends seen in Europe and North America. Non-transport oils, especially industrial and process oils, make up a substantial part of the market. The passenger car motor oil segment is expected to experience the most significant reductions, driven by a shift toward higher-quality products, extended drain intervals, and greater EV use. All major product categories, except marine lubricants, are expected to contract over the long term.

Other Asia including Southeast Asia and Indian subcontinent are forecasted to maintain steady growth in lubricants demand, with recent volumes surpassing pre-pandemic levels. The region's demand is supported by increasing motorization rates and slower fleet electrification compared to more mature markets. Heavy-duty engine oils and industrial oils represent the largest shares of demand, and passenger car motor oils are expected to continue growing as vehicle ownership rises.

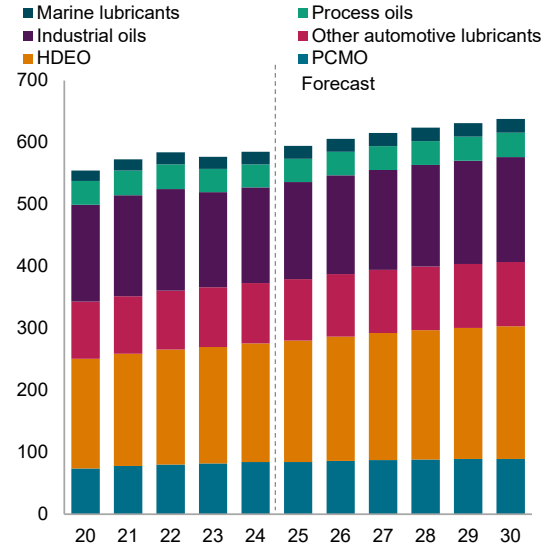
Thailand's Lube Base Oil Industry

Thailand is Southeast Asia's third largest base oil producer, with a total production capacity of 587 kta, behind Singapore and Indonesia. The country's two base oil plants were streamed in 1997 as part of a concerted national effort to secure domestic base oil supply and reduce the country's dependence on imports. The 320 kta Rayong plant is operated by IRPC, while the 267 kta Sri Racha plant is operated by Thai Lube Base. Both plants are producing Group I base oil. Thailand's major blending facilities have an estimated total lubricants and grease blending capacity of more than 1 million tons per annum (MMta). The demand for higher-quality Group II and Group III base oils in the region is expected to rise, which will in turn exert downward pressure on Group I producers.

Thailand is also the second largest lubricants demand center in Southeast Asia, after Indonesia, with a total demand at 585 kt in 2024. The transportation segment (PCMO, HDEO and other automotives) accounted for about 64% of total volumes in 2024, up from 62% in 2020. The rise has been supported by the growth Thailand's vehicle fleet. Lubricants demand growth in the non-transport segment has been more moderate, reflecting a combination of volatile growth trends in industrial activity and gradual gains in lubricants efficiency.

Thailand relies heavily on imports for higher-quality Group II/III base oils, while exporting a large part of its own Group I production. South Korea, Singapore, Qatar, Japan and Malaysia are key base oil suppliers to Thailand.

Thailand Lubricants Demand by Category, kta



Source: S&P Global Energy.
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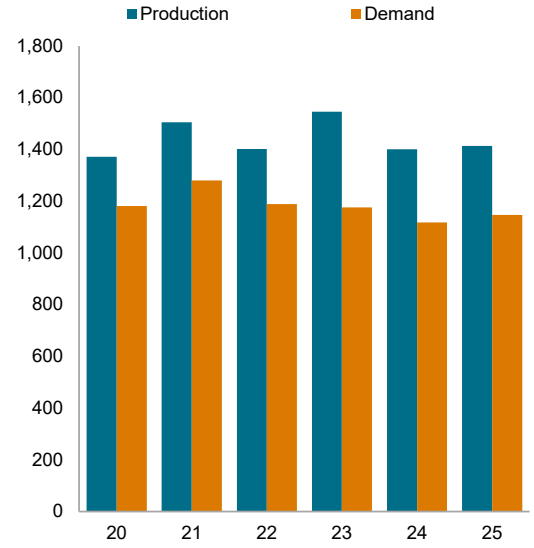
Bitumen

Thailand's Bitumen Industry

Bitumen is viscous and black by-product derived from the distillation of crude oil. It is primarily used in the construction and maintenance of roads, roofing and waterproofing applications. It is produced through refining process or from manufacturing of base oils. Key markets for bitumen demand include the Asia Pacific region, particularly Mainland China and India, which are undergoing rapid infrastructure development. Major producers and exporters of bitumen include Canada, US and Middle East. Thailand is a net exporter of bitumen.

Thailand Bitumen Production & Demand, kta



Source: S&P Global Energy.
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Thailand Bitumen Import & Export, kta

Source: S&P Global Energy.
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CORPORATE HISTORY AND CORPORATE STRUCTURE

Corporate History

The following table sets forth the key corporate milestones in our operating history.

Year	Event
1961	We were incorporated under a 20-year build-operate-transfer concession with the Thai government through the Ministry of Industry (the "**Concession**") to construct and operate an oil refinery in Sriracha.
1964	We commenced our oil refining operations following the completion of the first refining complex ("**TOC-1**") with a crude oil distillation capacity of 35,000 bpd with a fluidized catalytic cracking unit ("**FCCU**").
1970	Our refining capacity expanded to 65,000 bpd due to the completion of the second refinery complex ("**TOC-2**") with a thermal cracking unit ("**TCU**").
1981	Upon the expiration of the Concession, we transferred and leased back the land and the refinery assets from the Ministry of Industry.
1989	We increased our refining capacity from 65,000 bpd to 90,000 bpd after the installation of the first hydrocracking complex and other processing units.
1992	We purchased the leased refinery assets from the Ministry of Industry and entered into a long-term land lease agreement with the Treasury Department of the Ministry of Finance with a 30-year term, which expires on September 10, 2022.
1993	We expanded our refining capacity to 190,000 bpd with the installment of additional units, including the CCRs, TCU and the FCCU.
1994—1997	We entered into the petrochemical and the lube base oil businesses by making initial investments in Thai Paraxylene and Thai Lube Base, respectively. Our refining capacity increased to 220,000 bpd due to the installation of the second hydrocracking unit and other processing units. IPT became the first IPP to enter into a PPA with EGAT; separately, Thaioil Power was the first SPP to be constructed in Thailand under the SPP program.
2004	We converted into a public company and changed our name to Thai Oil Public Company Limited. Our shares were publicly listed for trading on the SET. We acquired additional shares in Thai Paraxylene and Thai Lube Base from the other shareholders, and Thai Paraxylene and Thai Lube Base became our wholly-owned subsidiaries.
2007	We increased the refining capacity of our third CDU by 50,000 bpd. As a result, our total crude refining capacity was increased to 275,000 bpd.
2008	We became the first refiner in Thailand with middle distillate refining capabilities to comply with the sulfur content requirements of Euro IV, ahead of the Thai government's required timeframe of January 1, 2012. Thai Paraxylene expanded its production capacity to 489,000 tons of paraxylene per year, 177,000 tons of benzene per year, 144,000 tons of toluene per year and 90,000 tons of mixed xylene per year, yielding 900,000 tons of petrochemical products capacity in total. We entered into the solvent business, including both manufacturing and trading operations in Thailand and trading operations in Vietnam.

Year	Event
2010	Through Thaioil Ethanol, we acquired a 50% equity interest in Sapthip, which focuses on the cassava-based ethanol production business.
2011	Thai Lube Base completed the construction and commenced commercial operation of its TDAE, which produces 50,000 tons of TDAE per year. Through Thaioil Ethanol, we acquired a 21.28% equity interest in UBE, which focuses on the cassava-based and molasses-based ethanol business. Through Thaioil Marine, we acquired our first VLCC under a joint venture agreement. We were the first refiner in the Asia-Pacific region to manufacture diesel and unleaded gasoline in compliance with the sulfur and benzene petrochemical content requirements of the Euro IV standard.
2012	Thai Paraxylene completed the construction of the paraxylene maximizer unit, which converts toluene into paraxylene and benzene. As of September 30, 2025, we had a nameplate capacity of approximately 527,000 tons of paraxylene per year, approximately 259,000 tons of benzene per year and approximately 52,000 tons of mixed xylene per year, yielding approximately 838,000 tons of petrochemical products capacity in total. We acquired a 19.0% equity interest in Thaioil Power from J-Power Holding (Thailand) Company Limited. As a result, we had a 73.99% shareholding in Thaioil Power.
2013	We formed GPSC through the amalgamation between IPT and PTT Utility Co., Ltd. ("**PTTUT**"). GPSC is engaged in the power business to develop power generation projects. We issued a US$1.0 billion dual-tranche senior unsecured fixed rate notes in accordance with Rule 144A and Regulation S. The notes were rated BBB and Baa1 by S&P and Moody's, respectively. Thai Paraxylene formed a joint venture with Mitsui & Co., Ltd. ("**Mitsui**") to set up LABIX Co., Ltd. ("**LABIX**") to produce LAB, a core feedstock for detergents. As of September 30, 2025, Thai Paraxylene and Mitsui & Co., Ltd. owned 75.0% and 25.0%, respectively, of LABIX. Thaioil Marine formed a joint venture with Nathalin Co., Ltd. ("**Nathalin**") TOP-NTL Shipping Trust ("**TOP-NTL**") to set up TOP Nautical Star Co., Ltd. to acquire large vessels for crude, feedstock and petroleum product storage and transportation. We formed a wholly owned subsidiary, TOP SPP, to operate two small power plants.
2014	We issued THB15 billion domestic, unsecured, unsubordinated debentures in four tranches of 3, 5, 7 and 10-year tenors to institutional and high net worth investors. The debentures were rated AA-(tha) by Fitch Ratings (Thailand) Ltd. Sak Chaisidhi Co., Ltd ("**Sak Chaisidhi**") expanded its hydrocarbon solvent nameplate capacity from approximately 76,000 to approximately 141,000 tons per year. Our third CDU and other core production units and underwent major turnaround. During the shutdown, we implemented energy efficiency improvement measures. We completed an emission improvement project for our refinery, which improved the quality of waste gas from our refinery by converting gaseous hydrosulfide into sulfur. Sulfur dioxide gas emissions from our refinery improved to a level lower than 250 ppm, which was significantly below 500 ppm as required by Thai law. We completed the HVU-2 debottlenecking project, which improved our ability to produce light products, such as jet and diesel.

Year	Event
	Through TOP SPP, we began constructing two small power plants with an aggregate capacity of 239 MW of electricity and 497 tons of steam per hour (taking into account the gas turbine generator with a capacity of 38 MW of electricity and the heat recovery steam generator with a capacity of 76 tons of steam per hour which we plan to sell to TOP SPP). The small power plants have strengthened our power generation capacity. We and PTT approved the joint investment in a transport and logistics system development project, which comprises two sub-projects. The first project aims to improve the distribution of jet fuel and paraxylene by modifying the existing pipeline system. The project of paraxylene distribution to the Sriracha Petroleum Terminal was completed in January 2017 and jet fuel distribution to the Chonburi Terminal is scheduled to be completed in the second quarter of 2018 respectively. The second project is a lorry expansion project for our product distribution system, which started commercial operation in March 2017.
2015	Our associate company, GPSC, completed its initial public offering on the SET in May 2015, raising approximately THB10.0 billion (US$309.3 million). We completed the energy efficiency improvement programs at our CDU-3 and propane deasphalting unit. This generated greater volumes of gasoline, TDAE, treated residual aromatic extract ("**TRAE**") and MES and helped to streamline inventory management. Thaioil Marine, our subsidiary, acquired three additional crew boats for offshore work, bringing our total number of crew boats up to 14. We established and inaugurated a Research and Development Center at the Thailand Science Park in Pathum Thani to support research work in furtherance of our business operations and strategies.
2016	Our associate company, LABIX Co., Ltd., commenced commercial operations of its 120,000 tons/year LAB facility at Sriracha on February 25, 2016. TOP SPP Co., Ltd., our subsidiary, successfully constructed and commenced the operation of two small power plants with an aggregate installed capacity of 239 MW of electricity and 497 tons/hour of steam. The project is divided into two phases: phase 1 of 124 MW electricity capacity and phase 2 of 115 MW. The commercial operation dates for phase 1 and phase 2 are April 1, 2016 and June 1, 2016, respectively. We established one chemical tanker for solvent and LAB products procurement for market expansion.
2017	We commenced operating our improved paraxylene line to the Sriracha Petroleum Terminal in December 2016. The project has increased Thaioil's paraxylene distribution to its fully utilized rate of 25,000 tons per month by modifying the existing pipeline system. Our lorry expansion project started commercial operation in March 2017. The project is a part of our product distribution system development and has increased petroleum products distribution by 5 million liters per day from 10 million liters per day to 15 million liters per day. Infrastructure improvement projects are being executed as planned. Infrastructure improvement projects are in progress. Jetty extension, office relocation and TOP crude oil tank projects are being executed as planned.
2018	On June 29, 2018, our board of directors approved the investment of approximately US$4,825 million in the Clean Fuel Project (the "**CFP**"). The CFP was subsequently approved at extraordinary shareholders' meeting on August 27, 2018. The CFP involves the construction of new production units, with the aim of improving our production and energy efficiency, oil refining capacity and refining capabilities, and reducing

Year	Event
	environmental impact. As part of the project, we plan to construct distillation units with a higher refining capacity to replace the current distillation units, which will result in an increase in our refining capacity from 275,000 barrels to 400,000 bpd and will improve the average complexity of our refinery from 9.8 to 12.0, based on our internal estimates using the methodology of the Nelson Complexity Index. On August 21, 2018, we signed a renewal 30-year land lease agreement (2022-2052) with the Treasure Department. Parts of Thaioil Sriracha Buildings Project completed construction. We moved into our Engineering Centre Building (ECB), a new workshop and new warehouse, in September 2018. TOP Solvent (Vietnam) Liability Limited Company completed the construction of a new solvent distribution center in Haiphong, Vietnam in October 2018. This project successfully expanded the company's market share in Northern Vietnam.
2019	TOP crude oil tanks started accommodating the fuel reserves in January 2019. The project is part of an infrastructure improvement project to increase flexibility in refining management for business continuity and to accommodate the reserves. A new laboratory building, another building in Thaioil Sriracha Buildings Project, was ready for use in January 2019. On April 10, 2019, our shareholders approved the disposal of assets to transfer ownership in Energy Recovery Unit (the "**ERU Project**"), which is a part of CFP, and the execution of the Relevant Agreements. Later on May 10, 2019, TOP and GPSC had signed the Asset Sales and Purchase Agreement. The ERU Project will be completed and transferred to GPSC in 2023. On May 31, 2019, the board of directors of TOP Solvent Company Limited (TS) approved TS to purchase the shares for investment in PT Tirta Surya Raya (TSR) for the amount of up to US$1.5 million or equivalent to shareholding of 67%. TS and TSR's shareholders had entered into the Share Purchase Agreement and completed the share transfer in September 2019. This investment is to strengthen the business structure and is in line with the company's strategy to address market demand and trends, and also enhance the company's competitiveness. On June 25, 2019, the board of directors of Thaioil Treasury Center resolved to established TOP Ventures Company Limited and TOP Ventures Hong Kong Limited for Corporate Venture Capital (CVC) transactions by investment in Venture Capital (VC) Fund and/or Startup Business. We commenced operating our Infrastructure Development at Existing Site Office Area for Future Projects (IDEA) in June 2019. We executed the project to improve our basic infrastructure on the former office building site, to reorganize and optimize the use of space on the refinery premises and to ensure enough space for the future projects. On July 26, 2019, our board of directors affirmed the provision of support to Global Power Synergy Public Company Limited ("**GPSC**") in the plan to increase its registered capital. We and Thaioil Power Company Limited ("**Thaioil Power**") held 8.91% and 20.78%, respectively, in GPSC and have subscribed such shares in proportion of their shareholding under the rules and conditions of GPSC to support its investment such as the GLOW acquisition and other future growth projects. On October 17, 2019, Thaioil Treasury Center issued senior unsecured notes to overseas institutional investors in a principal amount of US$565.0 million, fully guaranteed by the Company, at an interest rate of 3.50% per annum due 2049. The notes were rated BBB+ and Baa1 by S&P and Moody's, respectively.

Year	Event
	On November, 25 2019, we approved TOP SPP expansion for TOP SPP's electricity and steam capacity expansion project (TOP SPP Expansion Project) which this project expansion is under the existing TOP SPP Block 1 in order to be able to use Existing Infrastructure and Facility to save investment budget by increasing the production capacity of electricity and steam by approximately 115.3 megawatts and 260 tons per hour and will be completed by April 1, 2023, together with the termination of the Power Purchase Agreement between Thaioil Power and EGAT.
2020	On June 18, 2020, Thaioil Treasury Center issued senior unsecured notes to overseas institutional investors in a principal amount of US$1,000 million, fully guaranteed by the Company, comprising US$400 million at an interest rate of 2.50% per annum due 2030 and US$600 million at an interest rate of 3.75% per annum due 2050. The notes were rated BBB+ and Baa2 by S&P and Moody's, respectively.
	On August 20, 2020, our board of directors approved the restructuring of our shareholding in the power business, including the disposal of all ordinary shares directly held by the Company in GPSC to PTT and the acceptance of the entire business transfer from TP (the "**Power Business Restructuring**"). The Power Business Restructuring was intended to reduce the complexity of the shareholding in our power business in order to increase transparency, flexibility and efficiency in managing and driving the business forward, as well as to increase our net cash flow, working capital and liquidity, and to strengthen our financial position and provide funds for our future investment projects.
	On November 25, 2020, our board of directors approved the restructuring of our marine transport business unit, including the acquisition of all ordinary shares in Thaioil Marine International Pte Ltd. ("**TOMI**") from Thaioil Marine Company Limited ("**TM**") and disposing of all ordinary shares held by us in Thaioil Marine Company Limited to Phurich Marine Company Limited (the "**Marine Transport Business Restructuring**").
	On November 24, 2020, we celebrated the opening of our new office building in Sriracha.
2021	On February 1, 2021, we completed the implementation of the Power Business Restructuring.
	On March 25, 2021, we completed the Marine Transport Business Restructuring. We acquired all ordinary shares in TOMI from TM at the total share purchase price of THB277.18 million, and on April 30, 2021, we disposed of and transferred all ordinary shares held by the Company in TM to the Buyer at the total share purchase price of THB858.60 million, leading to TM's termination as our subsidiary.
	On April 26, 2021, the board of directors of TOP Solvent Company Limited (TS) approved TS to purchase the shares for investment in JSKEM Private Limited (JSKEM) for the amount of up to US$1.44 million, or equivalent to shareholding of 80%, and 1 share in TSChem India Private Limited. TS and JSKEM's shareholders have entered into a Share Purchase Agreement in May 2021 and completed the transfer within June 2021. This investment is an overseas expansion of our solvent distributor business, which strengthens our business structure and is in line with our strategy to address market demands and trends, and also enhances our competitiveness.
	On April 30, 2021, we completed the Marine Transport Business Restructuring.
	On July 12, 2021, our board of directors approved the establishment of PT TOP Investment Indonesia, in connection with the CAP Share Acquisition Transaction.
	On July 23, 2021, our board of directors approved the CAP Share Acquisition Transaction in CAP of up to US$1,183 million for up to 15.38 percent of total outstanding shares of CAP. CAP is the premier petrochemical producer with an integrated plant and supporting facilities in the Republic of Indonesia, the ASEAN's largest and high-growth chemicals market. It operates Indonesia's only naphtha cracker producing high quality olefins and polyolefins and is the sole domestic producer of styrene monomer and butadiene. The CAP

Year	Event
	Share Acquisition Transaction is expected to provide us with petrochemical industry exposure, the Indonesia market exposure, an investment into a leading petrochemical produce in Indonesia with high growth opportunity, and strategic collaborations with CAP. The investment was made through PT TOP Investment Indonesia, and the investment proceeds to CAP will be used exclusively for the investment in the development and construction of a petrochemical plant by PT Chandra Asri Perkasa. In September 2021, we acquired 15.0% of total outstanding shares of CAP with the investment value of US$913 million or THB29,798 million[8]. The investment in CAP is classified as an investment in associate and profit contribution from CAP is realized as our share of profit of joint ventures and associates. We plan to acquire the additional shares of CAP in the proportion of 0.38% of CAP's outstanding shares if the Final Investment Decision (FID) on the development and construction of the new petrochemical plant (CAP2) is approved within 5 years from the completion of the first acquisition of the newly issued shares. The total value of investment will not exceed US$270 million or THB8,928 million[9]. If the FID has not been obtained within 5 years from the completion of the first acquisition of the newly issued shares, the investment value will not exceed US$3.9 million or THB129 million[4]. On July 23, 2021, our board of directors approved the long-term recapitalization plan, involving the sale of GPSC shares not exceeding 10.8% of GPSC's paid up share capital and a capital increase of approximately THB10 billion. On September 17, 2021, Thaioil Power Company Limited completed the liquidation registration. On September 30, 2021, our associate, UBE completed its initial public offering and listed its shares on the SET. As a part of the initial public offering, Thaioil Ethanol sold some of its shares in UBE. Thaioil Ethanol currently owns a 12.39% effective interest in UBE. On November 19, 2021, the shareholders of TOMI approved the dissolution due to its inactive status. This dissolution will have no impact on our operations. On December 30, 2021, TOP Solvent Company Limited (TS) completed the additional acquisition of a 10.71% stake in PT Tirta Surya Raya, bringing our effective interest in PT Tirta Surya Raya to 77.71%.
2022	On April 7, 2022, at the 2022 Annual General Meeting of Shareholders, our shareholders resolved to approve the sale of our GPSC shares to our major shareholder PTT, and/or Siam Management Holding Co., Ltd. ("**SMH**") which is a related entity of PTT, in the total amount of 304,098,630 shares, equivalent to approximately 10.78% of GPSC's total issued and sold shares, at the total purchase price of approximately THB22,351 million. We completed the sale of the shares in GPSC on June 7, 2022. As of September 30, 2025, we hold 281,972,937 shares in GPSC, equivalent to 10.0% of GPSC's total shares. At the 2022 Annual General Meeting of Shareholders, our shareholders resolved to approve the increase of our registered capital in the amount of THB2,751,200,000 through the issuance of 275,120,000 newly issued ordinary shares with a par value of THB10.0 from the existing registered capital of THB20,400,278,730 to 23,151,478,730 Baht divided into 2,315,147,873 shares with a par value of THB10.0 for fundraising as part of our recapitalization plan for long-term financial restructuring. The allocation of newly issued ordinary shares will be (1) up to 239,235,000 newly issued ordinary shares at the par value of THB10.0 for public offering; and (2) up to 35,885,000 newly issued ordinary shares at the par value of THB10.0 and the total value of not exceeding 15.0% of the total number of shares issued and offered, for the over-allotment exercise by the Over-allotment Agent to be able to return the newly issued shares to PTT for the ordinary shares of our Company which the Over-allotment Agent borrows from PTT for the over-allotment (if any), which is part of this public offering.

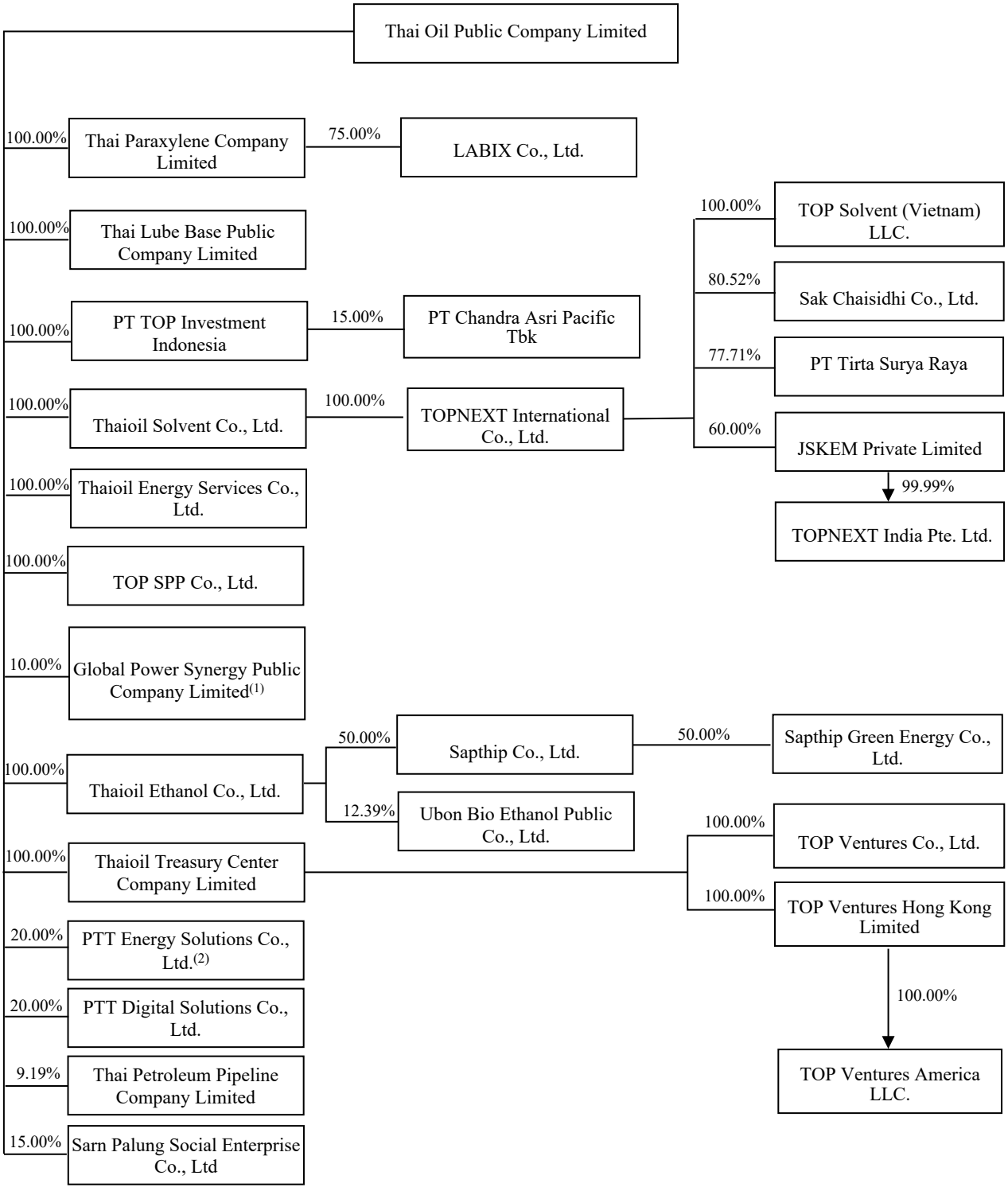
[8] The exchange rate was THB32.6 per US$1.00 as of September 2021.

[9] The exchange rate was THB33.1 per US$1.00 as of July 2021.

Year	Event
	In October 2022, we issued and offered total of 214,953,271 newly issued ordinary shares of our Company, which consisted of (1) the offering of 192,307,693 newly issued ordinary shares for sales to the general public, including sales made to the existing shareholders of our Company, and (2) the over-allotment of 22,645,578 ordinary shares. We issued THB12 billion domestic, unsecured, unsubordinated debentures in six tranches of 3, 5, 7, 10, 12 and 15-year tenors to institutional and high net worth investors. The debentures were rated A+(tha) by Fitch Ratings (Thailand) Ltd.
2023	Chaibadan Community Power Plant 1 Co., Ltd. and Chaibadan Community Power Plant 2 Co., Ltd. were liquidated and closed on March 27, 2023. We issued THB10 billion domestic, unsecured, unsubordinated debentures in three tranches of 5, 10 and 15-year tenors to institutional and high net worth investors. The debentures were rated A+(tha) by Fitch Ratings (Thailand) Ltd.
2024	On February 14, 2024, we completed our first successful trial run of the diesel Hydrodesulfurization Unit-4 (HDS-4) to enhance flexibility and the production of the Euro 5 diesel fuel standard. The board of directors of Thaioil endorsed a capital expenditure increase for the CFP of approximately THB63,028 million along with THB17,922 million in interest incurred during construction. Such budget increments will go toward construction, procurement of remaining supplies and equipment, and other expenses such consultancy fees for CFP completion and COD activities by the third quarter of 2028. To this end, Thaioil and Subsidiaries have planned Extraordinary General Meeting (EGM) no. 1/2025 on February 21, 2025, to seek shareholders' approval of an increase in capital expenditure.
2025	The Extraordinary General Meeting of Shareholders no. 1/2025 approved an increase of the investment cost in the CFP in the amount of approximately THB63,028 million or approximately US$1,776 million and the interest during construction of approximately THB17,922 million or approximately USD505 million equivalent. In July 2025, TOPNEXT International Company Limited (TX) purchased additional shares of JSKEM Private Limited (JSKEM) in accordance with the original share purchase agreement, representing a 20% shareholding and bringing our total effective stake to 80%. The board of directors' meeting no. 9/2025, held on September 25, 2025 approved the asset monetization project, which entails entering into long-term lease and leaseback arrangements for selected infrastructure assets of the Company (i.e., crude oil storage tanks, Single Buoy Mooring (SBM), lorry loading station, and land), located in Si Racha District, Chonburi Province (the "**Asset Monetization Project**"). The Extraordinary General Meeting of Shareholders no. 2/2025 approved the Asset Monetization Project with 99.99% of the votes. Following completion of the Asset Monetization Project in December 2025, we received net cash proceeds of THB18,230 million.

Corporate Structure

The following diagram summarizes our corporate structure as of September 30, 2025:



Notes:

(1) The Company has sold its shares in GPSC in the amount of 304,098,630 shares to PTT and /or Siam Management Holding Co., Ltd, which is a related party to PTT according to the resolution of the Annual General Meeting of Shareholders of 2022. The Company has completed the sale of GPSC shares on June 7, 2022. The Company currently holds 281,972,937 shares in GPSC, equivalent to 10.0% of GPSC's total shares.

(2) The resolution of the Extraordinary General Meeting of Shareholders no. 1/2022, which was held on August 29, 2022, resolved to dissolve PTTES. The liquidation process is expected to be completed within 2026.

(3) On November 17, 2025 we established a new subsidiary, TOP Infra Company Limited, for the Asset Monetization Project. The Company holds 51% of its total shares and a subsidiary of PTT Tank Terminal Company Limited holds the remaining 49%.

Consolidated Subsidiaries and Jointly-Controlled Associates

The following table sets forth our consolidated subsidiaries and jointly-controlled associates and their respective businesses as of the date of this Offering Memorandum.

Name of Entity	Nature of Business	Country of Incorporation	Effective Equity Interest (%)
SUBSIDIARIES			
Lube Base Oil Business			
Thai Lube Base Public Company Limited	Lube base oil refining and distribution	Thailand	99.99
Aromatics and LAB Business			
Thai Paraxylene Co., Ltd.	Paraxylene manufacturing and distribution	Thailand	99.99
LABIX Co., Ltd.	Linear Alkyl Benzene manufacturing and distribution	Thailand	75.00
Solvent Business			
Thaioil Solvent Co., Ltd.	Investment in solvent and chemical business	Thailand	99.99
TOPNEXT International Company Limited	Distribution of solvent and chemical products	Thailand	99.99
Sak Chaisidhi Co., Ltd.	Solvent and chemical products manufacturing	Thailand	80.52
TOP Solvent (Vietnam) LLC	Distribution of solvent and chemical products	Vietnam	100.00
PT Tirta Surya Raya	Distribution of solvent and chemical products	Republic of Indonesia	77.71
JSKem Private Limited	Distribution of solvent and chemical products	Republic of Singapore	80.00
TOPNEXT India Private Limited	Distribution of solvent and chemical products	Republic of India	99.99
Petrochemical			
PT TOP Investment Indonesia	Investment in Olefins petrochemical business	Republic of Indonesia	100.00
Power Generation Business			
TOP SPP Co., Ltd.	Power and stream generation and distribution	Thailand	99.99

Name of Entity	Nature of Business	Country of Incorporation	Effective Equity Interest (%)
Other Businesses			
Thaioil Energy Services Co., Ltd.	Providing human resource management	Thailand	99.99
Thaioil Ethanol Co., Ltd.	Investment in ethanol businesses and alternative	Thailand	99.99
Sapthip Co., Ltd.....	Ethanol products manufacturing and distribution	Thailand	50.00
Sapthip Green Energy Co., Ltd.	Biogas power generation and distribution	Thailand	99.99
Thaioil Treasury Center Co., Ltd.	Treasury centre services for the Group's business	Thailand	99.99
TOP Ventures Company Limited.....	Investment in venture capital and/or start-up business	Thailand	99.99
TOP Ventures Hong Kong Limited..	Investment in venture capital and/or start-up business	Hong Kong Special Administrative Region	100.00
TOP Ventures America LLC.....	Investment in venture capital and/or start-up business	United States of America	100.00
TOP Infra Company Limited	Managing the lease interest by subleasing all of the Leased Property to Thai Oil or its designees for the benefit of Thai Oil's operations of its refinery, fuel wholesale business and related businesses; Managing, maintaining, and developing infrastructure, facilities, and property (whether owned, leased, or subleased) that support or relate to the petroleum industry, refinery operations, fuel wholesale business, or other associated activities	Thailand	51.00
ASSOCIATES			
Petrochemical			
PT Chandra Asri Pacific Tbk	Chemical products manufacturing and distribution	Republic of Indonesia	15.00
Transportation Business			
Thai Petroleum Pipeline Co., Ltd.	Oil transportation through the pipeline	Thailand	9.19
Other Business			
PTT Digital Solutions Co., Ltd.	Provide information technology and computer service	Thailand	20.00

Name of Entity	Nature of Business	Country of Incorporation	Effective Equity Interest (%)
	activities		
PTT Energy Solutions Co., Ltd.	Provide technical and operational services	Thailand	20.00[10]
RELATED COMPANY			
Other Businesses			
Ubon Bio Ethanol Public Co., Ltd. ..	Cassava-based and molasses-based ethanol manufacturer and distributor	Thailand	12.39
Sarn Palung Social Enterprise Company Limited.....	Support execution of social enterprise of PTT Group	Thailand	15.00
Global Power Synergy Public Co., Ltd.	Operate power generation business, including invest and develop future projects in power business	Thailand	10.00

[10] On 29 August 2022, the Extraordinary General Meeting of Shareholders of PTT Energy Solutions Company Limited ("**PTTES**") passed a resolution approving the dissolution of PTTES, and it is currently in the process of liquidation. The liquidation process is expected to be completed within 2 years from the date of approval.

DESCRIPTION OF THE TREASURY CENTER

The Treasury Center was incorporated on October 3, 2017 as a limited liability company in Thailand with a registered and paid-up capital of THB10,000,000. Its registered office is at 555/1 Energy Complex, Building A, 11th Floor Vibhavadi-Rangsit Road Chatuchak, Chatuchak, Bangkok, Thailand. The Treasury Center is a direct wholly-owned subsidiary of the Company and its financial statements will be consolidated with the Company. No part of the equity securities of Treasury Center is listed or dealt in on any stock exchange and no listing or permission to deal in such securities is being or is proposed to be sought.

On November 21, 2017, the Treasury Center received a Treasury Center License ("**TC License**") from the MOF allowing it to operate corporate treasury center business under the supervision of the MOF and Bank of Thailand. On February 5, 2018, the Treasury Center also qualified as an "international headquarters" for the Company and received the International Headquarters License ("**IHQ License**") from the Revenue Department of Thailand.

On June 1, 2019, the Treasury Center replaced its IHQ license with an International Business Center License ("**IBC License**"), pursuant to regulatory changes from the Revenue Department of Thailand.

On June 6, 2019, the Extraordinary Board of Directors of The Treasury Center approved the company capital increase of THB946,200,000 with an initial paid-up capital 25%, amount THB236,550,000.

On June 25, 2019, the Extraordinary Board of Directors of The Treasury Center resolved to establish TOP Ventures Company Limited and TOP Ventures Hong Kong Limited to engage in certain Corporate Venture Capital (CVC) transactions. The objective of this initiative is to provide a platform for Thai Oil to invest in new businesses in which we have the expertise to support change. TOP Ventures Company Limited and TOP Ventures Hong Kong Limited are 100% owned by the Treasury Center. TOP Ventures Company Limited currently has a registered share capital of THB35,000,000 and TOP Ventures Hong Kong currently has a registered share capital of 1 Hong Kong Dollar and USD23,649,037.5.

The Treasury Center currently has a registered capital and paid-up capital of THB956,200,000.

As a corporate treasury center, the Treasury Center performs the liquidity management and foreign exchange risk management activities for the Company and its subsidiaries. As an international business center, the Treasury Center's functions include providing consulting services and giving managerial advice on commerce and industry to the Company.

The Treasury Center's Articles of Association provide that the board of directors is to be elected by shareholders. The Treasury Center's board of directors is comprised of five members and, together with our senior management team, is responsible for the management of the Treasury Center's business.

Name	Position
Ms. Wanida Boonpiraks	Director
Mr. Jeerawat Pattanasomsit	Director
Ms. Arkhanin Ruang-Art	Director
Mr. Phongsan Wanichphongpan	Director
Ms. Orawan Chalerm	Director

BUSINESS

Overview

We are the flagship refiner of PTT Group and we maintain our position as a highly efficient and competitive refinery, in order to be the principal petroleum refinery and to meet the energy demand of Thailand. We also explore opportunities by extending our value chain toward businesses with high-value products, where such expansion aligns with our strategies, knowledge, resources and technologies. The value chain expansion aims to increase the product value from petroleum business to petrochemical business in the Asia region, especially in the countries with high domestic demand. We are one of the leading integrated refining and petrochemical companies listed on the Stock Exchange of Thailand. We currently own and operate the largest single-site complex refinery in Thailand measured by nameplate capacity of crude distillation unit ("**CDU**"), which is integrated with our petrochemical platform. As of September 30, 2025, we had a refining nameplate capacity of approximately 275,000 bpd of crude oil and other feedstock, representing approximately 22.1% of the total refining nameplate capacity in Thailand, according to the EPPO. For the year ended December 31, 2024 and the nine months ended September 30, 2025, our refinery processed crude oil and other feedstock represented approximately 31.4% and 29.2%, respectively, of the total processed feedstock in Thailand for the periods, according to the DOEB. As of September 30, 2025, we also had a petrochemical production nameplate capacity of approximately 838,000 tons per year, a hydrocarbon solvent production nameplate capacity of approximately 214,000 tons per year, a linear alkyl benzene ("**LAB**") production nameplate capacity of approximately 120,000 tons per year and a lube base oil nameplate capacity of approximately 267,015 tons per year. We are the principal refiner for the PTT Group. PTT and OR are also our principal offtake customers for our refined petroleum and petrochemical products and PTT is our principal feedstock supplier. We also sell our refining and petrochemical products to other customers, both in Thailand and internationally.

Our core businesses can be divided into eight units: oil refinery, aromatics and LAB, lube base oil refinery, power generation, solvent and chemicals, ethanol, olefins and other businesses, such as pipeline transportation and information technology services. Our refinery, aromatics and LAB and lube base oil business units integration allows us to achieve an overall higher margin. See "*Management's Discussion and Analysis of Financial Condition and Results of Operation—Key Metrics for Our Group—Gross Integrated Margin*."

Our refined petroleum products include light products consisting of liquefied petroleum gas ("**LPG**"), unleaded gasoline, gasohol and naphtha, middle distillates consisting of diesel and jet fuel, and heavy products in the form of fuel oil. The principal aromatics and LAB products that we produce include paraxylene, benzene and LAB. Our lube base oil products include group 1 lube base oil, bitumen, slack wax and extract.

Our refinery, the Sriracha Complex, is located near the Laem Chabang deep sea port in Sriracha, Chonburi Province, approximately 124 kilometers southeast of Bangkok, the capital city of Thailand. The strategic location of the Sriracha Complex provides our offtake customers access to a convenient product delivery network. This network allows our offtake customers to take delivery of our refined petroleum products efficiently and in a cost-effective manner via the connecting multi-product pipeline owned and operated by our related party, Thai Petroleum Pipeline Co., Ltd. ("**Thappline**"), as well as via ground transportation and coastal vessels.

We believe that our refinery is one of the most complex and efficient in the Asia-Pacific region. The Sriracha Complex currently has three Crude Distillation Units ("**CDUs**"), two Continuous Catalyst Regeneration Units ("**CCRs**"), an Isomerization Unit ("**ISOM**"), two Hydrocracking Units ("**HCUs**"), a Fluidized Catalytic Cracking Unit ("**FCCU**"), a Thermal Cracking Unit ("**TCU**"), three Hydro Treating Units ("**HDTs**"), three Hydro De-sulfurization Units ("**HDSs**"), three High Vacuum Units ("**HVUs**") and various supporting units that allow us to produce refined petroleum products that meet our customers' requirements. Our various conversion units enable us to vary the output of our refinery and produce the blend of products which maximizes our gross refining margin, and provides us with significant flexibility in the use of feedstock. We are also capable of processing a wide range of crude oil, including crude oil from the Middle East, Asia (excluding Thailand), other foreign sources and Thailand, although our choice of feedstock at any time depends on relative prices and yields. Our gasohol, gasoline and diesel products are compliant with the sulfur content requirements of the Euro IV standard and we believe we were the first refinery in Thailand to achieve this standard.

The feedstock for our refinery primarily comprises crude oil imported by PTT and other suppliers from the Middle East and other regions and sold to us through a combination of long-term purchase contracts and spot market purchases to allow us flexibility in obtaining crude oil. PTT has agreed to supply and we have agreed to purchase at prevailing market prices crude oil and other feedstock required to produce refined petroleum products representing at least 49.99% of our refining nameplate capacity under the POCSA, subject to certain conditions.

PTT also has a priority right to supply to us at prevailing market prices crude oil and other feedstock in an amount up to 100% of our refining nameplate capacity under the POCSA. In addition, PTT also has a priority right to purchase our refined petroleum products in an amount up to 100%, subject to certain conditions. Our Single Buoy Mooring ("**SBM**") facilities allow us to receive crude oil and other feedstock directly from VLCC, thereby reducing our crude freight cost and increasing our feedstock offloading efficiency. We consumed approximately 107.2 million, 112.0 million, 111.2 million, 82.6 million and 77.2 million barrels for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, respectively. In 2022, crude oil originally sourced from the Middle East, Thailand, Asia (excluding Thailand), and other foreign sources accounted for, by volume, 88.3%, 8.9%, 0.8% and 2.1% of our total crude oil consumption, respectively. In 2023, crude oil originally sourced from the Middle East, Thailand, Asia (excluding Thailand), and other foreign sources accounted for, by volume, 91.5%, 6.7%, 1.3% and 0.5% of our total crude oil consumption, respectively. In 2024, crude oil originally sourced from the Middle East, Thailand, Asia (excluding Thailand), and other foreign sources accounted for, by volume, 92.0%, 5.8%, 2.0% and 0.2% of our total crude oil consumption, respectively. For the nine months ended September 30, 2024, crude oil originally sourced from the Middle East, Thailand, Asia (excluding Thailand), other foreign sources accounted for, by volume, 91.9%, 5.8%, 2.0% and 0.3% of our total crude oil consumption, respectively. For the nine months ended September 30, 2025, crude oil originally sourced from the Middle East, Thailand, Asia (excluding Thailand), other foreign sources accounted for, by volume, 91.0%, 5.1%, 4.0% and 0.0% of our total crude oil consumption, respectively.

Our aromatics and LAB business is carried out through our wholly-owned subsidiary, Thai Paraxylene Co., Ltd. ("**TPX**") and our 75.0%-owned joint venture company, LABIX Co., Ltd. ("**LABIX**"), while our lube base oil business is carried out through our wholly-owned subsidiary, Thai Lube Base Public Company Limited ("**TLB**"). We also engage in the power generation business through our wholly-owned subsidiary, TOP SPP Co., Ltd. ("**TOP SPP**") Global Power Synergy Public Company Limited ("**GPSC**"), in which we held an effective interest of 10.0% as of September 30, 2025. See "*—Our Business Units and Products—Power Generation—GPSC*" and "*—Our Business Units and Products—Power Generation—TOP SPP*." Our solvent business is carried out through our wholly-owned subsidiary, Thaioil Solvent Co., Ltd. ("**TOS**"). We have also entered into the alternative energy business through our wholly-owned subsidiary, Thaioil Ethanol Co., Ltd. ("**TET**"), through which we hold interests in various businesses producing cassava-based ethanol, molasses-based ethanol, starch and electricity from biogas. We also engage in olefins business through our wholly-owned subsidiary TII whereby TII holds approximately 15% in PT Chandra Asri Petrochemical Tbk ("**CAP**"), a large petrochemical company in Indonesia.

In the year ended December 31, 2022, our oil refining business, aromatics and LAB business, lube base oil business, power generation business, solvent and chemicals business, ethanol business, olefins business and other businesses contributed 79.7%, 2.4%, 9.2%, 5.7%, 2.8%, 0.5%, 0.0%, and (0.3)% of our EBITDA (before eliminating intra-Group sales), respectively, in the year ended December 31, 2023, 72.8%, 8.1%, 7.4%, 8.4%, 2.5%, 0.2%, 0.0% and 0.6% of our EBITDA (before eliminating intra-Group sales), respectively, in the year ended December 31, 2024, 53.9%, 18.3%, 9.1%, 13.3%, 4.0%, 0.1%, 0.0%, and 1.2% of our EBITDA (before eliminating intra-Group sales), in the nine months ended September 30, 2024, 51.7%, 20.6%, 6.9%, 14.1%, 4.7%, 0.6%, 0.0%, and 1.3% of our EBITDA (before eliminating intra-Group sales), and in the nine months ended September 30, 2025, 44.6%, 11.8%, 18.8%, 17.7%, 5.3%, 0.3%, (0.1)%, and 1.6% of our EBITDA (before eliminating intra-Group sales), respectively.

The following table sets out the EBITDA of our various business units in the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025.

	For the year ended December 31,				For the nine months ended September 30,		
	2022	2023	2024		2024		2025
			(in millions of)				
	THB	THB	THB	US$	THB	THB	US$
Business Unit							
Oil Refining	30,139.3	26,288.2	12,231.6	378.3	8,224.0	5,395.4	166.9
Aromatics and LAB	917.5	2,940.9	4,157.8	128.6	3,314.3	1,433.9	44.4
Lube Base Oil	3,481.3	2,678.3	2,076.9	64.2	1,110.4	2,278.5	70.5
Power Generation[(1)]	2,140.4	3,028.8	3,007.8	93.0	2,271.7	2,140.5	66.2
Solvent and Chemicals	1,042.9	887.4	918.9	28.4	752.0	639.1	19.8
Ethanol	206.4	86.5	30.6	0.9	94.3	39.0	1.2
Olefins[(2)]	(7.3)	(5.3)	(5.1)	(0.2)	(7.0)	(6.6)	(0.2)
Others	(120.9)	216.2	280.7	8.7	216.5	189.6	5.9
Eliminations[(3)]	(612.2)	(667.7)	(673.3)	(20.8)	(507.1)	(471.4)	(14.6)
Total EBITDA[(4)]	37,187.4	35,453.4	22,026.1	681.3	15,469.1	11,637.9	360.0

Notes:

(1) Does not include GPSC income, which was reflected as share of profit of joint ventures and associates. The Company completed the sale of GPSC shares on June 7, 2022. The Company currently holds 281,972,937 shares in GPSC, equivalent to 10.0% of GPSC's total shares and GPSC is no longer an associate of the Company.

(2) Does not include CAP income, which is reflected as share of profit of joint ventures and associates from 2021.

(3) Eliminations relate to intra-Group sales.

(4) EBITDA means profit for the year / period excluding income tax expense, finance cost, share of profit (loss) from investments in joint ventures and associates, others, finance income, gain (loss) from financial instruments, gain (loss) on exchange, depreciation and amortization. EBITDA and the related ratios presented in this Offering Memorandum are supplemental measures of our performance that are not required by, or presented in accordance with, TFRS or IFRS. EBITDA is not a measurement of financial performance or liquidity under TFRS or IFRS, and should not be considered as an alternative to net income, operating income or any other performance measures derived in accordance with TFRS or IFRS, or as an alternative to cash flow from operating activities as a measure of liquidity. In addition, EBITDA as presented in this Offering Memorandum is not a standardized term. Therefore, a direct comparison between companies using such a term, or a direct comparison with Thai Oil's historical public disclosure, may not be possible.

Vision, Mission and Core Values

Vision

Our vision is to empower human life through sustainable energy and chemicals.

We aim to be a competitive energy and chemicals company that delivers sustainable returns and better quality of life to all stakeholders.

We value professionalism, ownership and commitment, social responsibility, integrity, teamwork and collaboration, excellence striving, vision focus and initiative (POSITIVE).

Mission

Our mission is to enrich stakeholders' well-being and deliver sustainable returns built upon innovation, technology, and resilient portfolio, with top-class management and accountable corporate governance. Our goal is to promote sustainable organizational growth by extending the petroleum business into the petrochemical and high-value product businesses to meet customers' future needs, achieve top-quartile investment returns, lower earnings volatility through business diversification to enhance the flexibility of investment portfolio with due consideration for all stakeholders' interests as well as Environmental, Social and Governance ("**ESG**") to ensure the sustainability of business operation.

Competitive Strengths

We believe that we have the following competitive strengths:

Thailand's Largest, Most Integrated and Most Complex Refinery in Thailand Post-CFP with Dominant Domestic Market Share

We have a proven track record over the past 64 years of significant organic growth in the refinery and petrochemicals space and the demonstrated ability to maintain a strong foundation that reaps benefits in economic upturns and thriving in cyclical downturns. Since 1961, we have increased our refinery capacity to 275,000 bpd and regularly upgraded our asset base, including completing an emissions improvement, HVU-2 debottlenecking, and CDU-3 preheat train project in 2014 and a lorry expansion project from 10 to 15 mml/day in 2018.

We currently own and operate the Sriracha Complex, the largest single-site complex refinery in terms of nameplate capacity in Thailand with a refining nameplate capacity of approximately 275,000 bpd of crude oil and other feedstock as of September 30, 2025, representing approximately 22.1% of the total refining nameplate capacity in Thailand and 28% market share in refined petroleum product as of September 30, 2025, according to the EPPO.

We believe our refinery, which is integrated with our petrochemical platform, is one of the most complex refineries in the Asia-Pacific region, with an average complexity of 9.8 based on our internal estimates using the methodology of the Nelson Complexity Index as of September 30, 2025**.** The Nelson Complexity Index measures a refinery's upgrading capability, with the ratio representing the complexity of barrels divided by crude distillation nameplate capacity.

While our various units and plants are integrated with each other, they can also operate independently, allowing us the ability to adjust our production proportions according to market conditions, as well as to more efficiently manage our maintenance schedules to minimize the impact to our operations. We have three CDUs, which allow us to coordinate the maintenance of the CDUs without needing to halt our refining process.

We believe we have a strong market position in an industry with high natural barriers to entry. Although there are no regulatory barriers preventing new entrants from entering the Thai refining market, the significant investments required in the construction of a new refinery, as well as the long lead times which would be required before the new refinery becomes operational, means that the oil refinery industry is one with high natural barriers to entry. Furthermore, we distribute our products to various long term customers, including PTT and OR, with whom we have guaranteed offtake arrangements. We believe our long-term customers and offtake relationships place us in an advantageous position compared with any new competitors.

We believe our technologically superior plant enables us to produce a more favorable products slate, with a focus on the more profitable middle distillates and less on heavy oils which have lower profit margins. We actively partner with industry leaders and pursue our own research and development initiatives to improve our technologies. Since May 2008, we have signed three memoranda of understanding to collaborate with the Petroleum and Petrochemical College ("**PPC**") and Chulalongkorn University to establish a 275-square meter research and development center located in the PPC. In July 2014, we also entered into an agreement with the National Science and Technology Development Agency to establish a research and development center, which will focus on research relating to products development and operations. Our research and development initiatives have helped us improve our operations. For example, we improved the preheat train mechanism for our CDU-3, developing the crude compatibility prediction model, based on our research and development findings. In addition, our R&D efforts have enabled new product launches, including Rubber Process Oil (RPO) and Heat Transfer Oil (HTO), to meet market requirements. To date, the know-how and experience made available to us has allowed us to develop and operate a complex refinery without large expenditures on research and development See "— *Technological Support.*"

With an expected COD in 2028, the CFP will enhance our cost efficiency, flexibility, and competitiveness as a first quartile performer, bolstering our existing nameplate capacity from 275,000 bpd to 400,000 bpd. Our refining capacity ratio is set to rise from 28% to 50%, and our complexity score will be upgraded from 9.8 to 12.0, enhancing our products slate towards a higher proportion of middle distillates (Diesel/Jet), removing Fuel Oil from the mix, and increasing our feedstock flexibility to include medium and heavy crude.

The CFP is a big step towards increasing our position as a top player in the region, and presents numerous benefits to not only us, but also to the country of Thailand by being a driving force for economic development and long-term energy stability.

Strong Track Record of Operational Excellence and High Utilization Rate

Our plants have the ability to process a variety of crude and feedstock, reducing our dependence on any given type of feedstock. This high level of flexibility, greater than that of competitors with less complex refineries and plants, allows us to operate efficiently while minimizing both logistics costs and product wastage throughout the production chain. We also benefit from our ability to produce higher value-added petrochemical products instead of selling those products in their intermediate stage at lower margins to the market. For example, we have been able to utilize the platformate generated in our oil refinery to produce petrochemical products, including paraxylene and benzene during periods where the market prices for such products yielded higher margins than other products.

This flexibility allows our refinery and production units to consistently select the most cost-effective feedstocks and respond dynamically to changing market conditions, enabling us to optimize our product mix and capture incremental gross margin opportunities. As our core business units become more integrated, we are able to share our costs and lower our cost required to process each barrel of feedstock. Our average integrated cash costs were US$2.8/bbl, US$2.6/bbl, US$2.5/bbl, US$2.3/bbl and US$2.8/bbl for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, respectively.

Our ability to maintain offtake contractual arrangements with a diversified customer base, superior export sales compared to domestic players, product diversification and flexibility to optimize production between refinery, aromatic and lube base facilities have contributed to our ability to outperform our peers. Therefore, our plants have been able to maintain higher utilization rates than other plants in the market, who have been hovering below 100% in recent years. The capacity utilization rate of our refinery was 100%, 107%, 112%, 111%, 110%

and 103% for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, respectively.

Strategic Location of Our Plants with Competitive Advantages in Access to Key Markets

Our plants are located within the Sriracha Complex. Our SBM provides direct access to deep water ports, and the ability to receive crude oil and other feedstock directly from VLCC, thereby enabling us to reduce freight costs and increase feedstock offloading efficiency. This strategic location provides us with key competitive advantages as it puts us in close proximity with the key domestic markets such as Bangkok, a number of our key suppliers and customers in other parts of Thailand, and direct access to Indochina markets such as Laos, Vietnam, and Cambodia through deep water ports and trucks. We also enjoy available connections to delivery networks such as multi-product pipelines, including Thappline, a major pipeline operator, which transports a substantial portion of our products. This allows us to minimize feedstock and product transportation costs, enabling us to receive feedstock from our suppliers and deliver end-products to our customers in a timely and cost-effective manner.

Highly Experienced Management Team

Our senior management team is highly experienced and has a proven track record in the refining and petrochemical related industries. The most senior members of our executive management as of the date of this Offering Memorandum, Mr. Bandhit Thamprajamchit, Mr. Surachai Saengsamran, Mr. Jeerawat Pattanasomsit, Mr. Charlee Balmongkol, Mrs. Rungnapa Janchookiat, Mrs. Wanida Boonpiraks and Miss. Somporn Bunluesriruang, have an average of over 29 years of experience in the Thai refinery and petrochemical related industries and within the PTT Group.

Diversified Earnings through a Full Suite of Product Offerings and Balanced Customer Base

In order to diversify our business beyond oil petroleum refining, which is heavily affected by commodity pricing, we have expanded our business and operations to a broad range of downstream products including petrochemical products (aromatics and olefins), lube base oil and its by-products, solvent and chemical products, surfactants and ethanol, and related derivative products which in many cases enjoy higher profit margins. We benefit from our diversified portfolio of businesses and products. We believe this diversification enables us to reduce our dependence on any one product. This allows us to reduce earnings volatility and increase operating margins. In addition, we have also invested in support businesses, including pipeline transportation, power production and digital services. We believe that the ability to produce or provide many of the services required for our businesses further allows us to reduce the volatility of the price at which we can procure these, thus improving our operating margins. We began with our initial investment in the olefins business in TPX and TLB in the mid-1990s to their eventual consolidation as our wholly-owned subsidiaries. In 2013, through our wholly-owned subsidiary, TPX, we and Mitsui jointly established LABIX. As of March 31, 2022, TPX and Mitsui owned 75.0% and 25.0%, respectively, of LABIX. LABIX is a pioneer producer of a type of benzene derivatives called LAB in Thailand. LAB is a key ingredient used in the detergent business. We believe that LABIX's production of LAB in Thailand will reduce LAB imports and allow the export of LAB from Thailand to Southeast Asian markets. LABIX completed construction of the first fully integrated LAB plant in Southeast Asia and commercial production of LAB was commenced on February 25, 2016. We also diversify our operations by developing our business operations that are less susceptible to commodity prices, such as power generation. For example, TOP SPP constructed two small power plants which had commenced commercial operations on April 1, 2016 and June 1, 2016, respectively. The small power plants have strengthened our power generation capacity. TOP SPP has sales arrangements with EGAT in relation to electricity to be produced from its small power plants. Under a power purchase agreement between TOP SPP and EGAT, 180 MW of electricity is sold to EGAT (90 MW from each of the two small power plants). As of March 31, 2022, TOP SPP is expanding its electricity generating capacity to support our growth further. We also hold interest in GPSC, a power generation company in Thailand. We took advantage of governmental regulations encouraging the development of alternative energy sources by investing in Maesod Clean Energy Company Limited ("**MCE**") in 2006 (at the present, we have disposed all shares in MCE), Sapthip Co., Ltd. in 2010 which we currently hold 50% and Ubon Bio Ethanol Public Company Limited ("**UBE**") in 2011 which we currently hold 12.4%. In 2019, we established new investment entities, TOP Ventures Co., Ltd., TOP Ventures Hong Kong Limited and TOP Ventures America LLC, to continue invest in corporate venture capital and start-ups in alternative energy businesses and TOP Solvent Co., Ltd., our wholly-owned indirect subsidiary through TOS, acquired a majority stake in PT Tirta Surya Raya ("**TSR**") to expand our solvent distribution in Indonesia, which we currently hold 77.71%.

In September 2021, we made an investment by acquiring shares of PT Chandra Asri Petrochemical Tbk (later renamed PT Chandra Asri Pacific Tbk) ("**CAP**") in the proportion of 15.0% and the investment value was US$913 million or THB29,798 million[11]. The CAP investment provides us a gateway into Indonesia, a strategic market with growing demand and a shortfall in supply, via partnership with reputable and experienced local Indonesians and Thais.

Strategic Relationship and Operational Integration with PTT as the PTT Group's Principal Refiner

PTT, a Thai state-owned entity and Thailand's national oil company, is a long-term shareholder with a 48.03% interest in our Company (including the shares held by SMH which is a related party of PTT). According to DOEB, approximately 44.0%, 42.7%, 39.4%, 39.1% and 39.9% of the total refined petroleum products sold in Thailand for 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, respectively, was sold by OR. OR purchase a substantial portion of their requirements at prevailing market prices from us. For the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, OR purchased approximately 131,429 bpd, 136,035 bpd, 128,853 bpd, 126,509 bpd and 120,339 bpd of retail refined petroleum products from us, respectively. As the domestic demand for refined petroleum products grows, PTT's requirements for the utilization of petroleum products and feedstocks are also expected to increase. See "*—Our Business Units and Products—Oil Refining—Oil Refining—Sales*."

We are the PTT Group's principal refiner. PTT's dual role as our major shareholder and key business partner has resulted in a mutually beneficial business partnership covering, amongst others, crude oil production and product offtake. We also enjoy operational synergies as part of the PTT Group, including the reduction of freight costs in order to purchase larger quantities of crude oil and other feedstock and the transfer of knowledge and shared services. This includes our investment in PTT Digital Solution Co., Ltd. ("**PTT DIGITAL**"), which were established by the PTT Group to provide engineering technical consultation and IT and communication services to the PTT Group and to develop expertise to serve external clients, and through close management collaboration and the secondment of trained staff between PTT and us.

We collaborate closely with PTT under Project ONE (P1) to enhance trading competitiveness and strengthen synergy across the PTT Group. Project ONE is considered to be the key strategy of the PTT Downstream Petroleum Business Group that aims to transform its international trading business toward an asset-backed trading model by synergizing the expertise and diverse assets of each company within the PTT Group. This integrated trading model enables joint optimization of international trade flows, enhances operational efficiency and capitalizes on combined strengths to capture greater value in global markets. By aligning procurement, trading, logistics, and risk management functions across the PTT Group, the initiative creates added value for PTT as a whole, driving sustainable business growth, bolstering Thailand's energy security, and elevating the country's competitiveness in the global energy landscape. As a result of this initiative, Project ONE has lifted the PTT Group's EBITDA by THB3,174 million for the nine months ended September 30, 2025, well on track to achieve its 2025 target of THB3,421 million.

Additionally, we actively participated in PTT's EBITDA uplift program, an integrated strategic initiative designed to enhance profitability and improve competitive positioning across the PTT Group amid external market volatility. The program focuses on operational excellence, strengthening supply chain and cost optimization and strategic business transformation.

More recently, we embarked on an asset monetization project with the PTT Group which entailed entering into a 21-year long-term lease and a 3-year leaseback for seven crude tanks, two Single Bouy Moorings (SBMs) and certain additional facilities of the Company to a new subsidiary jointly established by us and a subsidiary of PTT Tank Terminal Company Limited (the "**Asset Monetization Project**"). Following completion of the Asset Monetization Project in December 2025, we received net cash proceeds of THB18,230 million, making our balance sheet more robust and solidifying our investment grade credit profile.

Strong Financial Profile

Our liquidity is supported by solid cash flow generation and strong access to capital markets and bank financing. We generated EBITDA of THB37,187.4 million, THB35,453.4 million, THB22,026.1 million (US$681.3 million), THB15,553.9 million and THB11,637.9 million (US360.0 million), for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, respectively. As of September 30, 2025, 87.0% of our total debt consisted of debentures with an outstanding principal amount

[11] The exchange rate was THB32.6 per US$1.00 as of September 2021.

of THB103,718.7 million (US$3,208.1 million), and 10.7% consisted of long-term borrowings with an outstanding principal amount of THB12,746.2 million (US$394.3 million).

Short-term borrowings of THB2,741.3 million (US$84.8 million) accounted for 2.3% of our total debt, while 53.9%, or THB64,215.5 million (US$1,986.3 million) had a maturity beyond five years as of September 30, 2025. As of September 30, 2025, we had cash and cash equivalents and short-term investments of THB33,161.1 million (US$1,025.7 million), compared with THB2,246.5 million (US$69.5 million) of debt maturing by September 30, 2026.

Our EBITDA-to-interest coverage ratio (i.e., EBITDA divided by finance costs) was 9.6 times, 8.7 times, 5.4 times, 5.1 times and 4.2 times as of December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, respectively. We follow a conservative treasury policy of limiting net debt to EBITDA at under 2.0 times and net debt to equity at under 1.0 times. Net Debt to EBITDA stood at 3.5 times, 4.2 times, 6.1 times, 7.6 times and 5.8 times as of December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, respectively. Net to Equity stood at 0.8 times, 0.9 times, 0.8 times, 0.9 times and 0.6 times as of December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2025, respectively. See "*Selected Consolidated Financial and Other Data*."

Strong Commitment to Sustainable Future and ESG

We are committed to a sustainable future and ESG and are globally recognized for our performance towards sustainability. For 12 consecutive years, 2013 to 2024, we are recognized as a member of the Dow Jones Sustainability Indices ("**DJSI**"), assessed by S&P Global, in the oil and gas refining and marketing industry. In addition, we are also recognized with the S&P Global Corporate Sustainability Assessment in the oil and gas refining and marketing industry, and listed in the Sustainability Yearbook reports for 11 consecutive years since 2014. These reflect our outstanding sustainability performance at the global level.

We have set a strategic target for sustainability and elevate our sustainability management, aiming to maintain our leadership position in the DJSI by 2030, and to be listed in at least three global sustainability benchmarking by 2035. To achieve these strategic goals, we operate under the "RESILIENCE" Sustainability Framework, encompassing Environment, Social, and Governance (ESG) aspects:

	Focus Area	**Description**
R	Risk and Crisis Management	Managing corporate risks and business continuity
E	Ethics, Code of Conduct, and Governance	Corporate governance, business ethics, and tax transparency
S	Sustainable Supply Chain	Managing a sustainable supply chain
I	Investment in Sustainable Business	Investing in sustainable businesses and products
L	Leveraging Digital and Cybersecurity	Digital adoption and cybersecurity
I	Inclusive Community & Society Development	Integrated community and social development
E	Elevating Health & Safety	Enhancing health and safety performance
N	Nurturing People and Human Rights	Employee well-being and human rights protection
C	Climate Strategy	Managing climate impacts
E	Environmental Impact & Resource Efficiency	Managing environmental impacts and resource efficiency

Our Key Sustainability Focus 2025 – 2035

Given the growing emphasis on decarbonization, media scrutiny during project construction, and the need for transparent and credible business operations, we have reviewed our strategic focus in three key areas, covering ESG dimensions as follows.

1) Environmental: Toward Net Zero through 3C Strategy

Targets:

- By 2035: Reduce GHG emissions (Scope 1&2) by 15%, comparing with 2029 baseline through energy efficiency and carbon credit compensation.
- By 2060: Achieve Net Zero.
- By 2050: Accelerate to Net Zero with the conditions of technological maturity, economic viability, and business competitiveness allows.

Approach – 3Cs Strategy:

- C1: Cut Down Existing Emissions – improve energy efficiency, implement Internal Carbon Price (ICP) by 2030, and explore CCS and clean energy technologies by 2035.
- C2: Compensate Residual Emissions – Apply the 3B Sub-strategy by 2030:
  - Build Up new carbon credits from reforestation and partnerships
  - Bring & Utilize existing credits efficiently
  - Buy high-quality, cost-effective credits
- C3: Control Future Emissions – Invest in low-carbon businesses such as Specialty Chemicals, Decarbonization Technologies, SAF (Sustainable Aviation Fuel), Hydrogen, and Small Modular Reactors (SMR).
- Furthermore, we implement CE WEGO Strategy regarding to Circular Economy Principle, which enhance Water and Energy consumption efficiency, promote Green procurement & office, and boost up opportunity for upcycling. This strategy will support GHG reduction and climate adaptation.

2) Social: Nurturing Relationship with C.A.R.E. Strategy

Target 2035: Achieve >90% community engagement score to ensure long-term trust and shared growth.

Approach: C.A.R.E. Strategy: Minimize environmental impacts, foster engagement, networks and build trust with community groups, and promote as well as support quality-of-life development through various projects for both nearby communities and the broader society.

- C: Control impact by apply 3Cs – Clear, Closed System, Control and Confirm, supported by digital environmental management tools.
- A&R: Associate and Relationship Strengthening by engaging 10 refinery communities and expanding outreach via the TOP CAREtopia Center for integrated stakeholder collaboration.
- E: Enhance Quality of Life by promoting well-being, low-carbon lifestyles, renewable energy, and biodiversity initiatives.

3) Governance: Strengthening & Expanding GRC (Governance, Risk, and Compliance)

Target 2035: Achieve Zero Non-Compliance and Fraud incident and be recognized as a GRC Trusted Company through awards and excellence in governance, risk, and compliance.

Approach – "3Ss Strategy":

- Safeguarding: Expand KYC (Know Your Customer) and Due Diligence to suppliers and apply GRC frameworks across all subsidiaries.
- Strengthening: Build a GRC culture through tailored communication and appoint GRC Champions at all levels.

- Sustaining: Leverage AI and digital GRC systems to integrate risk, control, and compliance insights for better decision-making

Strategy

Our vision is "Empowering Human Life through Sustainable Energy and Chemicals" with the mission to enrich stakeholders' well-being and deliver sustainable returns built upon innovation, technology, and resilient portfolio, with top-class management and accountable corporate governance. We have set strategic targets for 2030 and 2035 considering both financial and non-financial dimensions. Our 2030 strategic targets emphasize performance, resilience, creditworthiness and sustainability while our 2035 targets further elevate our ambition by focusing on performance, resilience, portfolio diversification and sustainability.

We intend to accomplish these goals through the execution of 2S1P strategy as follow:

S1: Strengthening the Core – Leverage Strength to Create Competitiveness

We aim to strengthen existing core businesses and maximize value of current assets by enhancing operational excellence to improve competitiveness, generate sustainable profitability and become a leading petroleum and petrochemical company in Thailand and Asia-Pacific region through five key strategic focus.

CFP Completion and Operation

Our priority is to deliver and complete the CFP in accordance with targeted timelines, budgets, quality standards and safety requirements. Initiated in 2018, the CFP is a transformational investment and the centerpiece of our strategy to enhance competitive advantage of our refinery and maintain our position as a first-quartile performer among global peers. The project is designed to modernize our operations by increasing refining capacity, upgrading our product mix, improving feedstock flexibility with a higher upgrade ratio, and raising overall refinery complexity, as reflected by an expected increase in our Nelson Complexity Index from 9.8 to 12.0. With the expansion of refining capacity from 275,000 bpd to 400,000 bpd, the CFP will also enhance our flexibility to process heavier, lower-cost crude oil, and upgrade lower value product into higher and cleaner value products. These enhancements will strengthen our competitiveness, improve operational efficiency, and allow us to better address evolving customer needs and enhance Thailand's long-term energy stability and global environmental sustainability.

The scope of the CFP includes the retirement of our existing Crude Distillation Units (CDUs) and installation of new CDU alongside additional process units such as Hydrocracking, Residue Hydrocracking, Hydrogen Manufacturing and Energy Recovery Units. These upgrades are expected to materially increase our upgrade ratio and provide improved product quality, flexibility, and margin. In parallel, the completion of our Euro V standard production project in the fourth quarter of 2022 and the subsequent enforcement of enforcement of Euro V diesel consumption under government policy in January 2024, represented important milestones in strengthening our competitive positioning. The successful trial run of Hydrodesulfurization Unit-4 (HDS-4) in February 2024 further enhanced our capability to produce Euro V diesel fuel in alignment with Government policy.

The targeted overall commercial operation date for the CFP units is the third quarter of 2028. Notwithstanding this, certain units, including Crude Distillation Unit-4, are expected to be subsequently available for test runs commencing from the second quarter of 2027 onward. See "– *Clean Fuel Project*."

Safety and Reliability

We are committed to achieving top quartile in safety and reliability performance under Quality, Safety, Health, and Environment (QSHE) framework. Our focus includes strengthening operational safety, maintaining high levels of plant reliability and availability and smooth integration of the CFP into business-as-usual operations with the pursuit of zero accidents and zero unplanned shutdown.

Furthermore, we continue to strengthen our safety culture and leadership across the organization, reinforce Process Safety Management (PSM) and enhance contractor safety and work-site controls under our "No Harm & No Leak" principle. We proactively manage asset integrity, particularly for aging facility, and advance

Reliability Excellence through execution of Operational Excellence Management System (OEMS) and proactive risk management.

Margin Leadership

We focus on enhancing competitiveness through EBITDA uplift or productivity improvement by proactively managing full hydrocarbon value chain – from feedstock selection, refinery operations and product optimization to commercial strategies and cost management. Our margin leadership strategy is built on three excellences: Operational Excellence, Commercial Excellence, and Cost Excellence.

Under Operational Excellence, we aim to ensure maximum asset readiness and operational efficiency to support continuous revenue generation and further enhance our profitability. We focus on identifying opportunities to maximize our gross refining margin through better feedstock selection, improved operation of process units, enhanced use of hydrocarbon streams, improved supply and planning processes and the exploration of new product specifications and new markets in order to improve our gross profit. Furthermore, we continuously undertake a number of other projects to enhance our performance and capabilities i.e. installing a real-time optimization system in our utility units to optimize efficiency in our steam and electricity production units, which we expect will lower our energy consumption. We believe that with these projects, we would be able to improve the competitiveness of our refinery, including in terms of availability of refining capacity, utilization, non-energy cash cost.

Commercial Excellence is driven by proactive market management, including high market margin maximization, logistic optimization and leveraging synergies within PTT Group. Through collaboration with PTT Group under Project ONE (P1), we have enhanced trading capabilities across crude procurement, re-optimization, and import and export of petroleum and petrochemical products, and vessel chartering.

Third, Cost Excellence focuses on disciplined spending, yield-efficient and cost-effective operations. We are undertaking financial and non-financial cost management initiatives such as entering cross currency swap contracts with local financial institutions for hedging foreign exchange and interest rate exposure and collaborative procurement with PTT Group to leverage collective purchasing power, thereby reducing costs and improving overall cost efficiency.

Quick-Win High Value Products

We aim to develop high-value products to enhance profitability and respond to evolving customer requirements. We continue to leverage our existing assets to develop and expand and differentiated high value products, with the objective of strengthening margin performance and enhancing commercial competitiveness. By integrating operational expertise with research and development capabilities, we have developed high value products such as military jet fuel (F-44), bitumen, high-purity toluene, and heat transfer oil.

Decarbonization through Energy Efficiency

We systematically implement energy efficiency initiatives across our existing production process to reduce carbon emissions by optimizing energy consumption and improving process performance, enhance yield efficiency by improving energy utilization increases process stability and precision and minimizes losses and enable cost-effective operations by lowering energy consumption. Overall, this strategy not only supports our sustainability commitment, but also maximizes the value of existing assets and establishes a strong foundation for resilient, efficient, and sustainable operations in the long term.

S2: Sustaining the Future – Grow High Margin with Less Carbon

We aim to sustain future businesses by investing in opportunities that deliver higher margin with lower carbon. This will be achieved through two key strategic focus: Specialty Chemicals and Low Carbon and New Energy.

Specialty Chemicals

We focus on two key businesses –Disinfectants and Surfactants (D+S) and Specialty Polymers – both of which offer attractive growth potential and strong alignment with our competitiveness.

1. Disinfectants and Surfactants (D+S), a segment with strong growth potential. To build this platform, we are driving organic growth through commercial collaboration, technical service and adaptive R&D, and R&D

intensity. In parallel, we are actively exploring joint ventures and merger and acquisition opportunities that could establish a long-term strategic platform to support and accelerate future growth.

2. Specialty Polymers through Solution Provider business model, integrating polymers and additives to tailor properties that meet specific end-use requirements. Currently, we are developing an execution plan and assessing market entry strategies in Indonesia, including opportunities for collaboration with PTT Group and partners. We plan to build commercial growth, starting with simple applications and gradually expanding into more advanced and high-end applications, while also exploring joint ventures or merger and acquisition opportunities in the long term.

Low Carbon and New Energy

We explore new business opportunities aligned with future trends in energy transition and increasingly stringent environmental carbon emission regulation such as sustainable aviation fuel ("**SAF**"), hydrogen, and carbon capture and storage ("**CCS**") to support our net zero greenhouse gas emission target while enhancing our portfolio resilience.

We are currently the largest producer of aviation fuel in Thailand and hold the highest market share in domestic aviation fuel market. To maintain this position and strengthen our competitive advantages amid rising demand for low-carbon aviation fuels, we are exploring opportunities to become SAF producer.

Regarding hydrogen, we are conducting studies on existing and emerging hydrogen technologies together with relevant regulatory frameworks, while monitoring domestic and international regulatory and market movement to understand the evolving landscape and evaluate the viability of hydrogen. In addition, we are studying CCS in collaboration with PTT Group to evaluate CCS deployment potential.

P1: Powering the Platform – Catalyze Regional Distribution Platform

We focus on expanding distribution channels through TOPNEXT International Co., Ltd – our distribution platform. TOPNEXT will serve as a key vehicle to reinforce both Strengthening the Core (S1) and Sustaining the Future (S2) strategy. Execution is driven through two key strategic focus. First, product portfolio expansion toward Specialty Chemicals aims to strengthen our commodity portfolio while accelerating expansion into specialty portfolio. Second, regional platform coverage focuses on expanding our regional footprint into high-growth markets in Vietnam, Indonesia, India, Malaysia, Singapore and Australia.

In parallel, we are pursuing both organic and inorganic growth opportunities to strengthen TOPNEXT's regional distribution platform. These efforts include exploring self-funding opportunities with potential strategic partners, evaluating joint ventures, and merger and acquisition in Specialty chemical distributor and Disinfectants and Surfactants (D+S), and growing towards Specialty production and formulation across Asia-Pacific region through greenfield investments, joint ventures, and merger and acquisition.

Enablers Strategy

1. **Asset Rationalization and Creditworthiness:** We optimize asset management to maximize value creation while maintaining strong financial discipline, with the objective of preserving our credit rating in investment grade level.

2. **Strategic Partnership:** We proactively seek and develop strategic business partnerships to support sustainable growth, enhance capabilities and secure access to funding and financial resources.

3. **Sustainability (ESG):** We integrate sustainability management through a comprehensive ESG approach, embedding environmental, social and governance considerations into business decisions to ensure long-term value creation.

4. **Digital and AI:** We leverage digital technologies and artificial intelligence to enhance operational efficiency, improve decision-making and strengthen overall competitiveness.

5. **People & Organization:** We focus on people capacity, people capability and people experience. In addition, we develop people capabilities and organizational readiness by aligning people capability, culture and organizational structure with the business strategy to effectively support execution and future growth.

Strategic Framework

We have structured our strategic framework into two phases to ensure effective execution:

Phase I (2025–2030) focuses on reinforcing our core business and establishing capabilities required for future growth. During this period, we will prioritize maintaining refinery competitiveness and enhancing decarbonization, strengthening our financial position to preserve investment-grade credit ratings, expanding our regional platform coverage, and preparing organization for new business initiatives, through commercial collaboration and research and development, to be pursued in the subsequent phase.

Phase II (2031–2035) aims to accelerate long-term value creation by diversifying our portfolio toward high margin and low carbon businesses while continuing to ensure refinery competitiveness and decarbonization. This phase also emphasizes further scaling and strengthening our regional platform to enhance our strategic positioning and resilience within a rapidly evolving energy landscape.

Recent Developments

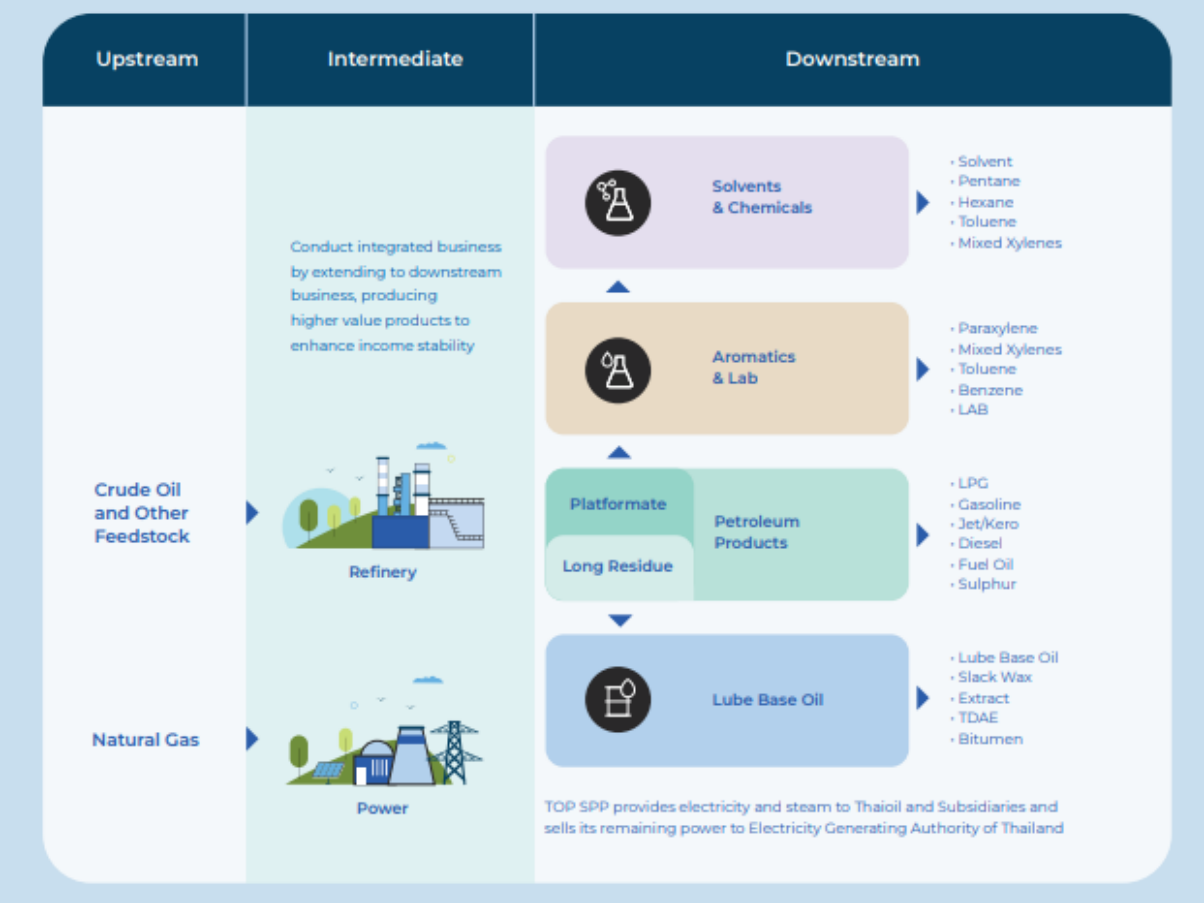
Asset Monetization Project

The board of directors' meeting no. 9/2025, held on September 25, 2025 approved the asset monetization project, which entails entering into long-term lease and leaseback arrangements for selected infrastructure assets of the Company (i.e., crude oil storage tanks, Single Buoy Mooring (SBM), lorry loading station, and land (the "**Leased Assets**")), located in Si Racha District, Chonburi Province (the "**Asset Monetization Project**"). The Extraordinary General Meeting of Shareholders no. 2/2025 approved the Asset Monetization Project with 99.99% of the votes.

On November 17, 2025, the Company established a new subsidiary, TOP Infra Company Limited ("**TOP Infra**"), in which the Company holds 51% of the total shares and a subsidiary of PTT Tank Terminal Company Limited holds 49%. The Company entered into a land and asset lease agreement dated December 11, 2025 with TOP Infra for a term of twenty-one (21) years, under which the Company leased the Leased Assets to TOP Infra for total consideration of THB37,402 million, which was paid on December 17, 2025. On the same date, the Company entered into a land and asset sublease agreement with TOP Infra to lease back the Leased Assets for operational purposes for an initial term of three (3) years, with an undertaking from TOP Infra to renew upon the Company's request, provided that the total sublease term (including renewals) shall not exceed the 21-year term of the long-term lease. The total rental fee for the initial three-year sublease term is THB9,772 million, subject to adjustment in accordance with the sublease terms. The Asset Monetization Project was completed in December 2025, with the Company and TOP Infra registering the lease agreement at the relevant land office on December 22, 2025. The Company received cash proceeds of THB18,230 million, net of expenses and tax liabilities related to the transaction.

Our Business Units and Products

We are organized into eight core business units: oil refining, lube base oil, aromatics and LAB, power generation, solvent and chemicals, ethanol, olefins and other businesses. The diagram below sets forth our products.



Oil Refining

Our oil refining business unit is the most important business unit of our Group. We generated revenues of THB544,791.7 million, THB492,054.5 million, THB486,610.4 million (US$15,051.4 million), THB368,755.6 million, and THB299,116.9 million (US$9,252.0 million) from our refining business unit (before eliminating intra-Group sales) for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, respectively. For the year ended December 31, 2024, revenues from this business unit (before eliminating intra-Group sales) accounted for 76.8% of our Group's revenues. Our revenues from our oil refining business unit are generated principally from the sale of our refined petroleum products, in particular diesel and gasoline, which represented 40.6% and 19.0%, respectively, of our revenue from this business unit for the year ended December 31, 2022, 42.1% and 20.1%, respectively, of our revenue from this business for the year ended December 31, 2023, 40.8% and 19.0%, respectively, of our revenue from this business for the year ended December 31, 2024, 40.1% and 19.3%, respectively, of our revenue from this business for the nine months ended September 30, 2024, and 42.6% and 18.3%, respectively, of our revenue from this business for the nine months ended September 30, 2025.

We own and operate an advanced refinery in the Sriracha Complex. This is the most important asset of our Group. We believe that our refinery is one of the most complex refineries in the Asia-Pacific region, with an average Nelson Complexity Index rating of 9.8 based on our internal estimates as of September 30, 2025. Our refinery's configuration allows us to process a variety of crude oil, while still producing high-value, clean fuels. The configuration is oriented towards maximizing middle distillates (through hydrocracking) and re-directing reformate to produce aromatics and LAB products at our aromatics and LAB facilities. We also believe that we were the first refiner in Southeast Asia to produce fuels which are compliant with the sulfur content requirements of the Euro IV standard. Generally, as the feedstock slate is more complex and flexible, the refinery is better

positioned to take advantage of the more cost effective crude oils, resulting in incremental gross margin opportunities for the refinery. We seek to maximize revenue from gasoil products by adjusting production to capture the domestic price premium of the various products. See "*—Oil Refining—Pricing*." We also maximize platformate production, which our wholly-owned subsidiary TPX uses to produce paraxylene, in order to capture the higher margin downstream aromatics and LAB products.

We are the principal refiner of the PTT Group. For the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, PTT and OR purchased 33.3%, 33.8%, 32.1%, 32.1% and 33.6%, respectively, in terms of sales volume, of our refined petroleum products.

Our refinery produces a wide range of refined petroleum products. Our products include light distillates consisting of LPG, gasoline, and light naphtha and platformate; middle distillates consisting of diesel and jet fuel; heavy distillates in the form of fuel oil and long residue. For the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, light distillates accounted for 33.8%, 34.1%, 34.1%, 34.5% and 34.1% of our sales volume, respectively, and middle distillates accounted for approximately 54.0%, 54.8%, 54.7%, 54.5% and 54.7% of our sales volume, respectively. For the same periods, heavy distillates, which are our lowest margin products, accounted for approximately 12.2%, 11.1%, 11.2%, 11.0% and 11.2% of our sales volume, respectively.

	For the year ended December 31,			For the nine months ended September 30,	
	2022	**2023**	**2024**	**2024**	**2025**
			(% of sales volume)		
LPG	4.2	4.3	4.3	4.4	4.5
Unleaded Gasoline	17.1	17.4	16.8	17.0	16.5
Light Naphtha	1.4	1.2	1.3	1.3	2.5
Isomerate/Reformate	11.1	11.2	11.6	11.8	10.5
Jet / Kerosene	17.1	18.0	19.6	19.4	20.6
Low-speed Diesel / High-speed Diesel	36.8	36.9	35.1	35.1	34.1
Fuel Oil	7.6	6.3	6.2	6.1	6.0
Long Residue	4.4	4.6	4.8	4.8	5.0
Sulphur	0.2	0.2	0.2	0.2	0.2
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Oil Refining—Intake Capacity and Capacity Utilization Rates

Our refinery is capable of refining crude oil into various intermediate and downstream products, including feedstock for captive consumption by our other business units. Our refinery had a total refining nameplate capacity of approximately 275,000 barrels of crude oil feed per day as of September 30, 2025, which accounted for approximately 22.1% of Thailand's total refining nameplate capacity according to the EPPO, making us the largest refiner in Thailand. For the year ended December 31, 2024 and for the nine months ended September 30, 2025, we processed crude oil and other feedstock representing approximately 31.4% and 29.2%, respectively, of the total processed feedstock in Thailand for the period, according to the DOEB.

We measure the capacity utilization rate of our refinery, or crude distillation rate, based on the refinery's crude input divided by its nameplate capacity. In any given year, our capacity utilization rate may exceed 100% as a result of efficiency and operational improvements, while operational disruptions and shutdowns, both planned and unplanned, may result in a reduction in the rate.

For the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, our refinery's capacity utilization rate was 106.8%, 111.5%, 110.5%, 109.6% and 102.8%, respectively. The increase in our capacity utilization rate from 2022 to 2024 was due to our internal optimization, including a planned major turnaround at CDU-2 and other units in 2022. The decline in our capacity utilization rate for the nine months ended September 30, 2025 compared with the same period in 2024 was due to a planned major turnaround at CDU-3 and other units.

Oil Refining—Feedstock

The main raw material used in our refinery is crude oil. We are capable of processing a wide range of crude oil, including crude oil from the Middle East, Asia (excluding Thailand), other foreign sources and Thailand, and our choice of feedstock at any time depends on relative prices and yields. The feedstock for our refinery primarily comprises crude oil imported by our suppliers and sold to us through a combination of indefinite term

purchase contracts and spot market purchases to allow us flexibility in obtaining crude oil. We take delivery of foreign sourced crude oil via waterborne delivery and domestically sourced crude oil via railway and waterborne delivery. Our SBM facilities allow us to receive crude oil and other feedstock directly from VLCC, thereby increasing our feedstock offloading efficiency.

We consumed approximately 107.2 million, 112.0 million, 111.2 million, 82.6 million and 77.2 million barrels for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, respectively. In 2022, crude oil originally sourced from the Middle East, Thailand, Asia (excluding Thailand), and other foreign sources accounted for, by volume, 88.0%, 8.0%, 2.5% and 1.5% of our total crude oil consumption, respectively. In 2023, crude oil originally sourced from the Middle East, Thailand, Asia (excluding Thailand), and other foreign sources accounted for, by volume, 91.5%, 6.7%, 1.3% and 0.5% of our total crude oil consumption, respectively. In 2024, crude oil originally sourced from the Middle East, Thailand, Asia (excluding Thailand), and other foreign sources accounted for, by volume, 92.3%, 5.5%, 2.0% and 0.2% of our total crude oil consumption, respectively. For the nine months ended September 30, 2024, crude oil originally sourced from the Middle East, Thailand, Asia (excluding Thailand), other foreign sources accounted for, by volume, 91.9%, 5.8%, 2.0% and 0.3% of our total crude oil consumption, respectively. For the nine months ended September 30, 2025, crude oil originally sourced from the Middle East, Thailand, Asia (excluding Thailand), other foreign sources accounted for, by volume, 91.0%, 5.1%, 4.0% and 0.0% of our total crude oil consumption, respectively. See "*Risk Factors—Risks Relating to Our Business—We are dependent on foreign sources for our supply of crude oil and other feedstock, in particular from the Middle East, and any disruption in our supply of crude oil and other feedstock could reduce our margins and materially adversely affect our results of operations*".

Depending on the crude oil market outlook, including market prices and the availability of crude oil, we previously procured approximately 50% of our crude oil from PTT pursuant to the POCSA and the remaining approximately 50% from various other suppliers such as BP Singapore Pte. Ltd. ("**BP**"), Shell or Exxon through indefinite term or long-term purchase contracts or spot purchases. A majority of imported crude oil is purchased under a 30-day open account basis (from bill of lading date), which is the market practice. We also procured Thai crude oil and condensate from PTT on a 30 days open account basis.

We have entered into the POCSA with PTT through which we purchase from PTT foreign or domestic crude oil and other feedstock which they have sourced. Pursuant to the POCSA, PTT has agreed to supply and we have agreed to purchase at prevailing market prices crude oil and other feedstock required to produce refined petroleum products representing at least 49.99% of our refining nameplate capacity under the POCSA, subject to the terms and conditions set forth in the POCSA. PTT also has a priority right to supply crude oil and other feedstock required to produce refined petroleum products in an amount up to 100% of our refining nameplate capacity under POCSA. Prices for crude oil and other feedstock are negotiated on an arm's length basis and shall be competitive market prices determined by reference to benchmark market prices. We generally obtain standard open account 30-day payment terms from PTT unless a different payment term is requested by us and agreed by PTT under the POCSA. The POCSA does not contain a termination date but may be terminated by, among others, either party providing 12 months' prior written notice of termination to the other party. From 2022 onward, we joined the PTT Group's collaboration project "Project ONE (P1)," under which we agreed to procure 100% of the crude oil and condensate required for our refinery from PTT. Since 2022, we have sourced up to 100% of our crude from PTT on payment terms of up to 90 days, which was extended to up to 120 days starting in May 2025. These transactions were conducted strictly on an arm's-length basis and at competitive market prices.

We enter into supply contracts on a yearly basis with other suppliers from time to time depending on our ability to obtain favorable terms with the relevant suppliers. In 2022, we purchased 100% of our crude oil requirement from PTT, pursuant to supply contracts. In 2023, we purchased 100% of our crude oil requirement from PTT, pursuant to supply contracts. In 2024, we purchased 100% of our crude oil requirement from PTT, pursuant to supply contracts.

The following table sets forth the volume of crude oil and other feedstock we consume by region of origin for the periods indicated.

	For the year ended December 31,						For the nine months ended September 30,			
	2022		2023		2024		2024		2025	
	(in millions of, except percentage)									
	Barrels	**%**	**Barrels**	**%**	**Barrels**	**%**	**Barrels**	**%**	**Barrels**	**%**
Middle East	91.1	88.3	99.3	91.5	99.1	92.3	73.4	91.9	68.2	91.0
Thailand	9.2	8.9	7.3	6.7	6.2	5.8	4.6	5.8	3.8	**5.1**
Asia (excluding Thailand)	0.8	0.8	1.4	1.3	2.1	2.0	1.6	2.0	3.0	**4.0**
Other foreign sources	2.1	2.1	0.5	0.5	0.2	0.2	0.2	0.3	0.0	**0.0**
Total	**103.2**	**100.0**	**108.6**	**100.0**	107.7	**100.0**	79.8	**100.0**	75.0	**100.0**

Oil Refining—Sales

The majority of our refined petroleum products are sold domestically to OR, a subsidiary and the "flagship" oil and retail arm of PTT Group. We also sell our refined petroleum products domestically to other major oil companies, including Bangchak, Shell Thailand and SFL, as well as other independent oil wholesalers and offtake customers and oil retailers in various countries (including independent wholesalers and petrol stations).

The following table sets forth the percentage volume of our refined petroleum products sold by key customers in Thailand and by export for the periods indicated.

	For the year ended December 31,			For the nine months ended September 30,	
	2022	2023	2024	2024	2025
	(% of the volume of products sold)				
Thailand					
OR	33.3	33.8	32.1	32.1	33.6
Bangchak	0.6	0.5	0.4	0.5	0.4
Shell Thailand	3.4	4.2	3.7	3.8	3.2
SFL	1.7	1.2	1.6	1.7	1.7
Other independent offtake customers and domestic jobbers	30.5	30.0	31.3	31.4	32.3
TPX	11.1	11.2	11.6	11.8	10.5
TLB	4.6	4.8	5.0	4.9	5.4
Total Thailand	**85.3**	**85.7**	**85.8**	**86.2**	**87.0**
Export(1)	**14.7**	**14.3**	**14.2**	**13.8**	**13.0**

Note:

(1) Includes export through OR and PTT.

In 2022, we sold, by volume, 85.3% of our refined petroleum products in the Thai domestic market, which is approximately 31.0% of the market share in Thailand according to DOEB and Company data. Our domestic sales were divided into 33.3% to PTT and OR, 0.6% to Bangchak, 3.4% to Shell Thailand, 1.7% to SFL, 30.5% to other independent offtake customers and domestic jobbers and 15.7% to TPX and TLB, while the remaining 14.7% of our products were exported. In 2023, we sold, by volume, 85.7% of our refined petroleum products in the Thai domestic market, which is approximately 30.4% of the market share in Thailand according to DOEB and Company data. Our domestic sales were divided into 33.8% to PTT and OR, 0.5% to Bangchak, 4.2% to Shell Thailand, 1.2% to SFL, 30.0% to other independent offtake customers and domestic jobbers and 16.0% to TPX and TLB, while the remaining 14.3% of our products were exported. In 2024, we sold, by volume, 85.8% of our refined petroleum products in the Thai domestic market, which is approximately 29.8% of the market share in Thailand according to DOEB and Company data. Our domestic sales were divided into 32.1% to PTT and OR, 0.4% to Bangchak, 3.7% to Shell Thailand, 1.6% to SFL, 31.3% to other independent offtake customers and domestic jobbers and 16.6% to TPX and TLB, while the remaining 14.2% of our products were exported. In the nine months ended September 30, 2025, we sold, by volume, 87.0% of our refined petroleum products in the Thai domestic market, which is approximately 27.7% of the market share in Thailand according to DOEB and Company data. Our domestic sales were divided into 33.6% to PTT and OR, 0.4% to Bangchak, 3.2% to Shell Thailand, 1.7% to SFL, 32.3% to other independent offtake customers and domestic jobbers and 15.9% to TPX and TLB, while the remaining 13.0% of our products were exported. PTT is our largest shareholder and also our largest customer. According to DOEB, OR sold approximately 44.0%, 42.7% and 39.4%, 39.1% and 39.9% of the total refined petroleum products sold in Thailand for 2022, 2023, 2024, and for the nine months ended September 30, 2024 and 2025 respectively. For the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, OR purchased approximately 131,429.0 bpd, 136,035.3 bpd, 128,853.1 bpd, 126,508.6 bpd and 120,339.1 bpd, respectively, of retail refined petroleum products from us. In order to ensure its supply of refined petroleum products, PTT purchases, at prevailing market prices, a substantial portion of its requirements from us. As the domestic demand for refined petroleum products grows, PTT's requirements for refined petroleum products are also expected to increase.

We sell refined petroleum products to OR under the POCSA. Pursuant to the POCSA, OR has agreed to purchase and we have agreed to sell at prevailing market prices our refined petroleum products, subject to the nomination procedure and other terms and conditions set forth in the POCSA. According to the nomination procedure, OR is required to nominate the types and quantities of our refined petroleum products that it requires for domestic and/or export markets, which must be at least 49.99% of our refining nameplate capacity under POCSA. We are required to inform PTT of the availability of such products for delivery to OR within an agreed time period and OR shall offtake such products that meet its conditions. OR also has a priority right to purchase at prevailing market prices our refined petroleum products up to 100% of our refining nameplate capacity under

POCSA, subject to certain conditions in the POCSA. OR is required to maximize its offtake of our products for domestic sales to the extent it is reasonably, commercially and technically possible and we are required to satisfy OR's requirements for our products as closely as reasonably, commercially and technically possible. The terms and conditions for sale and purchase of our refined petroleum products for export sales are made pursuant to a mutual agreement of both parties.

For the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, sales of refined petroleum products to OR represented 42.1%, 39.1%, 40.5%, 40.1% and 38.5% of our refining nameplate capacity under POCSA, respectively.

We also sell refined petroleum products to Shell Thailand, SFL and other independent offtake customers, such as Bangchak, PTG Energy Public Company Limited and Susco Public Company Limited, to satisfy their retail networks and to our wholly-owned subsidiary, TPX. We sell refined petroleum products to Shell Thailand and SFL pursuant to sale and purchase agreements that contain pricing terms based on published benchmark prices and also guaranteed offtake and supply amounts. The offtake contracts for our refined petroleum products are in the form of monthly, yearly, longer-term and indefinite-term contracts. These contracts are periodically negotiated from time to time with our customers on arm's length terms. In addition, we sell refined petroleum products to independent offtake customers and domestic jobbers at market prices.

Surplus products that are not taken up by domestic customers are exported either through PTT or other oil traders. The portion of export, adjusted for production increases, has declined over time as the domestic demand for refined petroleum products has increased.

The following table details the type and sales volume of refined petroleum products sold by us, as well as the percentage of sales volume for each product, for the periods indicated.

	For the year ended December 31,						For the nine months ended September 30,			
	2022		2023		2024		2024		2025	
	(in millions of, except percentages)									
Product	**Liters**	**%**	**Liters**	**%**	**Liters**	**%**	**Liters**	**%**	**Liters**	**%**
LPG	850.0	4.7	882.7	4.8	905.6	4.9	672.1	4.9	635.1	5.1
Platformate	2,235.5	12.4	2,294.8	12.5	2,421.1	13.1	1,817.6	13.3	1,476.2	11.9
Gasoline	3,436.5	19.1	3,566.6	19.4	3,494.2	18.9	2,626.2	19.2	2,319.0	18.7
Jet Fuel	2,504.8	13.9	2,731.4	14.9	3,070.0	16.6	2,244.3	16.4	2,365.4	19.0
Diesel	7,407.7	41.2	7,576.0	41.3	7,311.0	39.6	5,411.8	39.5	4,782.8	38.5
Fuel Oil	1,533.2	8.5	1,292.3	7.0	1,272.4	6.9	940.4	6.9	845.5	6.8
Total	**17,967.8**	**100.0**	**18,343.8**	**100.0**	**18,474.3**	**100.0**	**13,712.5**	**100.0**	**12,424.0**	**100.0**

The following table sets forth our gross revenue breakdown of refined petroleum products as well as the percentage of revenue for each product (before eliminating intra-Group sales), for the periods indicated.

	For the year ended December 31,							For the nine months ended September 30,				
	2022		2023		2024			2024		2025		
	(in millions of, except percentages)											
	THB	**%**	**THB**	**%**	**THB**	**US$**	**%**	**THB**	**%**	**THB**	**US$**	**%**
LPG	7,954.0	1.6	9,865.9	2.2	10,180.7	233.7	2.3	7,555.9	2.3	7,146.7	221.8	2.6
Platformate	58,554.8	11.9	50,156.9	11.2	51,135.1	1,229.4	11.6	39,745.2	11.9	26,130.2	811.0	9.7
Gasoline	103,295.3	21.0	97,446.7	21.8	92,591.9	2,208.3	21.0	71,395.6	21.5	54,844.5	1,702.2	20.3
Jet Fuel	70,532.3	14.4	62,937.9	14.1	66,490.2	1,552.3	15.1	50,185.4	15.1	41,764.9	1,296.2	15.5
Diesel	220,654.2	45.0	204,735.0	45.9	198,617.4	4,574.5	45.1	147,894.7	44.4	127,534.9	3,958.3	47.2
Fuel Oil	29,887.9	6.1	21,148.9	4.7	21,240.2	495.8	4.8	16,028.1	4.8	12,512.9	388.4	4.6
Total	**490,878.5**	**100.0**	**446,291.2**	**100.0**	**440,255.5**	**10,294.0**	**100.0**	**332,804.9**	**100.0**	**269,934.1**	**8,377.8**	**100.0**

Oil Refining—Pricing

Pricing of refined petroleum products in Thailand is based on the Singapore spot market price for the relevant product, which is a benchmark for the Thai ex-refinery price. The Singapore spot market price reflects the demand and supply balance in the region as well as the level of crude oil prices and is quoted in U.S. dollars on a daily basis. We sell refined petroleum products in the domestic market at a price based on import parity and those exported based on export parity.

Domestic sales of refined petroleum products are generally priced on an import parity basis, which means that the ex-refinery price of the refined petroleum product for sale in Thailand is derived from the Singapore spot market price for the relevant product quoted on MOPS, plus the logistics costs of transporting such product from Singapore to Thailand, including insurance, freight, import duties, ocean losses and handling. A quality premium or discount may be added or deducted for certain products to account for the differences in the product quality

specifications between the two locations. Generally, the product quality specifications, such as MTBE, sulfur, aromatic and benzene content in Thailand are more stringent than the standard product quality specifications quoted by Singapore refineries. The ex-refinery prices for our refined petroleum products, which are quoted in U.S. dollars per barrel except fuel oil, which is quoted in U.S. dollars per ton, are converted into Baht per liter for invoicing purposes using the applicable current Baht/U.S. dollar exchange rate. We invoice our customers at the ex-refinery price, which is based on MOPS plus relevant excise and municipal taxes, the oil fuel fund contributions and the energy conservation fund contributions imposed by the Thai government, and value added taxes. Taxes and fund contributions are collected as pass-through items by Thai refineries, including us, and such taxes and fund contributions are forwarded to the applicable Thai government authorities. For independent wholesalers, we generally require a bank-issued letter of guarantee, bill of exchange guaranteed by a bank, or pledge of oil products stored at our tank farm to secure payment. The payment is generally due within 19 days from the date of delivery.

Export sales of refined petroleum products are priced on an export parity basis, which is derived from the Singapore spot market price for the relevant product quoted on MOPS, plus or minus a premium or discount that is subject to the market conditions and negotiations with potential purchasers. For each export cargo, the price of the refined petroleum product is quoted in U.S. dollars per barrel except fuel oil, which is quoted in U.S. dollars per ton and is determined through bidding or negotiations. We generally try to minimize our export sales of refined petroleum products since export prices of our refined petroleum products are usually lower than domestic prices because domestic prices are based on import parity basis. Export sales of refined petroleum products are generally made on an FOB basis to traders for sale to various customers, primarily in Singapore, Vietnam, Malaysia and other countries in Asia. Payment for such export sales is mostly settled by a bank-issued letter of credit. The payment is generally due within 30 days from the date of delivery. See "*—Government Regulation—Regulation Relating to Refineries—Pricing of Refined Petroleum Products and Price Stabilization*."

Oil Refining—Delivery

We sell our refined petroleum products to our customers at gate, or on an "FOB" basis. We also deliver on a "FIP" (free into pipe) basis in the case of pipeline deliveries to specific customers. The strategic location of our refinery near the Laem Chabang deep sea port provides our offtake customers access to a convenient product delivery network that allows them to take delivery of our refined petroleum products in a cost-effective manner via the connecting multi-product pipeline owned and operated by our related party, Thappline, as well as ground transportation and coastal vessels. Our refinery is connected to a multi-product pipeline and a depot located north of Bangkok. For the year ended December 31, 2024, approximately 42.1% of the refined petroleum products sold by us was delivered by our offtake customers to their customers via the multi-product pipeline and a pipeline linked between PTT and us, approximately 24.5% was delivered via coastal vessels chartered by our offtake customers and the remaining approximately 33.4% was delivered via ground transportation. For the nine months ended September 30, 2025, approximately 48.4% of the refined petroleum products sold by us was delivered by our offtake customers to their customers via the multi-product pipeline and a pipeline linked between PTT and us, approximately 17.3% was delivered via coastal vessels chartered by our offtake customers and the remaining approximately 34.3% was delivered via ground transportation. We believe the strategic location of our refinery gives us an advantage, because our domestic customers can purchase our products under various modes of transportation closer to their locations and distribute such products at a relatively low cost to Thailand's main demand clusters for refined petroleum products, which include Bangkok and other regional centers around Thailand.

Aromatics and LAB

We own and operate primarily through our wholly-owned subsidiary, TPX, a petrochemical plant producing petrochemical (aromatics) products including paraxylene and benzene. We generated revenues of THB88,937.5 million, THB78,974.9 million, THB80,529.0 million (US$2,490.8 million), THB62,565.7 million and THB42,328.5 million (US$1,309.3 million) from our aromatics and LAB business unit (before eliminating intra-Group sales) in the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, respectively. For the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, revenues from our aromatics and LAB business unit (before eliminating intra-Group sales) accounted for 12.2%, 12.2%, 12.5%, 12.7% and 11.0% of our Group's revenues, respectively. Our revenues from our aromatics and LAB business unit are generated principally from the sale of our petrochemical products, in particular paraxylene and benzene and related by-products.

Our aromatics and LAB production facilities are located near the Sriracha Complex and have connecting facilities with our refinery for platformate supply and by-product return streams. Our aromatics products are used in various downstream petrochemical applications, including the production of automotive parts, furniture, toys,

household appliances, textiles, PET bottles, adhesives, laminate, pipe, paints, insecticides and glue. We also send certain of our gasoline by-products back to our refinery for further refining.

In July 2013, through our wholly-owned subsidiary, TPX, we and Mitsui jointly established LABIX. As of September 30, 2025, TPX and Mitsui owned 75.0% and 25.0%, respectively, of LABIX. We established LABIX with the intention of pioneering in the production of LAB in Thailand with a capacity of 120,000 tons per annum. Our commercial production of LAB commenced on February 25, 2016. LAB is an intermediate and the core feedstock for detergents. LAB production were linked to our production structure, with benzene and kerosene from our aromatics and refinery production facilities as the main raw materials. As there is only one other LAB plant in Southeast Asia which operated in the absence of a refinery link, LABIX's production of LAB in Thailand will reduce LAB import and will allow export of LAB to Southeast Asian markets. This will enhance Thailand's potential as the hub for production and export of detergents feedstock in Southeast Asia.

Aromatics and LAB—Production Nameplate Capacity and Capacity Utilization Rates

Our aromatics plant is integrated with our refinery. As of September 30, 2025, we had a petrochemical production nameplate capacity of approximately 527,000 tons of paraxylene per year, approximately 259,000 tons of benzene per year and approximately 52,000 tons of mixed-xylenes per year. Additionally, our LAB plant had nameplate capacity of 120,000 tons per annum.

We measure the utilization of our plants based on our plants' combined realized output, divided by their nameplate capacity. Operational disruptions and shutdowns, both planned and unplanned, may reduce our capacity utilization rate. For the year ended December 31, 2024, our utilization rate for TPX's plants was 79.6%, compared with 72.7% for the year ended December 31, 2023, primarily due to our internal optimization at the Sriracha Complex. The Product-to-feed (P2F) increased by $16.8/ton, mainly due to stronger Benzene spread in 2024. For the nine months ended September 30, 2025, our utilization rate for TPX's plants was 64.0%, compared with 79.7% for the nine months ended September 30, 2024, reflecting our product optimization and a scheduled major turnaround at our main production units in the third quarter of 2025. The P2F decreased by $26.8/ton, mainly due to weaker aromatics spreads in 2025.

Aromatics and LAB—Feedstock

The principal feedstock used in our aromatics plant is platformate, which is sourced internally from our refinery. For the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, approximately 1.8 million tons, 1.8 million tons, 1.9 million tons, 1.4 million tons and 1.2 million tons, respectively, of platformate were sourced internally from our refinery. The platformate produced by our refinery is only sufficient to meet approximately 99% of our aromatics plant's needs, and therefore, subject to demand and market prices, we may also elect to purchase the remaining approximately 1% of the feedstock for our aromatics plant, including mixed xylenes and toluene, from the local or international markets. The principal feedstocks used in our LAB plant are kerosene and benzene which are primarily sourced internally from our refinery and our aromatics plant.

Aromatics and LAB—Sales

For the year ended December 31, 2024, we sold, by volumes, approximately 48.8% of our aromatics products directly to domestic end-users, exported 24.2% of our aromatics products to other Asian countries (including China), and sold the remaining 27.1% to intermediaries (LABIX, TOPNEXT and SAKC plant). For the nine months ended September 30, 2025, we sold, by volumes, approximately 53.0% of our aromatics products directly to domestic end-users, exported 21.5% to other Asian countries (including China), and sold the remaining 25.5% to the same intermediaries. We enter into yearly contracts with traders through which we sell approximately 82.1% of our aromatics products, these contracts contain pricing terms based on published benchmark prices, and we sell the remainder on the spot market. All aromatics products are delivered to our customers by marine transportation via the jetty at our Sriracha Complex.

For LAB products, for the year ended December 31, 2024, we sold, by volume, approximately 45.9% of our LAB to our domestic customers and exported the remaining of 54.1%. For the nine months ended September 30, 2025, we sold, by volume, approximately 50.4% to our domestic customers and the remaining of 49.6% was exported. We enter into yearly contracts with traders through which we sell approximately 46.4% of our LAB products, these contracts include pricing terms based on published benchmark prices and we sell the remainder on the spot market. LAB products are delivered to our customers by both land and marine transportations.

Lube Base Oil

We own and operate through our wholly-owned subsidiary, TLB, a lube base oil refinery with a nameplate capacity of approximately 267,015 tons per year of lube base oil using long residue as a feedstock as of September 30, 2025. TLB's lube base oil plant also produced bitumen and TDAE in the amounts of approximately 435,673 tons per year and approximately 81,063 tons per year for the year ended December 31, 2024, and approximately 300,951 tons per year and approximately 53,486 tons per year for the nine months ended September 30, 2025, respectively. TLB's facilities are located near the Sriracha Complex. We also send our gasoil by-products from the lube base oil refinery back to our refinery for further refining.

We have integrated our wholly-owned subsidiary, TLB, with our refining and aromatics and LAB businesses. We have constructed a product pipeline between TLB's facilities and our refinery to support integrated operations, including supplying feedstock from our refinery to TLB's facilities.

We generated revenues of THB27,773.5 million, THB25,315.0 million, THB25,737.7 million (US$796.1 million), THB19,140.7 million and THB15,753.8 million (US$487.3 million) from our lube base oil business unit (before eliminating intra-Group sales) in the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, respectively. For the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, revenues from our lube base oil business unit (before eliminating intra-Group sales) accounted for 3.8%, 3.9%, 4.0%, 3.9% and 4.1% of our Group's revenues, respectively. Our revenues from our lube base oil business unit are generated principally from the sales of our lube base oil, specialty products such as TDAE and related by products, in particular bitumen.

Lube Base Oil—Production Nameplate Capacity and Capacity Utilization Rates

As of September 30, 2025, TLB had a nameplate capacity of approximately 267,015 tons per year of lube base oil, approximately 350,000 tons per year of bitumen and approximately 67,520 tons per year of TDAE.

We measure the utilization of our lube base oil plant based on the refinery's realized output, divided by its nameplate capacity. For the year ended December 31, 2024, our capacity utilization rate for our lube base oil plant was 80.2%, compared with 79.0% for the year ended December 31, 2023. The higher utilization rate in 2024 was primarily due to production optimization. For the nine months ended September 30, 2025, the capacity utilization rate was 71%, compared with 79% for the nine months ended September 30, 2024. The lower utilization rate was mainly attributable to a planned major turnaround, which temporarily reduced production volumes.

The principal feedstock for our lube base oil production is long residue, sourced mainly from our refinery and supplemented by purchases from other domestic refineries or traders under spot contracts. For the years ended December 31, 2022, 2023 and 2024, and for the nine months ended September 30, 2024 and 2025, we used approximately 1.1 million tons, 1.1 million tons, 1.1 million tons, 0.8 million tons and 0.8 million tons, respectively, of long residue as feedstock.

Pricing for long residue is determined based on negotiated formulas linked to published benchmarks such as MOPS HSFO, adjusted for volume and quality considerations. Feedstock cost is a key driver of our product margin and overall profitability, as fluctuations in crude and residue prices directly affect production economics.

Lube Base Oil—Feedstock

The principal feedstock used in our lube base oil plant is long residue. For the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, TLB used 1.1 million tons, 1.1 million tons, 1.1 million tons, 0.8 million tons and 0.8 million tons of long residue intake, respectively, from our oil refinery, and other refineries. We purchase long residue from traders under spot contracts which contain pricing terms based on a negotiated formula that takes into account published benchmark prices, such as MOPS HSFO, as well as the amounts of long residue to be supplied.

Lube Base Oil—Sales

For the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, we sold approximately 53%, 49%, 52%, 54% and 59%, respectively, of our lube base oil products domestically by volumes. During the same periods, we exported the remaining lube base oil products to a number of countries, including Singapore, Malaysia, China, Bangladesh, Taiwan, Vietnam, Philippines, Indonesia and Australia.

Our main domestic customers for our lube base oil products include OR, SFC Excellent and Bangchak. The products sold for export are generally sold directly to end users.

Our lube base oil and by-products are delivered to our customers by a combination of marine transportation, via our jetty at our Sriracha Complex, ground transportation or through pipelines.

Power Generation

As of September 30, 2025, our power generation business at TOP SPP had a total capacity of 354 MW of electricity and 787 tons of steam per hour. We also have power generation capacity for internal consumption in our refinery and plants. We generated revenues of THB11,715.9 million, THB12,787.5 million, THB11,825.5 million (US$365.8 million), THB9,030.9 million and THB8,273.0 million (US$255.9 million), from our power generation business unit (before eliminating intra-Group sales) in the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025. For the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, revenues from our power generation business unit (before eliminating intra-Group sales) accounted for 1.7%, 2.0%, 1.9%, 1.8% and 2.2% of our revenues, respectively. Our revenues from our power generation business unit are generated principally from the sale of the electricity generated by our power plants.

In addition, we also engage in our power generation business through GPSC, in which we currently hold a 10.0% stake.

Thaioil Power

We previously had a subsidiary, Thaioil Power, in which we owned a stake of 73.99%. It operated a natural gas-fired combined cycle co-generation power plant with capacity to produce 118 MW of electricity and 216 tons per hour of steam. On February 1, 2021, Thaioil Power transferred all business to us following a shareholding restructuring plan of its power generation business, and completed the registration of a dissolution and liquidation process in September 2021. We continue to honor Thaioil Power's contracts with EGAT and other customers that are our wholly-owned subsidiaries.

TOP SPP

TOP SPP, our wholly-owned subsidiary, was established in December 26, 2013. As at September 30, 2025, TOP SPP has an aggregated generation capacity of 354 MW of electricity and 787 tons of steam per hour. TOP SPP's remaining net sales are derived from the sale of electricity to EGAT pursuant to a 25-year power purchase agreement, which expires in 2041. The sales revenue of TOP SPP is secured by take-or-pay obligations of its customers, including an average of 85% minimum take obligations for electricity and an average of 85% minimum take obligations for steam. Under the power purchase agreement, EGAT has agreed to pay TOP SPP capacity payments at agreed amounts that are sufficient to cover fixed costs and debt service obligations, plus an additional amount of return. In addition, EGAT has agreed to make energy payments to TOP SPP according to the formula specified in the power purchase agreement. TOP SPP's net sales in 2024 and in the nine months ended September 30, 2025 were THB11,825.5 million (US$365.8 million) and THB8,273.0 million (US$255.9 million), respectively. In 2023, TOP SPP Expansion commenced commercial operation on 1 April 2023, providing a power generation capacity of 115 MW of electricity and that of steam of 290 tons per hour. The purpose of the capacity increase was mainly for in group utilization and to prepare for the growth of our Group companies.

GPSC

The Company currently holds 281,972,937 shares in GPSC, equivalent to 10.0% of GPSC's total shares. GPSC owns a portfolio of power plants with a total capacity of 14,076 MW of electricity and 3,294 tons per hour of steam as of September 30, 2025.

Solvent and Chemical

We engage in the production and distribution of hydrocarbon solvents, chemical solvents and other chemicals mainly in Thailand, Vietnam and other overseas markets through our wholly-owned subsidiary, Thaioil Solvent, which directly owns 99.99% interest in TOPNEXT International Co., Ltd. (formerly known as TOP Solvent Co., Ltd.) ("**TX**"), indirectly owns 80.52% interest in Sak Chaisidhi Co., Ltd.("**SAKC**"), and indirectly owns 100% interest in TOP Solvent (Vietnam) Limited Liability Company ("**TSV**"). In September 2019, we acquired 67% interest in PT Tirta Surya Raya ("**TSR**") and recognized its performance since then. TSR is a local Indonesian solvent and chemical trading and distribution company. In December 2021, we acquired a 10.71%

interest in TSR, bringing our total effective stake to 77.71%. In June 2021, we acquired a 60% interest in JSKEM Private Limited ("**JSKEM**"), a distributor of solvent and chemical products in Singapore. In July 2025, we acquired 20% interest in JSKEM, bringing our total effective stake to 80%. JSKEM also owns 99.9% in TOPNEXT India Pte. Ltd. Established in October 2008, TX engages in the hydrocarbon solvent manufacturing business through SAKC. It also engages in the solvent trading business in Thailand directly and, through TSV, in Vietnam. SAKC produces hydrocarbon solvent such as paraffin, aliphatic, SBPs, mineral spirits and aromatics which are used in various industries. Our products are also used in the manufacturing of industrial products such as coating, paints, automotive, tires, ink, adhesives, vegetable oils, foams, plastics, petrochemicals and the mining of copper. TSV is a distributor for solvent and chemicals such as aromatics, alcohol, ketone, ester, glycol ethers, ethylene glycols and monomer to Thailand and Vietnam, as well as to other Asia-Pacific countries. In July 2014, SAKC completed the expansion of its production plant which increased its hydrocarbon solvent nameplate capacity from approximately 76,000 tons per year to approximately 141,000 tons per year to meet the rising domestic and regional demand for hydrocarbon solvent. In 2015, SAKC completed the construction of a new lorry loading and new export pipeline to a terminal. In April 2023, SAKC completed the expansion of its production plant which increased its hydrocarbon solvent nameplate capacity from approximately 141,000 tons per year to approximately 214,000 tons per year.

We generated THB22,585.3 million, THB19,381.2 million, THB19,724.2 million (US$610.1 million), THB15,185.6 million and THB12,171.7 million (US$376.5 million) from our solvent business unit (before eliminating intra-Group sales and services) in the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025 respectively. For the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, revenues from our solvent business unit (before eliminating intra-Group sales and services) accounted for 3.2%, 3.0%, 3.1%, 3.1% and 3.2% of our Group's revenues, respectively. Our revenues from our solvent business unit are generated principally from the sales of our solvents.

Solvent—Production Nameplate Capacity and Capacity Utilization Rates

Our hydrocarbon solvent products are produced by the plants of SAKC, which had nameplate capacity of approximately 214,000 tons per year as of September 30, 2025.

We measure the production of our solvent plants based on SAKC plants' combined realized output, divided by their nameplate capacity. Operational disruptions and shutdowns, both planned and unplanned, may result in a reduction in our nameplate capacity utilization rate. For the nine months ended September 30, 2025, our production rate for our solvent plants was 92.3%, compared with 93.3% for the nine months ended September 30, 2024. For the year ended December 31, 2024, our production rate for our solvent plants was 91.7%, compared with 72.9% for the year ended December 31, 2023. The increase in the production rate of our solvent plants during this period was mainly attributable to higher exports and capacity changed from 141,000 tons per year to 214,000 tons per year since April 2023.

Ethanol

We expanded into alternative energy in 2006 by establishing our joint venture, MCE, a sugarcane-based ethanol producer. In 2008, we established our wholly-owned subsidiary Thaioil Ethanol ("**TET**") and transferred all of our shares in MCE to TET. However, we sold all of our shares in MCE to one of its major shareholders, MP Energy Co., Ltd., on February 16, 2017 and received total proceeds of THB50.6 million. This transaction is part of our business improvement strategy.

In 2010, TET acquired a 50.0% interest in Sapthip Co., Ltd. ("**SAPTHIP**"), a cassava-based ethanol producer with a production nameplate capacity of approximately 200,000 liters per day as of September 30, 2025.

In 2011, TET acquired a 21.28% stake in Ubon Bio Ethanol Public Co., Ltd. ("**UBE**"), which has a cassava and molasses-to-ethanol production plant with a production nameplate capacity of approximately 400,000 liters per day as of September 30, 2025. Apart from ethanol production, UBE has two wholly owned subsidiaries, Ubon Sunflower Co., Ltd., which produces and sells starch, flour and other food additives and Ubon Bio Agricultural Co., Ltd., which trades agricultural products. In 2021, UBE completed its initial public offering and listed its shares on the SET. As a part of the initial public offering, TET sold some of its shares in UBE. TET currently owns a 12.39% effective interest in UBE.

The Thai government has targeted to increase ethanol usage to 7.5 million liters per day by the year 2037. In order to meet this target, we expect that a substantial volume of refined products from our refinery would have

to be substituted by ethanol. We have therefore invested in the ethanol business to participate in the potential growth in this industry, as well as to hedge against any decrease in demand for traditional energy sources.

We generated THB1,796.1 million, THB1,879.0 million, THB1,681.4 million (US$52.0 million), THB1,334.9 million and THB763.0 million (US$23.6 million) from our ethanol business unit (before eliminating intra-Group sales) for the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, respectively. For the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, revenues from our ethanol business unit (before eliminating intra-Group sales) accounted for 0.2%, 0.3%, 0.3%, 0.3% and 0.2% of our Group's revenues, respectively. Our revenues from our ethanol business unit are generated principally from ethanol sales and may be affected by ethanol demand from gasoline blending for gasohol production, as well as prices of ethanol, which are impacted by the oil market and by governmental incentive programs that promote ethanol consumption.

Olefins

In July 2021, we established TII, a subsidiary in the Republic of Indonesia, in order to invest in CAP and our board of directors approved the purchase of shares in CAP at the value of US$1,183 million for up to 15.38% of total outstanding shares of CAP. CAP is one of the largest listed companies on the Indonesia Stock Exchange.[12] This investment is appropriate, consistent, supportive and align with our growth strategy. CAP is the premier petrochemical producer which has fully-integrated plants and supporting facilities in the Republic of Indonesia, which is the largest market with a high growth rate in ASEAN. CAP has the only plant in the Republic of Indonesia that employs naphtha cracker, which can produce high-quality olefins and polyolefins, and is the only producer of styrene monomer and butadiene in the country. CAP is now undertaking a study on capacity expansion and construction of the second petrochemical plant, which is expected to double the existing capacity. We believe that the purchase of shares in CAP will increase our business opportunities in the petrochemical industry, provide us with a gateway into the Indonesian market, and consolidate our investment in the leading petrochemical companies in Indonesia, which have a high potential for growth. In addition, we will gain benefits from the business cooperation with CAP. We also entered into the Feedstock Sale and Purchase Agreement with CAP in order to supply the feedstock for olefin products, e.g. naphtha and LPG in the quantity of at least 20% of the total demand of CAP and CAP2, or not exceeding approximately 1,050,000 tons per year. In addition, we also entered into the distributorship agreement, which will extend the distribution network and the access to CAP's products, including the knowledge and expertise transfer among the groups between the companies. This investment is consistent with our growth strategy and it also supports the expansion of our production capacity. In addition, it will be beneficial to us in terms of diversification of investment. The purchase of shares will be made through TII. Revenues from the sale of shares in CAP will be used specifically for investment in the development and construction of the petrochemical plants of CAP. See also "*Risk Factors—Risks Relating to Our Business—Our business is capital intensive and our expansion plans have significant capital expenditures and financing requirements, which are subject to a number of risks and uncertainties. In addition, our planned expansion projects and integration of any future acquisitions may not be completed as planned, or at all*".

As of September 30, 2025, we owned a 15.0% stake in CAP through TII. We have delegated three representatives to serve as CAP's directors in CAP's board of directors, out of a total of 13 directors and we also delegated two representatives to serve as the members of CAP's board of commissioners, out of a total of eight commissioners. In addition, we also entered into the Feedstock Sale and Purchase Agreement with CAP. The investment in CAP is classified as an investment in associate and profit contribution from CAP is realized as our share of profit of joint ventures and associates.

Others

Our wholly-owned subsidiary Thaioil Energy Services ("**TES**") provides manpower supply services to us, and another wholly-owned subsidiary, Thaioil Treasury Center ("**TTC**"), manages foreign currency funds and liabilities for us. We generated revenues of THB6,646.7 million, THB7,068.0 million, THB7,350.4 million (US$227.4 million), THB5,246.5 million and THB5,015.5 million (US$155.1 million) from these business units (before eliminating intra-Group sales and services) in the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025. For the years ended December 31, 2022, 2023 and 2024 and for the nine months ended September 30, 2024 and 2025, revenues from this business unit (before eliminating

[12] As of September 30, 2025, CAP's market capitalization was THB1,370,018 million (the exchange rate of 1 Indonesian Rupiah to THB0.00205.

intra-Group sales and services) accounted for 0.9%, 1.1%, 1.2%, 1.1% and 1.3% of our revenues. Our revenues are principally from the manpower supply and recruiting business and liabilities management.

We also hold 20.0% of each of PTTES and PTT DIGITAL, which were established by the PTT Group to provide engineering, technical consultation, information technology and communication services respectively to the PTT Group and to develop expertise to serve external clients. The resolution of the Extraordinary General Meeting of Shareholders of PTTES no. 1/2022, which was held on August 29, 2022, resolved to dissolve PTTES. The liquidation process is expected to be completed within 2026.

We hold 15.0% of Sarn Palung Social Enterprise Co., Ltd. ("**SPSE**") and 9.2% of Thappline. SPSE was established to promote social enterprises with the aim to be a leader in solving problems in the communities. Thappline operates a petroleum pipeline business in Thailand.

Clean Fuel Project

On June 29, 2018, our board of directors approved the investment of approximately US$4,825 million in the Clean Fuel Project (the "**CFP**"). CFP was subsequently approved at extraordinary general meeting of shareholders' no. 1/2018 on August 27, 2018. CFP mainly involves the construction of new production units, with the aim of improving our production and energy efficiency, oil refining capacity and refining capabilities, and reducing environmental impact. As part of the project, we plan to construct distillation units with a higher refining capacity to replace the current distillation units, which will result in an increase in our refining capacity from 275,000 barrels to 400,000 bpd and will improve the average complexity of our refinery from 9.8 to 12.0, based on our internal estimates using the methodology of the Nelson Complexity Index. We expect the higher refining capacity to increase our economies of scale and enable our refineries to handle more types and greater quantities of crude oil. By improving the performance of our production process, we expect to increase our capacity to refine heavy crude oil, which is normally cheaper than light crude oil that we currently refine. CFP will also increase our capacity to produce light distillates, i.e. naphtha and middle distillates, i.e. jet fuel and Euro 5 Standard low-sulfur diesel oil whereby these products tend to have higher margins. Light distillates and middle distillates currently constitute approximately 23% and 53% of our petroleum products, respectively, and are expected to comprise approximately 25% and 62% of our petroleum products after CFP is completed, respectively.

The scope of CFP is comprised of the construction of six groups of production units as follows:

Group 1: Hydrocracking Unit (HCU-3) and Residue Hydrocracking Unit (RHCU), which are units that add value to our products by converting fuel oil to middle distillates, such as jet and diesel in accordance with the Euro 5 Standard. As compared to fuel oil, middle distillates are lighter oils with lower sulfur content, are of higher value, higher quality and are more environmentally friendly.

Group 2: Crude Distillation Unit (CDU-4), which has a higher refining capacity of 220,000 bpd and will replace CDU-1 and CDU-2, and the High Vacuum Unit (HVU-4), which distills crude oil and long residues from the residues of crude distillation column and processes it with vacuum distillation column prior to feeding it to other units.

Group 3: Hydrogen Manufacturing Unit (HMU-3/4 and PSA-3/4), which produces hydrogen for the use in other production units.

Group 4: Hydro Treating Unit (HDT-4) and Hydro De-sulfurization Unit (HDS-4), which remove sulfur content from gasoline and diesel, respectively.

Group 5: Sulphur Recovery Unit (SRU-6), which converts Hydrogen Sulfide into sulfur which can be distributed in the form of liquid sulfur or converted into solids.

Group 6: Energy Recovery Unit (ERU), which uses the residual products from the RHCU/SDA as fuel for generating Steam and electricity, all of which will be used in the production units of CFP. The ERU will have an installed capacity of 250 MW.

In addition to the construction of the foregoing production units, we will build necessary supporting and utility units, such as wastewater treatment systems, raw water treatment plant, cooling water system, crude oil and products storage tanks, and pipelines for transportation of crude oils and products.

In May 2018, we entered into a memorandum of understanding with PTT for the sale to PTT of our increased production as a result of CFP. The products to be sold to PTT will include liquefied petroleum gas,

unleaded gasoline, base gasoline, jet fuel, diesel, fuel oil and bitumen. We will sell these products to PTT at market prices on an arm's length basis, representing at least 49.99% of our refining nameplate capacity under the agreement.

CFP will be constructed on the same plots of land as our existing oil refinery, and we leased the land from the Ministry of Finance of Thailand under a 30-year lease, initially expiring in September 2022. In August 2018, we extended the lease term for an additional 30 years from September 2022 to September 2052.

In October 2018, we engaged the Consortium, through the EPC Contract. Construction commenced in November 2018 and there have been various contractual amendments thereafter. At the 2019 Annual General Meeting of Shareholders held on April 10, 2019, the shareholders resolved to approve the disposal of assets to transfer ownership in the Energy Recovery Unit (ERU) which is a part of the CFP and the execution of the Relevant Agreements including the Asset Sale and Purchase Agreement, Fuel and Utilities Supply Agreement, Power Purchase Agreement, Operation and Maintenance Services Agreement and Land Sub-lease Agreement as well as the novation agreement with Energy Recovery Unit Company Limited (ERU Co.) or wholly owned subsidiary of Global Power Synergy Public Company Limited (GPSC) for the price not exceeding US$757.02 million. The disposal of the ERU was mainly aimed at reducing investment costs of the CFP, enhancing liquidity and efficiently support future investment; furthermore, the transaction will boost the return on investment of the CFP while the Company can continue to manage and oversee the implementation of the CFP and ERU during the construction phase and the operation phase in respect of the safety, reliability and plant optimization of the projects as originally planned.

The construction of the CFP was expected to be completed by the first quarter of 2023. However, following delays in the execution of the work under the EPC Contract, the board of directors meeting no. 4/2022 resolved to approve the Company's execution of an amendment agreement to the EPC Contract with the Consortium in the best interest of the Company and to enable the CFP to be completed. Under such amendment agreement, the budget of the CFP was increased by approximately US$550 million or approximately THB18,165 million equivalent, and the time for completion was extended by 24 months in accordance with the EPC Contract. Thereafter, while the Hydrodesulfurization Unit 4 or HDS-4 construction was successfully completed and commenced test-run for the production of Euro 5 Standard diesel in February 2024, in time for the Thai Government's policy of enforcing Euro 5 Standard diesel which came into effect in early 2024, the Consortium continuously failed to pay overdue payments to its subcontractors working on the CFP. This resulted in work stoppages or reduction of workforce, causing the construction of the CFP in accordance with the EPC Contract to be delayed.

Subsequently, at the meeting of the board of directors held on December 19, 2024, the board of directors approved an increase of the investment cost of the CFP and approved the convening of an Extraordinary General Meeting of Shareholders no. 1/2025 of the Company which was held on February 21, 2025, to propose an increase in the investment cost in the CFP and an increase in interest during construction, causing the total investment value of CFP to be approximately THB241,472 million or approximately US$7,151 million[13] equivalent and the total estimated interest expenses during construction to be approximately THB37,216 million or approximately US$1,078 million[14] equivalent. The additional investment will be used for the construction of the CFP, procurement of remaining equipment and materials and payment of other expenses related to the development of the CFP, including advisory fees, to support the completion of the CFP.

In January 2025, the Company enforced against the security provided by the Consortium under the EPC Contract in an amount of approximately THB12,339 million or US$358 million[15] following breaches by the Consortium of certain obligations under the EPC Contract. Subsequently, on February 19, 2025, certain members of the Consortium commenced arbitration proceedings against the Company disputing the Company's ability to enforce against the security. For further details, see "*—Legal Proceedings – Arbitration relating to CFP*" and "*Risk Factors—Risks Relating to Our Business—We may be subject to legal, arbitral, government or regulatory*

[13] The exchange rate of THB33.77 per US$1.00 was calculated based on the weighted average of the applicable foreign exchange rates for each approval period.

[14] The exchange rate of THB34.52 per US$1.00 was calculated based on the weighted average of the applicable foreign exchange rates for each approval period.

[15] Calculated as the weighted average of THB34.39 to US$1.00 and THB35.21 to EUR1.00 as of January 16, 2025 and includes foreign exchange gains.

proceedings, investigations, actions or suits that could be time consuming and costly, require significant amounts of management time and result in the diversion of significant operational resources."

In April 2025, the EPC Contract was terminated. The Company is continuing the construction of the CFP and is targeting to complete construction of the CFP in the third quarter of 2028. A consultant with expertise and experience to enhance efficiency in engineering, procurement and construction management has been engaged to support the Company in managing each stage of the CFP until completion. The remaining work of the CFP will be performed by contractors that the Company will engage who have proven capabilities and experience in large-scale construction projects to ensure that all remaining work on the CFP will be successfully completed in accordance with the Company's plan.

We believe that CFP will be highly beneficial to our competitiveness in the oil refinery industry and to Thailand's energy security. The new refineries to be constructed will be equipped with advanced technologies that are more energy efficient and enable us to accept supplies of crude oil from more varied sources resulting in increasing the Company's competitiveness toward that of the top-quartile refinery.

Through the CFP, we will expand our production of diesel, jet fuel, and naphtha. The capability to convert lower-value heavy oil products such as fuel oil, for which demand has declined due to reduced use in the shipping industry since 2022, into higher-value and more environmentally friendly fuels such as jet fuel and diesel will help increase our revenue. In addition, the additional naphtha, which is a key raw material for the petrochemical industry, will offer new business opportunities. The improvement in our production capacity and the range of our oil products, will help reduce Thailand's dependency on imported products, especially jet fuel, in line with the government's policies to support the consumption of domestic refined petroleum products. We will produce less gasoline and fuel oil, which tend to be oversupplied in Thailand.

Production Facilities

General

The Sriracha Complex is located near the Laem Chabang deep-sea port in Sriracha, Chonburi Province, approximately 124 kilometers southeast of Bangkok.

The following table sets out the various units and its combined nameplate capacity as of September 30, 2025 at the Sriracha Complex that allow us to produce refined petroleum products that meet our customers' requirements.

Process Unit	Number	Combined Nameplate Capacity (bpd, except where otherwise indicated)
CDU and intermediate feedstock processing facilities	3	275,000
CCRs	2	50,000
ISOM	1	20,000
Mixed-xylenes unit	1	40,000
HCU	2	50,000
FCCU	1	10,400
TCU	1	19,000
HDT	3	85,000
HDS	3	75,000
HVU	3	95,000
Paraxylene unit	1	53,900
PXMax	1	750 tons per day
Sulfolane unit	1	1,632 tons per day
Vacuum distillation unit	1	3,650 tons per day
Propane deasphalting unit	1	1,300 tons per day
MP refining unit	1	1,650 tons per day
LABIX	1	120,000 tons per annum

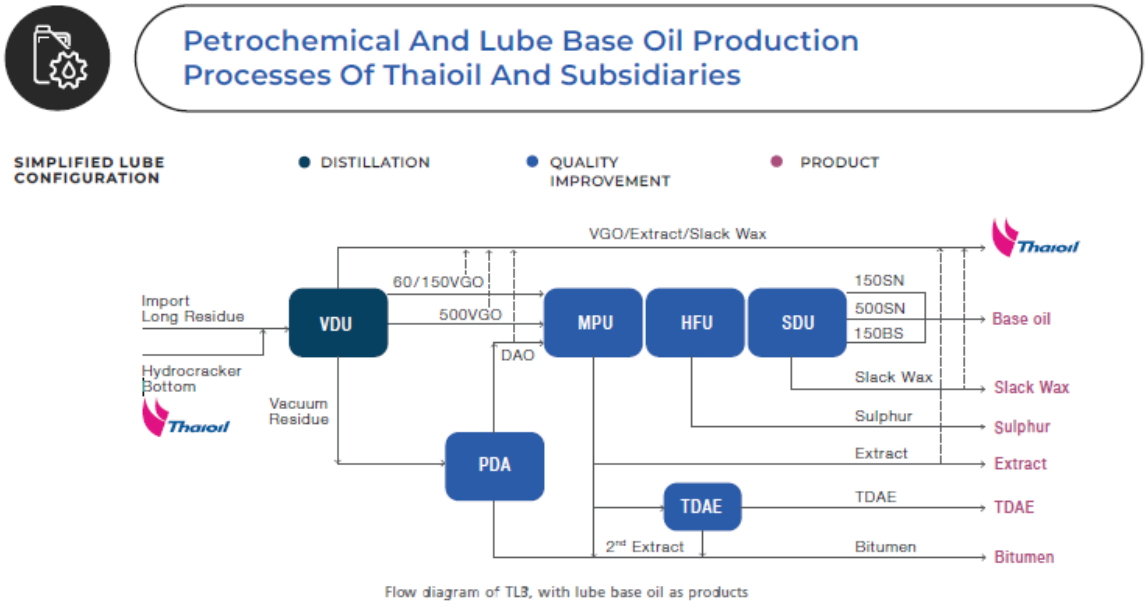
Our various conversion units enable us to maximize our middle distillate production, which represents the majority of the Thai market's demand, and provides us with significant flexibility in the use of feedstock. Our gasohol, gasoline and diesel products are compliant with the sulfur content requirements of the Euro V standard.

In order to maximize the efficiency of the refinery and utilization of the Sriracha site, enhance production safety and occupational health and accommodate future business expansion, we relocated our office, the product testing laboratory and the engineering and warehouse building. The new office buildings are divided into three building groups, namely, group 1 consisting of office and product testing laboratory; group 2 consisting of the

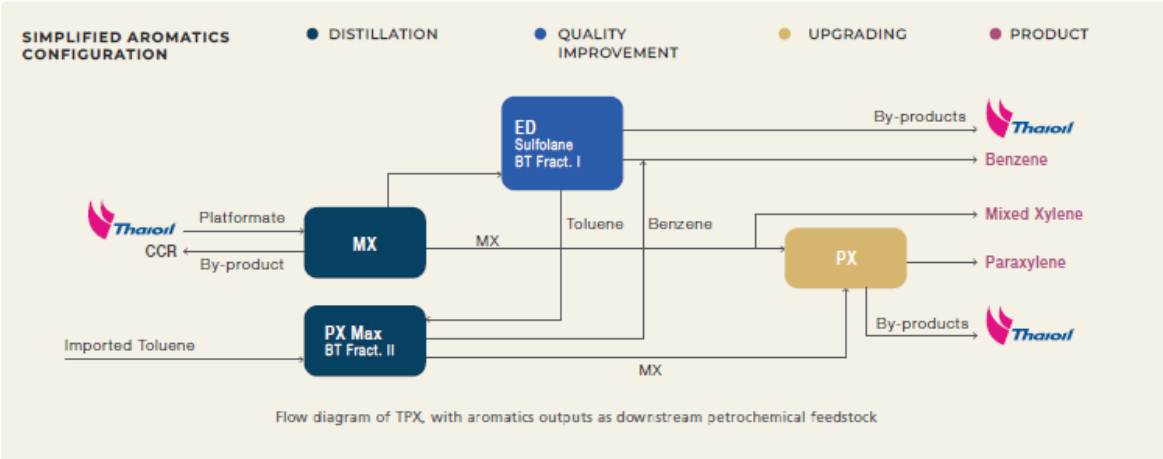
engineering and warehouse building; and group 3 consisting of entrance control and the security office. The engineering and warehouse building was completed in 2018 while the product laboratory was completed in early 2019. The office was completed in 2020.

Production Process

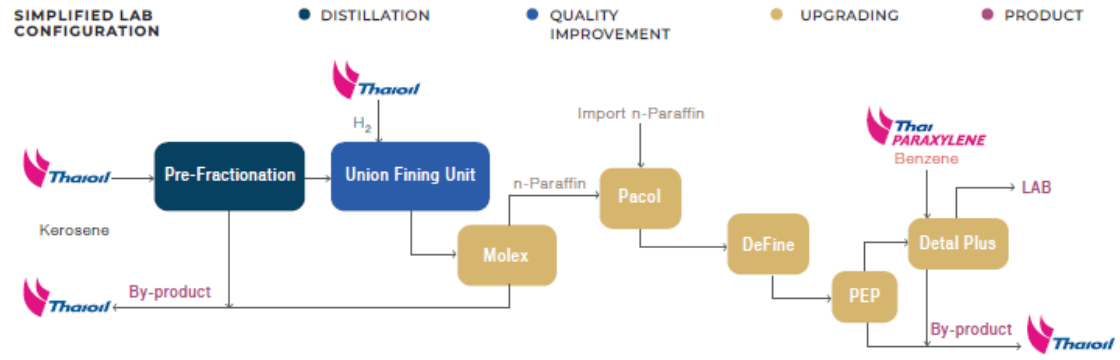
The following flowchart illustrates the production process of our business units, including the principal feedstock inputs we purchase, the products we produce and the integration of production and exchange stream across our business units.



Flow diagram of TL3, with lube base oil as products



Flow diagram of TPX, with aromatics outputs as downstream petrochemical feedstock



Flow diagram of LAB IX, with Linear Alkyl Benzene (LAB) as products

Refinery and Plant Maintenance

As with all refineries and petrochemical plants, our refinery and plants are shut down periodically for scheduled turnaround maintenance and unscheduled corrective or emergency maintenance. Scheduled maintenance shutdowns reduce our utilization rates but increases refinery and plant safety and efficiency and reduces the possibility of future unscheduled refinery and plant shutdowns and extend refinery and plant life.

The number and length of turnarounds carried out in any given period can impact operating results. We typically schedule major turnaround maintenance for each refinery and plant every three to six years for periods of approximately 21 to 30 days and on a staggered basis to minimize impact on our overall production. When possible, we seek to schedule the timing of turnarounds to coincide with the scheduled shutdowns of feedstock providers and periods of relatively lower demand for the products of the relevant units. In between major scheduled turnaround maintenance events, we may plan minor scheduled maintenance periodically, during which our plants are partially or entirely shut down. We coordinate the major turnarounds for units in the Sriracha Complex to minimize the effects of the turnarounds and to optimize the Group's operations with a view to avoiding any disruption in products supply to customers during major turnarounds.

In 2014, certain of our major processing units, including CDU-3, HCU-1, CCR-1 and HVU-3, underwent major turnarounds aimed to enhance our processing capabilities and competitiveness by optimizing the efficiency and production of these processing units. As part of the major turnarounds, we improved the energy efficiency of CDU-3 by modifying the crude oil pre-heating train, incorporating high efficiency plate heat exchangers with updated configurations and installing a convection bank with higher efficiency in the CDU-3 furnace. After the completion of the major turnarounds, we were able to realize more than 20% of energy saving from the crude-fired heater, which would allow us to save up to 26 MW of fuel per year and reduce carbon dioxide emissions by 46,000 tons per year. These major turnarounds have enhanced our competitiveness by lowering our operating costs, thereby enhancing our operational excellence and promoting our environmental sustainability.

The recent major turnarounds were completed in 2024 and 2025, with major turnaround activities ("**MTAs**") covering various refinery process units, including TPX, LABIX, and TLB. The primary objective of the MTAs was to restore asset capability, performance, integrity, and reliability. Most equipment was opened for inspection and cleaning. A key activity was the inspection and replacement of the refinery flare stacks to ensure their performance and integrity. Catalysts were replaced in many process units, including HCU-2, HMU-1, and HMU-2, to restore and enhance unit performance. In addition, to improve energy efficiency, CDU-3's air preheater was replaced in 2025 with a modern design.

These major turnarounds have strengthened our competitiveness by lowering operating costs, enhancing our operational excellence and promoting environmental sustainability. With respect to product supply, the MTA shutdowns were planned with customers in advance to ensure that supply and energy security were effectively managed.

Utilities and Catalysts

As part of the production process, we consume a variety of utilities, including steam, industrial water, gas and electricity. We are able to meet some of these needs through production within the Group. To the extent our internal production of these utilities is insufficient, we purchase such utilities from third parties.

Water

We currently use two main types of water: raw water and seawater.

(1) Raw water. Raw water accounts for approximately 67% of the refinery's total water requirements and is sourced from:

- Bang Phra Reservoir: This is our primary source. As of September 30, 2025, the supply rate from the reservoir was approximately 600 m3 per hour.

- Eastern Water Resources Development and Management PCL ("**East Water**"): We have an agreement with East Water to ensure adequate supply in the event of insufficient raw water from the Bang Phra Reservoir.

(2) Seawater. Our seawater desalination facilities provide approximately 33% of our refinery's water consumption. The desalination plants supply almost all the water required for steam

generation in our refinery. As of September 30, 2025, our desalination plants had a rate of water supply of approximately 300 m3 per hour and a spare water supply capacity of 60 m3 per hour for use in the event of a shortage of raw water.

To ensure a stable supply of water for our refinery, we cooperate with the Royal Irrigation Department of Thailand and East Water to closely monitor the sources of raw water supply and the pipeline system in Chonburi Province and Rayong Province, formulate water management plans for the ordinary course of our operations and prepare backup plans in the event of a shortage of raw water. In addition, we have an agreement with Veolia Water Technologies & Solutions Thailand Co. Ltd to rent mobile Sea Water Reverse Osmosis (SWRO) in case of water crisis.

Moreover, in the future, the capacity of TOP's refinery will be increased, leading to a 5 times higher water demand. In such context, relying on only two raw water sources and current desalination plant is no longer a robust strategy. Therefore, TOP is actively working to strengthen its water supply security through further diversification of water suppliers.

Electricity and Steam

We previously purchased our electricity and steam requirements, respectively, from Thaioil Power. The balance is generated within our refinery from refinery fuel. On February 1, 2021, following a restructuring plan of our power generation business, Thaioil Power's business was entirely transferred to us. The restructuring had no impact on our operations as there was no change in physical assets. We continue to produce steam from our gas turbine generators, fire-tube boiler and other processing units. When necessary, we can increase our steam production by utilizing the idle capacity of our spare fire-tube boilers. Additionally, we purchase electricity and steam from TOP SPP.

TOP SPP completed and commenced operations of its two small power plants in 2016. Our refinery and affiliated companies use electricity and steam from these two small power plants for approximately 34% and 43% of our total electricity and steam requirements, respectively. We believe that our internal sources can provide a sufficient and uninterrupted power supply given that we can manage and maintain different sources for our electricity and steam requirements.

Natural Gas

PTT is the main supplier of natural gas in Thailand. PTT supplies natural gas to us, TOP SPP and GPSC for power generation and for our refining production pursuant to a long-term contract which was negotiated on an arm's length basis, with pricing determined by a specified formula.

In addition to natural gas, we have the flexibility to use other alternative fuels, such as fuel oil and liquefied petroleum gas, which would minimize our risk exposure in the event of a shortage of natural gas supply.

Catalysts

Various types of catalysts are utilized in various process units such as HCU, FCC, HMU, Isomar and Pacol. Catalysts support reforming, heavy feed upgrading, and fuel quality improvement, such as sulfur removal in gasoline and diesel and octane enhancement in gasoline. They are also employed for environmental control, including SOx removal from off-gas in the Tail Gas Treating Unit. Catalysts are carefully tested and selected to maximize product yield and selectivity, ensure on-spec product quality, extend catalyst life, and optimize overall operating costs. During operations, catalyst performance is regularly monitored to confirm effectiveness and to inform long-term catalyst replacement planning. The technology team continuously tracks advances in catalyst technology to fully leverage newer formulations available in the market.

Storage

Our plants have storage tanks and facilities which enable us to store our products before delivery and to store feedstock before use. We believe our storage facilities have sufficient capacity to accommodate normal operations, including foreseeable circumstances, such as where we or one or more of our customers or feedstock suppliers may experience an unplanned plant shutdown for a limited period of time. Our inventory of products may increase from time to time, reflecting unscheduled shutdowns or other problems at our customers' plants that prevent or delay their taking delivery, as well as our inventory planning in advance of our scheduled shutdowns and our customers' inventory planning for planned production. Pursuant to the regulations of the Energy Business

Department of the Ministry of Energy, each Thai refinery, including ours, is required to hold as legal reserve an equivalent of 6.0% of its annual throughput of crude oil and certain amounts of other feedstock for producing domestic refined petroleum products. As of September 30, 2025, our oil legal reserves were approximately 4.8 million barrels of crude oil, feedstock and oil product inventories.

Our board of directors has approved the study for the potential acquisition of new storage tanks for storing legal reserve, the amount of which had been changed in line with the revised Fuel Trade Act, and for enhancing the stability in refining to ensure constant production and strong competitiveness. As a result, we built five new storage tanks with a total capacity of about 250 million liters and started utilizing them in 2019. Also, to serve the requirement of crude after our refinery capacity expansion, we built nine new storage tanks with a total capacity of about 700 million liters and started utilizing them in 2021.

Competition

We face significant competition in the refining and petrochemical markets. Given that most refinery products are commodities, we believe the main competitive criteria are pricing (which in turn depends principally on the price and availability of crude oil and other feedstock and refinery efficiency), service and lead time to product delivery. A key competitive factor is the ability to manage costs successfully, which requires management focus on reducing unit costs and improving efficiency. The main drivers in this respect include technology, scale, feedstock access, asset utilization, refined petroleum product mix, logistics, level of integration, geographical location of feedstock, plants and customers, which affect product distribution and transportation costs, and the ability to execute capital projects efficiently.

We compete in both the domestic market in Thailand and the international markets. We consider Thailand to be our principal market, not only because we are a Thai company, but because of the strength of our strategic business relationship with PTT with respect to feedstock supply and offtake arrangements and also the fact that the majority of our products are sold within Thailand. In the international markets, we compete with a number of international refineries and petrochemical companies. In these markets, proximity to our customers is an important cost-driver as delivery and freight costs affect our pricing, and therefore our price competitiveness. For this reason, our international customers are mostly located in Asia, including China, Singapore, Vietnam, Indonesia, Malaysia, Taiwan, the Philippines, Laos, Cambodia and Myanmar. However, in order to take advantage of our geographical proximity, we plan to further expand our sales into other parts of Asia, especially ASEAN, as well as increase our sales efforts in China, in accordance with our investment plans. See "*—Strategy*."

According to the public information published by the Ministry of Energy of Thailand as of November 2025, there are currently seven major oil refinery business operators in Thailand, with a combined refining nameplate capacity of approximately 1,241,500 bpd as of 2024. These include us, Bangchak, Esso (Thailand) Public Company Limited ("**ESSO**"), IRPC, PTTGC, Fang Oilfield and SPRC. Our refinery competes primarily with these domestic refineries and, to a lesser degree, with regional refineries in Asia. See "*Industry Overview—Oil Market*."

We compete with other companies for supplies of feedstock and for outlets for our refined petroleum products. Many of our competitors produce their own feedstock and have extensive retail outlets. We do not produce any of our own feedstock for our refining operations and do not own any retail outlets. The stable supply of feedstock and ready market and distribution channels of such competitors place us at a competitive disadvantage in periods of feedstock shortages, high feedstock prices, low refined petroleum product prices or unfavorable distribution conditions. In addition, competitors with their own production or retail outlets may be better able to withstand such periods of depressed refining margins or feedstock shortages because they can offset refining losses with profits from their retail operations.

As the products from our refinery and aromatics and LAB business units are largely commodity products, we do not expend significant resources in the marketing of our products. For the year ended December 31, 2024 and the nine months ended September 30, 2025, our total selling and distribution expenses (including distribution, promotional, marketing and marketing-related personnel costs) amounted to THB683.8 million (US$21.2 million) and THB422.4 million (US$13.1 million), respectively.

Our industry is subject to extensive environmental regulations. These regulations may have a significant impact on the refining industry and may require capital outlays by us and our competitors in order to upgrade our facilities to comply with any new standards. Competitors who have more modern plants than we do may not need to spend as much to comply with these regulations and may be better able to afford the upgrade costs. For further information on environmental compliance, see "*—Environment, Sustainability and Corporate Social*

Responsibility." See also "*Risk Factors—Risks Relating to Our Business—The refining, petrochemical and lube base oil industries are highly competitive*."

We aim to continuously improve production of our petrochemical and lube base oil products to ensure that we are able to most effectively use available feedstock to ensure lowest possible costs to allow us to compete effectively in the petrochemical and lube base oil markets. We believe we are able to achieve this through the use of leading production technologies, ensuring feedstock flexibility and strategically locating ourselves in the Sriracha Complex, where a large number of our customers are also located, to ensure timely and less costly delivery.

In the domestic petrochemical market, our key competitors are ESSO and PTTGC (an affiliate of ours and a member of the PTT Group).

In the domestic lube base oil market, IRPC (an affiliate of ours and a member of the PTT Group) is the other main supplier of lube base oil and related products. Our main customers are PTT and other domestic users, while IRPC's main customers are large scale international oil companies such as Shell and SFL. Our remaining lube base oil products which are sold internationally face competition from, in particular, other exporters from South Korea, Taiwan, Indonesia and Singapore.

Marketing

We generally sell our products directly to our customers or through distributors.

We have a sales and marketing team based in Bangkok that is responsible for sales and marketing activities both in Thailand and internationally. The team has regular meetings with our key customers, including OR, to understand their requirements and to maintain good relationships, as well as to provide good service. We are focused on relationship management to ensure customer satisfaction.

With our emphasis on a proactive marketing strategy, we adjust work processes to be more resilient in order to meet customer expectations (i.e., be customer focused); expand our customer base both in Thailand and abroad; maximize sales volume in Thailand and target countries with high economic growth, which are those in Indochina (Cambodia, Laos, Myanmar and Vietnam), as well as Indonesia and India; increase the proportion of high-value products and proportion of end users; in addition, we constantly manage good relationships with local and foreign customers in a professional manner. Through such endeavors, and with products that meet the required standard with on-time delivery, a wider range of product offerings, services and solutions rendered to customers quickly and accurately, along with product-receiving processes of an acceptable safety standard, we remain Thailand's major fuel producer. In 2024, we sold, by volume, 86% of our refined petroleum products in the Thai domestic market, which is approximately 27.6% of the market share in Thailand according to DOEB and Company data (as of March 2025), while being able to increase sales by expanding product distribution in the Southeast Asian markets. Our customer engagement score for Thaioil is 95% according to our internal data.

Plants and Properties

The Sriracha Complex occupies approximately 925 acres (equivalent to approximately 2,339 rai[16]) of sea front land. We currently lease approximately 58.9%, or 545 acres (equivalent to approximately 1,378 rai), of the land from the Ministry of Finance under a long-term lease, which will expire on September 10, 2052. We own the remaining 41.1%, or 380 acres (equivalent to approximately 961 rai), of land. We sublease approximately 12.5% of the land we lease from the Treasury Department, and we lease approximately 23.0% of our own land to our investee companies under long-term arrangements. The annual rent we pay is subject to an escalation adjustment at the rate of 10% every three years.

The majority of our material plants and properties are located in the Sriracha Complex in Sriracha, Chonburi Province, Thailand. Our material plants and properties, including their approximate nameplate capacities as of September 30, 2025, are set forth in the table below.

[16] 1 rai is approximately 0.395 acre.

Plant/Property	Location	Usage or principal products manufactured	Unit	Approximate Nameplate capacity
Oil Refinery				
Refinery	Sriracha Complex	LPG, platformate, gasoline, jet fuel, diesel and fuel oil	Barrels/day	275,000
Lube Base Oil Refinery				
Lube Base Oil refinery	Sriracha Complex	Lube base oil, bitumen, TDAE, slack wax, extract and by-products	Metric tons/year	Lube base oil — 267,015 Bitumen — 350,000 TDAE — 67,520
Aromatics and LAB				
Aromatics Complex	Sriracha Complex	Paraxylene, benzene, toluene and mixed xylenes	Metric tons/year	Paraxylene — 527,000 Benzene — 259,000 Mixed Xylene — 52,000
LAB Plant	Sriracha Complex	LAB	Metric tons/year	160,600
Power Generation				
TOP SPP co-generation power plant	Sriracha Complex	Electricity	MW	354
		Steam	Tons per hour	787
Solvent				
Sak Chaisidhi	Rayong	Hydrocarbon solvent	Metric tons/year	214,000
Ethanol				
Sapthip—cassava based ethanol plant	Lopburi	Ethanol	Liters/day	200,000
UBE—cassava-based and molasses-based ethanol plant	Ubon Ratchathani	Ethanol	Liters/day	400,000

Investment Promotion

We have obtained investment promotion privileges from the BOI pursuant to the Investment Promotion Act B.E. 2520 (1977) (as amended) (the "**Investment Promotion Act**"). Under the Investment Promotion Act, a company looking to make an investment in Thailand in certain industries or business activities that meet the criteria of the BOI may apply to the BOI for investment incentives provided by the Government, including tax privileges, relaxation of restrictions on foreign participation, business protection, land ownership rights, and customs duties reduction/exemption. The BOI grants investment promotion on a project-by-project basis and the company whose project has been granted investment promotion by the BOI must comply with general conditions as well as project-specific conditions the BOI may impose on the project.

We hold investment promotion privileges granted by the BOI with respect to our plants, industrial zones, and investment projects for our production of refining and petrochemical products and our power plants. These rights and privileges granted to us by the BOI under these investment promotion certificates include, among others:

- permission to bring into Thailand foreign technicians who are skilled workers, experts, and their spouses and dependents;
- foreign nationals who are skilled workers or experts and who are permitted to stay in Thailand shall be granted a work permit for a specific position approved by the BOI for the period of permitted stay;

- reduction or exemption of import duty on machinery approved by the BOI imported within the period specified in each investment promotion certificate;

- exemption of import duty on raw materials, things or other materials that need to be imported in order to manufacture our products for export or things that need to be imported and then exported, for one year;

- exemption of income tax for certain operations and dividends for three to eight years, subject to each project's criteria, from the date on which income is first derived from such operations. In certain emission improvement projects, the capped amount of the corporate income tax exemption is equal to the total investment amount. The amount of corporate income tax exempted is also limited to a certain amount, as specified in each particular investment promotion certificate, and is subject to adjustment according to the actual investment capital on the date of the commencement of operations under the promoted project; and

- permission to take out or remit abroad money in foreign currency.

We are required to comply with a number of conditions set forth in each investment promotion certificate, or otherwise, risk losing the investment promotion privileges. These conditions include, among others, restrictions as to the areas where the project can be located, registered capital requirements, various reporting obligations and requirements to install and implement environmental protection systems.

Feedstock Procurement

We procure crude oil which is the main feedstock for oil refining–from domestic and overseas sources, taking into consideration estimated yields from each type of crude against market demand at a given time for maximum returns. Our policy is to diversify crude procurement from different sources to mitigate risks in case crude cannot be delivered. We enter into two types of crude supply agreement, namely, term contract and spot contract, which are entered into to ensure balance between the security of feedstock procurement and the opportunity to profit from crude market fluctuation.

In 2024 and for the nine months ended September 30, 2025, imported crude oil from foreign sources accounted for 94.3% and 95.1% respectively, of the total volume of crude. For the nine months ended September 30, 2025, the majority of the crude, or 91.1% (by volume), was procured from Middle Eastern countries such as UAE, Qatar, and Saudi Arabia. Crude imported from Asia (excluding Thailand), such as from Malaysia, Brunei, and Indonesia, accounted for 4.0%, and other foreign sources such as Europe and Africa, accounted for 0.0%. The remaining 4.9% was local crude. Local crude is usually transported by rail and vessel while imported crude is shipped directly to our refinery. Through SBM, we are able to receive crude delivered by large vessels, which has increased oil transportation efficiency while reducing the unit cost of crude shipping.

The table below shows the cost of crude oil procured from various sources for the periods indicated.

	For the year ended December 31,						For the nine months ended September 30, 2025	
	2022		2023		2024			
Source of crude	**THB (in millions)**	**% of total cost**	**THB (in millions)**	**% of total cost**	**THB (in millions)**	**% of total cost**	**THB (in millions)**	**% of total cost**
Middle East	327,978.43	88.4	302,335.48	91.9	296,337.58	92.3	172,594.33	91.1
Thailand	31,365.16	8.4	20,971.46	6.4	17,547.35	5.5	9,286.04	4.9
Asia (excluding Thailand)	6,220.17	1.7	4,153.61	1.2	6,282.05	2.0	7,616.31	4.0
Other foreign sources	5,613.74	1.5	1,553.89	0.5	745.92	0.2	0.0	0.0
Total	**371,177.50**	**100.0**	**329,014.44**	**100.0**	**320,912.90**	**100.0**	**189,496.68**	**100.0**

For other raw materials, we import additives and components in line with market demand and applicable law. TLB procures long residue, a raw material for lube base production from domestic and overseas markets.

Environment, Sustainability and Corporate Social Responsibility

Our operations are subject to significant environmental laws and regulations, including the Enhancement and Conservation of National Environmental Quality Act B.E. 2535 (1992) (as amended), the Factory Act B.E. 2535 (1992) (as amended), the Hazardous Substances B.E. 2535 (1992) and the Public Health Act, B.E.2535 (1992). In 1992, Thailand strengthened its environmental laws and regulations in an effort to promote sustainable development and to better protect the natural environment.

Environmental laws and regulations that primarily relate to air emissions, water discharged and industrial waste from our facilities and, to a lesser extent, to our construction and maintenance programs affect all aspects of our business, including oil refining and construction of our new facilities, including the power plant and petrochemical business of our subsidiaries. We are required by environmental laws to conduct studies and assessments of the environmental impact of a potential facility ("**Environmental Impact Assessment**" or "**EIA**") and take into consideration the environmental philosophy in the design phase of a project prior to construction or installation to assess the likely effect of our activities on the surrounding environment, to conduct mitigation and monitoring programs and to ensure that our new facilities will operate with minimal impact on the environment, the local community and biodiversity. We have engaged the licensed environmental consultants to conduct the studies and prepare the EIA reports for our projects and our subsidiaries' projects which are subject to the EIA requirement, such EIA reports were duly approved by the Office of Natural Resources and Environmental Policy and Planning. Environmental laws also require us to maintain the emissions of our various facilities within certain limits. The primary governmental bodies which supervise our operations are the Office of Natural Resources and Environmental Policy and Planning and the Pollution Control Department, both of which are under the Ministry of Natural Resources and Environment.

The principal objectives of our environmental policy are to comply with all relevant legislation, to minimize the adverse effects that our existing and potential oil refining activities may have on the environment and local communities, and to ensure that we operate with a high degree of social responsibility. We view the safe and environmentally responsible conduct of our oil refining activities as an important aspect of our business. To achieve this, we employ a variety of pollution control and other environmental impact mitigation efforts, including the application of advanced technology to improve and reduce environmental impact such as VOCs treating by biotechnology, Sulphur treating unit- SRU, TGTU, and also emission dispersion enhancement by stack with 140 meter height. We also run a continuous emission monitoring system in the refinery stacks and a mobile air quality monitoring system in 2002. Our effluent water treatment plant applies denitrification—nitrification biotreating technology to ensure that treated waste water quality meets the environmental regulations before discharging it to the sea. We also monitor on a regular basis the emissions of our facilities and the effect that these emissions and effluents have on the surrounding air quality, water quality and terrestrial and aquatic environments, as required by environmental laws and regulations. To support our environmental protection measures, we have coordinated, cooperated with and supported governmental studies of environmental monitoring models near our refinery. We are one of the founding members of the Oil Industry Environmental Safety Group Association, which is a voluntary group comprised of oil companies in Thailand that are committed to providing mutual aid for clean-up activities in the event of oil spills.

We have adopted international codes, standards and recommended practices from the International Organization for Standardization ("**ISO**"), American Petroleum Institute and Process Safety Management for process safety management. The Quality, Security, Safety, Occupational Health, Environment, and Energy Management (QSHE) Policy embodies our unwavering commitment to environmental protection and operational safety, aligning with global benchmarks for excellence. We have achieved certification under ISO 14001 for Environmental Management and ISO 45001 for Occupational Health and Safety Management Systems, underscoring our dedication to continual improvement and compliance with applicable regulatory requirements. While we believe we are in compliance in all material respects with applicable environmental laws and regulations, the discharge of oil or other pollutants into the air, soil or water may nevertheless give rise to liabilities to the government or third parties and may require us to incur costs to remedy the damage caused by such discharges. Furthermore, environmental laws may change in the future, resulting in curtailment of production activities requiring additional capital expenditures or otherwise adversely affecting our operations and financial condition. See "*Risk Factors—Risks Relating to Our Business—Compliance with, and changes to, environmental, health and safety, tax and other laws and regulations may adversely affect our results of operations and our financial condition*." Our environmental program continues to focus on compliance and our social projects are aimed at contribution to the local community and society. We have progressively improved and adjusted our operations to conform with Corporate Social Responsibility Department of Industrial Works ("**CSR DIW**") continuous 2025 – in order to ensure that our business operates in a socially responsible manner, and in order to strengthen our corporate sustainability.

To gain long-term business value and competitiveness, we aspire to develop genuine business integration for sustainability. To achieve this, we studied all stakeholder expectations in all aspects to identify risks and opportunities to strengthen environmental management. We have initiated a five-year Environmental Master Plan (2025 – 2029) to proactively ensure compliance and to use as a framework for improvement of environmental sustainability efforts, addressing key components such as governance structure, technical procedure, climate strategy, water management, eco-efficiency performance, biodiversity, supplier and contractor programs, environmental audits and also management information systems. We review our five-year Environmental Master

Plan every year. In addition, we aim to improve our Environmental Master Plan by adding new initiatives, projects and/or activities, including those relating to the DJSI, to enhance our long–term business value and competitiveness for sustainability.

In 2025, ESG management was enhanced through the O2BX Program, guided by the "New CARE, Better Than Ever" Concept. The initiative focused on strengthening collaboration among all employees and prioritized four key areas:

- Control of Impact: Advanced Green MTA initiatives, resumed CFP construction, and promoted digitalization to reduce environmental impact.
- Associate: Fostered stronger partnership with contractors, communities, government agencies, and youth.
- Refined Stakeholder Relationships: Strengthen top management involvement to build trust and transparency with local communities.
- Enhance Quality of Life: Expanded CSR programs with executive support to improve community well-being.

Policy on Investment in Subsidiaries

We have a policy on investment in subsidiaries and other companies in future investments that support or promote our business or to strengthen the Group. To supervise subsidiaries, Thaioil as a shareholder will appoint a representative to participate in the shareholders' meeting as proxy or representative and exercise the voting right at the shareholders' meeting according to the board of directors' principles or guidelines.

Moreover, Thaioil will appoint representatives to as directors and/or managing director of subsidiaries. The positions of representatives include Chairman of the Board, director, managing director, high-ranking executives or experts with the required knowledge and experience suitable for and without any direct conflict of interest with the business. The appointed representatives will manage subsidiaries under rules, regulations, and guidelines specified in the articles of association of each given subsidiary and related laws.

Government Regulation

General

The energy industry in Thailand is under the supervision of five main government authorities: the Ministry of Energy (the "**MOE**"), the National Energy Policy Council (the "**NEPC**"), the EPPO, the Energy Regulatory Commission (the "**ERC**") and the Oil and Fuel Fund Management Commission (the "**OFFMC**").

The Ministry of Energy

The Ministry of Energy oversees the country's energy policy and energy industry. The policy includes management of the country's indigenous resources by granting concessions for natural gas exploration and production in the Gulf of Thailand. It is also responsible for an oversight of PTT and EGAT. The Ministry of Energy also exercises its powers and duties through the DOEB in the supervision of refineries to ensure safety compliance in oil and gas business operations and the supervision of oil domestic trading and oil product quality and legal reserve.

The NEPC

The NEPC is the government body established under the National Energy Policy Council Act B.E. 2535 (1992), as amended (the "**NEPC Act**"). The NEPC functions its duties by giving recommendations on the country's energy policies and energy management and development plans to the Thai cabinet. Its powers and duties as set out in the NEPC Act include establishing rules and conditions for the determination of energy prices in conjunction with the abovementioned plans, supervising and monitoring operation of all committees relating to energy sector and constituencies, including government agencies, state enterprises and private sectors as well as performing any duties as assigned by the Prime Minister or the cabinet.

Under the NEPC, the Energy Policy Management Board ("**EPMB**") was established by the NEPC pursuant to its power under the NEPC Act to function as a screening and supporting body for the NEPC. Its powers

and duties include making recommendations and/or providing comments with regard to energy management and development. In addition, the EPMB is empowered by the Prime Minister of Thailand by virtue of the Emergency Decree on Remedy and Prevention of Shortage of Fuel Oils B.E. 2516 (1973), as amended, and the Order of the Prime Minister no.15/2562 re: Prescribing the Measures to Remedy and Prevent the Shortage of Fuel Oils, to prescribe regulations in relation to price calculation and fuel oil pricing.

The EPPO

The EPPO was formerly known as the National Energy Policy Office (the "**NEPO**") and was originally established as the secretariat to the NEPC. After the enactment of the Act on the Administrative Organization of State Affairs (No. 5) B.E. 2545 (2002) and the Act on Organizing Ministries, Sub-ministries and Departments B.E. 2545 (2002), as amended, the supervision of NEPO was transferred to the Ministry of Energy, following which NEPO was renamed to the Energy Policy and Planning Office, EPPO.

Among the EPPO's powers and duties set out in the NEPC Act, one of its primary responsibilities is to study and analyze the country's energy policy and national management and development plan to be presented to the NEPC. Its functions and duties include monitoring, evaluating, and acting as a coordinating and supporting center for the foregoing policy and plan, collecting data, monitoring the changing energy situation, analyzing trends and making forecasts. The EPPO is also in charge of disseminating energy statistics and must perform any other duties as assigned by the Prime Minister or NEPC. In addition to the powers and duties given in the NEPC Act, the EPPO's powers and duties are given in the Emergency Decree on Remedy and Prevention of Shortage of Fuel Oils B.E. 2516 (1973), as amended, the Order of the Prime Minister no. 15/2562 re: Prescribing the Measures to Remedy and Prevent the Shortage of Fuel Oils and the Energy Conservation Promotion Act B.E. 2535 (1992). As the PTT Group's principal refiner, we are required to cooperate with the EPPO on the implementation of such policies.

The ERC

The ERC was established by virtue of the Energy Industry Act B.E. 2550 (2007), as amended (the "**Energy Industry Act**") and has become the key regulatory body of energy industry in power, natural gas and the energy network system sectors. ERC's main authorities and duties are to regulate an operation of power and natural gas businesses and to ensure compliance with objectives of the Energy Industry Act under the policy approved by the Cabinet, monitoring the operation of business of the licensee, issuing the regulations for governing the standard and quality of energy service for the benefit of the energy consumers, serving as the center for submission of applications for issuance of key licenses required for the operation of electricity and natural gas businesses under the Energy Industry Act and other laws regarding energy business operation as well as acting as the deciding authority in relation to disputes between licensees and energy consumers, or between licensees.

The OFFMC

The OFFMC was established by Oil Fuel Fund Act B.E. 2562 (2019), as amended, and is authorized, and obliged to manage the domestic oil fuel fund and energy conservation promotion fund. Its significant duties are to propose and consider the plan in connection with oil and fuel crisis, and to propose oil and fuel strategic plan, and to propose and consider any related matters to NEPC for further consideration and approval of related and competent authority.

Regulation Relating to Refineries

Pricing of Refined Petroleum Products and Price Stabilization

Pricing of refined petroleum products in Thailand is based on the Singapore spot market price for the relevant refined petroleum products. See "*—Our Business Units and Products—Oil Refining—Oil Refining—Sales*."

Through the adjustment of oil fuel fund collection policies and petroleum tax, the Thai Government can maintain the stability of the prices of retail petroleum products. Therefore, refineries in Thailand can sell their products to their off takers at market price—the government uses the oil fuel fund and petroleum tax policy to manipulate the retail price and domestic demand pattern according to their energy policy.

The wholesale and importation of LPG, which is largely used by households as cooking gas, has no longer been regulated since August 2017. Due to the resolutions of NEPC in July 2017 approving the liberalization of the LPG business, as previously contemplated by the EPMB in late 2016, the Thai Government has lifted the

price control from all supply sources and allowing free import and wholesale of LPG based on global market price. According to the resolutions of the EPMB as of July 18, 2018, the benchmark price for quoting the ex-refinery price of LPG is a global LPG market price (LPG Cargo) calculated from an average of Platts' Propane Cargo price and Butane Cargo (FOB Arab Gulf) price plus importation costs. While the retail price of LPG is still controlled via the mechanism of the oil fuel fund and retail sale is still under the supervision of the Department of Internal Trade in order to ensure that there will be no unfair pricing (marking-up excessive profits from the benchmark price) by LPG retailers.

Limitation on LPG Exports

Despite the liberalization of the wholesale and importation of LPG, the export of LPG still remains regulated by the DOEB in order to prevent domestic shortages of LPG. The current regulatory framework requires specific compliance measures: only duly listed oil traders under the Fuel Trade Act B.E. 2543 (2000) are permitted to export LPG; a letter of certification must be obtained from DOEB for each export shipment; and the exporter is required to make contribution to the oil fuel fund at the rate set out in relevant regulations.

Legal Reserve Requirement

Each Thai refiner is required to hold parts of its annual throughput of crude oil and certain types of refined petroleum products as legal reserve. A legal reserve level for each of crude oil and refined petroleum products varies and is subject to change from time to time by the DOEB. Subject to prior approval of the DOEB, oil refiners may reserve the requisite volume of its refined petroleum products as substitute for reserves of crude oil or other types of refined petroleum products in accordance with the criteria, and subject to compliance with the requirements, set out in the regulation.

Each Thai refiner is also required to hold parts of its LPG and natural gas as legal reserve. The legal reserve level for each of them also varies and is subject to change from time to time by the DOEB.

Domestic Oil Fuel Fund and Energy Conservation Promotion Fund

The Oil Fuel Fund Act B.E. 2562 (2019) (the "**Oil Fuel Fund Act**") is the framework for the operation and function of the oil fuel fund, which are, by and large, based on the same concept under the Order of the Prime Minister of Thailand issued under the Emergency Decree on Remedy and Prevention of Shortage of Fuel Oils B.E. 2516 (1973) that first set up the oil fuel fund in 1979 by merging the fuel stabilization fund with the fuel price stabilization fund, but with certain modifications in the organization of supervisory agencies and operational requirements which aim to provide more efficiency, neutrality and transparency of the oil fuel fund. The OFFMC, a committee specifically established by the Oil Fuel Fund Act leads the management role for the oil fuel fund which were main duties that the EPMB previously had over the oil fuel fund in place of the EPMB.

The oil fuel fund was set up to stabilize the domestic retail price of oil fuel resulting from the increase of price in the world market to minimize any adverse effect on the Thai economy. The operators of oil fuel production and distribution are obligated to make contributions to the fund in accordance with the volume produced or distributed at the rate levied by the OFFMC, as adjusted from time to time. Remittance to the fund is made under the supervision of the Excise Department, the Customs Department and the Department of Mineral Fuels. The OFFMC sets the oil fuel fund contribution rates and compensation rates for various types of fuel oils produced from domestic refineries, including imported fuel oil for domestic use, which may be amended from time to time.

The energy conservation promotion fund was created to meet the requirement for working capital and expenditures and to support or promote activities relating to energy conversation. The operators of oil fuel production and distribution are obligated to make contributions to the fund at the rate as prescribed by the NEPC. The Excise Department, the Customs Department and the Department of Mineral Fuels are in charge of collecting the contributions to the fund.

Product Specification

The Thai government has imposed stringent environmental compliance regulations on petroleum products. The regulations prescribe specifications and quality of refined petroleum products, including, among others, the reduction of lead content in ULG and diesel. The Thai government has also imposed significant regulatory changes in relation to the quality of refined petroleum products, including the reduction of lead content in ULG and diesel.

The Thai Cabinet Resolution of May 17, 2005 approved a new strategy to attempt to solve Thailand's energy shortages by promoting the use of renewable energy sources, including natural gas for vehicles, gasohol and biodiesel, in place of oil. The foregoing Cabinet resolution also set a goal for phasing out the use of 95-octane unleaded gasoline by January 1, 2007. However, this complete phase-out has not yet occurred and 95-octane unleaded gasoline was, as of the date hereof, still sold in Thailand but is becoming less common over time. In addition, the Thai Cabinet Resolutions of December 27, 2011 and of October 9, 2012 approved the resolutions of the NEPC to call for a phase-out of 91-octane unleaded gasoline by January 1, 2013, which has been completed. As a substitute for unleaded gasoline, the Thai government intends to encourage the use of gasohol containing ethanol content in the volume pursuant to the applicable statutory minimum imposed for each type of gasohol. The minimum volume of ethanol in gasohol is variable depending on the type of gasohol. Regulations of the DOEB which are issued from time to time, by virtue of the Fuel Oil Trading Act B.E. 2543 (2000), include a requirement that gasohol sold in Thailand, unless otherwise exempt pursuant to certain conditions set out in the regulations, must consist of denatured ethanol within a range of percentage of volume as specified in the regulations.

Product specifications may vary from product to product and may depend on purposes of using such product. For example, refined petroleum products for export purposes may be exempt from compliance with the stringent specification and quality control in Thailand upon prior approval from the Director General of the DOEB.

Air Emission Standards

The air emission regulatory standards have set emission source standards and ambient standards, which cover operational control and operational impact of emissions. Thus, as part of our emissions management, we focus on both the internal operations of the emission source and the external impact following the ambient standard.

In respect of the emission source standards for air emissions from refineries, the Thai government has adopted notifications prescribing the controlled standards of other emissions, including the notification of the Ministry of Industry in 2010 and the notification of the Ministry of Natural Resources and Environment in 2011 (as amended in 2024), which set out the controlled standards for the emission of particulate matter, sulfur dioxide, carbon monoxide, hydrogen sulfide, mercury, lead and oxides of nitrogen emitted from petroleum refinery plants; as well as the notification of the Ministry of Natural Resources and Environment in 2021 setting controlled standards for Total Volatile Organic Compounds (VOCs) from fuel storage facilities and the notification of the Ministry of Industry in 2012 setting controlled standards for leak emission of Volatile Organic Compounds from petroleum refinery plants and petrochemical plants. Apart from emission source standards, there ambient standard on emissions on an area basis (e.g. sulphur oxide, nitrogen oxide, VOCs, benzene, etc.). The Pollution Control Department monitors ambient standards.

To ensure all emissions are within the standards, the CEMs monitoring system installed connect directly online to Department of Industrial Works (DIW) and we carry out inspections from time to time for the purposes of monitoring the environmental impact according to the EIA plan has been conducted on both an operational level and ambient level to ensure that emissions from the refinery and its affiliate will not impact on area basis. See "*Risk Factors—Risks Relating to Our Business—Compliance with, and changes to, environmental, health and safety, tax and other laws and regulations may adversely affect our results of operations and our financial condition*."

Regulation Relating to Electricity

Governance and regulation of energy businesses in Thailand is mainly governed by the Energy Industry Act which came into effect on December 11, 2007. The Energy Business Act aims to restructure the energy industry and increase efficiency by separating policy-making, regulatory and operational functions and allowing for greater participation in the power industry by the private sector, the local community, and the public. Moreover, the Energy Industry Act provides for the establishment of ERC to supervise and regulate both the power industry and the natural gas industry, including the granting, suspension or termination of licenses for energy sector operations. It is tasked with ensuring the separation of the activities of policy making, regulation and operations in Thailand's energy industry. One mandate of the ERC is to prevent abusive use of monopoly power and protect energy consumers and other segments of society that may be adversely affected by activities of the energy industry in part through a licensing regime.

Under the Energy Industry Act, any operation in the power business, either with or without remuneration, is required to obtain a license from the ERC, unless otherwise exempted by the Royal Decree dated June 1, 2009

prescribing the types, capacity and characteristics of energy business exempted from the license requirement. A power plant which has a generator with capacity greater than 200 kilo-volt-ampere is also required to obtain a controlled energy production license from the ERC under the Energy Development and Promotion Act B.E. 2535 (1992). Moreover, in accordance with the Electricity Generation Authority of Thailand Act B.E. 2511 (1968), any operator of a power plant with a capacity greater than 20 megawatts for supplying to its facilities or greater than six megawatt for selling to the public is required to obtain permission from EGAT on any connection with the electric system of EGAT, the MEA or the PEA. EGAT may impose any conditions concerning the quality, engineering technique and safety of such connection.

The Power Development Plan 2018-2037 ("**PDP 2018**") was amended by The Power Development Plan 2018-2037 Revision 1 ("**PDP 2018 Rev. 1**") by the approval of the Thai Cabinet in October 2020 respectively in order to adjust the Power Development Plan to be more consistent with the direction of national economic and social development plan. Similar to PDP 2018, the PDP Rev. 1 embraces three major principles:

- *Security of national power system.* The security of the country's power system is reflected through its generation, transmission and distribution systems designed to respond to the national economic and social development plan and encourage fuel diversification with an aim to reduce the country's over dependence in a particular type of fuel, including an expansion of power plant numbers for energy security in case of energy crisis;

- *Economy.* Supporting low-cost electricity generation to reduce end-user's burden as well as effective cost management of power generation; and

- *Ecology.* Reducing environmental impact, promoting renewable energy, and enhance efficiency in the power generation and consumption by development of a smart grid power network system.

Previously, the PDP 2018, provides for reliability in the power system of subsystem areas in terms of generation, transmission and distribution, promoting electricity production with low investment costs to reduce customer expenses and support economic and community long-term development and preparing readiness of the power system to be more competitive in electricity production. This PDP 2018 Rev. 1 amends some aspects such as reducing the purchase of electricity from Local Solar Project, highly supporting in Energy for All policy, increasing amount of biogas electricity generating from 546 Megawatts to 1,183 Megawatts, and increasing of stability in electricity system of upper north area which are Chiang Mai province, Chaing Rai province, Pha Yao province and Lamphun province.

Other Regulations

Factory Law

The operation of a factory in Thailand is regulated under the Factory Act B.E. 2535 (1992) (as amended) (the "**Factory Act**"). The Factory Act regulates and controls the operation, expansion, and safety of factories in Thailand and the level of industrial pollution released through factory activities. A factory is defined as buildings, premises or vehicles which use machines with a total power of 50 horsepower or more or employ 50 workers or more with or without machinery to engage in factory operations, as prescribed in the Ministerial Regulation Prescribing Categories, Types and Sizes of Factory, B.E. 2563 (2020). Generally, the factory under the Factory Act is classified into three categories as follows:

(1) Type 1 factory: a factory that the factory operator can freely operate;

(2) Type 2 factory: a factory which require advance notification to be made to the officer of the Department of Industrial Works; and

(3) Type 3 factory: a factory that must obtain a factory operation license.

Generally, a factory operation license issued by the Department of Industrial Works, Ministry of Industry must be obtained for the operation of a type 3 factory as defined under the Factory Act. The extent to which various governmental regulations apply to each factory varies according to the perceived level environmental impact and the level of environmental protection deemed necessary. Currently, a factory operation license is valid perpetually so long as the licensee is in compliance with the terms of the license.

Public Health Law

Pursuant to the Public Health Act B.E. 2535 (1992) (as amended), the production of petroleum products is considered an activity that is harmful to health, as it involves fuel, oil, petroleum, petrochemical, or chemical compounds or substances. The operator of a plant manufacturing for such is required to obtain a license to operate businesses that are harmful to public health from the local authority where the plant is located. A license to operate businesses that are harmful to public health is valid for one year. If the licensee wishes to renew the license, it must file an application for renewal of the license prior to the expiration date.

Hazardous Substance Law

In the operation of our business, we use certain chemicals which are classified as hazardous substances pursuant to the Hazardous Substances Act B.E. 2535 (1992) (as amended).

Under the Hazardous Substances Act B.E. 2535 (1992) (as amended), hazardous substances are classified into four categories as follows:

(1) Category 1 Hazardous Substances: the production, importation, exportation or possession of which must be in accordance with the criteria and procedures prescribed by law;

(2) Category 2 Hazardous Substances: the production, importation, exportation or possession of which requires advance notification to be made to the competent official, and must be in accordance with the criteria and procedures prescribed by law;

(3) Category 3 Hazardous Substances: the production, importation or exportation or possession of which requires a license; and

(4) Category 4 Hazardous Substances: the production, importation or exportation or possession of which is prohibited.

In practice, the operator may send a consultation paper to the Hazardous Substance Control Bureau at the Department of Industrial Works in advance to check whether the components of the products are considered to be hazardous substances and subject to the current regulations or not.

See "*Risk Factors—Risks Relating to Our Business—Compliance with, and changes to, environmental, health and safety, tax and other laws and regulations may adversely affect our results of operations and our financial condition.*"

Employees

As of September 30, 2025, we had 2,091 full-time employees in our operations, as well as 748 contractors.

Our remuneration package includes salary, overtime, bonus, allowances, welfare benefits and gratuity. Employees are also entitled to receive certain company subsidies relating to housing, medical care, children's education and other miscellaneous benefits, such as annual leave and special leave for military service, maternity and funerals. As part of the remuneration, we contribute 5% to 15% of an individual employee's salary monthly to the registered applicable provident fund while the employees may choose to contribute 5% to 15% of their salaries to the fund.

We believe that we have well-trained and experienced employees. As of September 30, 2025, there were 1,260 employees holding a bachelor's degree or higher (Bachelor's 770, Master's 471, Doctoral 19) and 50% of our employees have been employed by us for more than ten years. We have invested significant efforts and resources in our employee development program.

Our employees are classified into four major groups:

- junior staff, consisting of technicians, operative and clerical staff;
- supervisory staff, consisting of team leaders, assistant engineers and semi-professionals;
- senior staff, consisting of section heads, engineers, senior engineers and professionals; and

- management.

Historically, we believe we have enjoyed good labor relations and we are committed to maintaining these strong relationships. As of September 30, 2025, approximately 16.5% of our employees were members of the Thaioil voluntary labor union. A committee made up of management and union member reports to the national state enterprise employees union representative on a regular basis. We have not been subject to any strikes or other labor disturbances that have interrupted our operations.

Insurance

Our insurance policies cover the following:

- all risks insurance for refinery plant, physical loss or damage and business interruption;
- third party liability;
- all risks for properties other than our plants, such as office buildings, office appliances and petrol stations;
- environmental liability insurance;
- marine cargo;
- political violence, including terrorism and war or civil war; and
- insurance for CFP (construction insurance, all risks for property, third party liability, project delay and marine cargo).

We believe our policies are in accordance with customary industry practices, including deductibles and coverage amounts. We have a physical loss or damage and business interruption insurance policy, which includes coverage for fire, flood, earthquakes, severe storms, vehicular damage, damage to oil and material stocks and real property owned or held under custody by us and against business interruption, subject to certain limitations. In addition, we have a third party liability and marine open cargo insurance policy. We also take out an all risks insurance policy for other properties not relating to the refining process. Such insurance policies are renewed on an annual basis. Our insurance covers liability arising out of operations at the refinery and the power plants, including premises, products and operations risks within Sriracha, Chonburi Province, within Thailand and worldwide, but excludes, for certain insurance policies, the United States and Canada. Our insurance does not cover sabotage, certain risks arising from war and terrorism or environmental pollution liability. Furthermore, our insurance policies are subject to deductibles and are renewed annually. See "*Risk Factors—Risks Relating to Our Business—Our insurance coverage may not adequately protect us against possible risk of loss*."

Legal Proceedings

As is the case with many companies in the refining and petrochemical industry, we are and may from time to time become a party to claims and lawsuits incidental to the ordinary course of our business.

Arbitration relating to CFP

On February 19, 2025, the Claimants, members of the Consortium with whom the Company entered into the EPC Contract for the CFP, commenced the EPC Arbitration against the Company at the Singapore International Arbitration Centre. The EPC Arbitration arose from a dispute concerning the Company's enforcement of the security provided by the Consortium under the EPC Contract in an amount of approximately THB12,339 million or US$358 million[17] following breaches by the Consortium of certain obligations under the EPC Contract. The Claimants have alleged that the Company's enforcement of such security was premature and improper, and sought damages for losses which are yet to be particularized. The Company considers that the Claimants' claims are without merit and on March 25, 2025, the Company filed its response to defend such claims and bring counterclaims against the Claimants. As of the date of this Offering Memorandum, the EPC Arbitration is ongoing, the Claimants' damages have not yet been particularized and the outcome and timing of the resolution

[17] Calculated as the weighted average of THB34.39 to US$1.00 and THB35.21 to EUR1.00 as of January 16, 2025 and includes foreign exchange gains.

are uncertain. An adverse decision in the EPC Arbitration could require repayment of amounts enforced and/or damages, which could materially and adversely affect our business, reputation and operating results.

Except as disclosed herein, we currently are not involved in any litigation or legal proceeding which we believe will have a material adverse effect on our business, financial condition or results of operations.

Research and Development

We are committed to maximizing process efficiency, developing high-value products ("**HVPs**") and high-value businesses ("**HVB**"), and conducting R&D to drive new technology creation. Our R&D acts as a key enabler in advancing the company's strategic goals through collaboration with internal stakeholders and external experts from academia, startups, and industry. The R&D focus areas are structured into six key pillars as follows:

Pillar 1: Crude Excellence Center

Pillar 2: Catalyst & Adsorbent Excellence Center

Pillar 3: AI/Robotics Solution Provider

Pillar 4: HVP/HVB

Pillar 5: Polymer & Olefin Derivatives

Pillar 6: Sustainability & New Business

The goals of the six pillars are clearly defined: (A) to enhance existing businesses for operational excellence (Pillars 1–3), and (B) to accelerate future growth (Pillars 4–6). Our R&D targets include initiating new projects, launching product prototypes, and supporting products toward commercialization through collaboration with internal stakeholders and external partners, ensuring all projects are executed in alignment with the company's strategic goals.

As for innovation, we have promoted innovation-related activities by supporting and motivating our staff to emphasize on the value of innovation for creativities. We aspire to be a learning organization where employees are knowledgeable about innovation and that innovator DNA is inherent in each of them. It is everyone's responsibility to advocate innovation.

From 2022 to 2025, our key R&D activities include:

- **[Pillar 1] RHCU Pilot Plant Project:** Pilot plant has been completed and commenced operations in 2025. The main objectives of the project are the experiment of crude oil recipes and researching the crude oil properties for supporting the CFP.

- **[Pillar 1] Sedimentation Prediction in RHCU Pilot Plant:** The project, conducted in collaboration with the Petroleum and Petrochemical College, Chulalongkorn University ("**PPC**") under the TOP–PPC collaboration, investigates sedimentation behavior at the molecular level to build in-house expertise and predictive capability for the resid hydrocracker. The study aims to strengthen the Company's ability to anticipate and manage sedimentation, one of the key challenges in resid hydrocracking operations.

- **[Pillar 2] The Activated Carbon Performance Test in Pilot Unit for VOCs/Benzene Treatment in ETP Waste Gas project:** This project, under the TOP–PPC collaboration, aimed to evaluate the real performance of activated carbon under the Company's actual waste gas conditions. The study provided key data to support the selection of the most effective activated carbon for removing volatile organic compounds ("**VOCs**") and benzene. The results are expected to enhance emission control efficiency, supporting the Company's goals in environmental compliance and cost optimization.

- **[Pillar 2] The HDS-2 and HDS-3 Catalyst Pilot Plant Testing Project:** This project, under the TOP–PPC collaboration, aims to support the 2027 catalyst replacement by generating reliable performance data under representative operating conditions of the Company. The pilot results will enable fair vendor comparisons, minimize selection risks, and ensure the optimal catalyst choice for Thaioil's HDS units.

- **[Pillar 3] Efficiency Improvement Through Fired Heater/Furnace Cleaning (REFINE)**: This project is a collaboration with VISTEC to develop a cleaning robot prototype capable of climbing and cleaning on radiant coil tubes in fired heaters and furnaces. The project aims to improve cleaning efficiency and reduce manual work in confined spaces. Upon completion, the robot will help increase furnace efficiency and enhance maintenance safety during turnaround operations.

- **[Pillar 4] HVP projects:** The list of projects is provided below.

    1) **Heavy Alkyl Benzene ("HAB") to Heat Transfer Oil ("HTO"):** The project focuses on validating thermal stability and enhancing oxidation resistance through suitable antioxidant selection. Laboratory studies identified a formulation with oxidation stability comparable to commercial heat transfer oils. Since 2023, LABIX has launched two new HVPs, LABIX HTO 15 and LABIX HTO 22, generating approximately THB9 million in revenue and demonstrating strong commercial potential. There are also potential HVPs from HAB currently under development for other applications, including Transformer oil and Gun oil.

    2) **Effect of Rubber Process Oil ("RPO") Type on Properties of Passenger Car Tire Tread Compounds:** The study investigated the effects of these oils on the properties of rubber compounds used in passenger car tire treads. The results provided supporting evidence for positioning Light Residual Aromatic Extract ("**LRAE**") as a new HVP.

    3) **Phase Change Material ("PCM") from TLB Slack Wax:** The study evaluated key thermal properties i.e. latent heat, melting point, and chemical composition; against reference standards. Results confirmed that 150 Slack Wax (150SW) meets the required thermal performance for PCM applications, validating its potential as a new HVP for commercialization.

    4) **Ceramic coating [Tech-push]:** Results show that the coating withstands temperatures above 800 °C, exhibits strong surface adhesion, high corrosion resistance under acidic conditions (pH < 2), and excellent re-emissivity, thereby improving heat transfer efficiency and overall furnace performance.

- **[Pillar 4] HVB projects:** The list of projects is provided below.

    1) **New Surfactant Formulations for Hydrocarbon Decontamination Chemicals: BTX, Gasoline, Crude oil:** This project, under the TOP–PPC collaboration, successfully developed two innovative surfactant SKUs, DBTX10 and DGasoline, formulated to enhance surface cleaning efficiency and reduce VOC emissions in oil storage tanks. Prototype testing was completed with a tank cleaning service provider, leading to commercial sales and the launch of both products in early 2025, generating over THB146,600 in revenue for the fiscal year.

    2) **Mild Surfactant Ingredient for Personal Care Products:** This research project, in collaboration with Suan Dusit University ("**SDU**"), developed PureSurf™ Mild, a mild surfactant formulation for various rinse-off personal care applications. It delivers an ideal balance of ultra-mildness, creamy foam, and effective cleansing in one ingredient. The product has been scaled up to a 300 kg batch and is ready for commercialization, supported by comprehensive formulation guidelines for facial cleanser, shower gel, shampoo, baby care, feminine wash, and pet shampoo.

    3) **New Surfactant Formulations for Industrial Hand Wash:** The project focused on optimizing the surfactant system for high cleaning efficiency. Prototypes with and without bio-surfactants were rigorously tested for cleaning performance and sensory qualities against benchmarks. The final product is now in the pre-marketing stage and included in the Disinfectants+Surfactants ("**D+S**") portfolio.

- **[Pillar 5] Carbon Fiber from Polyethylene:** Lightweight yet strong materials are essential in the automotive sector but are often expensive. This project, in collaboration with NANOTEC(NSTDA), explored the conversion of low-cost polyethylene into carbon fiber. The goal was to develop a cost-effective, medium-grade carbon fiber suitable for replacing select materials in automotive applications.

- **[Pillar 6] Bio-sludge to Lipase:** The project explores the extraction of high-value enzymes, particularly lipase; an oil-degrading enzyme; from bio-sludge, one of the company's major waste streams. In collaboration with BIOTEC (NSTDA), the study successfully demonstrated the potential to extract lipase and identify diverse enzyme-producing microbes. The findings could serve as a foundation for developing a microbial library showcasing the biodiversity within the bio-sludge and its potential value.

- **[Pillar 6] Direct Conversion of CO_2 in HMU:** The Hydrogen Manufacturing Unit ("**HMU**") is a major source of CO_2 emissions in the refinery. While CO_2 capture from HMU is straightforward, its utilization remains a critical and cost-intensive challenge. This project, in collaboration with NANOTEC ("**NSTDA**"), explores a one-step process to capture and convert CO_2 from the HMU into valuable solid carbon products.

For the years ended December 31, 2022, 2023 and 2024, our R&D and Innovation expenses were THB10.4 million, THB17.9 million and THB42.2 million (US$2.2 million), respectively.

Technological Support

Since starting up the refinery, we have received technical support from various technology licensors and consultants for both process and catalyst technologies via technical service agreement. The service agreement provides advanced technological, operative and engineering know-how for day-to-day operation, troubleshooting, optimization, energy efficiency and process improvement. We obtained the necessary know-how and experience and the latest developments in technology for petroleum refining and products from various technology providers around the globe.

Our Research and Development ("**R&D**") function plays a critical role in strengthening operations and supporting new business growth. Since 2008, we have partnered with leading universities and research institutes in Thailand, beginning with a memorandum of understanding with the Petroleum and Petrochemical College (PPC) at Chulalongkorn University to establish an R&D center. The center started with 150 square meters and has expanded to 275 square meters. These collaborations have delivered tangible outcomes, including crude oil evaluation, optimization of crude preheat train improvement, catalyst formulation, and hydrodesulfurization (HDS) catalyst testing and evaluation.

Our R&D partnerships have since expanded to include National Science and Technology Development Agency ("**NSTDA**"), Vidyasirimedhi Institute of Science and Technology ("**VISTEC**"), Faculty of Pharmaceutical Sciences at Chulalongkorn University, SDU, and PTT Innovation Institute ("**PTT INI**"). In 2012, the R&D section was formally established under the Technology Department and later evolved, together with the Innovation Section, into the current Research & Development and Innovation Department. Our R&D targets include initiating new projects, launching product prototypes, and supporting products toward commercialization through collaboration with internal stakeholders and external partners, ensuring all projects are executed in alignment with the company's strategic goals. In 2025, we further strengthened our capabilities by establishing a dedicated section to develop and operate our pilot plant at the Sriracha facility. To date, the know-how and experience made available to us has allowed us to develop and operate a complex refinery without large expenditures on research and development.

As of September 30, 2025, our technology department comprised approximately 55 personnel, most of whom were chemical engineers. The team's main responsibilities consist of the following:

- technological support to each refining/petrochemical area;

- project development and execution;

- refining process control for basic and advanced controllers; and

- technical audit.

Together with the commercial department and other related departments, the technology department is involved in decision-making to optimize our throughput, feedstock selection, refinery operations and scheduled turnaround.

Risk Management and Safety

Our risk management, loss prevention and safety management processes, ranging from operational procedures, process hazard analysis, asset integrity and reliability, compliance with standards, work practices, safety functions to change of management, contractor management, emergency management and employee training, are in line with international standards and include quality assurance, occupational health, safety and environmental procedures. We carry out a risk-based approach to our inspection activities and our technical and non-technical functions. We use a computerized maintenance management system by SAP for planning and recording of inspection and maintenance activities. We also use SAP for human resource management, financial accounting and controlling, purchasing and inventory systems.

We emphasize a culture of safety through line responsibility training of our employees and contractors, area inspection activities and involvement of line management. We believe we have a strong culture and personal safety record, with lost time frequency rates for staff and contractors due to accidents decreasing over the past few years. We record all reportable accidents and conduct regular technical safety audits.

We are subject to various Thai health and safety laws, which impose certain general duties and procedures in relation to health and safety in the workplace. In accordance with these laws, we have implemented safety procedures to help protect the health and safety of our workers, assets and the environment.

We have implemented a special software tool, Thaioil Information Portal System, to provide a well-structured documentation system. We have also implemented a plant information software system, which is a data recording and information tool that will improve plant monitoring and our operational technology. The plant information software system will maintain data for thousands of process variables, such as track throughput rates and heater tube skin temperatures, from which trends can be produced to, among others, trouble-shoot process problems.

We have adopted a proximity card access system to verify the access of eligible persons and movement-activated closed circuit television monitor for our refinery. Our refinery site has been classified into three zones based on security and plant hazard areas to control access of personnel and vehicles.

Our operational structure is customized to suit our environment. Teams of personnel from our technology, operations and engineering departments from area production units manage four individual operational areas. They have joint performance targets and work together to achieve safe and economic operation of their unit.

Since 1996, we have adopted the ISO System as a basis for managing product quality control, testing calibration, environment, occupational health and safety. In 2009, we made progress with the Integrated Management System, unifying all three internal standard systems to improve the efficiency of the overall management system and to better respond to needs and expectations from stakeholders. These three systems are Quality Management Systems (ISO 9001:2015), Environmental Management Systems (ISO 14001:2015) and Occupational Health & Safety Management Systems (TIS 18001:2554 & ISO 45001:2018). In 2012, we integrated the Operational Management System (OEMS) to enhance process safety management (PSM) and help prevent major incidents. In 2010 and 2012, these systems underwent reassessment for TLB and TPX, and we achieved certification of Energy Management Systems (ISO 50001:2011) surveillance for CDU-3 and all refining units of TLB. In 2016 Thaioil Power achieved ISO 9001:2008 and reassessed as ISO 9001:2015 in 2017. Furthermore, in 2017 TOPSPP and LABIX also achieved three systems which are ISO 9001:2015, ISO 14001:2015, TIS 18001:2554 & BS OHSAS 18001:2007 and IMS System. In addition, we focus on product quality control and require testing and calibration laboratories to meet our requirement of competence in order to comply with the requirements of the agreements and sales contracts with our customers.

In 2011, we obtained a certification of Information Security Management System (ISO/IEC 27001) for Advanced Process Control Network to protect data from threats and other risks. We also obtained the ISO/IEC 27001 certification for our Instrument control system and our data center in 2012 and 2013 respectively. In 2015, we obtained recertification for our “integration 3” scopes and the upgrading of the Information Security Management System (ISO/IEC27001). In 2020, ISO 27001:2013 was expanded to cover the Electrical Integrated Control System (ELIC) and Telecommunication network and storage CCTV system. Therefore, we obtained recertification for our “integration 4” scopes under ISO 27001.

MANAGEMENT

Board of Directors

Our board of directors (the Board) has ultimate responsibility for the administration of our Company's affairs. Our Articles of Association provide for a board of directors of at least five but not more than 15 directors. As of the date of this Offering Memorandum, our board of directors consists of 15 members, 14 of whom are Non-Executive Directors. Out of the 14 Non-Executive Directors, 8 are Independent Directors. Our Articles of Association require the board of directors to hold a meeting at least once every three months.

The following table sets out our current directors, their position(s) on the board of directors and board committees, their age and the date of their appointment to the board as of the date of this Offering Memorandum.

Name	Position	Age	Date Appointed
Air Chief Marshal Chanon Mungthanya	Independent Director; Chairman of the Board	61	April 11, 2024
General Apichat Chaiyadar	Independent Director; Chairman of the Audit Committee; Member of the Nomination and Remuneration Committee	57	April 10, 2023
Police General Thiti Sangsawang	Independent Director; Chairman of the Nomination and Remuneration Committee; Member of Corporate Governance and Sustainability Committee	60	June 1, 2024
Ms. Pattaralada Sa-ngasang	Director; Chairman of the Risk Management Committee	59	November 1, 2024
Mrs. Pantip Sripimol	Independent Director; Member of the Audit Committee	62	April 11, 2024
Mr. Chookiat Jittimaitriskul	Independent Director; Member of the Audit Committee	63	April 9, 2025
Mr. Prajuck Boonyoung	Director; Member of the Corporate Governance and Sustainability Committee; Member of the Nomination and Remuneration Committee	63	April 11, 2024
Mr. Nopadhol Pereeroek	Independent Director; Member of the Corporate Governance and Sustainability Committee	58	April 9, 2025
Mr. Chadil Chavanalikikorn	Director; Member of the Corporate Governance and Sustainability	59	October 1, 2025
Ms. Phenrasmi Bhuritdhanalert	Independent Director; Member of the Risk Management Committee	54	October 1, 2024
Dr. Sompop Pattanariyankool	Director; Member of the Risk Management Committee	47	Re-elected on April 11, 2024
Ms. Chaweewan Pornpruksanunt	Director; Member of the Risk Management Committee	56	January 1, 2026
Mrs. Woranuch Phu-im	Independent Director; Member of the Corporate Governance and Sustainability Committee	61	December 1,2025

Name	Position	Age	Date Appointed
Mr. Pirun Krimwongrut	Director; Member of the Risk Management Committee	57	December 1,2025
Mr. Bandhit Thamprajamchit	Director; Member of the Risk Management Committee; Chief Executive Officer and President	55	Re-elected on April 11, 2024

Air Chief Marshal Chanon Mungthanya has been serving as Independent, Non-Executive Director since April 11, 2024. He was elected as Chairman of the Board on April 11, 2024. He previously served as Deputy Chief of Defence Forces, Deputy Commander-in-Chief of the Royal Thai Air Force, Assistant Commander-in-Chief of the Royal Thai Air Force, Chief of the Air Staff, Deputy Chief of the Air Staff, and Director of Operations, Royal Thai Air Force. He received a Bachelor of Science from the Royal Thai Air Force Academy and completed the Squadron Officer School (Class 79) and the Air Command and Staff College (Class 41) of the Royal Thai Air Force.

General Apichat Chaiyadar has been serving as Independent, Non-Executive Director since April 10, 2023. He was elected as Chairman of the Audit Committee on May 10, 2023 and is a Member of the Nomination and Remuneration Committee. General Apichat Chaiyadar currently serves as Senior Advisor, Office of the Permanent Secretary for Defence, Ministry of Defence. He previously served as Director-General of the Defence Energy Department, Chief, Military Affairs Coordination Officers to the Ministry of Foreign Affairs and Officer of Policy and Planning, Office of the Permanent Secretary for Defence, and Deputy Director-General of the Defence Energy Department. He received a Master of Arts in International Relations from Chulalongkorn University, Thailand and a Bachelor of Science from the Chulachomklao Royal Military Academy.

Police General Thiti Sangsawang has been serving as Independent, Non-Executive Director since June 1, 2024. He was elected as Chairman of the Nomination and Remuneration Committee on July 18, 2024 and is a Member of the Corporate Governance and Sustainability Committee. He previously served as Assistant Commissioner General of the Royal Thai Police, Acting Assistant Commissioner General of the Royal Thai Police, Commissioner of the Metropolitan Police Bureau, Commissioner of the Provincial Police Region 2, Commissioner Attached to the Office of the Commissioner General, and Deputy Commissioner of the Provincial Police Region 1. He received a Bachelor of Public Administration (Police Science) from the Royal Police Cadet Academy and a Master of Public Administration from Dhurakij Pundit University, Thailand.

Ms. Pattaralada Sa-ngasang has been serving as Non-Executive Director since November 1, 2024. She was elected as Chairman of the Risk Management Committee on October 1, 2025. Ms. Pattaralada Sa-ngasang currently serves as Chief Financial Officer of PTT. She previously served as Executive Vice President, PTT seconded as Senior Executive Vice President, Finance and Accounting, PTT Global Chemical Plc, and as Executive Vice President, PTT seconded as Executive Vice President, Finance and Accounting, Thai Oil. She received a Bachelor of Accounting (Commerce and Accountancy) and a Master of Business Administration (Commerce and Accountancy) from Thammasat University, Thailand.

Mrs. Pantip Sripimol has been serving as Independent, Non-Executive Director since April 11, 2024. She is a Member of the Audit Committee. She previously served as Member of the Screening Directors for State Enterprise Committee, Director of the State Enterprise Policy Office, and Deputy Permanent Secretary, Chief of the Revenue Cluster. She received a Bachelor of Law and a Bachelor of Business Administration from Ramkhamhaeng University, Thailand and a Master of Public Administration from Chulalongkorn University, Thailand.

Mr. Chookiat Jittimaitriskul has been serving as Independent, Non-Executive Director since April 9, 2025. He is a Member of the Audit Committee. Mr. Chookiat Jittimaitriskul currently serves as Director and Managing Director, Rachakarn Asset Management Co., Ltd. He previously served as Managing Director, Sukhumvit Asset Management Co., Ltd. He received a Bachelor of Business Administration in Finance and Banking from Assumption University, Thailand and a Master of Business Administration in Finance from the University of Southern Mississippi, USA.

Mr. Prajuck Boonyoung has been serving as Non-Executive Director since April 11, 2024. He is a Member of the Corporate Governance and Sustainability Committee and a Member of the Nomination and Remuneration Committee. Mr. Boonyoung previously served as Auditor General, Deputy Auditor General, Inspector General, Inspector General of the Regional Audit Office No. 2, and Director of Performance Audit

Office No. 1. He received a Bachelor of Economics (Economic Theory) with Second Class Honours from the University of the Thai Chamber of Commerce and a Master of Economics (Financial Economics) from the National Institute of Development Administration.

Mr. Nopadhol Pereeroek has been serving as Independent, Non-Executive Director since April 9, 2025. He is a Member of the Corporate Governance and Sustainability Committee. Mr. Nopadhol Pereeroek currently serves as Deputy Secretary-General, Office of the Council of State. He previously served as Permanent Legislative Drafting Committee Member, Office of the Council of State. He received a Bachelor of Law from Ramkhamhaeng University, Thailand.

Mr. Chadil Chavanalikikorn has been serving as Non-Executive Director since October 1, 2025. He is a Member of the Corporate Governance and Sustainability Committee. Mr. Chadil Chavanalikikorn currently serves as Senior Executive Vice President, Organization Effectiveness and Corporate Governance, PTT. He previously served as Executive Vice President, Office of Corporate Audit, PTT. He received a Bachelor of Engineering and a Master of Business Administration from Kasetsart University, Thailand and is a Certified Internal Auditor of The Institute of Internal Auditors.

Ms. Phenrasmi Bhuritdhanalert has been serving as Independent, Non-Executive Director since October 1, 2024. She is a Member of the Risk Management Committee. Ms. Phenrasmi Bhuritdhanalert currently serves as Deputy Managing Director, P1 Property Co., Ltd. and Managing Director, Khun Fueangfu & Khun Fueangfung Co., Ltd. She previously served as Managing Director, C&N Business Consulting Co., Ltd. She received a Bachelor of Business Administration in Personnel Administration from Dhurakij Pundit University, Thailand and a Master of Public Administration in Public and Private Management from the National Institute of Development Administration.

Dr. Sompop Pattanariyankool has been serving as Non-Executive Director since April 7, 2021 and was re-elected on April 11, 2024. He is a Member of the Risk Management Committee. Dr. Sompop Pattanariyankool currently serves as Deputy Permanent Secretary, Office of the Permanent Secretary, Ministry of Energy. He previously served as Inspector-General, Office of the Permanent Secretary, Ministry of Energy; Assistant Permanent Secretary, Ministry of Energy; and Director, Strategy and Planning Division, Ministry of Energy. He received a Bachelor of Economics with First Class Honours from Chulalongkorn University, a Master of Science in Economic and Policy from the University of Surrey, United Kingdom, and a Ph.D. in Economics from the Tepper School of Business, Carnegie Mellon University, USA.

Ms. Chaweewan Pornpruksanunt was appointed as Non-Executive Director on January 1, 2026 She is also a Member of the Risk Management Committee. Ms. Chaweewan Pornpruksanunt currently serves as Executive Vice President, Acting Senior Executive Vice President, Office of General Counsel, PTT. She previously served as Executive Vice President, Corporate Legal, PTT. She received a Bachelor of Laws from Thammasat University, an Advanced Certificate in Legal Studies from Institute of Legal Education of the Thai Bar, a Master of Comparative Law from Indiana University, USA. and a Master of M.L.I. (M.A.) Legal Institutions from University of Wisconsin, USA.

Mrs. Woranuch Phu-im has been serving as Independent, Non-Executive Director since December 1,2025. She is also a Member of Corporate Governance and Sustainability Committee. Mrs. Woranuch Phu-im currently serves as Advisory Speaker, Government Saving Bank. She previously served as Deputy Permanent Secretary, Ministry of Finance and also an Inspector General, Office of the Permanent Secretary, Ministry of Finance. She received a Bachelor of Laws, Thammasat University, Diploma in Public Law, Thammasat University and Master of Public Administration, Chulalongkorn University.

Mr. Pirun Krimwongrut has been serving as Non-Executive Director since December 1,2025. He is also a Member of the Risk Management Committee. Mr. Pirun Krimwongrut currently serves as Senior Executive Vice President, Downstream Business Group Alignment, PTT. He previously served as Chief Operating Officer - Base and Intermediate Chemicals, PTT Global Chemical Public Company Limited. He received a Bachelor of Engineering (Electrical Engineering), (Second-Class Honors), Khon Kaen University and Master of Engineering Science (Electrical Engineering), University of New South Wales, Sydney, Australia.

Mr. Bandhit Thamprajamchit has been serving as Executive Director since January 1, 2023 and was re-elected on April 11, 2024. He is also a Member of the Risk Management Committee and serves as Chief Executive Officer and President. Mr. Bandhit Thamprajamchit previously served as Acting Executive Vice President - Corporate Governance and Sustainability, Thai Oil; Acting Executive Vice President - Corporate Governance and Affairs, Thai Oil; Acting Senior Executive Vice President - Hydrocarbon and Acting Executive

Vice President - Manufacturing, Thai Oil; Senior Executive Vice President – Hydrocarbon and Acting Executive Vice President - Manufacturing, Thai Oil; Senior Executive Vice President – Petroleum & Petrochemical, Thai Oil. He received a Bachelor's degree in Chemical Engineering from Chulalongkorn University, Thailand, and two Master's degrees: Executive MBA from Sasin Graduate Institute of Business Administration of Chulalongkorn University, Thailand; and Advanced Chemical Engineering from Imperial College London, UK. and a Honorary Doctorate Degree in Business Administration (Management & Business Development), Rajamangala University of Technology Srivijaya, Thailand.

The business address of all our directors is our registered office.

Under our Articles of Association, at least one-third of the total number of Directors must be Independent Directors and the number of whom must be at least three. At every annual general meeting, one-third of the directors shall vacate from office. A vacating director may be eligible for re-election. The directors to vacate office in the first and second years following the registration of the conversion of the Company shall be drawn by lots. In subsequent years, the directors who have remained in office for the longest time shall vacate office.

Board-Committees

Our board of directors has four Board-Committees: the Audit Committee, the Nomination and Remuneration Committee, the Corporate Governance and Sustainability Committee and the Risk Management Committee. All board committees report directly to our board of directors. Members of these board committees are appointed by the board of directors from time to time.

Audit Committee

The Audit Committee shall consist of at least three directors, all of whom must be independent and fully qualified members in compliance with the SEC and SET requirements, and at least one member must be knowledgeable and possess sufficient work experience in accounting or financial field to review reliability of financial statement. The Committee reviews Thaioil's performance outcomes, financial reports, internal control system, and consider related-party transactions, the appropriateness of accounting (external) auditors, including the selection and appointment process.

The current members of the Audit Committee (each, an Independent Director) are:

Name	Position
General Apichat Chaiyadar	Chairman of the Audit Committee
Mrs. Pantip Sripimol	Member of the Audit Committee, with sufficient expertise and experience to review creditability of financial statements
Mr. Chookiat Jittimaitriskul	Member of the Audit Committee, with sufficient expertise and experience to review creditability of financial statements

Miss Rungtip Maneesarachun, Vice President Corporate Internal Audit, serves as Secretary to the Audit Committee.

The appointment of each Committee member is subject to the relevant director's term. In the case of any Audit Committee member vacating the position, resulting in the insufficient number of the committee members, the Board shall appoint another director, who is fully qualified, to replace the resigning member not later than three months from the date of incomplete composition of the Audit Committee. Members of the Audit Committee shall immediately be terminated from the position by death, resignation, vacating the position, the board of directors' resolution to vacate the position, or lack of qualifications of the Audit Committee member.

The Audit Committee has the responsibilities set out below.

(1) Reviews the efficiency and effectiveness of the good corporate governance, risk management, and internal control processes.

(2) Reviews the Company's financial reporting process to ensure its accuracy, credibility, and sufficient information disclosure by coordinating with the external auditors. The responsible executive is required to prepare quarterly and annually financial reports to comply with the Thai

Financial Accounting Standards and to promote the development of accounting systems to be comparable to the International Financial Accounting Standards.

(3) Reviews the Company's compliance with laws governing securities and stock exchange, or requirements of the Stock Exchange of Thailand, and other policies, rules, regulations, charters, and laws applicable to the Company's business.

(4) Considers the connected transactions or the transactions that may lead to conflicts of interests, to ensure that they are in compliance with the laws and the Stock Exchange of Thailand's regulations, and are reasonable and for the highest benefit of the Company.

(5) Considers to select, nominate, re-elect, and terminate the Company's external auditors and to propose the auditors' remuneration to the board of directors before tabling to the shareholder's meeting for approval respectively. The Audit Committee, is to also meet with the external auditor without executives at least once a year, and provide concurrence on the Non-Assurance Services of the Audit Firm to ensure independence of the financial statements audits.

(6) Reviews the anti-corruption self-assessment for certification process and sign by the Chairman of the Audit Committee.

(7) Finds facts and track progress of complaints that may imply fraud that the Audit Committee has received through the whistle blowing channels to ensure duly action.

(8) Reviews and provides opinion on internal audit plan and system to meet internationally-accepted methods and standards.

(9) Considers the independence of the Internal Audit Department including the adequacy of the budget and workforce of the Internal Audit Department, and considers to approve the appointment and relocation of, and evaluates the annual performance of the Head of the Internal Audit Department.

(10) The Audit Committee may seek independent opinions from professional advisors or specialists in other fields when needed under the Company's expense with the approval from the board of directors. The employment of advisors or specialists must comply with the Company's regulations.

(11) Chairman or members of the Audit Committee shall attend the shareholders' annual general meeting in order to clarify issues associated with the Audit Committee or appointment of the external auditors.

(12) Approves the disclosure of quarterly financial statements to the Stock Exchange of Thailand.

(13) Reports the operating results of the Internal Audit to the board of directors annually. Such report must include the Audit Committee's opinion on internal audit, opinions on financial reports, adequacy of internal control systems, and other applicable topics to the board of directors as deemed appropriate.

(14) Approves the Audit Committee Charter before presenting to the board of directors for approval. The Committee shall review its charter at least once a year.

(15) Prepares the Audit Committee's report signed by the Chairman of the Audit Committee. The report is to be disclosed in the Company's annual report in accordance with the requirement of the Stock Exchange of Thailand, and shall consist of at least the following information:

(i) Opinion(s) on the accuracy and credibility of the Company's financial report;

(ii) Opinion(s) on the adequacy of the Company's internal control system;

(iii) Opinion(s) on the compliance with the law on the Securities and Exchange Commission, the Stock Exchange of Thailand's regulations, or laws applicable to the Company's business;

(iv) Opinion(s) on the suitability of the external auditors;

(v) Opinion(s) on the transactions that may lead to conflicts of interests;

(vi) The number of the Audit Committee's meetings and the attendance of such meetings of each committee member;

(vii) Opinion(s) or overview comment gained from the Audit Committee's its performance or duties in accordance with the Committee Charter; and

(viii) Other reports which should be known to the shareholders and general investors under the roles and responsibilities as assigned by the Company's board of directors.

(16) After the Audit Committee receives from the auditors the information on any suspicious circumstances that the director, manager or any person responsible for the Company's operation commits an offence under the Securities and Exchange Act, the Audit Committee is required to report the preliminary inspection to the Company's board of directors prior to reporting the Securities and Exchange Commission and the Company's auditors within 30 days from the date of the auditor's notification is received.

(17) If it is found or suspected that there is any transaction or action that may materially affect the Company's financial condition and operating results, the Committee shall promptly report it to the board of directors for rectification in a timely manner.

(i) A transaction which causes a conflict of interest;

(ii) Any fraud, irregularity, or material defect in the internal control system;

(iii) An infringement of laws or the Stock Exchange of Thailand's regulations, and any laws applicable relating to the Company's business.

If the Audit Committee reports to the board of directors on suspicious actions and discusses with the Board and executives on the rectification of such issue, when it is due time, as agree by all involved. If the Audit Committee finds that the Board or executives fail to make corrective actions without a justifiable reason, any member of the Audit Committee may report such transaction or action directly to the Securities and Exchange Commission or the Stock Exchange of Thailand.

(18) Performs other duties as assigned by the Company's board of directors, with the approval of the Audit Committee.

Under its scope of duties and responsibilities, the Audit Committee is authorized to invite the executives, or any concerned persons to give suggestions, to attend the meeting, or to deliver necessary information.

In its performance of duties, the Audit Committee must be directly responsible to the Company's board of directors, while the Company's board of directors shall remain responsible to third parties for the operations of the Company.

Nomination and Remuneration Committee

The Committee consists of at least three Directors, most of whom must be Independent Directors and must not be the Chairman of the Board or the Chief Executive Officer. All of the members are fully qualified as Directors in accordance with the Nomination and Remuneration Committee Charter. The Committee considers and sets criteria and nomination process of qualified candidates to be appointed as directors and Chief Executive Officer of the Company. The Committee also selects directors to take position in the Board-Committees; considers remuneration form and criteria; and presents the candidate(s) carefully selected with the nomination process to the board of directors (the Board) for consideration or to the Shareholders' Meeting for approval as required by law.

The current members of the Nomination and Remuneration Committee are:

Name	Position
Police General Thiti Sangsawang	Chairman of the Nomination and Remuneration Committee
General Apichat Chaiyadar	Member of the Nomination and Remuneration Committee
Mr. Prajuck Boonyoung	Member of the Nomination and Remuneration Committee

Miss Korapat Limpaphayom serves as the secretary to the Nomination and Remuneration Committee.

The appointment of each Committee member is subject to the relevant director's term. In the case of any Nomination and Remuneration Committee member vacating the position, resulting in the insufficient number of the committee members, the Board shall appoint another director, who is fully qualified, to replace the resigning member not later than three months from the date of incomplete composition of the Nomination and Remuneration Committee. Members of the Nomination and Remuneration Committee shall immediately be terminated from the position by death, resignation, vacating the position, the board of directors' resolution to vacate the position, or Lack of Qualifications of the Nomination and Remuneration Committee member.

The Nomination and Remuneration Committee has the responsibilities as set out below:

(1) Nomination

(i) Considers the board of directors' composition and qualifications of both the Board and individual Director to suit the size, type, and complexity of the business focusing on education, knowledge, expertise, skills, experience, and specialization that associate with the Company's business as well as their independency in accordance to the Company's criteria.

(ii) Considers the qualifications of the Chief Executive Officer to suit the Company's business management in order to achieve the Company's objectives, covering education, experience, knowledge, and expertise; as well as take into consideration the essential and relevant business environment such as economic and industry trends and business competitiveness.

(iii) Defines nomination process and criteria in accordance with the composition and qualifications stated in (1)(i) and (1)(ii) in compliance with good corporate governance principles.

(iv) Supervises to ensure that the Company arranges orientation programs and provide welcoming package that is beneficial to the newly appointed Director(s) to perform the roles and responsibilities.

(v) Develops and review the succession plan for Chief Executive Officer and President as continuous preparation plan for readiness and successor to ensure the Company's continuity of business management and operation.

(vi) Encourages the Company to provide opportunity for minor shareholders to propose candidate to be nominated as the Company's Director.

(vii) Selects qualified Director(s) to take position in the Board-Committees and table the name(s) to the Board for consideration and approval in the case of vacancy.

(2) Remuneration

(i) Reviews and proposes remuneration form and criteria to suit the responsibilities of the board of directors; taking into consideration the Company's overall performance to motivate and retain Directors with competency, quality, and potential. The board of directors is to consider such matters prior to presenting it to the shareholders in the Annual General Meeting of Shareholders for approval.

(ii) Conducts the performance evaluation and consider to adjust the appropriate remuneration rate for the Company's Chief Executive Officer and President before proposing to the board of directors for approval.

(3) Reviews the Nomination and Remuneration Committee Charter regularly.

(4) Responsible for other tasks assigned by the board of directors.

Reporting

(1) The Nomination and Remuneration Committee must report to the board of directors on the results of the nomination and remuneration process, the resolution of the meeting, or related matters as deemed necessary in the following board of directors meeting.

(2) The Chairman of the Nomination and Remuneration Committee must report to the shareholders via the Company's annual report and the Disclosure Report concerning additional information (Form 56-1) on the performance of the Nomination and Remuneration Committee.

Corporate Governance and Sustainability Committee

The Corporate Governance and Sustainability Committee consists of at least four Non-Executive Directors, most of whom must be Independent Directors. All of the members are fully qualified as Directors in accordance with the Corporate Governance and Sustainability Committee Charter. The Committee supports the performance of the board of directors in determining corporate governance policies and guidelines for compliance in the Company in accordance with the internationally-accepted good corporate governance principles for listed companies. The Committee is committed to promote and support all employees to adhere and comply with the corporate governance principles and business ethics to ensure the Company's sustainable growth with safety, integrity, efficiency, transparency, openness to audit and social and environmental responsibility. When this becomes the corporate culture, it will enhance the Company's confidence and credibility to all shareholders, investors, stakeholders, and all concerned parties.

The current members of the Corporate Governance and Sustainability Committee are:

Name	Position
Police General Thiti Sangsawang	Member of the Corporate Governance and Sustainability Committee
Mr. Prajuck Boonyoung	Member of the Corporate Governance and Sustainability Committee
Mr. Nopadhol Pereeroek	Member of the Corporate Governance and Sustainability Committee
Mr. Chadil Chavanalikikorn	Member of the Corporate Governance and Sustainability Committee
Mrs. Woranuch Phu-im	Member of the Corporate Governance and Sustainability Committee

Miss Korapat Limpaphayom serves as Secretary to the Corporate Governance and Sustainability Committee.

The appointment of each Committee member is subject to the relevant director's term. In the case of any Corporate Governance and Sustainability Committee member vacating the position, resulting in the insufficient number of the committee members, the Board shall appoint another director, who is fully qualified, to replace the resigning member not later than three months from the date of incomplete composition of the Corporate Governance and Sustainability Committee. Members of the Corporate Governance and Sustainability Committee shall immediately be terminated from the position by death, resignation, vacating the position, the board of directors' resolution to vacate the position, or Lack of Qualifications of the Corporate Governance and Sustainability Committee member.

The Corporate Governance and Sustainability Committee has the responsibilities set out below:

(1) Defines corporate governance policies, practices, and related operations including sustainability management and corporate social responsibility aspects to conform with principles, standards, and requirements as stipulated by the Stock Exchange of Thailand, the Securities and Exchange Commission, and other recognized institutions domestically and internationally. The aim is to

promote corporate strategies and goals, as well as to regularly review such policies and practices.

(2) Defines guidelines, as well as supervise and monitor process, to ensure that the Company's operations are in compliance with established policies and practices in order to continuously develop and enhance corporate governance of the Company.

(3) Promotes corporate governance culture among all executives and employees for clear understanding and actual implementation within Thaioil and Subsidiaries.

(4) Promotes and provides advice for the Company on participating in the corporate governance-related assessment or rating to continuously develop and enhance the Company's corporate governance standard.

(5) Considers and approve the Board's performance evaluation form, including approving the overall evaluation results and give consent before proposing to the Board.

(6) Reviews the Corporate Governance and Sustainability Committee Charter regularly.

(7) Responsible for other tasks assigned by the board of directors.

Reporting

(1) The Corporate Governance and Sustainability Committee must report to the board of directors on the resolution of the meeting or related matters as deemed necessary in the following board of directors meeting.

(2) The Chairman of the Corporate Governance and Sustainability Committee must report to the shareholders via the Company's annual report or the Disclosure Report concerning additional information (Form 56-1) on the compliance with good corporate governance principles.

Chief Executive Officer

The Chief Executive Officer conducts the Company business under the approved plans and budgets with rigor and integrity, while protecting the best interests of the Company and its shareholders. The Chief Executive Officer must not be engaged in any conflicts of interest with Thai Oil and its Subsidiaries.

Risk Management Committee

The Risk Management Committee consists of a minimum of three Directors, with the Chief Executive Officer and President serving as one of the members. All of the members are fully qualified as Directors in accordance with the Risk Management Committee Charter. The Committee determines risk management policy covering the entire organization, and to supervise to ensure there is a system or process risk management to reduce the impact to the Company's business. The Board determines the Committee composition and scope of duties and responsibilities in order for the Committee to effectively perform their roles as assigned by the Board.

The current members of the Risk Management Committee are:

Name	Position
Ms. Pattaralada Sa-ngasang	Chairman of the Risk Management Committee
Ms. Phenrasmi Bhuritdhanalert	Member of the Risk Management Committee
Dr. Sompop Pattanariyankool	Member of the Risk Management Committee
Ms. Chaweewan Pornpruksanunt	Member of the Risk Management Committee
Mr. Pirun Krimwongrut	Member of the Risk Management Committee
Mr. Bandhit Thamprajamchit	Member of the Risk Management Committee

Mr. Ekachai Sirithammasan, Executive Vice President-Strategy, serves as Secretary to the Risk Management Committee.

The appointment of each Committee member is subject to the relevant director's term. In the case of any Risk Management Committee member vacating the position, resulting in the insufficient number of the committee members, the Board shall appoint another director, who is fully qualified, to replace the resigning member not later than three months from the date of incomplete composition of the Risk Management Committee. Members of the Risk Management Committee shall immediately be terminated from the position by death, resignation, vacating the position, the board of directors' resolution to vacate the position, or Lack of Qualifications of the Risk Management Committee member.

The Risk Management Committee has the responsibilities set out below:

(1) Defines and reviews the risk management framework, Risk Management Committee Charter, risk management policy and process, as well as considers the Risk Appetite Statement prior to submission to the board of directors for approval. The Committee shall suitably and effectively suggest the guidelines to risk management relating to the Company's business to correspond with business strategies, business plans, and volatile circumstances, for example operational risk, strategic and business risk, investment risk, financial risk, organizational risk and information security and cybersecurity risk, etc.

(2) Continuously and effectively promotes and develops risk management and risk management tools in all levels across the organization, as well as encourage the development of risk management culture in the organization and raises awareness of the importance of risk management.

(3) Supports the operation of the risk management function to achieve the goals of risk management and be in line with the strategic direction of operations, business plans, changing circumstances, as well as risk management policy.

(4) Considers and provides comments on risk management of agendas related to contracts or legally binding agendas to the Company that must be presented to the Board for approval, which are complex in business and have risks that may affect the Company or may have a significant impact on the Company's stakeholders.

(5) Considers and provides comments on risk management of the Company's investment-related agenda that must be presented to the board of directors for approval. In accordance with Thaioil and Subsidiaries investment policy, there are risks that may affect the Company or may have a significant impact on the Company's stakeholders.

(6) Considers and provides comments on agendas related to the management of crude oil and product price risks, as well as financial risks, before presenting them to the Board and consistently monitor the performance.

(7) Supervises, monitors, and reviews key risk management plan and report that may affect the Company or may have a significant impact on the Company's stakeholders or emerging risks that may affect business operations. The Committee shall provide necessary advice to ensure effective and appropriate risk management at an acceptable tolerance level corresponding with risk management policy.

(8) Report significant risk management performance to the Board; in case there are factors or events that might have significant impact on the Company, the Committee shall notify the Board in a timely manner.

(9) Be Responsible for other tasks assigned by the Board.

In performing its duties, the Risk Management Committee may request an opinion from independent counsel when deemed necessary and appropriate. The Company shall cover all relevant expenses.

Reporting

(1) The Risk Management Committee must report to the board of directors on the resolution of the meeting, matters needed to be improved or resolved, or any other related matters as deemed necessary in the following board of directors meeting.

(2) The Chairman of the Risk Management Committee must report to the shareholders via the Company's annual report or the Disclosure Report concerning additional information (Form 56-1) on the performance relating to risk management.

The Management

The Company is principally managed by certain executives that comprise the management team responsible for determining strategy and reviewing policies of the Company. The management team is also responsible for managing the affairs of the Company in accordance with the policies established by the board of directors.

Our executive officers are appointed from time to time by a majority vote of our board of directors.

The following table sets out our current executive officers, most of whom have served the Company for over 30 years and their position(s), age and date of appointment, as of the date of this Offering Memorandum.

Name	Position	Age	Date of appointment to current position
Mr. Bandhit Thamprajamchit[(1)]	Chief Executive Officer and President	55	January 1, 2023
Mr. Surachai Saengsamran	Senior Executive Vice President-Hydrocarbon, Acting Executive Vice President-CFP Project Sponsor	59	October 1, 2023
Mr. Jeerawat Pattanasomsit	Executive Vice President-Power, New Business and Digitalization	52	January 1, 2021
Mr. Ekachai Sirithammasan	Executive Vice President-Strategy	55	January 1, 2026
Mr. Charlee Balmongkol	Executive Vice President-CFP Project Director	55	October 22, 2018
Mr. Nuttapon Meerit	Executive Vice President-Organization Effectiveness	48	July 1, 2025
Mrs. Rungnapa Janchookiat	Executive Vice President-Corporate Commercial Acting Executive Vice President-Petrochemical Business	52	October 1,2024
Mrs. Wanida Boonpiraks	Executive Vice President-Finance and Accounting	59	October 1, 2024
Miss Somporn Bunluesriruang	Executive Vice President-Manufacturing Acting Vice President-Movement Marine and Logistic	54	March 25, 2025
Mr. Narongsak Chavienpob	Acting Executive Vice President-Operation Excellence	56	January 1, 2026
Dr. Ittipon Diewwanit	Executive Vice President-Corporate Governance and Sustainability	57	October 1, 2025
Ms. Tarika Devahastin	Vice President-Financial Planning	50	April 1, 2025
Mr. Phongsan Wanichphongpan	Vice President-Accounting	57	October 1,2025
Miss Wanwisa Yanchinda	Vice President-Treasury	53	April 1, 2025

Note:

(1) The board of directors' meeting no. 9/2025 on September 25, 2025 has passed resolution to appoint Mr. Pongpun Amornvivat as the Chief Executive Officer and President, replacing Mr. Bandhit Thamprajamchit, effective from February 1, 2026 onwards.

Mr. Bandhit Thamprajamchit was appointed as Chief Executive Officer and President on January 1, 2023. He currently also serves as Chairman and Director of the Board of Thai Paraxylene Co., Ltd., and LABIX Co., Ltd. and TOPNEXT International Co., Ltd. Mr. Thamprajamchit previously served as Senior Executive Vice President – Hydrocarbon. He received a Bachelor's degree in Chemical Engineering from Chulalongkorn University, Thailand, and two Master's degrees: Executive MBA from Sasin Graduate Institute of Business Administration of Chulalongkorn University, Thailand; and Advanced Chemical Engineering from Imperial College London, UK, and a Honorary Doctorate Degree in Business Administration (Management & Business Development), Rajamangala University of Technology Srivijaya, Thailand. He has more than 34 years of experience in the energy sector.

Mr. Pongpun Amornvivat was appointed as Chief Executive Officer and President on September 25, 2025 effective from February 1, 2026. He previously served as Executive Vice President-Secondment to PTT, Executive Vice President-Strategy, Executive Vice President-Innovation and Digitalization, Senior Vice President-Business Development and Senior Vice President-Corporate Project Development.

Mr. Amornvivat received three Master's degrees: Master of Civil and Environmental Engineering from Massachusetts Institute of Technology, U.S.A., and Master of Business Administration from MIT Sloan School of Management, U.S.A. and Master of Arts Program in Economic Law from Chulalongkorn University, Thailand, as well as a Bachelor's degree in Civil Engineering from Carnegie Mellon University, U.S.A.

Mr. Surachai Saengsamran was appointed as Senior Executive Vice President - Hydrocarbon, Acting Executive Vice President-CFP Project Sponsor on October 1, 2023. He currently also serves as Director of Thaioil Energy Services Co., Ltd. Mr. Saengsamran previously served as Executive Vice President-Operation Excellence and Senior Vice President-Engineering. He obtained a Bachelor's degree in Mechanical Engineering from Chulalongkorn University, Thailand. He has more than 35 years of experience in the energy sector.

Mr. Jeerawat Pattanasomsit was appointed as Executive Vice President-Power, New Business and Digitalization on 1 January 2021, Acting Vice President-Research & Development and Innovation on January 1, 2026. He currently also serves as Director and Chairman of the Board of TOP Ventures Co., Ltd., TOP Ventures Hong Kong Ltd., TOP Ventures America LLC, TOP SPP Co., Ltd., and Thaioil Ethanol Co., Ltd., as well as a Director of Thaioil Treasury Center Co., Ltd., Thaioil Energy Services Co., Ltd., PTT Digital Solutions Co., Ltd., Sapthip Co., Ltd., and Ubon Bio Ethanol PCL. Mr. Pattanasomsit previously served as Executive Vice President-Manufacturing, Vice President-Refinery, Vice President-Petrochemical and Lube Base and Managing Director of Thai Lube Base PCL., Thai Paraxylene Co., Ltd., Sak Chaisidhi Co., Ltd., He received a Master's degree in Petrochemical Technology (International Program) from The Petroleum and Petrochemical College, Chulalongkorn University, and a Bachelor's degree in Chemical Engineering from Kasetsart University, Thailand.

He has more than 29 years of experience in the energy sector.

Mr. Ekachai Sirithammasan was appointed as Executive Vice President-Strategy on January 1, 2026. Mr. Sirithammasan previously served as Executive Vice President, Strategic Planning in Gas Business Unit, PTT. He received a Master of Business Administration (Finance) from Loyola University Chicago, USA, and a Bachelor's degree in Electrical Engineering from King Mongkut's Institute of Technology, Ladkrabang. Thailand. He has more than 29 years of experience in the energy sector.

Mr. Charlee Balmongkol was appointed as Executive Vice President-CFP Project Director on October 22, 2018. He previously served as Vice President-Engineering, and Managing Director of Thaioil Power Co., Ltd. and TOP SPP Co., Ltd. Mr. Balmongkol received a Master of Mechanical Engineering from Imperial College, London, UK and a Bachelor's degree in Mechanical Engineering from Chulalongkorn University, Thailand. He has more than 32 years of experience in the energy sector.

Mr. Nuttapon Meerit was appointed as Executive Vice President-Organization Effectiveness Acting Vice President-People and Organization Management on January 1, 2025. He previously served as Vice President-People and Organization Management. He is also currently serving as a Chairman and Director of the Board of Thaioil Energy Services Co., Ltd. He received a Master's Degree in Chemical Engineering from King Mongkut Institute - Thonburi, Thailand and a Bachelor's degree in Chemical Engineering from Thammasat University, Thailand. He has more than 24 years of experience in energy sector.

Mrs. Rungnapa Janchookiat was appointed as Executive Vice President-Corporate Commercial on October 1, 2024 and as Acting Executive Vice President-Petrochemical Business on January 1, 2026. She currently also serves Director and Chairman of the Board of Sak Chaisidhi Co., Ltd., TOP Solvent (Vietnam)

LLC, Director of TOP NEXT, as well as Director of LABIX Co., Ltd, Thaioil Solvent Co., Ltd, and Thai Petroleum Pipeline Co., Ltd. Mrs. Janchookiat previously served as Executive Vice President-Manufacturing. She received a Master's Degree in Process Engineering from Strathclyde University, Glasgow, United Kingdom and a Bachelor's Degree in Chemical Engineering from Chulalongkorn University, Thailand. She has more than 30 years of experience in the industry.

Mrs. Wanida Boonpiraks was appointed as Executive Vice President-Finance and Accounting on October 1, 2024. She currently serves as Director and Chairman of the Board of Thaioil Treasury Center; as well as a Director of Thai Lube Base PCL, Thaioil Energy Services Co., Ltd., TOP Next International Co., Ltd., Thaioil Ethanol Co., Ltd., and PT TOP Investment Indonesia Co., Ltd. Mrs. Boonpiraks previously served as Executive Vice President seconded as Executive Vice President, Group Corporate Finance and Strategy at PTT. She received a Master's degree in Finance from University of St. Thomas and a Bachelor's degree in Accounting from Chulalongkorn University, Thailand. She has more than 35 years of experience in the industry.

Miss. Somporn Bunluesriruang was appointed as Executive Vice President-Manufacturing Acting Vice President-Movement Marine and Logistic, on March 25, 2025. She is currently also serving Director and Chairman of the Board of Thai Lube Base Plc. Co., Ltd.; as well as a director of Thai Paraxylene Co., Ltd., Sak Chaisidhi Co., Ltd., and Thaioil Energy Services Co., Ltd. Miss. Bunluesriruang previously served as Vice President-Movement Marine and Logistic. She received a Master of Science (Chemical Technology) from Chulalongkorn University, a Master of Public Administration from the National Institute of Development Administration, and a Bachelor of Science (Chemical Technology) from Chulalongkorn University. She has more than 30 years of experience in energy sector.

Mr. Narongsak Chaviengpob was appointed as Acting Executive Vice President-Operation Excellence on January 1, 2026. Mr. Chavienpob previously served as Acting Vice President-Asset Development. He received a Master's degree in Engineering from The Ohio State University, USA. And a Bachelor's degree in Engineering from Kasetsart University, Thailand. He has more than 28 years of experience in the energy sector.

Dr. Ittipon Diewwanit was appointed as Executive Vice President-Corporate Governance and Sustainability on October 1, 2025. He received a Doctoral's Degree of Engineering in Metallurgy Massachusetts Institute of Technology, USA.

Mrs. Tarika Devahastin was appointed as Vice President-Financial Planning on April 1, 2025. She is currently also serving as Director of Top Solvent (Vietnam) LLC, TOP SPP Company Limited Mrs. Devahastin previously served as Vice President-Treasury. She received a Master of Finance degree from Royal Melbourne Institute of Technology, Australia, and a Bachelor's degree in Business Administration from Kasetsart University, Thailand. She has more than 19 years of experience in energy sector.

Mr. Phongsan Wanichphongpan was appointed as Vice President-Accounting on October 1, 2025. He is currently serving as Director of Thaioil Treasury center Co., Ltd., TOP Ventures Co., Ltd., TOP Ventures Hong Kong Ltd., and TOP Ventures America LLC. Mr. Wanichphongpan previously served as Financial Accounting manager. He received a Master of Financial Accounting from Chulalongkorn University, Thailand and a Bachelor's degree in Accounting from Chulalongkorn University, Thailand. He has more than 35 years of experience in energy sector.

Miss Wanwisa Yanchinda was appointed as Vice President-Treasury on April 1, 2025. She is currently also serving as a Director of Top Solvent Company Limited, Sak Chaisidhi Company Limited. Miss Yanchinda previously served Vice President-Accounting. She received a Master of Business Administration from Ramkhamhaeng University, Thailand and a Bachelor of Accountancy from Bangkok University, Thailand. She has more than 19 years of experience in energy sector.

Corporate Governance and Management Practices

Corporate Governance

We review our corporate governance principles and practices and implement new principles and practices to improve our corporate governance from time to time. We have corporate governance principles that apply to our directors and employees. Our principles of good corporate governance are generally based on the principles of good corporate governance established by the SET and the Thai SEC and address a wide range of matters, including establishing procedures and requirements relating to the following:

- Rights of shareholders;

- Fair treatment for all shareholders;
- Role toward the shareholders;
- Information disclosure and transparency; and
- Duties, responsibilities qualifications and ethics with respect to the board of directors;

Code of Conduct

We have defined for our board, the management, and employees a code of conduct and business ethics to frame sound business operations. The emphasis is on the core principles of corporate governance and the treatment of shareholders with fairness and transparency; these principles also address the consideration of and respect for all shareholders' rights in order to forge balance in society as a whole. We value continuous improvement of personnel competence, righteousness, and ethics by strengthening basic behavior of commitment to learning, improving products and services, and sharing of knowledge, apart from cultivating an awareness of integrity, perseverance, patience, and responsibility on the basis of human dignity. Our code of conduct is divided into 2 parts as follows:

(1) Code of Conduct relating to the board, the management, and employees, i.e. behavior, treatment of colleagues and treatment of the company.

(2) Code of Conduct relating to the business operation, which sets out the guideline for the shareholders purchasing of goods and service, human rights, compliance with laws and regulations and respect for cultures and customs, political neutrality, charitable contribution and sponsorship, giving or acceptance of presents, assets, or other benefits, conflicts of interest, connected transactions, confidential information and use of inside information, marketing communications, intellectual properties and application of information and communication technology.

Anti-Corruption Policy

We are committed to conducting business on fairness, integrity, transparency, responsibility to society and all shareholders in compliance with our corporate governance principles and code of conduct on a par with international standards, to bolster confidence among all stakeholders and promote its own sustainability. We are aware that corruption is a major obstacle to objective achievement and is also a problem to national economic and social development.

Management Practices

We have adopted a management code of conduct which outlines certain management practices, focusing on good management and responsibility to our shareholders. We have systems to implement our management practices and committees at the operational level to implement and review these systems.

We have also implemented an employee's code of conduct which outlines our various policies, systems and committees to fulfil our responsibilities to different stakeholder groups, namely, our shareholders, business partners, competitors and creditors, employees, society and the environment and the Government and associated organizations.

Awards and Recognitions

Our 2024 performance was widely recognized both nationally and internationally, with recognitions and awards across multiple disciplines, including sustainability (9 awards) and corporate governance (4 awards). For the twelfth consecutive year, we were selected as a member of the Dow Jones Sustainability Indices (DJSI) 2024 in the Oil & Gas Refining and Marketing Industry, assessed by S&P Global, and were recognized in the Sustainability Yearbook report for 2024 as a "Top 1% S&P Global Corporate Sustainability Assessment Score 2023" in the Oil & Gas Refining and Marketing Industry, assessed by S&P Global. We were also received the Membership of the Global Sustainability Index, in the "FTSE4Good Emerging Index" and "FTS4EGood ASEAN 5 Index" by FTSE Russell, UK, a Sustainable Asia Award at the 14th Asian Excellence Award 2024, organized by Corporate Governance Asia Magazine and a Sustainability Excellence Award in the category of Commended Sustainability Awards at the SET Awards 2024, the ultimate rating (AAA level) for the second consecutive year under the SET ESG Ratings 2024 (Resources sector) granted by the Stock Exchange of Thailand (SET). In

addition, we earned a Sustainability Disclosure Award 2024 from the Thaipat Institute for the seventh consecutive years, obtained Carbon Footprint Certification for nine products from the Thailand Greenhouse Gas Management Organization (Public Organization, TGO), and received certificates of honor as model organizations for greenhouse gas reduction under the Low Emission Support Scheme (LESS) for 2024 from the Ministry of Natural Resources and Environment along with Thai Paraxylene Co., Ltd., Thai Lube Base Plc, and Labix Co., Ltd.

For corporate governance, we also received notable awards and recognitions in 2024, i.e. (1) the Strongest Adherence to Corporate Governance Award, presented by Alpha Southeast Asia, for the ninth consecutive year; (2) excellent assessment outcomes at the highest level under the Corporate Governance Report of Thai Listed Companies (CGR), for the sixteenth consecutive year; and (3) two awards for the renewal of membership in the Thai Private Sector Collective Action Against Corruption (CAC) for Thai Oil (third renewal, valid 2023–2026 and currently applying for fourth renewal) and first-time certification for TOPNEXT International Co., Ltd. (valid 2024–2027), and (4) three awards from the ASEAN Corporate Governance Scorecard for the third consecutive year including other governance-related accolades.

Share Ownership and Compensation

Our directors and executive officers named above held in aggregate 0.012641% of our share capital as of January 1, 2026. The total remuneration (salaries, discretionary bonuses and directors' fees) expenses to our directors as a group was THB16.7 million (US$516,115.1) for the nine months ended September 30, 2025.

The tables below set forth the shareholdings of our directors and executive officers as of January 1, 2026:

Shareholdings of Directors

Name	Position	No. of shares
Air Chief Marshal Chanon Mungthanya	Independent Director; Chairman of the Board	—
General Apichat Chaiyadar	Independent Director; Chairman of the Audit Committee; Member of the Nomination and Remuneration Committee	—
Police General Thiti Sangsawang	Independent Director; Chairman of the Nomination and Remuneration Committee; Member of Corporate Governance and Sustainability Committee	—
Ms. Pattaralada Sa-ngasang	Director; Chairman of the Risk Management Committee	—
Mrs. Pantip Sripimol	Independent Director; Member of the Audit Committee	—
Mr. Chookiat Jittimaitriskul	Independent Director; Member of the Audit Committee	—
Mr. Prajuck Boonyoung	Director; Member of the Corporate Governance and Sustainability Committee; Member of the Nomination and Remuneration Committee	—
Mr. Nopadhol Pereeroek	Independent Director; Member of the Corporate Governance and Sustainability Committee	—
Mr. Chadil Chavanalikikorn	Director; Member of the Corporate Governance and Sustainability	—
Ms. Phenrasmi Bhuritdhanalert	Independent Director; Member of the Risk Management Committee	—
Dr. Sompop Pattanariyankool	Director; Member of the Risk Management Committee	—
Ms. Chaweewan Pornpruksanunt	Director; Member of the Risk Management Committee	—

Name	Position	No. of shares
Mrs. Woranuch Phu-im	Independent Director; Member of the Corporate Governance and Sustainability Committee	—
Mr. Pirun Krimwongrut	Director; Member of the Risk Management Committee	4,800 and 2,000 (By Spouse, Unmarried Partner, and Minor)
Mr. Bandhit Thamprajamchit	Director; Member of the Risk Management Committee; Chief Executive Officer and President	2,400 and 40,000 (By Spouse, Unmarried Partner, and Minor)

Shareholdings of Executive Officers

Name	Position	No. of shares
Mr. Bandhit Thamprajamchit[(1)]	Chief Executive Officer and President	2,400 and 40,000 (By Spouse, Unmarried Partner, and Minor)
Mr. Surachai Saengsamran	Senior Executive Vice President-Hydrocarbon, Acting Executive Vice President-CFP Project Sponsor	107,000
Mr. Jeerawat Pattanasomsit	Executive Vice President-Power, New Business and Digitalization	-
Mr. Ekkachai Sirithammasan	Executive Vice President-Strategy	-
Mr. Charlee Balmongkol	Executive Vice President-CFP Project Director	-
Mr. Nuttapon Meerit	Executive Vice President-Organization Effectiveness Acting Vice President-People and Organization Management	1,000
Mrs. Rungnapa Janchookiat	Executive Vice President-Corporate Commercial Acting Executive Vice President-Petrochemical Business	100 (By Spouse, Unmarried Partner, and Minor)
Mrs. Wanida Boonpiraks	Executive Vice President-Finance and Accounting	6,585
Miss Somporn Bunluesriruang	Executive Vice President-Manufacturing, Acting Vice President-Movement Marine and Logistic	58,800
Mr. Narongsak Chaviengpob	Acting Executive Vice President-Operation Excellence	59,700 (By Spouse, Unmarried

Name	Position	No. of shares
		Partner, and Minor)
Dr. Ittipon Diewwanit	Executive Vice President-Corporate Governance and Sustainability	-
Ms. Tarika Devahastin	Vice President-Financial Planning	-
Mr. Phongsan Wanichphongpan	Vice President-Accounting	3,900
Miss Wanwisa Yanchinda	Vice President-Treasury	5,000

Note:

(1) The board of directors' meeting no. 9/2025 on September 25, 2025 has passed resolution to appoint Mr. Pongpun Amornvivat as the Chief Executive Officer and President, replacing Mr. Bandhit Thamprajamchit, effective from February 1, 2026 onwards.

PRINCIPAL SHAREHOLDERS

The following table sets forth certain information about our Principal Shareholders, defined as shareholders who own 1% or more of our outstanding common shares, and information about common shares as of October 9, 2025. To the best of our knowledge, no shareholder owns more than 1% of our outstanding common shares except as indicated in the table below.

Principal Shareholders[1]	**Number of common shares**	**Percentage[1]**
PTT Public Company Limited[2]	1,005,920,239	45.03%
Siam Management Holding Company Limited	66,400,49	2.97%
The Bank of New York Mellon	46,734,867	2.09%
South East Asia UK (Type C) Nominees Limited	44,281,041	1.98%
Social Security Office	41,475,473	1.86%
Total shareholdings of Principal Shareholders	**1,204,812,119**	**53.93%**
Total number of common shares outstanding	**2,233,835,566**	**100.00%**

Notes:

(1) The table excludes Thai NVDR Co., Ltd., a subsidiary of the Stock Exchange of Thailand with the objective of promoting investor's investment, particularly of foreign investors, in the common stock of listed companies in Thailand, without being restricted by the foreign shareholding. Investments through Thai NVDR Co., Ltd. are not entitled to the right to vote at shareholders' meetings of listed companies.

(2) As a major shareholder, PTT participates in formulating the Company's management and operational policies via directors nominated to our board of directors. As of December 1, 2025, five directors from a total of 15 directors were nominated by PTT. These five directors are Ms. Pattaralada Sa-ngasang, Mr. Chadil Chavanalikikorn, Ms. Peangpanor Boonklum, Mr. Pirun Krimwongrut, and Mr. Bandhit Thamprajamchit, who also hold positions either as a director of PTT or as a member of PTT management. See "*Management—Board of Directors*" for further information.

As of January 1, 2026, our directors and executive officers collectively held in aggregate approximately 0.012641% of our total common shares.

FORM OF THE SECURITIES

Securities may only be issued in registered form.

Each Tranche of Securities in registered form ("**Securities**") will be represented by either:

(i) individual certificates in registered form ("**Individual Certificates**"); or

(ii) one or more unrestricted global certificates ("**Unrestricted Global Certificate(s)**") in the case of Securities sold outside the United States to non-U.S. persons in reliance on Regulation S ("**Unrestricted Securities**") and/or one or more restricted global certificates ("**Restricted Global Certificate(s)**") in the case of Securities sold to persons who are both QIBs and QPs in reliance on Rule 144A ("**Restricted Securities**"),

in each case as specified in the relevant Pricing Supplement, and references in this Offering Memorandum to "Global Certificates" shall be construed as a reference to Unrestricted Global Certificates and/or Restricted Global Certificates.

Each Security represented by a Restricted Global Certificate will be registered in the name of Cede & Co. (or such other entity as is specified in the applicable Pricing Supplement) as nominee for DTC or, as the case may be, in the name of the common depositary (or its nominee) for Euroclear and/or Clearstream and the relevant Restricted Global Certificate will be deposited on or about the issue date with the custodian for DTC (the "**DTC Custodian**") or a depositary of the common depositary for Euroclear and/or Clearstream. Beneficial interests in Securities represented by a Restricted Global Certificate may be held through DTC or, as the case may be, Euroclear and/or Clearstream at any time.

Each Security represented by an Unrestricted Global Certificate will be registered in the name of a common depositary (or its nominee) for Euroclear and/or Clearstream and/or any other relevant clearing system or in the name of Cede & Co. as nominee for DTC, and the relevant Unrestricted Global Certificate will be deposited on or about the issue date with the common depositary or the DTC Custodian.

If the relevant Pricing Supplement specifies the form of Securities as being "Individual Certificates," then the Securities will at all times be represented by Individual Certificates issued to each Holder in respect of their respective holdings.

Global Certificate exchangeable for Individual Certificates

If the relevant Pricing Supplement specifies the form of Securities as being "Global Certificate exchangeable for Individual Certificates," then the Securities will initially be represented by one or more Global Certificates, each of which will be exchangeable in whole, but not in part, for Individual Certificates:

(i) on the expiry of such period of notice as may be specified in the relevant Pricing Supplement;

(ii) at any time, if so specified in the relevant Pricing Supplement; or

(iii) if the relevant Pricing Supplement specifies "in the limited circumstances described in the Global Certificate," then:

(a) in the case of any Global Certificate held by or on behalf of DTC, if DTC notifies the relevant Issuer that it is no longer willing or able to discharge properly its responsibilities as depositary with respect to any Global Certificate or DTC ceases to be a "clearing agency" registered under the Exchange Act or if at any time DTC is no longer eligible to act as such, and the relevant Issuer is unable to locate a qualified successor within 90 days of receiving notice or becoming aware of such ineligibility on the part of DTC;

(b) in the case of any Unrestricted Global Certificate held by or on behalf of, Euroclear and/or Clearstream and/or any other clearing system (other than DTC), if Euroclear, Clearstream or any other relevant clearing system is closed for business for a continuous period of 14 days (other than by reason of legal holidays) or announces an intention permanently to cease business; and

(c) in any case, if any of the circumstances described in Condition 13 (*Events of Default*) or an Enforcement Event (as applicable) occurs in respect of any Security of the relevant Tranche and the Notes become due and payable.

Whenever a Global Certificate is to be exchanged for Individual Certificates, each person having an interest in a Global Certificate must provide the Registrar (through the relevant clearing system) with such information as the relevant Issuer and the Registrar may require to complete and deliver Individual Certificates (including the name and address of each person in which the Securities represented by the Individual Certificates are to be registered and the principal amount of each such person's holding). In addition, whenever a Restricted Global Certificate is to be exchanged for Individual Certificates, each person having an interest in the Restricted Global Certificate must provide the Registrar (through the relevant clearing system) with a certificate given by or on behalf of the holder of each beneficial interest in the Restricted Global Certificate stating either (i) that such holder is not transferring its interest at the time of such exchange or (ii) that the transfer or exchange of such interest has been made in compliance with the transfer restrictions applicable to the Securities and that the person transferring such interest reasonably believes that the person acquiring such interest is both a QIB and a QP, is obtaining such beneficial interest in a transaction meeting the requirements of Rule 144A. Individual Certificates issued in exchange for interests in the Restricted Global Certificate will bear the legends and be subject to the transfer restrictions set out under "*Transfer Restrictions*."

Whenever a Global Certificate is to be exchanged for Individual Certificates, the relevant Issuer shall procure that Individual Certificates will be issued in an aggregate principal amount equal to the principal amount of the Global Certificate within five business days of the delivery, by or on behalf of the registered holder of the Global Certificate to the Registrar of such information as is required to complete and deliver such Individual Certificates against the surrender of the Global Certificate at the specified office of the Registrar.

Such exchange will be effected in accordance with the provisions of the Indenture and the regulations concerning the transfer and registration of Securities and, in particular, shall be effected without charge to any holder, but against such indemnity as the Registrar may require in respect of any tax or other duty of whatsoever nature which may be levied or imposed in connection with such exchange.

Terms and Conditions applicable to the Securities

The terms and conditions applicable to any Individual Certificate will be endorsed on that Individual Certificate and will consist of the terms and conditions set out under "*Terms and Conditions of the Securities*" below and the provisions of the relevant Pricing Supplement which supplement, amend and/or replace those terms and conditions.

The terms and conditions applicable to any Global Certificate will differ from those terms and conditions which would apply to the Security were it in definitive form to the extent described under "*Summary of Provisions Relating to the Securities while in Global Form*" below.

TERMS AND CONDITIONS OF THE NOTES

The following is the text of the terms and conditions which, as supplemented, amended and/or replaced by the relevant Pricing Supplement, will be endorsed on each Note in definitive form issued under the Program. The terms and conditions applicable to any Note in global form will differ from those terms and conditions which would apply to the Note were it in definitive form to the extent described under "Summary of Provisions Relating to the Notes while in Global Form" below.

1. **Introduction**

(a) **Program**: Thai Oil Public Company Limited (the "**Company**") and Thaioil Treasury Center Company Limited ("**Treasury Center**") have established a Global Medium Term Note Program (the "**Program**") for the issuance of up to U.S.$3,679,000,000 in aggregate principal amount of notes (the "**Notes**"). Each Series (as defined below) of Notes shall be issued either by (i) the Company (in its capacity as issuer, an "**Issuer**"); or (ii) Treasury Center (in its capacity as issuer, an "**Issuer**", and together with the Company in its capacity as issuer, the "**Issuers**"); in the case of (ii), the Notes shall be unconditionally and irrevocably guaranteed by the Company (in its capacity as guarantor, the "**Guarantor**") in accordance with Condition 1(d). References to "the Issuer" in these Conditions shall be construed as to the Issuer specified in the relevant Pricing Supplement.

(b) **Pricing Supplement**: Notes issued under the Program are issued in series (each, a "**Series**") and each Series may comprise one or more tranches (each, a "**Tranche**") of Notes. The terms and conditions applicable to any particular Series or Tranche of Notes are set out in the relevant pricing supplement (the "**Pricing Supplement**") which supplements, amends and/or replaces these terms and conditions (the "**Conditions**"). In the event of any inconsistency between these Conditions and the relevant Pricing Supplement, the relevant Pricing Supplement shall prevail.

(c) **Indenture**: The Notes are subject to, and have the benefit of, an amended and restated indenture dated June 11, 2020 (as amended and/or supplemented from time to time, the "**Indenture**") between the Issuers, the Guarantor and Citicorp International Limited as trustee (the "**Trustee**", which expression includes all persons for the time being trustee or trustees appointed under the Indenture). Noteholders (as defined below) are deemed to have accepted the appointment of the Trustee.

(d) **Guarantee**: The Guarantor has, in accordance with the terms of the Indenture, unconditionally and irrevocably guaranteed the due and punctual payment of all sums from time to time payable in respect of Notes issued by Treasury Center in its capacity as Issuer (the "**Guarantee**"). The Guarantor's maximum liability under the Guarantee in respect of each Series of Guaranteed Notes (as defined below) will be capped at an amount equal to 125 per cent. of the outstanding aggregate principal amount of the relevant Series of Guaranteed Notes (or such other level as may be specified in the relevant Pricing Supplement) outstanding as of the Issue Date or the issue date of any further Guaranteed Notes issued in accordance with Condition 19 (*Further Issuances*) and consolidated and forming a single series therewith. The Guarantee will be released in respect of a Series of Notes upon the later of (i) the date falling ten years after the maturity date of the relevant Series of Notes or (ii) the date on which all sums expressed to be payable by Treasury Center under the Indenture and the relevant Series of Guaranteed Notes have been unconditionally and irrevocably paid and discharged in full; or, alternatively, upon a defeasance or discharge as provided in Article 13 of the Indenture, *provided that*, in each case, any rights of the Holders and any liability of the Guarantor that have arisen or accrued under the Guarantee prior to any such release will continue to be in full force and effect after any such release and will survive any such release.

(e) **Agents**: Pursuant to a paying and transfer agent and registrar appointment letter dated June 11, 2020 (as amended and/or supplemented from time to time, the "**Paying and Transfer Agent and Registrar Appointment Letter**"), Citibank, N.A., London Branch is appointed as principal paying agent (the "**Principal Paying Agent**", which expression includes any successor principal paying agent appointed from time to time in connection with the Notes), Citibank, N.A., London Branch as exchange agent (the "**Exchange Agent**", which expression includes any successor exchange agent appointed from time to time in connection with the Notes) and Citibank, N.A., London Branch as registrar (the "**Registrar**", which expression

includes any successor registrar appointed from time to time in connection with the Notes). In addition, the paying agents named therein (together with the Principal Paying Agent, the "**Paying Agents**", which expression includes any successor or additional paying agents appointed from time to time in connection with the Notes) and the transfer agents named therein (together with the Registrar, the "**Transfer Agents**", which expression includes any successor or additional transfer agents appointed from time to time in connection with the Notes) are appointed subject to these Conditions, the Indenture and the Paying and Transfer Agent and Registrar Appointment Letter. In these Conditions references to the "**Agents**" are to the Paying Agents, the Exchange Agent and the Transfer Agents and any reference to an "**Agent**" is to any one of them.

(f) **The Notes**: The Notes may only be issued in registered form. All subsequent references in these Conditions to "**Notes**" are to the Notes which are the subject of the relevant Pricing Supplement. Copies of the relevant Pricing Supplement are available for inspection at the Specified Office of the Paying Agents by Noteholders during normal business hours (being between 9:00 a.m. and 3:00 p.m. (London time)) on any weekday (Saturdays and public holidays excepted) following prior written notice and proof of holding and identity satisfactory to the Paying Agents.

(g) **Summaries**: Certain provisions of these Conditions are summaries of the Indenture and are subject to their detailed provisions. Noteholders are bound by, and are deemed to have notice of, all the provisions of the Indenture applicable to them. Copies of the Indenture are available for inspection at the Specified Office of the Paying Agents by Noteholders during normal business hours (being between 9:00 a.m. and 3:00 p.m. (London time)) on any weekday (Saturdays and public holidays excepted) following prior written notice and proof of holding and identity satisfactory to the Paying Agents.

2. **Interpretation**

(a) ***Definitions***: In these Conditions the following expressions have the following meanings:

"**Accrual Yield**" has the meaning given in the relevant Pricing Supplement;

"**Additional Business Centre(s)**" means the city or cities specified as such in the relevant Pricing Supplement;

"**Additional Financial Centre(s)**" means the city or cities specified as such in the relevant Pricing Supplement and in the city where the relevant Paying Agent is located;

"**Applicable Premium**" means, with respect to any Note on any date fixed for redemption, as determined by the Issuer, the greater of:

(a) 1.0 per cent. of the principal amount of the Note; or

(b) the excess of:

(i) the present value at the date fixed for redemption of (i) the principal amount of the Note *plus* (ii) all required interest payments due on the Note through the Maturity Date (excluding accrued but unpaid interest to the date fixed for redemption), computed using a discount rate equal to the Treasury Rate as of such redemption date *plus* 35 basis points; over

(ii) the principal amount of the Note.

"**Authorized Officer**" means, with respect to any Person, a director or officer of such Person duly authorized to perform the acts required under these Conditions or the Indenture;

"**Business Day**", means any day (other than a Saturday or a Sunday) on which commercial banks and foreign exchange markets are open for business in Bangkok, London, Hong Kong and New York and, other than in Condition 3(e) (*Registration and delivery of Note Certificates*) and Condition 13 (*Events of Default*):

(a) in relation to any sum payable in euro, a TARGET Settlement Day and a day on which commercial banks and foreign exchange markets settle payments generally in each (if any) Additional Business Centre;

(b) in relation to any sum payable in a currency other than euro and Renminbi, a day on which commercial banks and foreign exchange markets settle payments generally, in the Principal Financial Centre of the relevant currency and in each (if any) Additional Business Centre; and

(c) for the purposes of Notes denominated in Renminbi only, any day (other than a Sunday or a Saturday) on which commercial banks and foreign exchange markets are open for business and settle Renminbi payments in Hong Kong and are not authorized or obligated by law or executive order to be closed;

"**Business Day Convention**", in relation to any particular date, has the meaning given in the relevant Pricing Supplement and, if so specified in the relevant Pricing Supplement, may have different meanings in relation to different dates and, in this context, the following expressions shall have the following meanings:

(a) "**Following Business Day Convention**" means that the relevant date shall be postponed to the first following day that is a Business Day;

(b) "**Modified Following Business Day Convention**" or "**Modified Business Day Convention**" means that the relevant date shall be postponed to the first following day that is a Business Day unless that day falls in the next calendar month in which case that date will be the first preceding day that is a Business Day;

(c) "**Preceding Business Day Convention**" means that the relevant date shall be brought forward to the first preceding day that is a Business Day;

(d) "**FRN Convention**", "**Floating Rate Convention**" or "**Eurodollar Convention**" means that each relevant date shall be the date which numerically corresponds to the preceding such date in the calendar month which is the number of months specified in the relevant Pricing Supplement as the Specified Period after the calendar month in which the preceding such date occurred *provided, however, that*:

(i) if there is no such numerically corresponding day in the calendar month in which any such date should occur, then such date will be the last day which is a Business Day in that calendar month;

(ii) if any such date would otherwise fall on a day which is not a Business Day, then such date will be the first following day which is a Business Day unless that day falls in the next calendar month, in which case it will be the first preceding day which is a Business Day; and

(iii) if the preceding such date occurred on the last day in a calendar month which was a Business Day, then all subsequent such dates will be the last day which is a Business Day in the calendar month which is the specified number of months after the calendar month in which the preceding such date occurred; and

(e) "**No Adjustment**" means that the relevant date shall not be adjusted in accordance with any Business Day Convention;

"**Calculation Agent**" means the Principal Paying Agent or such other Person, in each case as specified in the relevant Pricing Supplement as the party responsible for calculating the Rate(s) of Interest and Interest Amount(s) and/or such other amount(s) as may be specified in the relevant Pricing Supplement;

"**Calculation Amount**" has the meaning given in the relevant Pricing Supplement;

"**Change of Control**" means (i) PTT Public Company Limited ceasing to own and control, directly or indirectly, at least 40 per cent. of the Company's issued and outstanding capital stock or (ii) any Person or Persons, acting together, becoming the owner, directly or indirectly, of a greater number of the Company's issued and outstanding capital stock than that owned and controlled, directly or indirectly, by PTT Public Company Limited or (iii) in the case of Guaranteed Notes, the Guarantor ceasing to own and control, directly or indirectly, at least 99 per cent. of Treasury Center's issued and outstanding capital stock;

"**Change of Control Triggering Event**" means the occurrence of both a Change of Control and a Ratings Decline;

"**Code**" means the U.S. Internal Revenue Code of 1986;

"**Consolidated Net Tangible Assets**" means the total amount of the assets of the Company and its consolidated Subsidiaries, including investments in unconsolidated Subsidiaries and associated companies, after deducting therefrom (i) all current liabilities (excluding any current liabilities constituting Long-term Debt by reason of their being renewable or extendible at the option of the Company or its consolidated Subsidiaries), and (ii) all goodwill, trade names, trademarks, patents, unamortized debt discount and expense and other like intangible assets, all as set forth on the most recent statement of financial position of the Company and its consolidated Subsidiaries and computed in accordance with TFRS;

"**Day Count Fraction**" means, in respect of the calculation of an amount for any period of time (the "**Calculation Period**"), such day count fraction as may be specified in these Conditions or the relevant Pricing Supplement and:

(a) if "**Actual/Actual (ICMA)**" is so specified, means:

(i) where the Calculation Period is equal to or shorter than the Regular Period during which it falls, the actual number of days in the Calculation Period divided by the product of (1) the actual number of days in such Regular Period and (2) the number of Regular Periods in any year; and

(ii) where the Calculation Period is longer than one Regular Period, the sum of:

(A) the actual number of days in such Calculation Period falling in the Regular Period in which it begins divided by the product of (a) the actual number of days in such Regular Period and (b) the number of Regular Periods in any year; and

(B) the actual number of days in such Calculation Period falling in the next Regular Period divided by the product of (a) the actual number of days in such Regular Period and (b) the number of Regular Periods in any year;

(b) if "**Actual/365**" or "**Actual/Actual (ISDA)**" is so specified, means the actual number of days in the Calculation Period divided by 365 (or, if any portion of the 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);

(c) if "**Actual/365 (Fixed)**" is so specified, means the actual number of days in the Calculation Period divided by 365;

(d) if "**Actual/360**" is so specified, means the actual number of days in the Calculation Period divided by 360;

(e) if "**30/360**" is so specified, the number of days in the Calculation Period divided by 360, calculated on a formula basis as follows:

Day Count Fraction = $\frac{[360x(Y_2 - Y_1)]+[30x(M_2 - M_1)]+(D_2 - D_1)}{360}$

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 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 D*2* will be 30;

(f) if "**30E/360**" or "**Eurobond Basis**" is so specified, the number of days in the Calculation Period divided by 360, calculated on a formula basis as follows:

Day Count Fraction = $\frac{[360x(Y_2 - Y_1)]+[30x(M_2 - M_1)]+(D_2 - D_1)}{360}$

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, in which case D*2* will be 30; and

(g) if "**30E/360 (ISDA)**" is so specified, the number of days in the Calculation Period divided by 360, calculated on a formula basis as follows:

Day Count Fraction = $\frac{[360x(Y_2 - Y_1)]+[30x(M_2 - M_1)]+(D_2 - D_1)}{360}$

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 (i) that day is the last day of February or (ii) 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 (i) that day is the last day of February but not the Maturity Date or (ii) such number would be 31, in which case D2 will be 30,

provided, however, that in each such case the number of days in the Calculation Period is calculated from and including the first day of the Calculation Period to but excluding the last day of the Calculation Period;

"**Default**" means an occurrence of any event or condition which constitutes or which, after notice or passage of time or both, would become, an Event of Default;

"**Early Redemption Amount (Tax)**" means, in respect of any Note, its principal amount or such other amount as may be specified in (which shall in no event be less than its initial issue price), or determined in accordance with, the relevant Pricing Supplement;

"**Early Termination Amount**" means, in respect of any Note, its principal amount or such other amount as may be specified in, or determined in accordance with, these Conditions or the relevant Pricing Supplement;

"**Exchange Act**" means the U.S. Securities Exchange Act of 1934, as amended, and any rules or regulations promulgated thereunder;

"**Final Redemption Amount**" means, in respect of any Note, its principal amount or such other amount as may be specified in, or determined in accordance with, the relevant Pricing Supplement;

"**First Interest Payment Date**" means the date specified in the relevant Pricing Supplement;

"**Fixed Coupon Amount**" has the meaning given in the relevant Pricing Supplement;

"**Group**" means the Company and its Subsidiaries, taken as a whole;

"**Guaranteed Notes**" means Notes issued by Treasury Center as Issuer and guaranteed by the Guarantor;

"**Holder**" has the meaning given in Condition 3(b) (*Title*);

"**Hong Kong**" means the Hong Kong Special Administrative Region of the PRC;

"**Indebtedness**" means any obligation for the payment or repayment of money borrowed;

"**Interest Amount**" means, in relation to a Note and an Interest Period, the amount of interest payable in respect of that Note for that Interest Period;

"**Interest Commencement Date**" means the Issue Date of the Notes or such other date as may be specified as the Interest Commencement Date in the relevant Pricing Supplement;

"**Interest Determination Date**" has the meaning given in the relevant Pricing Supplement;

"**Interest Payment Date**" means the First Interest Payment Date and any date or dates specified as such in, or determined in accordance with the provisions of, the relevant Pricing Supplement and, if a Business Day Convention is specified in the relevant Pricing Supplement:

(a) as the same may be adjusted in accordance with the relevant Business Day Convention; or

(b) if the Business Day Convention is the FRN Convention, Floating Rate Convention or Eurodollar Convention and an interval of a number of calendar months is specified in the relevant Pricing Supplement as being the Specified Period, each of such dates as may occur in accordance with the FRN Convention, Floating Rate Convention or Eurodollar Convention at such Specified Period of calendar months following the Interest Commencement Date (in the case of the first Interest Payment Date) or the previous Interest Payment Date (in any other case);

"**Interest Period**" means each period beginning on (and including) the Interest Commencement Date or any Interest Payment Date and ending on (but excluding) the next Interest Payment Date;

"**ISDA Definitions**" means the 2006 ISDA Definitions (as amended and updated as at the date of issue of the first Tranche of the Notes of the relevant Series (as specified in the relevant Pricing Supplement) as published by the International Swaps and Derivatives Association, Inc.) unless otherwise specified in the relevant Pricing Supplement;

"**Issue Date**" has the meaning given in the relevant Pricing Supplement;

"**Long-term Debt**" means any note, bond, debenture or other Indebtedness having a maturity of more than one year from the date such Indebtedness was incurred or having a maturity of less than one year but by its terms being renewable or extendible, at the option of the Company or the borrower, beyond one year from the date such evidence of Indebtedness was incurred;

"**Margin**" has the meaning given in the relevant Pricing Supplement;

"**Maturity Date**" has the meaning given in the relevant Pricing Supplement;

"**Maximum Redemption Amount**" has the meaning given in the relevant Pricing Supplement;

"**Minimum Redemption Amount**" has the meaning given in the relevant Pricing Supplement;

"**Moody's**" means Moody's Investors Service, Inc. and its successors;

"**Noteholder**" has the meaning given in Condition 3(b) (*Title*);

"**Officer's Certificate**" means a certificate signed by an Authorized Officer of the Issuer or the Guarantor (as applicable) and delivered to the Trustee;

"**Opinion of Counsel**" means an opinion in writing signed by legal counsel who may be an employee of, or counsel to, the Issuer or the Guarantor (as applicable) or who may be other counsel satisfactory to the Trustee;

"**Optional Redemption Amount (Call)**" means, in respect of any Note, its principal amount *plus* the Applicable Premium;

"**Optional Redemption Amount (Put)**" means, in respect of any Note, its principal amount or such other amount as may be specified in, or determined in accordance with, the relevant Pricing Supplement;

"**Optional Redemption Date (Call)**" has the meaning given in the relevant Pricing Supplement;

"**Optional Redemption Date (Put)**" has the meaning given in the relevant Pricing Supplement;

"**Payment Business Day**" means:

(a) if the currency of payment is euro, any day which is:

(i) a day on which (a) banks in the relevant place of presentation are open for presentation and payment of debt securities and for dealings in foreign currencies; and (b) a day on which commercial banks are open for general business (including dealings in foreign currencies) in the city where the Principal Paying Agent or, as the case may be, the Paying Agent has its Specified Office; and

(ii) in the case of payment by transfer to an account, (a) a TARGET Settlement Day and (b) a day on which dealings in foreign currencies may be carried on in each (if any) Additional Financial Centre; or

(b) if the currency of payment is not euro, any day which is:

(i) a day on which (a) banks in the relevant place of presentation are open for presentation and payment of debt securities and for dealings in foreign currencies and (b) a day on which commercial banks are open for general business (including dealings in foreign currencies) in the city where the Principal Paying Agent or, as the case may be, the Paying Agent has its Specified Office; and

(ii) in the case of payment by transfer to an account, a day on which dealings in foreign currencies (including, in the case of Notes denominated in Renminbi, settlement of Renminbi payments) may be carried on in the Principal Financial Centre of the currency of payment and in each (if any) Additional Financial Centre;

"**Person**" means any individual, corporation, partnership, joint venture, association, joint- stock company, trust, unincorporated organization, limited liability company, state-owned enterprise, government or any agency or political subdivision thereof or any other entity;

"**PRC**" means, for the purpose of these Conditions, the People's Republic of China excluding Hong Kong, Macau and Taiwan;

"**Principal Financial Centre**" means, in relation to any currency, the principal financial centre for that currency *provided, however, that*:

(a) in relation to euro, it means the principal financial centre of such Member State of the European Communities as is selected (in the case of a payment) by the payee or (in the case of a calculation) as specified in the applicable Pricing Supplement;

(b) in relation to Australian dollars, it means Sydney and in relation to New Zealand dollars, it means Auckland, in each case as is selected (in the case of a payment) by the payee or (in the case of a calculation) by the Calculation Agent or, in each case, the principal financial centre as is specified in the applicable Pricing Supplement; and

(c) in relation to Renminbi, it means Hong Kong or the principal financial centre as is specified in the applicable Pricing Supplement;

"**Rate of Interest**" means the rate or rates (expressed as a percentage per annum) of interest payable in respect of the Notes specified in the relevant Pricing Supplement or calculated or determined in accordance with the provisions of these Conditions and/or the relevant Pricing Supplement;

"**Rating Agency**" means any of (i) S&P and (ii) Moody's *provided that* (A) if either of S&P or Moody's, but not both, will not make a rating of the Notes publicly available, one other "nationally recognized statistical rating organization" that is registered as such pursuant to Section 15E of the Exchange Act and Rule 17g thereunder selected by the Issuer as a replacement agency will be substituted for S&P or Moody's, as the case may be; and (B) if both

S&P and Moody's will not make a rating of the Notes publicly available, two other "nationally recognized statistical rating organizations" that are registered as such pursuant to Section 15E of the Exchange Act and Rule 17g thereunder selected by the Issuer as replacement agencies;

"**Rating Category**" means (1) with respect to S&P, any of the following categories: "AAA," "AA," "A," "BBB," "BB," "B," "CCC," "CC," "C" and "D" (or equivalent successor categories); (2) with respect to Moody's, any of the following categories: "Aaa," "Aa," "A," "Baa," "Ba," "B," "Caa," "Ca," and "C" (or equivalent successor categories); and (3) the equivalent of any such category of S&P or Moody's 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; 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 "B+" to "B-," will constitute a decrease of one gradation);

"**Ratings Decline**" means, in connection with a Change of Control Triggering Event, the occurrence on, or within 90 days after, the earlier of the date, or public notice of the occurrence, of a Change of Control or the intention by PTT Public Company Limited to effect a Change of Control (which period will be extended so long as the rating of the Notes is under publicly announced consideration for possible downgrade by any of the Rating Agencies), the public announcement by either Rating Agency of a decrease in the rating of the Notes by one or more gradations (including gradations within Rating Categories as well as between Rating Categories);

"**Redemption Amount**" means, as appropriate, the Final Redemption Amount, the Early Redemption Amount (Tax), the Optional Redemption Amount (Call), the Optional Redemption Amount (Put), the Early Termination Amount or such other amount in the nature of a redemption amount as may be specified in, or determined in accordance with the provisions of, the relevant Pricing Supplement;

"**Reference Banks**" has the meaning given in the relevant Pricing Supplement or, if none, four major banks selected by the Issuer in the market that is most closely connected with the Reference Rate and notified in writing to the Trustee and the Calculation Agent;

"**Reference Price**" has the meaning given in the relevant Pricing Supplement;

"**Reference Rate**" has the meaning given in the relevant Pricing Supplement;

"**Regular Period**" means:

(a) in the case of Notes where interest is scheduled to be paid only by means of regular payments, each period from and including the Interest Commencement Date to but excluding the first Interest Payment Date and each successive period from and including one Interest Payment Date to but excluding the next Interest Payment Date;

(b) in the case of Notes where, apart from the first Interest Period, interest is scheduled to be paid only by means of regular payments, each period from and including a Regular Date falling in any year to but excluding the next Regular Date, where "**Regular Date**" means the day and month (but not the year) on which any Interest Payment Date falls; and

(c) in the case of Notes where, apart from one Interest Period other than the first Interest Period, interest is scheduled to be paid only by means of regular payments, each period from and including a Regular Date falling in any year to but excluding the next Regular Date, where "**Regular Date**" means the day and month (but not the year) on which any Interest Payment Date falls other than the Interest Payment Date falling at the end of the irregular Interest Period.

"**Relevant Date**" means, in relation to any payment, whichever is the later of (a) the date on which the payment in question first becomes due and (b) if the full amount payable has not been received in the Principal Financial Centre of the currency of payment by the Principal Paying

Agent or the Trustee on or prior to such due date, the date on which (the full amount having been so received) notice to that effect has been given to the Noteholders;

"**Relevant Financial Centre**" has the meaning given in the relevant Pricing Supplement;

"**Relevant Indebtedness**" of any Person means, at any date, Indebtedness (i) that has a final maturity date of one year or more from the date of incurrence or issuance of such Indebtedness and (ii) is in the form of, is represented or embodied by, bonds, notes, debentures or other securities which are, or are intended to be, commonly quoted, listed or dealt in or traded on any stock exchange or over-the- counter securities market;

"**Relevant Screen Page**" means the page, section or other part of a particular information service (including, without limitation, Reuters) specified as the Relevant Screen Page in the relevant Pricing Supplement, or such other page, section or other part as may replace it on that information service or such other information service, in each case, as may be nominated by the Person providing or sponsoring the information appearing there for the purpose of displaying rates or prices comparable to the Reference Rate;

"**Relevant Time**" has the meaning given in the relevant Pricing Supplement;

"**Reset Interest Rate**" has the meaning given in Condition 6(e);

"**Security Interest**" means any mortgage, pledge, lien, fixed or floating charge or other encumbrance;

"**SGX-ST**" means the Singapore Exchange Securities Trading Limited;

"**Specified Currency**" has the meaning given in the relevant Pricing Supplement;

"**Specified Denomination(s)**" has the meaning given in the relevant Pricing Supplement;

"**Specified Office**" has the meaning given in the Indenture;

"**Specified Period**" has the meaning given in the relevant Pricing Supplement;

"**Subsidiary**" means any corporation or other entity of which more than 50 per cent. of the total voting power of shares, securities or other ownership interests entitled to vote in the election of the board of directors or other persons performing similar functions is at the time directly or indirectly owned by the Company;

"**S&P**" means S&P Global Inc. and its successors;

"**TARGET Settlement Day**" means any day on which TARGET2 is open for the settlement of payments in euro;

"**TARGET2**" means the Trans-European Automated Real-Time Gross Settlement Express Transfer payment system which utilizes a single shared platform and which was launched on November 19, 2007;

"**Treasury Rate**" means, as of any redemption date, the yield to maturity as of such redemption date of United States Treasury securities with a constant maturity (as compiled and published in the most recent Federal Reserve Statistical Release H.15 (519) that has become publicly available at least two business days prior to the redemption date (or, if such Statistical Release is no longer published, any publicly available source of similar market data)) most nearly equal to the period from the redemption date to the Maturity Date; *provided, however, that* if the period from the redemption date to the Maturity Date, is less than one year, the weekly average yield on actually traded United States Treasury securities adjusted to a constant maturity of one year will be used;

"**TRFS**" means Thai Financial Reporting Standards; and

"**Zero Coupon Note**" means a Note specified as such in the relevant Pricing Supplement.

(b) ***Interpretation***:

In these Conditions:

(i) any reference to principal shall be deemed to include the Redemption Amount, any Additional Amounts (as defined in Condition 12 (*Additional Amounts*)), any premium payable in respect of a Note and any other amount in the nature of principal payable pursuant to these Conditions or the Indenture;

(ii) any reference to interest shall be deemed to include any Additional Amounts and any other amount in the nature of interest payable pursuant to these Conditions or the Indenture;

(iii) references to Notes being "**outstanding**" shall be construed in accordance with the Indenture;

(iv) if an expression is stated in Condition 2(a) (*Interpretation —Definitions*) to have the meaning given in the relevant Pricing Supplement, but the relevant Pricing Supplement gives no such meaning or specifies that such expression is "**not applicable**" then such expression is not applicable to the Notes; and

(v) any reference to the Indenture shall be construed as a reference to the Indenture as amended and/or supplemented up to and including the Issue Date of the Notes.

3. **Form, Denomination, Title and Transfer**

(a) ***Notes***

Notes are in the Specified Denomination(s), which may include a minimum denomination specified in the relevant Pricing Supplement and higher integral multiples of a smaller amount specified in the relevant Pricing Supplement.

(b) ***Title***

The Registrar will maintain a register outside the United Kingdom in accordance with the provisions of the Indenture. A certificate (each, a "**Note Certificate**") will be issued to each Holder of Notes in respect of its registered holding. Each Note Certificate will be numbered serially with an identifying number which will be recorded in the register (the "**Register**"). "**Holder**" means the person in whose name such Note is for the time being registered in the Register (or, in the case of a joint holding, the first named thereof) and "**Noteholder**" shall be construed accordingly.

(c) ***Ownership***

The Holder of any Note shall (except as otherwise required by law) be treated as its absolute owner for all purposes (whether or not it is overdue and regardless of any notice of ownership, trust or any other interest therein, any writing on the Note Certificate relating thereto (other than the endorsed form of transfer) or any notice of any previous loss or theft thereof) and no Person shall be liable for so treating such Holder.

(d) ***Transfers of Notes***

Subject to paragraphs (g) and (h) below, a Note may be transferred upon surrender of the relevant Note Certificate, with the endorsed form of transfer duly completed, at the Specified Office of the Registrar or any Transfer Agent, together with such evidence as such Registrar or (as the case may be) such Transfer Agent may reasonably require to prove the title of the transferor and the authority of the individuals who have executed the form of transfer; provided, however, that a Note may not be transferred unless the principal amount of Notes transferred and (where not all of the Notes held by a Holder are being transferred) the principal amount of the balance of Notes not transferred are Specified Denominations. Where not all the Notes represented by the surrendered Note Certificate are the subject of the transfer, a new Note Certificate in respect of the balance of the Notes will be issued to the transferor.

(e) ***Registration and delivery of Note Certificates***

Within five business days of the surrender of a Note Certificate in accordance with paragraph (d) above, the Registrar will register the transfer in question and deliver a new Note Certificate of a like principal amount to the Notes transferred to each relevant Holder at its Specified Office or (as the case may be) the Specified Office of any Transfer Agent or (at the request and risk of any such relevant Holder) to the address specified for the purpose by such relevant Holder. In this paragraph, "business day" means a day on which commercial banks are open for general business (including dealings in foreign currencies) in the city where the Registrar or (as the case may be) the relevant Transfer Agent has its Specified Office.

(f) ***No charge***

The transfer of a Note will be effected without charge by or on behalf of the Issuer, the Guarantor (if applicable) or the Registrar or any Transfer Agent but against such indemnity by the transferor as such Registrar or (as the case may be) such Transfer Agent may require in respect of any tax or other duty of whatsoever nature which may be levied or imposed in connection with such transfer.

(g) ***Closed periods***

Noteholders may not require transfers to be registered:

(i) during the period of 15 days ending on the due date for any payment of principal or interest in respect of the Notes; and

(ii) during the period of 15 days ending on any date on which Notes may be called for redemption by the Issuer at its option pursuant to Condition 10(b) (*Optional Tax Redemption*) or Condition 10(c) (*Optional Redemption*) below.

(h) ***Regulations concerning transfers and registration***

All transfers of Notes and entries on the Register are subject to the detailed regulations concerning the transfer of Notes scheduled to the program manual relating to the Program. The regulations may be changed by the Issuer with the prior written approval of the Registrar. A copy of the current regulations will be sent by the Registrar to any Noteholder (at the cost and expense of such Noteholder) who requests in writing a copy of such regulations.

4. **Status**

(a) The Notes constitute direct, unconditional, unsubordinated and (subject to Condition 5(a) (*Limitation on Liens*)) unsecured obligations of the Issuer which will at all times rank *pari passu* among themselves and at least *pari passu* with all other present and future unsecured and unsubordinated obligations of the Issuer, save for such obligations as may be preferred by provisions of law that are both mandatory and of general application.

(b) The Guarantor's obligations under the Guarantee constitute direct, unconditional, unsubordinated and (subject to Condition 5(a) (*Limitation on Liens*)) unsecured obligations of the Guarantor which will at all times rank *pari passu* among themselves and at least *pari passu* with all other present and future unsecured and unsubordinated obligations of the Guarantor, save for such obligations as may be preferred by provisions of law that are both mandatory and of general application.

5. **Certain Covenants**

(a) ***Limitation on Liens***

So long as any Note remains outstanding, the Company will not, and the Company will not permit any of its Subsidiaries to, create, incur, issue or assume or guarantee any Relevant Indebtedness secured by any Security Interest on any property or assets owned by it or any Subsidiary without in any such case effectively providing that the Notes (together with, if the Company shall so determine, any other Indebtedness of the Company or the Company's

Subsidiaries then existing or thereafter created which is not subordinated to the Notes) will be secured at least equally and ratably with or prior to such secured Relevant Indebtedness unless, after giving effect thereto, the aggregate principal amount of all such secured Relevant Indebtedness would not exceed 10 per cent. of the Company's Consolidated Net Tangible Assets.

The foregoing restrictions will not apply to Relevant Indebtedness secured by:

(i) any Security Interest existing on the Issue Date of the Notes;

(ii) any Security Interest existing on any property or assets prior to the acquisition thereof by the Company or any of its Subsidiaries or arising after such acquisition pursuant to contractual commitments entered into prior to, and not in contemplation of, such acquisition;

(iii) any Security Interest securing Relevant Indebtedness incurred or assumed for the purpose of financing the purchase price of any property or assets or the cost of construction, improvement or repair of all or any part thereof, *provided that* such Security Interest attaches to such property or assets concurrently with or within 12 months after the acquisition thereof or the completion of construction, improvement or repair thereof;

(iv) any Security Interest existing on any property or assets of any Subsidiary prior to the time such Subsidiary becomes a Subsidiary of the Company or arising after such time pursuant to contractual commitments entered into prior to, and not in contemplation of, such Subsidiary becoming a Subsidiary of the Company; or

(v) any Security Interest arising out of the refinancing, extension, renewal or refunding of any Relevant Indebtedness secured by any Security Interest permitted by any of the foregoing clauses, to the extent of the amount of such Relevant Indebtedness; *provided that* such Relevant Indebtedness is not secured by any additional property or assets.

(b) ***Consolidation, Merger and Sale of Assets***

Neither the Issuer nor (while there are any Guaranteed Notes outstanding) the Guarantor (if applicable) will consolidate with or merge with or into any other Person in a transaction in which the Issuer or the Guarantor (if applicable) is not the surviving entity, or sell, transfer or lease or otherwise dispose of all or substantially all of its property or assets (computed on a consolidated basis) to any Person, unless:

(i) any Person formed by such consolidation or into which the Issuer or the Guarantor (if applicable) is merged or to whom the Issuer or the Guarantor (if applicable) has sold, transferred, leased or otherwise disposed of substantially all of its properties or assets (a "**Successor Issuer**" or a "**Successor Guarantor**", as applicable) is a corporation organized and validly existing under the laws of the Kingdom of Thailand, and expressly assumes by a supplemental agreement all obligations of the Issuer or the Guarantor (if applicable) under the Notes, the Indenture and the Paying and Transfer Agent and Registrar Appointment Letter;

(ii) immediately after giving effect to such transaction, no Default or Event of Default shall have occurred and be continuing;

(iii) if, as a result of the transaction, any property or asset of the Company or any of the Company's Subsidiaries would become subject to a Security Interest that would not be permitted under Condition 5(a) above, the Company or such successor Person takes such steps as shall be necessary to secure the Notes at least equally and ratably with the Relevant Indebtedness secured by such Security Interest or by such other Security Interest as shall have been approved by Holders of the Notes pursuant to the Indenture; and

(iv) the Issuer or the Guarantor (if applicable) delivers to the Trustee an Officer's Certificate and an Opinion of Counsel, in each case stating that such consolidation, merger or transfer and the relevant supplemental agreement complies with this provision and that all conditions precedent provided for in the Indenture and the Paying and Transfer Agent and Registrar Appointment Letter relating to such transaction have been complied with and that the relevant supplemental agreement is enforceable.

References to the Issuer and the Guarantor in these Conditions shall be deemed to include any Successor Issuer or Successor Guarantor.

(c) ***Reports and Notices of Default***

So long as any of the Notes remain outstanding, the Issuer shall file with the Trustee and, upon request, furnish to the Holders of the Notes, as soon as they are available but in any event not more than 10 calendar days after any financial statements of the Company are filed with the Stock Exchange of Thailand (the "**SET**") or any other recognized exchange on which the Company's common shares are at any time listed for trading, true and correct copies of any financial statements filed with such exchange if such financial statements are in the English language;

provided that, if such financial statements are not in the English language, or at any time the common stock of the Company ceases to be listed for trading on SET or any other recognized exchange, the Issuer shall file with the Trustee and, upon request, furnish to the Holders of the Notes:

(i) as soon as they are available, but in any event within 90 calendar days after the end of each fiscal year of the Company, copies of the Company's financial statements (on a consolidated basis) in respect of such fiscal year (including a statement of income, balance sheet and cash flow statement) audited by a member firm of independent accountants;

(ii) as soon as they are available, but in any event within 45 calendar days after the end of the first three fiscal quarters of the Company, copies of the Company's unaudited financial statements (on a consolidated basis) in respect of such fiscal quarter (including a statement of income, balance sheet and cash flow statement) prepared on a basis consistent with the audited financial statements of the Company, together with a certificate signed by the person then authorized to sign financial statements on behalf of the Company, to the effect that such financial statements are true in all material respects and present fairly the financial position of the Company, as at the end of, and the results of its operations for, the relevant fiscal quarter; and

provided further that, if reports other than financial statements filed with the SET or any other recognized exchange on which the Company's common shares are at any time listed for trading are not in the English language, the Issuer shall file with the Trustee and, upon request, furnish to the Holders of the Notes, as soon as practicable after the issue or publication of such reports, English copies of such reports.

The Trustee shall have no obligation whatsoever to determine whether or not such information, documents or reports have been filed with the exchange.

So long as any of the Notes remain outstanding, the Issuer and the Guarantor (if applicable) shall provide to the Trustee promptly after the Issuer or the Guarantor (if applicable) becomes aware of the occurrence of a Default, an Officer's Certificate setting forth the details of the Default, and the action which the Issuer or the Guarantor (if applicable) proposes to take with respect thereto.

6. **Fixed Rate Note Provisions**

(a) ***Application***

This Condition 6 is applicable to the Notes only if the Fixed Rate Note Provisions are specified in the relevant Pricing Supplement as being applicable.

(b) ***Accrual of interest***

The Notes bear interest from the Interest Commencement Date at the Rate of Interest payable in arrear on each Interest Payment Date up to and including the Maturity Date, subject as provided in Condition 11 (*Payments*) below. Each Note will cease to bear interest from the due date for final redemption unless, upon due presentation, payment of the Redemption Amount is improperly withheld or refused, in which case it will continue to bear interest in accordance with this Condition 6 (as well after as before judgment) until whichever is the earlier of (i) the day on which all sums due in respect of such Note up to that day are received by or on behalf of the relevant Noteholder and (ii) the day which is seven days after the Principal Paying Agent or the Trustee has notified the Noteholders of receipt of all sums due in respect of the Notes up to such seventh day (except to the extent that there is any subsequent default in payment).

(c) ***Fixed Coupon Amount***

Unless specified in the relevant Pricing Supplement, the amount of interest payable in respect of each Note for any Interest Period shall be the relevant Fixed Coupon Amount and, if the Notes are in more than one Specified Denomination, shall be the relevant Fixed Coupon Amount in respect of the relevant Specified Denomination.

(d) ***Calculation of interest amount***

The amount of interest payable in respect of each Note for any period for which a Fixed Coupon Amount is not specified shall be calculated by applying the Rate of Interest to the Calculation Amount, multiplying the product by the relevant Day Count Fraction, rounding the resulting figure to the nearest sub-unit of the Specified Currency (half a sub-unit being rounded upwards) and multiplying such rounded figure by a fraction equal to the Specified Denomination of such Note divided by the Calculation Amount. For this purpose a "**sub-unit**" means, in the case of any currency other than euro, the lowest amount of such currency that is available as legal tender in the country of such currency and, in the case of euro, means one cent.

(e) ***Step-up upon a Change of Control Triggering Event***

The Rate of Interest payable on the Notes will be subject to an increase of 1.25 per cent. upon the occurrence of a Change of Control Triggering Event (the Rate of Interest subject to such increase, the "**Reset Interest Rate**"). The Reset Interest Rate will have effect from and including the first interest payment date following the date of the occurrence of such Change of Control Triggering Event and shall apply to all subsequent interest payment dates regardless of any future increase in the ratings of the Notes.

7. **Floating Rate Note and Index-Linked Interest Note Provisions**

(a) ***Application***

This Condition 7 is applicable to the Notes only if the Floating Rate Note Provisions or the Index- Linked Interest Note Provisions are specified in the relevant Pricing Supplement as being applicable.

(b) ***Accrual of interest***

The Notes bear interest from the Interest Commencement Date at the Rate of Interest payable in arrear on each Interest Payment Date, subject as provided in Condition 11 (*Payments*) below. Each Note will cease to bear interest from the due date for final redemption unless, upon due presentation, payment of the Redemption Amount is improperly withheld or refused, in which case it will continue to bear interest in accordance with this Condition (as well after as before judgment) until whichever is the earlier of (i) the day on which all sums due in respect of such Note up to that day are received by or on behalf of the relevant Noteholder and (ii) the day which is seven days after the Principal Paying Agent or the Trustee has notified the Noteholders of receipt of all sums due in respect of the Notes up to such seventh day (except to the extent that there is any subsequent default in payment).

(c) ***Screen Rate Determination***

If Screen Rate Determination is specified in the relevant Pricing Supplement as the manner in which the Rate(s) of Interest is/are to be determined, the Rate of Interest applicable to the Notes for each Interest Period will be determined by the Calculation Agent on the following basis:

(i) if the Reference Rate is a composite quotation or customarily supplied by one entity, the Calculation Agent will determine the Reference Rate which appears on the Relevant Screen Page as of the Relevant Time on the relevant Interest Determination Date;

(ii) if Linear Interpolation is specified as applicable in respect of an Interest Period in the applicable Pricing Supplement, the Rate of Interest for such Interest Period shall be calculated by the Calculation Agent by straight-line linear interpolation by reference to two rates which appear on the Relevant Screen Page as of the Relevant Time on the relevant Interest Determination Date, where:

(A) one rate shall be determined as if the Relevant Period were the period of time for which rates are available next shorter than the length of the relevant Interest Period; and

(B) the other rate shall be determined as if the Relevant Period were the period of time for which rates are available next longer than the length of the relevant Interest Period;

provided, *however*, that if no rate is available for a period of time next shorter or, as the case may be, next longer than the length of the relevant Interest Period, then the Calculation Agent shall, upon seeking advice from the Reference Banks (at the cost of the Issuer (failing which, the Guarantor (if applicable))) or taking instructions from the Issuer, determine such rate at such time and by reference to such sources as it determines appropriate;

(iii) in any other case, the Calculation Agent will determine the arithmetic mean of the Reference Rates which appear on the Relevant Screen Page as of the Relevant Time on the relevant Interest Determination Date;

(iv) if, in the case of (i) above, such rate does not appear on that page or, in the case of (ii) above, fewer than two such rates appear on that page or if, in either case, the Relevant Screen Page is unavailable, the Issuer (or an agent appointed by it) will:

(A) request the principal Relevant Financial Centre office of each of the Reference Banks to provide a quotation of the Reference Rate at approximately the Relevant Time on the Interest Determination Date to prime banks in the Relevant Financial Centre interbank market in an amount that is representative for a single transaction in that market at that time; and

(B) the Issuer (or an agent appointed by it) shall notify the Calculation Agent of the same. The Calculation Agent will determine the arithmetic mean of such quotations;

(v) if fewer than two such quotations are provided as requested in accordance with (iv) above, the Calculation Agent will determine the arithmetic mean of the rates (being the nearest to the Reference Rate, as determined by the Calculation Agent) quoted by major banks in the Principal Financial Centre of the Specified Currency, selected by the Issuer, at approximately 11.00 a.m. (local time in the Principal Financial Centre of the Specified Currency) on the first day of the relevant Interest Period for loans in the Specified Currency for a period equal to the relevant Interest Period and in an amount that is representative for a single transaction in that market at that time, and the Rate of Interest for such Interest Period shall be the sum of the Margin and the rate or (as the case may be) the arithmetic mean so determined; provided, however, that if the Calculation Agent is unable to determine a rate or (as the case may be) an arithmetic mean in accordance with the above provisions in relation to any Interest Period, the Rate of Interest applicable to the Notes during such Interest Period will be the sum of

the Margin and the rate or (as the case may be) the arithmetic mean last determined in relation to the Notes in respect of a preceding Interest Period; and

(vi) notwithstanding the foregoing, if the Reference Rate from time to time in respect of Floating Rate Notes is specified hereon as CNH HIBOR:

(A) the Rate of Interest for each Interest 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 on the Relevant Screen Page as at 11.15 a.m. (Hong Kong time) or if, at or around that time it is notified that the fixing will be published at 2.30 p.m. (Hong Kong time), then 2.30 p.m. (Hong Kong time) on the Interest Determination Date in question as determined by the Calculation Agent;

(B) if the Relevant Screen Page is not available or, if sub-paragraph (vi)(A)(1) above applies and no such offered quotation appears on the Relevant Screen Page, or, if subparagraph (vi)(A)(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 Issuer (or an agent appointed by it) shall request the principal Hong Kong office of each of the Reference Banks to provide it with its offered quotation (expressed as a percentage rate per annum) for the Reference Rate at approximately 11.15 a.m. (Hong Kong 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 Period shall be the arithmetic mean of such offered quotations as determined by the Calculation Agent. If all four Reference Banks provide the Calculation Agent with such offered quotations, 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;

(C) if subparagraph (vi)(B) 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) on the request of the Issuer (or an agent appointed by it) and as communicated to the Calculation Agent by the Reference Banks or any two or more of them, at which such banks were offered at approximately 11.15 a.m. (Hong Kong time) on the relevant Interest Determination Date, deposits in CNH for a period equal to that which would have been used for the Reference Rate by leading banks in the Hong Kong inter-bank market. If fewer than two of the Reference Banks provide the Calculation Agent with such offered rates, the Rate of Interest shall be (i) the offered rate for deposits in CNH for a period equal to that which would have been used for the Reference Rate by a bank, or (ii) the arithmetic mean of the offered rates for deposits in CNH for a period equal to that which would have been used for the Reference Rate by two or more banks, in each case as informed to the Calculation Agent by such bank or banks (which shall be such bank or banks being in the opinion of the Issuer suitable for such purpose) as being quoted by each such bank at approximately 11.15 a.m. (Hong Kong time) on the relevant Interest Determination Date to leading banks in the Hong Kong inter-bank market and notified in writing to the Calculation Agent, *provided that*, if the Rate of Interest cannot be determined in accordance with the foregoing provisions of this paragraph, 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 Period from that which applied to the last preceding Interest Period, the Margin or Maximum or Minimum Rate of Interest relating to the relevant Interest Period, in place of the Margin or Maximum or Minimum Rate of Interest relating to that last preceding Interest Period); and

(D) in no event shall the Rate of Interest be less than zero per cent. per annum.

(d) ***ISDA Determination***

If ISDA Determination is specified in the relevant Pricing Supplement as the manner in which the Rate(s) of Interest is/are to be determined, the Rate of Interest applicable to the Notes for each Interest Period will be the sum of the Margin and the relevant ISDA Rate where "**ISDA Rate**" in relation to any Interest Period means a rate equal to the Floating Rate (as defined in the ISDA Definitions) that would be determined by the Calculation Agent under an interest rate swap transaction if the Calculation Agent were acting as Calculation Agent for that interest rate swap transaction under the terms of an agreement incorporating the ISDA Definitions and under which:

(i) the Floating Rate Option (as defined in the ISDA Definitions) is as specified in the relevant Pricing Supplement;

(ii) the Designated Maturity (as defined in the ISDA Definitions) is a period specified in the relevant Pricing Supplement;

(iii) the relevant Reset Date (as defined in the ISDA Definitions) is either (A) if the relevant Floating Rate Option is based on (x) the London inter-bank offered rate (LIBOR), (y) the Eurozone inter-bank offered rate (EURIBOR) or (z) the Hong Kong inter-bank offered rate (HIBOR) for a currency, the first day of that Interest Period or (B) in any other case, as specified in the relevant Pricing Supplement; and

(iv) if Linear Interpolation is specified as applicable in respect of an Interest Period in the applicable Pricing Supplement, the Rate of Interest for such Interest Period shall be calculated by the Calculation Agent by straight-line linear interpolation by reference to two rates based on the relevant Floating Rate Option, where:

(A) one rate shall be determined as if the Designated Maturity were the period of time for which rates are available next shorter than the length of the relevant Interest Period; and

(B) the other rate shall be determined as if the Designated Maturity were the period of time for which rates are available next longer than the length of the relevant Interest Period,

provided, *however*, that if there is no rate available for a period of time next shorter than the length of the relevant Interest Period or, as the case may be, next longer than the length of the relevant Interest Period, then the Calculation Agent shall determine such rate at such time and by reference to such sources as the Issuer (or an agent appointed by it) determines appropriate.

(e) ***Index-Linked Interest***

If the Index-Linked Interest Note Provisions are specified in the relevant Pricing Supplement as being applicable, the Rate(s) of Interest applicable to the Notes for each Interest Period will be determined in the manner specified in the relevant Pricing Supplement.

(f) ***Maximum or Minimum Rate of Interest***

If any Maximum Rate of Interest or Minimum Rate of Interest is specified in the relevant Pricing Supplement, then the Rate of Interest shall in no event be greater than the maximum or be less than the minimum so specified. If the relevant Pricing Supplement does not specify any Minimum Rate of Interest and the Rate of Interest as determined by the Calculation Agent

according to this Condition is a negative value, the Rate of Interest shall be zero per cent. per annum.

(g) ***Step-up upon a Change of Control Triggering Event***

The Rate of Interest payable on the Notes will be subject to an increase of 1.25 per cent. upon the occurrence of a Change of Control Triggering Event (the Rate of Interest subject to such increase, the Reset Interest Rate). The Reset Interest Rate will have effect from and including the first interest payment date following the date of the occurrence of such Change of Control Triggering Event and shall apply to all subsequent interest payment dates regardless of any future increase in the ratings of the Notes.

(h) ***Calculation of Interest Amount***

The Calculation Agent will, as soon as practicable after the time at which the Rate of Interest is to be determined in relation to each Interest Period, calculate the Interest Amount payable in respect of each Note for such Interest Period. The Interest Amount will be calculated by applying the Rate of Interest for such Interest Period to the Calculation Amount, multiplying the product by the relevant Day Count Fraction, rounding the resulting figure to the nearest sub-unit of the Specified Currency (half a sub-unit being rounded upwards) and multiplying such rounded figure by a fraction equal to the Specified Denomination of the relevant Note divided by the Calculation Amount. For this purpose a "**sub-unit**" means, in the case of any currency other than euro, the lowest amount of such currency that is available as legal tender in the country of such currency and, in the case of euro, means one cent.

(i) ***Calculation of other amounts***

If the relevant Pricing Supplement specifies that any other amount is to be calculated by the Calculation Agent, the Calculation Agent will, as soon as practicable after the time or times at which any such amount is to be determined, calculate the relevant amount. The relevant amount will be calculated by the Calculation Agent in the manner specified in the relevant Pricing Supplement.

(j) ***Publication***

The Calculation Agent will cause each Rate of Interest and Interest Amount determined by it, together with the relevant Interest Payment Date, and any other amount(s) required to be determined by it together with any relevant payment date(s) to be notified to the Issuer, the Guarantor (if applicable), the Paying Agents, and the Trustee as soon as practicable after such determination but (in the case of each Rate of Interest, Interest Amount and Interest Payment Date) in any event not later than the first day of the relevant Interest Period. Notice thereof shall also promptly be given by the Issuer to the Noteholders and each competent authority, stock exchange and/or quotation system (if any) by which the Notes have then been admitted to listing, trading and/or quotation. The Calculation Agent will be entitled to recalculate any Interest Amount (on the basis of the foregoing provisions) without notice in the event of an extension or shortening of the relevant Interest Period. If the Calculation Amount is less than the minimum Specified Denomination the Calculation Agent shall not be obliged to publish each Interest Amount but instead may publish only the Calculation Amount and the Interest Amount in respect of a Note having the minimum Specified Denomination.

(k) ***Notifications etc***

All notifications, opinions, determinations, certificates, calculations, quotations and decisions given, expressed, made or obtained for the purposes of this Condition by the Calculation Agent will (in the absence of manifest error) be binding on the Issuer, the Guarantor (if applicable), the Trustee, the Paying Agents, the Noteholders and (subject as aforesaid) no liability to any such Person will attach to the Calculation Agent in connection with the exercise or non-exercise by it of its powers, duties and discretions for such purposes.

(l) ***Benchmark Discontinuation***

If a Benchmark Event occurs in relation to the Reference Rate when the Rate of Interest (or any component part thereof) for any Interest Period remains to be determined by reference to such Reference Rate, then the Issuer shall use its reasonable endeavours to appoint an Independent Adviser, as soon as reasonably practicable, to determine a Successor Rate, failing which an Alternative Rate (in accordance with Condition 7(l)) and, in either case, an Adjustment Spread, if any (in accordance with Condition 7(l)(iii)) and any Benchmark Amendments (in accordance with Condition 7(l)(iv)).

In the absence of bad faith or fraud, the Independent Adviser shall have no liability whatsoever to the Issuer, the Guarantor, the Trustee, Agents or the Noteholders for any determination made by it pursuant to this Condition 7(l) and the Trustee and Agents will not be liable for any loss, liability, cost, charge or expense which may arise as a result thereof.

(i) If (A) the Issuer is unable to appoint an Independent Adviser or (B) the Independent Adviser appointed by it fails to determine a Successor Rate or, failing which, an Alternative Rate in accordance with this Condition 7(l) prior to the relevant Interest Determination Date, the Reference Rate applicable to the immediate following Interest Period shall be the Reference Rate applicable as at the last preceding Interest Determination Date. If there has not been a first Interest Payment Date, the Reference Rate shall be the Reference Rate applicable to the first Interest Period. For the avoidance of doubt, any adjustment pursuant to this final paragraph of Condition 7(l) shall apply to the immediately following Interest Period only. Any subsequent Interest Period may be subject to the subsequent operation of this Condition 7(l).

(ii) If the Independent Adviser determines in its discretion that:

(A) there is a Successor Rate, then such Successor Rate shall (subject to adjustment as provided in Condition 7(l)(iii)) subsequently be used in place of the Reference Rate to determine the Rate of Interest for the immediately following Interest Period and all following Interest Periods, subject to the subsequent operation of this Condition 7(l); or

(B) there is no Successor Rate but that there is an Alternative Rate, then such Alternative Rate shall (subject to adjustment as provided in Condition 7(i)(cc)) subsequently be used in place of the Reference Rate to determine the Rate of Interest for the immediately following Interest Period and all following Interest Periods, subject to the subsequent operation of this Condition 7(l).

(iii) If the Independent Adviser determines in its discretion (A) that an Adjustment Spread is required to be applied to the Successor Rate or the Alternative Rate (as the case may be) and (B) the quantum of, or a formula or methodology for determining, such Adjustment Spread, then such Adjustment Spread shall apply to the Successor Rate or the Alternative Rate (as the case may be).

(iv) If any relevant Successor Rate, Alternative Rate or Adjustment Spread is determined in accordance with this Condition 7(l) and the Independent Adviser determines in its discretion (i) that amendments to these Conditions are necessary to ensure the proper operation of such Successor Rate, Alternative Rate and/or Adjustment Spread (such amendments, the "**Benchmark Amendments**") and (ii) the terms of the Benchmark Amendments, then the Issuer shall, subject to giving notice thereof in accordance with Condition 7(l)(v), without any requirement for the consent or approval of relevant Noteholders, vary these Conditions to give effect to such Benchmark Amendments with effect from the date specified in such notice (and for the avoidance of doubt, the Trustee shall, at the direction and expense of the Issuer, consent to and effect such consequential amendments to the Indenture and these Conditions as may be required in order to give effect to this Condition 7(l)).

(v) Any Successor Rate, Alternative Rate, Adjustment Spread and the specific terms of any Benchmark Amendments, determined under this Condition 7(l) will be notified promptly by the Issuer to the Trustee, the Calculation Agent, the Paying Agents and, in accordance with Condition 22 (*Notices*), the Noteholders. Such notice shall be irrevocable and shall specify the effective date of the Benchmark Amendments, if any.

(vi) No later than notifying the Trustee of the same, the Issuer shall deliver to the Trustee a certificate signed by two authorised signatories of the Issuer:

(A) confirming (x) that a Benchmark Event has occurred, (y) the relevant Successor Rate, or, as the case may be, the relevant Alternative Rate and, (z) where applicable, any relevant Adjustment Spread and/or the specific terms of any relevant Benchmark Amendments, in each case as determined in accordance with the provisions of this Condition 7(l); and

(B) certifying that the relevant Benchmark Amendments are necessary to ensure the proper operation of such relevant Successor Rate, Alternative Rate and/or Adjustment Spread.

(vii) The Successor Rate or Alternative Rate and the Adjustment Spread (if any) and the Benchmark Amendments (if any) specified in such certificate will (in the absence of manifest error or bad faith in the determination of such Successor Rate or Alternative Rate and such Adjustment Spread (if any) and such Benchmark Amendments (if any)) be binding on the Issuer, the Trustee and Principal Paying Agent, the Calculation Agent, the other Paying Agents and the Noteholders.

As used in this Condition 7(l):

"**Adjustment Spread**" means either a spread (which may be positive or negative), or the formula or methodology for calculating a spread, in either case, which the Independent Adviser determines is required to be applied to the relevant Successor Rate or the relevant Alternative Rate (as the case may be) to reduce or eliminate, to the extent reasonably practicable in the circumstances, any economic prejudice or benefit (as the case may be) to Noteholders as a result of the replacement of the Reference Rate with the Successor Rate or the Alternative Rate (as the case may be) and is the spread, formula or methodology which:

(i) in the case of a Successor Rate, is formally recommended, or formally provided as an option for parties to adopt, in relation to the replacement of the Reference Rate with the Successor Rate by any Relevant Nominating Body; or

(ii) (if no such recommendation has been made, or in the case of an Alternative Rate), the Independent Adviser, determines is customarily applied to the relevant Successor Rate or Alternative Rate (as the case may be) in international debt capital markets transactions to produce an industry-accepted replacement rate for the Reference Rate; or

(iii) (if no such recommendation has been made, or in the case of an Alternative Rate) the Independent Adviser determines, is recognised or acknowledged as being the industry standard for over-the-counter derivative transactions which reference the Reference Rate, where such rate has been replaced by the Successor Rate or the Alternative Rate (as the case may be); or

(iv) (if the Independent Adviser determines that no such industry standard is recognised or acknowledged) the Independent Adviser determines to be appropriate.

"**Alternative Rate**" means an alternative benchmark or screen rate which the Independent Adviser determines in accordance with Condition 7(l)(ii) is customary in market usage in the international debt capital markets for the purposes of determining floating rates of interest (or the relevant component part thereof) in the Specified Currency.

"**Benchmark Event**" means:

(i) the relevant Reference Rate has ceased to be published on the Relevant Screen Page as a result of such benchmark ceasing to be calculated or administered; or

(ii) a public statement by the administrator of the relevant Reference Rate that it has ceased, or will, by a specified date within the following six months, cease, publishing such Reference Rate permanently or indefinitely (in circumstances where no successor administrator has been appointed that will continue publication of such Reference Rate); or

(iii) a public statement by the supervisor of the administrator of the relevant Reference Rate that such Reference Rate has been or will, by a specified date within the following six months, be permanently or indefinitely discontinued; or

(iv) a public statement by the supervisor of the administrator of the relevant Reference Rate that means that such Reference Rate will, by a specified date within the following six months, be prohibited from being used or that its use will be subject to restrictions or adverse consequences, either generally or in respect of the Notes; or

(v) a public statement by the supervisor of the administrator of the relevant Reference Rate (as applicable) that, in the view of such supervisor, (i) such Reference Rate is no longer representative of an underlying market or (ii) the methodology to calculate such Reference Rate has materially changed; or

(vi) it has or will, by a specified date within the following six months, become unlawful for the Calculation Agent to calculate any payments due to be made to any Noteholder using the relevant Reference Rate (as applicable) (including, without limitation, under the Benchmarks Regulation (EU) 2016/1011, if applicable).

"**Benchmark Amendments**" has the meaning given to it in Condition 7(l)(i).

"**Independent Adviser**" means an independent financial institution of international repute or other independent financial adviser experienced in the international capital markets, in each case appointed by the Issuer at its own expense under Condition 7(l)(i).

"**Relevant Nominating Body**" means, in respect of a benchmark or screen rate (as applicable):

(i) the central bank for the currency to which the benchmark or screen rate (as applicable) relates, or any central bank or other supervisory authority which is responsible for supervising the administrator of the benchmark or screen rate (as applicable); or

(ii) any working group or committee sponsored by, chaired or co-chaired by or constituted at the request of (a) the central bank for the currency to which the benchmark or screen rate (as applicable) relates, (b) any central bank or other supervisory authority which is responsible for supervising the administrator of the benchmark or screen rate (as applicable), (c) a group of the aforementioned central banks or other supervisory authorities or (d) the Financial Stability Board or any part thereof.

"**Successor Rate**" means a successor to or replacement of the Reference Rate which is formally recommended by any Relevant Nominating Body.

8. Zero Coupon Note Provisions

(a) *Application*

This Condition 8 is applicable to the Notes only if the Zero Coupon Note Provisions are specified in the relevant Pricing Supplement as being applicable.

(b) ***Late payment on Zero Coupon Notes***

If the Redemption Amount payable in respect of any Zero Coupon Note is improperly withheld or refused, the Redemption Amount shall thereafter be an amount equal to the sum of:

(i) the Reference Price; and

(ii) the product of the Accrual Yield (compounded annually) being applied to the Reference Price on the basis of the relevant Day Count Fraction from (and including) the Issue Date to (but excluding) whichever is the earlier of (A) the day on which all sums due in respect of such Note up to that day are received by or on behalf of the relevant Noteholder and (B) the day which is seven days after the Principal Paying Agent or the Trustee has notified the Noteholders of receipt of all sums due in respect of the Notes up to such seventh day (except to the extent that there is any subsequent default in payment).

9. **Dual Currency Note Provisions**

(a) ***Application***

This Condition 9 is applicable to the Notes only if the Dual Currency Note Provisions are specified in the relevant Pricing Supplement as being applicable.

(b) ***Rate of Interest***

If the rate or amount of interest falls to be determined by reference to an exchange rate, the rate or amount of interest payable shall be determined in the manner specified in the relevant Pricing Supplement.

10. **Redemption and Purchase**

(a) ***Scheduled redemption***

Unless previously redeemed, or purchased and cancelled, each Note will be redeemed at its Final Redemption Amount on the Maturity Date, subject as provided in Condition 11 (*Payments*).

(b) ***Optional Tax Redemption***

The Notes may be redeemed at the option of the Issuer in whole, but not in part, at the relevant Early Redemption Amount (Tax), upon not less than 30 nor more than 60 days' written notice:

(i) at any time (if neither the Floating Rate Note Provisions nor the Index-Linked Interest Note Provisions are specified in the relevant Pricing Supplement as being applicable); or

(ii) on any Interest Payment Date (if the Floating Rate Note Provisions or the Index-Linked Interest Note Provisions are specified in the relevant Pricing Supplement as being applicable),

if, as a result of any change in, or amendment to, the tax laws of a Taxing Jurisdiction (as defined in Condition 12 (*Additional Amounts*)) or any regulations or ruling promulgated thereunder or any change in the official interpretation or official application of such laws, regulations or rulings, which change or amendment becomes effective on or after the Issue Date of the Notes (or in the case of a jurisdiction that becomes a Taxing Jurisdiction at a later date, after such date):

(A) the Issuer is, or would be, obligated on the next succeeding due date for a payment with respect to the Notes to pay Additional Amounts (as defined in Condition 12 (*Additional Amounts*)) and such obligation cannot be avoided by the use of reasonable measures available to the Issuer; or

(B) the Guarantor (if applicable) is, or would be (if a demand was made under the Guarantee), obligated on the next succeeding due date for a payment with respect to the Notes to pay Additional Amounts (as defined in Condition 12 (*Additional Amounts*)) under the Guarantee and such obligation cannot be avoided by the use of reasonable measures available to the Guarantor (if applicable);

in each case *provided that* changing the jurisdiction of the Issuer or the Guarantor (as applicable) is not a reasonable measure, but changing the jurisdiction of the Paying Agent may be a reasonable measure, for purposes of this Condition; *provided further that* where any such requirement to pay Additional Amounts is due to taxes of the Kingdom of Thailand (or any political subdivision or taxing authority thereof or therein), the Issuer shall be permitted to redeem the Notes in accordance with the provisions above only if the rate of withholding or deduction in respect of which Additional Amounts are required is in excess of 15 per cent; and *provided further that* (i) no such written notice of redemption may be given earlier than 60 days prior to the earliest date on which the Issuer or the Guarantor (as applicable) would be obligated to pay such Additional Amounts if a payment in respect of the Notes were then due or (as the case may be) a demand under the Guarantee were then made, and (ii) at the time such written notice of redemption is given, such obligation to pay such Additional Amounts remains in effect.

Prior to any redemption of any Notes, the Issuer will deliver to the Trustee, to be made available for inspection by Noteholders, (a) an Opinion of Counsel of recognized standing with respect to tax matters in the relevant Taxing Jurisdiction that the requirement to pay such Additional Amounts results from such change or amendment in law occurring on or after the Issue Date (or such later date specified above) of the Notes and (b) an Officer's Certificate stating that the Issuer is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to the right of redemption have occurred including that the Issuer's or the Guarantor's (if applicable) obligation to pay Additional Amounts giving rise to the right of redemption cannot be avoided by the use of reasonable measures available to the Issuer or the Guarantor (if applicable).

The Trustee shall be entitled without further enquiry to accept and rely upon such Opinion of Counsel and Officer's Certificate as sufficient evidence of the satisfaction of the circumstances set out above, in which event they shall be conclusive and binding on the Noteholders.

(c) ***Optional Redemption***

If the Call Option is specified in the relevant Pricing Supplement as being applicable, the Notes may be redeemed at the option of the Issuer in whole or, if so specified in the relevant Pricing Supplement, in part on any Optional Redemption Date (Call) at the relevant Optional Redemption Amount (Call) on the Issuer's giving not less than 30 nor more than 60 days' notice to the Noteholders (which notice shall be irrevocable and shall oblige the Issuer to redeem the Notes or, as the case may be, the Notes specified in such notice on the relevant Optional Redemption Date (Call) at the Optional Redemption Amount (Call) *plus* accrued and unpaid interest (if any) to such date).

(d) ***Partial redemption***

If the Notes are to be redeemed in part only on any date in accordance with Condition 10(c) (*Optional Redemption*) above, each Note shall be redeemed in part in the proportion which the aggregate principal amount of the outstanding Notes to be redeemed on the relevant Optional Redemption Date (Call) bears to the aggregate principal amount of outstanding Notes on such date. If any Maximum Redemption Amount or Minimum Redemption Amount is specified in the relevant Pricing Supplement, then the Optional Redemption Amount (Call) shall in no event be greater than the maximum or be less than the minimum so specified.

(e) ***No other redemption***

The Issuer shall not be entitled to redeem the Notes otherwise than as provided in Conditions 10(a) to 10(d) above.

(f) ***Early redemption of Zero Coupon Notes***

Unless otherwise specified in the relevant Pricing Supplement, the Redemption Amount payable on redemption of a Zero Coupon Note at any time before the Maturity Date shall be an amount equal to the sum of:

(i) the Reference Price; and

(ii) the product of the Accrual Yield (compounded annually) being applied to the Reference Price from (and including) the Issue Date to (but excluding) the date fixed for redemption or (as the case may be) the date upon which the Note becomes due and payable.

Where such calculation is to be made for a period which is not a whole number of years, the calculation in respect of the period of less than a full year shall be made on the basis of such Day Count Fraction as may be specified in the Pricing Supplement for the purposes of this Condition 10(f) or, if none is so specified, a Day Count Fraction of 30E/360 (ISDA).

(g) ***Repurchase***

The Company and any of its Subsidiaries (including Treasury Center) may, in accordance with all applicable laws and regulations, at any time purchase Notes in the open market or otherwise at any price. Any Notes the Company or any of its Subsidiaries (including Treasury Center) repurchase may be held, cancelled or sold.

(h) ***Calculations***

Neither the Trustee nor any of the Agents (other than the Calculation Agent and solely in respect of its functions as an appointed Calculation Agent of the Issuer and the Guarantor (if applicable)) shall be responsible for calculating or verifying the calculations of any amount payable under any notice of redemption and shall not be liable to the Noteholders or any other person for not doing so.

11. **Payments**

(a) ***Principal***

Payments of principal and premium shall be made by transfer to an account denominated in that currency (or, if that currency is euro, any other account to which euro may be credited or transferred) and maintained by the payee with, a bank in the Principal Financial Centre of that currency, and (ii) in the case of Renminbi, by transfer to an account denominated in that currency and maintained by the payee with a bank in the Principal Financial Centre of that currency, and (in the case of redemption) upon surrender (or, in the case of part payment only, endorsement) of the relevant Note Certificates at the Specified Office of any Paying Agent.

(b) ***Interest***

Payments of interest shall be made by transfer to an account denominated in that currency (or, if that currency is euro, any other account to which euro may be credited or transferred) and maintained by the payee with, a bank in the Principal Financial Centre of that currency, and (in the case of interest payable on redemption) upon surrender (or, in the case of part payment only, endorsement) of the relevant Note Certificates at the Specified Office of any Paying Agent.

(c) ***Payments subject to fiscal laws***

All payments in respect of the Notes are subject in all cases to (i) any applicable fiscal or other laws and regulations in the place of payment, but (except as described in (ii) below) subject to

Condition 12 (*Additional Amounts*), and (ii) any withholding or deduction required pursuant to an agreement described in Section 1471(b) of the Code or otherwise imposed pursuant to Sections 1471 through 1474 of the Code, as of the issue date (or any amended or successor version of such sections) any regulations or agreements thereunder, any official interpretations thereof, or any similar law implementing any intergovernmental agreement between a non-U.S. jurisdiction and the United States with respect to the foregoing. No commissions or expenses shall be charged to the Noteholders in respect of such payments.

(d) ***Payments on business days***

Where payment is to be made by transfer to an account, payment instructions (for value the due date, or, if the due date is not Payment Business Day, for value the next succeeding Payment Business Day) will be initiated (i) (in the case of payments of principal, premium and interest payable on redemption) on the later of the due date for payment and the day on which the relevant Note Certificate is surrendered (or, in the case of part payment only, endorsed) at the Specified Office of a Paying Agent and (ii) (in the case of payments of interest payable other than on redemption) on the due date for payment. A Holder of a Note shall not be entitled to any interest or other payment in respect of any delay in payment resulting from the due date for a payment not being a Payment Business Day.

(e) ***Partial payments***

If a Paying Agent makes a partial payment in respect of any Note, the Issuer shall procure that the amount and date of such payment are noted on the Register and, in the case of partial payment upon presentation of a Note Certificate, that a statement indicating the amount and the date of such payment is endorsed on the relevant Note Certificate.

(f) ***Record date***

Each payment in respect of a Note will be made to the person shown as the Holder in the Register at the opening of business in the place of the Registrar's Specified Office on the fifth (in the case of Renminbi) and fifteenth (in the case of a currency other than Renminbi) day before the due date for such payment (the "**Record Date**").

*So long as the Global Certificate is held on behalf of Euroclear Bank SA/NV ("**Euroclear**") and/or Clearstream Banking, S.A. ("**Clearstream**"), The Depository Trust Company ("**DTC**") or any other clearing system, each payment in respect of the Global Certificate will be made to the person shown as the holder in the Register at the close of business of the relevant clearing system on the Clearing System Business Day before the due date for such payments, where "Clearing System Business Day" means a weekday (Monday to Friday, inclusive) except 25 December and 1 January.*

12. **Additional Amounts**

All payments, including, without limitation, payments of principal, redemption price, purchase price, premium and interest in respect of the Notes or under the Guarantee (if applicable) by or on behalf of the Issuer or (with respect to the Guaranteed Notes) the Guarantor shall be made free and clear of, and without withholding or deduction for present or future taxes, duties, assessments, fees or other governmental charges imposed by the Kingdom of Thailand or any other jurisdiction in which the Issuer or the Guarantor (if applicable) is tax resident (or of any political subdivision or taxing authority thereof or therein) or any jurisdiction through which the Issuer, the Guarantor (if applicable) or its Agent makes payment (each such jurisdiction a "**Taxing Jurisdiction**"), unless such withholding or deduction is required by law or by regulation or any governmental policy having the force of law. In the event that any such withholding or deduction is so required, the Issuer (failing which, with respect to Guaranteed Notes, the Guarantor) will pay additional amounts ("**Additional Amounts**") as necessary to ensure that the Holder will receive the same amount as would have been received without any such withholding or deduction.

However, no Additional Amounts will be payable by the Issuer, the Guarantor (if applicable) or its Agent to the extent that such Additional Amounts are required to be paid because:

(i) a Holder or beneficial owner (or, if the holder or beneficial owner is a trust, partnership, limited liability company or a corporation, its beneficiaries, partners, members or shareholders) was or is connected with a Taxing Jurisdiction (including, without limitation, being a citizen or resident or national of, or carrying on a business or maintaining a permanent establishment in, or being physically present in, a Taxing Jurisdiction) other than by merely owning the Note, enforcing the Note or the Guarantee or receiving income or payments on the Note or the Guarantee;

(ii) a Holder or beneficial owner failed, after a timely request by the Issuer, the Guarantor (if applicable) or a relevant taxing authority, to (a) provide information concerning its nationality, residence or identity or connection with a Taxing Jurisdiction or (b) make any declaration or other similar claim or satisfy any information or reporting requirement which is required or imposed by a statute, treaty, regulation or administrative practice of the relevant Taxing Jurisdiction as a precondition to exemption from, or reduction in the rate of deduction or withholding of, taxes, in each case to the extent legally able to do so;

(iii) a Holder failed to present a Note or the Guarantee for payment within 30 days of when the payment is due (when presentation is required), except that, the relevant payor will pay Additional Amounts to the extent the holder would have been entitled to such amounts had the holder presented the Note or the Guarantee for payment on the last day of the 30-day period;

(iv) a Holder would have been able to avoid the withholding or deduction by the presentation (where presentation is required) of the relevant Note or the Guarantee to, or otherwise accepting payment from, another paying agent, but failed to do so;

(v) any withholding or deduction is required pursuant to an agreement described in Section 1471(b) of the Code, or otherwise imposed pursuant to Sections 1471 through 1474 of the Code, as of the issue date (or any amended or successor version of such sections), any regulations or agreements thereunder, any official interpretations thereof, or any similar law implementing an intergovernmental agreement between a non-U.S. jurisdiction and the United States with respect to the foregoing; or

(vi) any withholding or deduction that is required as a result of any combination of the above.

Neither the Issuer, the Guarantor (if applicable) nor any of their agents will pay any Additional Amounts for taxes on the Notes or the Guarantee except for taxes payable through deduction or withholding from payments of principal, premium (if any) or interest on the Notes. Examples of the types of taxes for which no Additional Amounts will be paid include the following: estate or inheritance taxes, gift taxes, sales or transfer taxes, personal property or related taxes, assessments or other governmental charges. The Issuer (failing which, the Guarantor (if applicable)) will pay stamp or other similar taxes that may be imposed by any Taxing Jurisdiction as a result of entering into, registering or enforcing the Indenture or may be payable in connection with the issuance of the Notes or any other document or instrument referred to therein, or the receipt of any payments with respect thereto (limited, solely in the case of taxes attributable to the receipt of any payments with respect thereto, to any such taxes which are not excluded under clauses (i) through (vi) above or any combination thereof).

In addition, with respect to any payment of the principal of, or premium (if any) or interest on, a Note, if the Holder of a Note is a fiduciary, partnership, limited liability company or person other than the sole beneficial owner of any payment, neither the Issuer nor the Guarantor (if applicable) shall be required to pay any Additional Amounts with respect to taxes imposed by a Taxing Jurisdiction to the extent that such payment would be required to be included in the income under the laws of a Taxing Jurisdiction 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 or member, or beneficial owner been the Holder of such Note.

If the Issuer or the Guarantor (if applicable), as the case may be, becomes aware that it will be obligated to pay Additional Amounts with respect to any payment under or with respect to the notes or the Guarantee, the Issuer or the Guarantor (if applicable), as the case may be, will deliver to the trustee on a date at least 30 days prior to the date of payment (unless the obligation to pay Additional Amounts arises after the 30th day prior to that payment date, in which case the Issuer or the Guarantor (if applicable) shall notify the trustee promptly thereafter) an officers' certificate stating the fact that Additional Amounts will be payable and the amount estimated to be so payable. The officers' certificate must also set forth any other information reasonably necessary to enable the paying agent to pay Additional Amounts on the relevant payment date. The trustee shall be entitled to rely solely on such officers' certificate as conclusive proof that such payments are necessary. The Issuer or the Guarantor (if applicable) will provide the trustee with documentation reasonably satisfactory to the trustee evidencing the payment of Additional Amounts.

The Issuer or the Guarantor (if applicable) will make all withholdings and deductions required by law and will remit the full amount deducted or withheld to the relevant tax authority in accordance with applicable law. The Issuer or the Guarantor (if applicable) will use its reasonable efforts to obtain tax receipts from each tax authority evidencing the payment of any taxes so deducted or withheld. The Issuer or the Guarantor (if applicable) will furnish to the holders, within 60 days after the date the payment of any taxes so deducted or withheld is made, certified copies of tax receipts evidencing payment by the Issuer or the Guarantor (if applicable), as the case may be, or if, notwithstanding such entity's efforts to obtain receipts, receipts are not obtained, other evidence of payments by such entity.

References to principal, premium (if any) or interest in respect of the Notes will be deemed also to refer to any Additional Amounts which may be payable as set forth in the Notes and the Indenture.

The above obligation will survive any termination, defeasance or discharge of the Indenture, any transfer by a holder or beneficial owner of its Notes, and will apply, mutatis mutandis, to any jurisdiction in which any successor Person to the Issuer or the Guarantor (if applicable) is then incorporated, organized, engaged in business or resident for tax purposes or any jurisdiction from or through which such person makes any payment on the notes (or the Guarantee) and any political subdivision or taxing authority or agency thereof or therein having the power to tax.

13. **Events of Default**

The occurrence and continuance of the following events will constitute events of default ("**Events of Default**"):

(a) failure to pay interest (including premium, if any) on the Notes as and when the same will become due and payable, and continuance of such default for a period of 14 days;

(b) failure to pay principal on the Notes when due, and continuance of such default for a period of 7 days, whether at Maturity Date, upon redemption or otherwise;

(c) failure by the Issuer or the Guarantor (if applicable) to comply with its obligations under the covenant described under Condition 5(b) (*Certain Covenants—Consolidation, Merger and Sale of Assets*);

(d) failure on the part of the Issuer or the Guarantor (if applicable) to duly observe or perform any of the other covenants or agreements on the part of the Issuer or the Guarantor (if applicable), as the case may be, contained in the Notes or in the Indenture relating to the Notes or the Guarantee that continues for 60 days after the date on which written notice specifying such failure, stating that such notice is a "Notice of Default" under the Notes and demanding that the Issuer or the Guarantor (if applicable) remedy the same, shall have been sent to the Issuer or the Guarantor (if applicable) by the Trustee, or to the Issuer or the Guarantor (if applicable) at the office of the Trustee by the holders of at least 25 per cent. in aggregate principal amount of the outstanding Notes;

(e) any of the Issuer's or (while there are any Guaranteed Notes outstanding) the Guarantor's Indebtedness of an amount equal to or greater than U.S.$25,000,000 either (a) becoming due and payable prior to the due date for payment thereof by reason of acceleration following a default by the Issuer or the Guarantor (if applicable), or (b) not being repaid by the Issuer or the Guarantor (if applicable) at, and remaining unpaid after, maturity (as extended by the grace

period, if any), or any guarantee given by the Issuer or (while there are any Guaranteed Notes outstanding) the Guarantor in respect of any Indebtedness of any other Person of an amount equal to or greater than U.S.$25,000,000 not being honored and remaining dishonored after becoming due and called;

(f) a court or administrative or other governmental agency or body having jurisdiction in the premises shall enter a decree or order for relief in respect of the Issuer or (while there are any Guaranteed Notes outstanding) the Guarantor in an involuntary case under any applicable bankruptcy, insolvency, reorganization, compulsory composition or other similar law now or hereafter in effect, or appointing a receiver, liquidator, assignee, custodian, trustee, sequestrator (or similar official) of the Issuer or (while there are any Guaranteed Notes outstanding) the Guarantor or for any substantial part of its property or ordering the winding up, dissolution or liquidation of its affairs, or shall otherwise adjudicate or find the Issuer or (while there are any Guaranteed Notes outstanding) the Guarantor to be bankrupt or insolvent, and such decree or order shall remain unstayed and in effect for a period of 60 consecutive days;

(g) the Issuer or (while there are any Guaranteed Notes outstanding) the Guarantor shall commence a voluntary case under any applicable bankruptcy, insolvency, reorganization, compulsory composition or other similar law now or hereafter in effect, or consent to the entry of an order for relief in an involuntary case under any such law, or consent to the appointment or taking possession by a receiver, liquidator, assignee, custodian, trustee, sequestrator or similar official of the Issuer or (while there are any Guaranteed Notes outstanding) the Guarantor or for any substantial part of any of its property, or the Issuer or (while there are any Guaranteed Notes outstanding) the Guarantor ceases to carry on the whole or substantially the whole of its business or make any general assignment for the benefit of creditors, or enter into any composition with any of its respective creditors, or take corporate action in furtherance of any such action; or

(h) (while there are any Guaranteed Notes outstanding) the Guarantee is not (or is claimed by the Guarantor not to be) in full force and effect.

If an Event of Default (other than an Event of Default described in clauses (f) or (g) above) with respect to the Notes shall occur and be continuing, either the Trustee or the Holders of at least 25 per cent. in aggregate principal amount of the Notes then outstanding by written notice to the Issuer and (while there are any Guaranteed Notes outstanding) the Guarantor (and to the Trustee if given to the Holders) may declare the principal amount of the Notes and any accrued and unpaid interest thereon to be due and payable immediately. If an Event of Default in clause (f) or (g) above with respect to the Notes shall occur, the unpaid principal amount of all the Notes and any accrued and unpaid interest thereon will automatically, and without any action by the Trustee or any Holder of Notes, become immediately due and payable. After any such acceleration but before a judgment or decree based on acceleration has been obtained, the Holders of at least a majority in aggregate principal amount of the Notes then outstanding may, under certain circumstances, rescind and annul such acceleration if all Events of Default, other than the non-payment of accelerated principal, have been cured or waived as provided in the Indenture.

In the event of a declaration of acceleration of the Notes because of an Event of Default described in clause (e) has occurred and is continuing, the declaration of acceleration of the Notes will be automatically annulled if the acceleration described in clause (e)(a) above, the failure to pay described in clause (e)(b) above, or the failure to honor a guarantee described in clause (e), as the case may be, constituting such Event of Default pursuant to clause (e) is rescinded and annulled or cured, as the case may be, by the Issuer or the Guarantor (if applicable) or waived by the holder of such Indebtedness within 20 days after such declaration of acceleration of the Notes, *provided that* (1) the annulment of the acceleration of the Notes would not conflict with any judgment or decree of a court of competent jurisdiction and (2) all existing Events of Default, except with respect to the payment of principal of, premium (if any), Additional Amounts or interest on any Notes that became due solely because of the acceleration of the Notes, have been cured or waived.

Subject to the provisions of the Indenture relating to the duties of the Trustee, in case an Event of Default shall occur and be continuing, the Trustee will be under no obligation to exercise any of its rights or powers under the Indenture at the request or direction of any of the Holders of Notes unless such Holders shall have offered to the Trustee security and/or indemnity satisfactory to the Trustee. Subject to certain provisions, including those requiring security and/or indemnification of the Trustee, the Holders of a majority in aggregate principal amount of the Notes then outstanding will have the right to 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 with respect to the Notes. No Holder will have any right to institute any proceeding, judicial or otherwise, with respect to the Indenture, or for the appointment of a receiver or a trustee, or for any other remedy thereunder unless (i) such Holder has previously given to the Trustee written notice of a continuing Event of Default with respect to the Notes, (ii) the Holders of at least 25 per cent. in aggregate principal amount of the Notes then outstanding have made written request, and such Holder or Holders have offered to the Trustee security and/or indemnity satisfactory to the Trustee, to institute such proceeding as trustee and (iii) the Trustee has failed to institute such proceeding, and has not received from the Holders of a majority in aggregate principal amount of the Notes then outstanding a direction inconsistent with such request, within 60 days after such written notice, request and offer. However, such limitations do not apply to a suit instituted by a Holder of a Note for the enforcement of the right to receive payment of the principal of or interest on such Note on or after the applicable due date specified in such Note.

14. **Prescription**

Any moneys deposited with or paid to the Trustee or any Paying Agent of the Notes, or then held by the Issuer or the Guarantor (if applicable) for the payment of the principal of, premium (if any) or interest on (or any Additional Amount payable in respect of) any Note or the Guarantee (if applicable) and not applied but remaining unclaimed for two years after the date upon which such principal, premium (if any) or interest shall have become due and payable, shall, upon the written request of the Issuer or the Guarantor (if applicable) be repaid to the Issuer or the Guarantor (if applicable) by the Trustee or such Paying Agent or (if then held by the Issuer or the Guarantor (if applicable)) be discharged unless otherwise required by mandatory provisions of applicable escheat or abandoned or unclaimed property law, and the Holder shall, unless otherwise required by mandatory provisions of applicable escheat or abandoned or unclaimed property laws, thereafter look only to the Issuer or the Guarantor (if applicable) for any payment which such Holder may be entitled to collect, and all liability of the Trustee or any Paying Agent of the Notes with respect to such moneys shall thereupon cease.

Under New York law, any legal action upon the Notes must be commenced within six years after the payment thereof is due. Thereafter, the Notes will generally become unenforceable.

15. **Replacement of Notes**

If any Note or Note Certificate is lost, stolen, mutilated, defaced or destroyed, it may be replaced at the Specified Office of the Registrar (and, if the Notes are then admitted to listing, trading and/or quotation by any competent authority, stock exchange and/or quotation system which requires the appointment of a Paying Agent or Transfer Agent in any particular place, the Paying Agent or Transfer Agent having its Specified Office in the place required by such competent authority, stock exchange and/or quotation system), subject to all applicable laws and competent authority, stock exchange and/or quotation system requirements, upon payment by the claimant of the expenses incurred in connection with such replacement and on such terms as to evidence, pre-funding, security and/or indemnity and otherwise as the Trustee, the Paying Agent or the Transfer Agents may reasonably require. Mutilated or defaced Notes or Note Certificates must be surrendered before replacements will be issued.

16. **Modification and Waiver**

(a) ***Modification with consent of Holders***

With the consent of the Holders of more than 50 per cent. in aggregate principal amount of the outstanding Notes, the Issuer or the Guarantor (if applicable) may execute supplemental indentures or modify, amend or supplement the Conditions or the Paying and Transfer Agent and Registrar Appointment Letter with the Trustee and Agents, as the case may be, to add provisions or change or eliminate any provision of the Indenture, any supplemental indenture, the Paying and Transfer Agent and Registrar Appointment Letter or the Conditions to modify, amend or supplement the rights of the Holders of the Notes. Without the consent of the Holders of all the outstanding Notes, however, no such supplemental indenture or modification, amendment or supplementation will, with respect to the Notes or the Guarantee:

(i) change their stated maturity;

(ii) reduce the principal amount payable, reduce the stated rate of (including the Reset Interest Rate), or extend the stated time for payment of, interest on any Note;

(iii) change the obligation of the Issuer or (with respect to Guaranteed Notes) the Guarantor to pay Additional Amounts;

(iv) change the terms of the Guarantee;

(v) change the place or currency in which they are payable;

(vi) impair the right to institute suit for their enforcement;

(vii) waive a Default in the payment of principal of, premium (if any) or interest on the Notes;

(viii) reduce the percentage in principal amount of the outstanding Notes, the consent of the holders of which is required for any such supplemental indenture or for any modification to the provisions relating to modification and waiver; or

(ix) reduce the premium payable upon the redemption or repurchase of any Note or change the time at which any Note may be redeemed or repurchased as described above under Condition 10(b) (*Optional Tax Redemption*) or Condition 10(c) (*Optional Redemption*).

The Holders of more than 50 per cent. in aggregate principal amount of the outstanding Notes may:

(a) waive compliance by the Issuer and Guarantor (if applicable) with certain provisions of the Indenture, the Conditions, the Guarantee or the Paying and Transfer Agent and Registrar Appointment Letter; and

(b) waive any past Default (except Defaults relating to payment of principal of, premium (if any) or interest on any Note).

(b) ***Modification without consent of Holders***

Notwithstanding the foregoing, the Issuer, the Guarantor (if applicable), the Trustee and the Agents may, without notice to or the consent or vote of any Holder of the Notes, amend or supplement the Indenture, the Notes or the Guarantee (if applicable) or modify, amend or supplement the Conditions or the Paying and Transfer Agent and Registrar Appointment Letter, in each case, for one or more of the following purposes (it being understood that such modification, amendment or supplement shall not materially and adversely affect the rights of the Holders of the Notes):

(i) to cure any ambiguity, omission, defect or inconsistency (including, without limitation, any inconsistency between the text of the Indenture, the Paying and Transfer Agent and Registrar Appointment Letter, the Guarantee or the Notes and the description of the Indenture, the Paying and Transfer Agent and Registrar Appointment Letter, the Guarantee or the Notes contained in the Offering Memorandum);

(ii) to comply with the covenant described under Condition 5(b) (*Certain Covenants—Consolidation, Merger and Sale of Assets*);

(iii) to evidence and provide for the appointment of a successor Trustee or Agent;

(iv) to add guarantors or guarantees with respect to such Notes;

(v) to add to the covenants of the Issuer and the Guarantor (if applicable) for the benefit of Holders of such Notes;

(vi) to surrender any right conferred by the relevant Indenture upon the Issuer or the Guarantor (if applicable);

(vii) to enter into a supplemental indenture, in any case where a supplemental indenture is required or permitted to be entered into pursuant to the provisions of the Indenture without the consent of any Holder;

(viii) to effect any changes to the Indenture, the Conditions or the Paying and Transfer Agent and Registrar Appointment Letter in a manner necessary to comply with the procedures of DTC, Euroclear or Clearstream or any other clearing system;

(ix) to provide for the issuance of additional Notes in accordance with the limitations set forth in the Indenture and the Conditions;

(x) to provide for Global Certificates in addition to or in place of Note Certificates;

(xi) to provide collateral to secure the Notes; or

(xii) to make any other change that does not materially and adversely affect the rights of any Holder.

17. **Concerning the Trustee**

The Holders of more than 50 per cent. in aggregate principal amount of all outstanding Notes shall have the right to direct the time, method and place of conducting any proceeding for exercising any remedy or power available to the Trustee with respect to the Notes. However, the direction must not conflict with any rule of law or with the Indenture. In case of an Event of Default, the Trustee shall be required to exercise its powers with the degree of care and skill of a prudent person in the conduct of his own affairs. The Trustee is, however, under no obligation to exercise any of its rights or powers under the Indenture at the request of any of the Holders, unless they have offered to the Trustee pre-funding, security and/or indemnity satisfactory to the Trustee against the costs, expenses and liabilities that might be incurred by it in compliance with such request or direction in its sole discretion.

Under the Indenture, the Trustee is entitled to be indemnified and/or provided with security to its satisfaction, as well as relieved from responsibility in certain circumstances and to be paid its fees, costs and expenses in priority to the claims of the Noteholders. In addition, the Trustee is entitled to enter into business transactions with Treasury Center or the Company and any entity relating to Treasury Center or the Company without accounting for any profit.

In connection with the exercise by it of any of its trusts, powers, authorities and discretions (including, without limitation, any modification, waiver, authorization or determination), the Trustee shall have regard to the general interests of the Noteholders as a class (but shall not have regard to any interests arising from circumstances particular to individual Noteholders whatever their number) and, in particular but without limitation, shall not have regard to the consequences of any such exercise for individual Holders (whatever their number) resulting from their being for any purpose domiciled or resident in, or otherwise connected with, or subject to the jurisdiction of, any particular territory or any political sub-division thereof and the Trustee shall not be entitled to require, nor shall any Noteholder be entitled to claim, from the Issuer, the Guarantor (if applicable), the Trustee or any other person any indemnification or payment in respect of any tax consequences of any such exercise upon individual Noteholders except to the extent already provided for under Condition 12 (*Additional Amounts*) and/or any undertaking or covenant given in addition to, or in substitution for, Condition 12 (*Additional Amounts*) pursuant to the Indenture.

The Trustee may rely without liability to Noteholders on a report, confirmation or certificate or any advice of any lawyers, accountants, financial advisors, financial institution or any other expert, whether or not addressed to it and whether their liability in relation thereto is limited (by its terms or by any engagement letter relating thereto or in any other manner) by reference to a monetary cap, methodology or otherwise. The Trustee may accept and shall be entitled to rely on any such report, confirmation or certificate or advice and such report, confirmation or certificate or advice shall be binding on the Issuer, the Guarantor (if applicable), the Trustee and the Noteholders.

18. **The Agents**

In acting under the Indenture and the Paying and Transfer Agent and Registrar Appointment Letter and in connection with the Notes, the Agents act solely as agents of the Issuer, the Guarantor (if applicable)

and (to the extent provided therein) the Trustee and do not assume any obligations towards or relationship of agency or trust for or with any of the Noteholders.

The initial Calculation Agent (if any) is specified in the relevant Pricing Supplement. The Issuer and the Guarantor (if applicable) reserve the right (with the prior approval of the Trustee) at any time to vary or terminate the appointment of any Agent and to appoint a successor principal paying agent or registrar or Calculation Agent and additional or successor paying agents; *provided, however, that*:

(a) the Issuer and the Guarantor (if applicable) shall at all times maintain a principal paying agent and a registrar; and

(b) if a Calculation Agent is specified in the relevant Pricing Supplement, the Issuer and the Guarantor (if applicable) shall at all times maintain a Calculation Agent; and

(c) for so long as the Notes are listed on the SGX-ST and the rules of the SGX-ST so require, the Issuer and the Guarantor (if applicable) shall maintain a Paying Agent in Singapore, where the Notes may be presented or surrendered for payment or redemption, in the event that global certificates are exchanged for definitive certificates; and

(d) if and for so long as the Notes are admitted to listing, trading and/or quotation by any competent authority, stock exchange and/or quotation system which requires the appointment of a paying agent and/or a transfer agent in any particular place, the Issuer and the Guarantor (if applicable) shall maintain a paying agent and/or a transfer agent having its Specified Office in the place required by such competent authority, stock exchange and/or quotation system.

Notice of any change in any of the Agents or in their Specified Offices shall promptly be given to the Noteholders by the Issuer.

19. **Further Issuance**

The Issuer may from time to time, without notice to or the consent of the Noteholders, create and issue further debt securities ranking *pari passu* with the Notes in all respects (or in all respects except for the payment of interest accruing prior to the issue date of the debt securities or except for the first payment of interest following the issue date of the debt securities). The Issuer may consolidate such further debt securities with the outstanding Notes to form a single Series; *provided that*, if any further debt securities issued are not fungible for U.S. federal income tax purposes with any Notes previously issued, such further debt securities shall trade separately from such previously issued Notes under different CUSIP, ISIN and common codes from those assigned to the Notes but shall otherwise be treated as a single Series with all other Notes issued under the Indenture.

20. **Payment for consent**

Neither the Company nor any of its Subsidiaries will, 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 agreed to be paid to all Holders that consent, waive or agree to amend in the time frame set forth in the solicitation documents relating to such consent, waiver or agreement.

21. **Defeasance and Discharge**

The Issuer and the Guarantor (if applicable) shall not be required to comply with certain restrictive covenants of the Indenture (including the limitations on liens) with respect to the Notes or the Guarantee, if:

(a) the Issuer deposits with the Trustee, in trust, money or U.S. Government Obligations (or a combination thereof) sufficient to pay the principal of, and interest on, the Notes when due;

(b) there is no Default under the Indenture;

(c) the Issuer delivers to the Trustee an Opinion of Counsel of recognized standing with respect to U.S. federal income tax matters to the effect that the deposit will not cause the beneficial owners

of the Notes to recognize income, gain or loss for U.S. federal income tax purposes and the beneficial owners of the Notes will be subject to U.S. federal income tax on the same amounts, in the same manner and at the same times as if the deposit was not made; and

(d) the Issuer delivers to the Trustee an Officer's Certificate and Opinion of Counsel stating that all conditions for the defeasance have been complied with.

In addition, if the conditions described in paragraphs (a) and (c) above are complied with, the Issuer and the Guarantor (if applicable) will be discharged from all of its obligations under the Notes (except for certain obligations to exchange or register the transfer of the Notes, replace stolen, lost or mutilated notes, maintain paying agents and pay Additional Amounts) ("**Legal Defeasance**") (a) if the Issuer delivers to the Trustee all the Notes for cancellation, together with an Opinion of Counsel and an Officer's Certificate stating that all conditions for the discharge have been complied with, and pays all other amounts payable under the Indenture, or (b) if all Notes not delivered to the Trustee for cancellation have become due and payable, will become due and payable within one year or are to be called for redemption within one year, and the Issuer has irrevocably deposited with the Trustee, in trust, money or U.S. Government Obligations (or a combination thereof) sufficient to pay the principal of, and interest on, the Notes when due, together with an Opinion of Counsel and an Officer's Certificate stating that all conditions for discharge have been complied with, and pays all other amounts payable under the Indenture, *provided that*, under the circumstances outlined in (a) or (b) above, the Opinion of Counsel described in paragraph (c) above also confirms that (x) the Issuer has received from, or there has been published by, the U.S. Internal Revenue Service a ruling or (y) since the Issue Date, 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 will confirm that, the beneficial owners of the 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.

"**U.S. Government Obligations**" means direct obligations (or certificates representing an ownership interest in such obligations) of the United States of America (including any agency or instrumentality thereof) for the payment of which the full faith and credit of the United States of America is pledged and which are not callable at the Issuer's option.

22. **Notices**

Notices to the Holders of Notes shall be sent to them (or the first named of joint holders) at their respective addresses on the Register. Any such notice shall be deemed to have been given on the fourth day after the date of sending.

So long as the Notes are represented by a Global Certificate and such Global Certificate is held on behalf of Euroclear and/or Clearstream, DTC or any other clearing system, notices to the Holders of Notes of that Series may be given by delivery of the relevant notice to that clearing system for communication by it to entitled accountholders in substitution for publication as required by the Indenture.

23. **Indemnification for Judgment Currency Fluctuations**

To the fullest extent permitted by law, the obligations of the Issuer and the Guarantor (if applicable) to any Noteholder under the Indenture, the Guarantee or the Notes, as the case may be, shall, notwithstanding any judgment in a currency (the "**Judgment Currency**") other the currency of the particular Series or Tranche of Notes (the "**Agreement Currency**"), be discharged only to the extent that on the day following receipt by such Noteholder or the Trustee, as the case may be, of any amount in the Judgment Currency, such Noteholder or the Trustee, as the case may be, may in accordance with normal banking procedures purchase the Agreement Currency with the Judgment Currency. If the amount of the Agreement Currency so purchased is less than the amount originally to be paid to such Noteholder or the Trustee, as the case may be, in the Agreement Currency, the Issuer and the Guarantor (if applicable) agree, as a separate obligation and notwithstanding such judgment, to pay the difference and if the amount of the Agreement Currency so purchased exceeds the amount originally to be paid to such Noteholder, such Noteholder or the Trustee, as the case may be, agrees to pay to or for the account of the Issuer or the Guarantor (if applicable), as the case may be, such excess; *provided that* such Noteholder or the Trustee, as the case may be, shall not have any obligation to pay any such excess as

long as a Default has occurred and is continuing, in which case such excess may be applied by such Noteholder or the Trustee, as the case may be, to such obligations.

24. **Rounding**

For the purposes of any calculations referred to in these Conditions or the Indenture (unless otherwise specified in these Conditions or the relevant Pricing Supplement), (a) all percentages resulting from such calculations will be rounded, if necessary, to the nearest one hundred-thousandth of a percentage point (with 0.000005 per cent. being rounded up to 0.00001 per cent.), (b) all United States dollar amounts used in or resulting from such calculations will be rounded to the nearest cent (with one half cent being rounded up), (c) all Japanese Yen amounts used in or resulting from such calculations will be rounded downwards to the next lower whole Japanese Yen amount, and (d) all amounts denominated in any other currency used in or resulting from such calculations will be rounded to the nearest two decimal places in such currency, with 0.005 being rounded upwards.

25. **Governing Law; Consent to Jurisdiction and Waiver of Immunity**

(a) The Indenture and the Notes shall be governed by, and construed in accordance with, the laws of the State of New York.

(b) The Issuer and the Guarantor (if applicable) shall irrevocably submit 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, New York (each a "**New York Court**") in any suit, action or proceeding arising out of or relating to the Indenture, the Notes or any transaction contemplated thereby, and will irrevocably waive, to the fullest extent permitted by applicable law, any objection to the venue of any such suit, action or proceeding in any such New York Court and any claim of any inconvenient forum. The Issuer and the Guarantor (if applicable) has appointed Corporation Service Company as agent for service of process with respect of any such suit, action or proceeding.

(c) To the extent that the Issuer or the Guarantor (if applicable) has or hereafter may acquire any immunity (sovereign or otherwise) from any legal action, suit or proceeding, from jurisdiction of any court or from set-off or any legal process (including any immunity from non-exclusive jurisdiction or from service of process or from any execution to satisfy a final judgment or from attachment or in aid of such execution or otherwise) with respect to itself or any of its assets or properties, the Issuer and the Guarantor (if applicable) irrevocably waives, to the fullest extent permitted under applicable law, any such right or immunity or claim thereto which may now or hereafter exist, and agrees not to assert any such right or claim in any action or proceeding against it arising out of or based on the Notes or the Indenture.

26. **No Personal Liability of Directors, Officers, Employees and Stockholders**

No director, officer, employee, incorporator or stockholder of the Issuer or the Guarantor (if applicable) shall have any personal liability for any obligations of the Issuer or the Guarantor (if applicable) under the Notes, the Guarantee, the Indenture, or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder by accepting a Note waives and releases all such liability. The waiver and release are part of the consideration for issuance of the Notes. The waiver may not be effective to waive liabilities under federal securities laws.

TERMS AND CONDITIONS OF THE PERPETUAL SECURITIES

The following is the text of the terms and conditions which, as supplemented, amended and/or replaced by the relevant Pricing Supplement, will be endorsed on each Perpetual Security in definitive form issued under the Program. The terms and conditions applicable to any Perpetual Security in global form will differ from those terms and conditions which would apply to the Perpetual Security were it in definitive form to the extent described under "Summary of Provisions Relating to the Perpetual Securities while in Global Form" below.

1. **Introduction**

(a) **Program**: Thai Oil Public Company Limited (the "**Company**") and Thaioil Treasury Center Company Limited ("**Treasury Center**") have established a Global Medium Term Note Program (the "**Program**") for the issuance of up to U.S.$3,679,000,000 in aggregate principal amount of perpetual securities (the "**Perpetual Securities**"). Each Series (as defined below) of Perpetual Securities shall be issued either by (i) the Company (in its capacity as issuer, an "**Issuer**"); or (ii) Treasury Center (in its capacity as issuer, an "**Issuer**", and together with the Company in its capacity as issuer, the "**Issuers**"); in the case of (ii), the Perpetual Securities shall be unconditionally and irrevocably guaranteed by the Company (in its capacity as guarantor, the "**Guarantor**") in accordance with Condition 1(d). References to the "Issuer" in these Conditions shall be construed as to the Issuer specified in the relevant Pricing Supplement.

(b) **Pricing Supplement**: Perpetual Securities issued under the Program are issued in series (each, a "**Series**") and each Series may comprise one or more tranches (each, a "**Tranche**") of Perpetual Securities. The terms and conditions applicable to any particular Series or Tranche of Perpetual Securities are set out in the relevant pricing supplement (the "**Pricing Supplement**") which supplements, amends and/or replaces these terms and conditions (the "**Conditions**"). In the event of any inconsistency between these Conditions and the relevant Pricing Supplement, the relevant Pricing Supplement shall prevail.

(c) **Indenture**: The Perpetual Securities are subject to, and have the benefit of, an amended and restated indenture dated June 11, 2020 (as amended and/or supplemented from time to time, the "**Indenture**") between the Issuers, the Guarantor and Citicorp International Limited as trustee (the "**Trustee**", which expression includes all persons for the time being trustee or trustees appointed under the Indenture). Securityholders (as defined below) are deemed to have accepted the appointment of the Trustee.

(d) **Guarantee**: The Guarantor has, in accordance with the terms of the Indenture, unconditionally and irrevocably guaranteed the due and punctual payment of all sums from time to time payable in respect of Perpetual Securities issued by Treasury Center in its capacity as Issuer (the "**Guarantee**"). The Guarantor's maximum liability under the Guarantee in respect of each Series of Guaranteed Perpetual Securities (as defined below) will be capped at an amount equal to 150 per cent. of the aggregate principal amount of the relevant Series of Guaranteed Perpetual Securities. The Guarantee will be released in respect of a Series of Perpetual Securities upon the later of (i) the date falling ten years after the liquidation or winding-up of the Treasury Center or (ii) the date on which all sums expressed to be payable by Treasury Center under the Indenture and the relevant Series of Guaranteed Perpetual Securities have been unconditionally and irrevocably paid and discharged in full, **provided that**, in each case, any rights of the Holders and any liability of the Guarantor that have arisen or accrued under the Guarantee prior to any such release will continue to be in full force and effect after any such release and will survive any such release.

(e) **Agents**: Pursuant to a paying and transfer agent and registrar appointment letter dated June 11, 2020 (as amended and/or supplemented from time to time, the "**Paying and Transfer Agent and Registrar Appointment Letter**"), Citibank, N.A., London Branch is appointed as principal paying agent (the "**Principal Paying Agent**", which expression includes any successor principal paying agent appointed from time to time in connection with the Perpetual Securities), Citibank, N.A., London Branch as exchange agent (the "**Exchange Agent**", which expression includes any successor exchange agent appointed from time to time in connection with the Perpetual Securities) and Citibank, N.A., London Branch as registrar (the "**Registrar**", which expression includes any successor registrar appointed from time to time in connection with the Perpetual Securities). In addition, the paying agents named therein (together with the

Principal Paying Agent, the "**Paying Agents**", which expression includes any successor or additional paying agents appointed from time to time in connection with the Perpetual Securities) and the transfer agents named therein (together with the Registrar, the "**Transfer Agents**", which expression includes any successor or additional transfer agents appointed from time to time in connection with the Perpetual Securities) are appointed subject to these Conditions, the Indenture and the Paying and Transfer Agent and Registrar Appointment Letter. In these Conditions references to the "**Agents**" are to the Paying Agents, the Exchange Agent and the Transfer Agents and any reference to an "**Agent**" is to any one of them.

(f) **The Perpetual Securities**: The Perpetual Securities may only be issued in registered form. All subsequent references in these Conditions to "**Perpetual Securities**" are to the Perpetual Securities which are the subject of the relevant Pricing Supplement. Copies of the relevant Pricing Supplement are available for inspection at the Specified Office of the Paying Agents by Holders during normal business hours (being between 9:00 a.m. and 3:00 p.m. (London time)) on any weekday (Saturdays and public holidays excepted) following prior written notice and proof of holding and identity satisfactory to the Paying Agents.

(g) **Summaries**: Certain provisions of these Conditions are summaries of the Indenture and are subject to their detailed provisions. Securityholders are bound by, and are deemed to have notice of, all the provisions of the Indenture applicable to them. Copies of the Indenture are available for inspection at the Specified Office of the Paying Agents by Holders during normal business hours (being between 9:00 a.m. and 3:00 p.m. (London time)) on any weekday (Saturdays and public holidays excepted) following prior written notice and proof of holding and identity satisfactory to the Paying Agents.

2. **Interpretation**

(a) ***Definitions***

In these Conditions the following expressions have the following meanings:

"**Accrual Yield**" has the meaning given in the relevant Pricing Supplement;

"**Additional Business Centre(s)**" means the city or cities specified as such in the relevant Pricing Supplement and in the city where the relevant Paying Agent is located;

"**Additional Financial Centre(s)**" means the city or cities specified as such in the relevant Pricing Supplement;

"**Authorized Officer**" means, with respect to any Person, a director or officer of such Person duly authorized to perform the acts required under these Conditions or the Indenture;

"**Business Day**", means any day (other than a Saturday or a Sunday) on which commercial banks and foreign exchange markets are open for business in Bangkok, London, Hong Kong and New York and, other than in Condition 3(e) (*Registration and delivery of Security Certificates*) and Condition 14 (*Non-Payment*):

(a) in relation to any sum payable in euro, a TARGET Settlement Day and a day on which commercial banks and foreign exchange markets settle payments generally in each (if any) Additional Business Centre;

(b) in relation to any sum payable in a currency other than euro and Renminbi, a day on which commercial banks and foreign exchange markets settle payments generally, in the Principal Financial Centre of the relevant currency and in each (if any) Additional Business Centre; and

(c) for the purposes of Perpetual Securities denominated in Renminbi only, any day (other than a Sunday or a Saturday) on which commercial banks and foreign exchange markets are open for business and settle Renminbi payments in Hong Kong and are not authorized or obligated by law or executive order to be closed;

"**Business Day Convention**", in relation to any particular date, has the meaning given in the relevant Pricing Supplement and, if so specified in the relevant Pricing Supplement, may have different meanings in relation to different dates and, in this context, the following expressions shall have the following meanings:

(a) "**Following Business Day Convention**" means that the relevant date shall be postponed to the first following day that is a Business Day;

(b) "**Modified Following Business Day Convention**" or "**Modified Business Day Convention**" means that the relevant date shall be postponed to the first following day that is a Business Day unless that day falls in the next calendar month in which case that date will be the first preceding day that is a Business Day;

(c) "**Preceding Business Day Convention**" means that the relevant date shall be brought forward to the first preceding day that is a Business Day;

(d) "**FRN Convention**", "**Floating Rate Convention**" or "**Eurodollar Convention**" means that each relevant date shall be the date which numerically corresponds to the preceding such date in the calendar month which is the number of months specified in the relevant Pricing Supplement as the Specified Period after the calendar month in which the preceding such date occurred **provided**, **however**, **that**:

(i) if there is no such numerically corresponding day in the calendar month in which any such date should occur, then such date will be the last day which is a Business Day in that calendar month;

(ii) if any such date would otherwise fall on a day which is not a Business Day, then such date will be the first following day which is a Business Day unless that day falls in the next calendar month, in which case it will be the first preceding day which is a Business Day; and

(iii) if the preceding such date occurred on the last day in a calendar month which was a Business Day, then all subsequent such dates will be the last day which is a Business Day in the calendar month which is the specified number of months after the calendar month in which the preceding such date occurred; and

(e) "**No Adjustment**" means that the relevant date shall not be adjusted in accordance with any Business Day Convention;

"**Calculation Agent**" means the Principal Paying Agent or such other Person, in each case as specified in the relevant Pricing Supplement as the party responsible for calculating the Rate(s) of Distribution and Distribution Amount(s) and/or such other amount(s) as may be specified in the relevant Pricing Supplement;

"**Calculation Amount**" has the meaning given in the relevant Pricing Supplement;

"**Change of Control**" means (i) PTT Public Company Limited ceasing to own and control, directly or indirectly, at least 40 per cent. of the Company's issued and outstanding capital stock or (ii) any Person or Persons, acting together, becoming the owner, directly or indirectly, of a greater number of the Company's issued and outstanding capital stock than that owned and controlled, directly or indirectly, by PTT Public Company Limited or (iii) in the case of Guaranteed Perpetual Securities, the Guarantor ceasing to own and control, directly or indirectly, at least 99 per cent. of Treasury Center's issued and outstanding capital stock;

"**Change of Control Step-up Rate**" means 1.25 per cent., unless as otherwise specified in the relevant Pricing Supplement;

"**Change of Control Triggering Event**" means the occurrence of both a Change of Control and a Ratings Decline;

"**Code**" means the U.S. Internal Revenue Code of 1986;

"**Compulsory Distribution Payment Event**" means either or both of:

(i) a discretionary dividend, distribution or other payment has been declared or paid on or in respect of any of its Junior Securities or Parity Securities, save that such provision shall not apply to payments in respect of an employee benefit plan or similar arrangement with or for the benefit of employees, officers, directors or consultants of the Issuer or the Guarantor; or

(ii) any of its Junior Securities or Parity Securities have been redeemed, reduced, cancelled, bought back or acquired for any consideration on a discretionary basis, save that such provision shall not apply to redemptions, reductions, cancellations, buy-backs or other acquisitions in respect of an employee benefit plan or similar arrangement with or for the benefit of employees, officers, directors or consultants of the Issuer or the Guarantor;

"**Consolidated Net Tangible Assets**" means the total amount of the assets of the Company and its consolidated Subsidiaries, including investments in unconsolidated Subsidiaries and associated companies, after deducting therefrom (i) all current liabilities (excluding any current liabilities constituting Long-term Debt by reason of their being renewable or extendible at the option of the Company or its consolidated Subsidiaries), and (ii) all goodwill, trade names, trademarks, patents, unamortized debt discount and expense and other like intangible assets, all as set forth on the most recent statement of financial position of the Company and its consolidated Subsidiaries and computed in accordance with TFRS;

"**Day Count Fraction**" means, in respect of the calculation of an amount for any period of time (the "**Calculation Period**"), such day count fraction as may be specified in these Conditions or the relevant Pricing Supplement and:

(a) if "**Actual/Actual (ICMA)**" is so specified, means:

(i) where the Calculation Period is equal to or shorter than the Regular Period during which it falls, the actual number of days in the Calculation Period *divided by* the product of (1) the actual number of days in such Regular Period and (2) the number of Regular Periods in any year; and

(ii) where the Calculation Period is longer than one Regular Period, the sum of:

(A) the actual number of days in such Calculation Period falling in the Regular Period in which it begins *divided by* the product of (a) the actual number of days in such Regular Period and (b) the number of Regular Periods in any year; and

(B) the actual number of days in such Calculation Period falling in the next Regular Period *divided by* the product of (a) the actual number of days in such Regular Period and (b) the number of Regular Periods in any year;

(b) if "**Actual/365**" or "**Actual/Actual (ISDA)**" is so specified, means the actual number of days in the Calculation Period *divided by* 365 (or, if any portion of the 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);

(c) if "**Actual/365 (Fixed)**" is so specified, means the actual number of days in the Calculation Period *divided by* 365;

(d) if "**Actual/360**" is so specified, means the actual number of days in the Calculation Period *divided by* 360;

(e) if "**30/360**" is so specified, 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:

"$\mathbf{Y_1}$" is the year, expressed as a number, in which the first day of the Calculation Period falls;

"$\mathbf{Y_2}$" is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"$\mathbf{M_1}$" is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

"$\mathbf{M_2}$" is the calendar month, expressed as number, in which the day immediately following the last day included in the Calculation Period falls;

"$\mathbf{D_1}$" is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case D_1 will be 30; and

"$\mathbf{D_2}$" 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 D_1 is greater than 29, in which case D_2 will be 30;

(f) if "**30E/360**" or "**Eurobond Basis**" is so specified, 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:

"$\mathbf{Y_1}$" is the year, expressed as a number, in which the first day of the Calculation Period falls;

"$\mathbf{Y_2}$" is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"$\mathbf{M_1}$" is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

"$\mathbf{M_2}$" is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"$\mathbf{D_1}$" is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case D_1 will be 30; and

"$\mathbf{D_2}$" is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless such number would be 31, in which case D_2 will be 30; and

(g) if "**30E/360 (ISDA)**" is so specified, 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:

"$\mathbf{Y_1}$" is the year, expressed as a number, in which the first day of the Calculation Period falls;

"**Y_2**" is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"**M_1**" is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

"**M_2**" is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

"**D_1**" is the first calendar day, expressed as a number, of the Calculation Period, unless (i) that day is the last day of February or (ii) such number would be 31, in which case D_1 will be 30; and

"**D_2**" is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless (i) that day is the last day of February or (ii) such number would be 31, in which case D_2 will be 30,

provided, **however**, **that** in each such case the number of days in the Calculation Period is calculated from and including the first day of the Calculation Period to but excluding the last day of the Calculation Period;

"**Distribution Amount**" means, in relation to a Perpetual Security and an Distribution Period, the amount of Distribution payable in respect of that Perpetual Security for that Distribution Period;

"**Distribution Commencement Date**" means the Issue Date of the Perpetual Securities or such other date as may be specified as the Distribution Commencement Date in the relevant Pricing Supplement;

"**Distribution Determination Date**" has the meaning given in the relevant Pricing Supplement;

"**Distribution Payment Date**" means the First Distribution Payment Date and any date or dates specified as such in, or determined in accordance with the provisions of, the relevant Pricing Supplement and, if a Business Day Convention is specified in the relevant Pricing Supplement:

(a) as the same may be adjusted in accordance with the relevant Business Day Convention; or

(b) if the Business Day Convention is the FRN Convention, Floating Rate Convention or Eurodollar Convention and an interval of a number of calendar months is specified in the relevant Pricing Supplement as being the Specified Period, each of such dates as may occur in accordance with the FRN Convention, Floating Rate Convention or Eurodollar Convention at such Specified Period of calendar months following the Distribution Commencement Date (in the case of the first Distribution Payment Date) or the previous Distribution Payment Date (in any other case);

"**Distribution Period**" means each period beginning on (and including) the Distribution Commencement Date or any Distribution Payment Date and ending on (but excluding) the next Distribution Payment Date;

"**Early Redemption Amount (Tax)**" means, in respect of any Perpetual Security, its principal amount or such other amount as may be specified in (which shall in no event be less than its initial issue price), or determined in accordance with, the relevant Pricing Supplement;

"**Exchange Act**" means the U.S. Securities Exchange Act of 1934, as amended, and any rules or regulations promulgated thereunder;

"**First Distribution Payment Date**" means the date specified in the relevant Pricing Supplement;

"**Fixed Coupon Amount**" has the meaning given in the relevant Pricing Supplement;

"**Group**" means the Company and its Subsidiaries, taken as a whole;

"**Guaranteed Perpetual Securities**" means Perpetual Securities issued by Treasury Center as Issuer and guaranteed by the Guarantor;

"**Holder**" has the meaning given in Condition 3(b) (*Title*);

"**Hong Kong**" means the Hong Kong Special Administrative Region of the People's Republic of China;

"**Indebtedness**" means any obligation for the payment or repayment of money borrowed;

"**ISDA Definitions**" means the 2006 ISDA Definitions (as amended and updated as at the date of issue of the first Tranche of the Perpetual Securities of the relevant Series (as specified in the relevant Pricing Supplement) as published by the International Swaps and Derivatives Association, Inc.) unless otherwise specified in the relevant Pricing Supplement;

"**Issue Date**" has the meaning given in the relevant Pricing Supplement;

"**Junior Securities**" means, unless as otherwise specified in the relevant Pricing Supplement:

(a) in the case Guaranteed Perpetual Securities:

(i) (i) any class of the Issuer's share capital (including preference shares); (ii) any security issued by the Issuer which is subordinated or which rank, or is expressed to rank, junior to the Issuer's obligations in respect of the Perpetual Securities; and (iii) any security guaranteed by the Issuer which rank, or is expressed to rank, junior to the Issuer's obligations under the Perpetual Securities; and

(ii) (i) any class of the Guarantor's share capital (including preference shares); (ii) any security issued by the Guarantor which is subordinated or which rank, or is expressed to rank, junior to the Guarantor's obligations in respect of the Perpetual Securities; and (iii) any security guaranteed by the Guarantor which rank, or is expressed to rank, junior to the Perpetual Securities; or

(b) in the case of Perpetual Securities issued by the Company in its capacity as Issuer, any class of the Issuer's share capital (including preference shares); (ii) any security issued by the Issuer which is subordinated or which rank, or is expressed to rank, junior to the Issuer's obligations in respect of the Perpetual Securities; and (iii) any security guaranteed by the Issuer which rank, or is expressed to rank, junior to the Issuer's obligations under the Perpetual Securities;

"**Long-term Debt**" means any note, bond, debenture or other Indebtedness having a maturity of more than one year from the date such Indebtedness was incurred or having a maturity of less than one year but by its terms being renewable or extendible, at the option of the Company or the borrower, beyond one year from the date such evidence of Indebtedness was incurred;

"**Margin**" has the meaning given in the relevant Pricing Supplement;

"**Maximum Redemption Amount**" has the meaning given in the relevant Pricing Supplement;

"**Minimum Redemption Amount**" has the meaning given in the relevant Pricing Supplement;

"**Moody's**" means Moody's Investors Service, Inc. and its successors;

"**Officer's Certificate**" means a certificate signed by an Authorized Officer of the Issuer or the Guarantor (as applicable) and delivered to the Trustee;

"**Opinion of Counsel**" means an opinion in writing signed by legal counsel who may be an employee of, or counsel to, the Issuer or the Guarantor (as applicable) or who may be other counsel satisfactory to the Trustee;

"**Optional Redemption Amount (Call)**" means, in respect of any Perpetual Security, its principal amount or such other amount as may be specified in, or determined in accordance with, the relevant Pricing Supplement;

"**Optional Redemption Date (Call)**" has the meaning given in the relevant Pricing Supplement;

"**Parity Securities**" means, unless otherwise defined in the relevant Pricing Supplement:

(a) in the case of Guaranteed Perpetual Securities:

(i) any class of security issued or guaranteed by the Issuer which rank, or is expressed to rank, *pari passu* with the Perpetual Securities; and

(ii) any class of security issued or guaranteed by the Guarantor which rank, or is expressed to rank, *pari passu* with the Perpetual Securities; or

(b) in the case of Perpetual Securities issued by the Company in its capacity as Issuer, any class of security issued or guaranteed by the Issuer which rank, or is expressed to rank, *pari passu* with the Perpetual Securities;

"**Payment Business Day**" means:

(a) if the currency of payment is euro, any day which is:

(i) a day on which (a) banks in the relevant place of presentation are open for presentation and payment of debt securities and for dealings in foreign currencies; and (b) a day on which commercial banks are open for general business (including dealings in foreign currencies) in the city where the Principal Paying Agent or, as the case may be, the Paying Agent has its Specified Office; and

(ii) in the case of payment by transfer to an account, (a) a TARGET Settlement Day and (b) a day on which dealings in foreign currencies may be carried on in each (if any) Additional Financial Centre; or

(b) if the currency of payment is not euro, any day which is:

(i) a day on which (a) banks in the relevant place of presentation are open for presentation and payment of debt securities and for dealings in foreign currencies and (b) a day on which commercial banks are open for general business (including dealings in foreign currencies) in the city where the Principal Paying Agent or, as the case may be, the Paying Agent has its Specified Office; and

(ii) in the case of payment by transfer to an account, a day on which dealings in foreign currencies (including, in the case of Perpetual Securities denominated in Renminbi, settlement of Renminbi payments) may be carried on in the Principal Financial Centre of the currency of payment and in each (if any) Additional Financial Centre;

"**Person**" means any individual, corporation, partnership, joint venture, association, joint-stock company, trust, unincorporated organization, limited liability company, state-owned enterprise, government or any agency or political subdivision thereof or any other entity;

"**Principal Financial Centre**" means, in relation to any currency, the principal financial centre for that currency **provided**, **however**, **that**:

(a) in relation to euro, it means the principal financial centre of such Member State of the European Communities as is selected (in the case of a payment) by the payee or (in the case of a calculation) as specified in the applicable Pricing Supplement;

(b) in relation to Australian dollars, it means Sydney and in relation to New Zealand dollars, it means Auckland, in each case as is selected (in the case of a payment) by the payee or (in the case of a calculation) by the Calculation Agent or, in each case, the principal financial centre as is specified in the applicable Pricing Supplement; and

(c) in relation to Renminbi, it means Hong Kong or the principal financial centre as is specified in the applicable Pricing Supplement;

"**Rate of Distribution**" means the rate or rates (expressed as a percentage per annum) of distribution payable in respect of the Perpetual Securities specified in the relevant Pricing Supplement or calculated or determined in accordance with the provisions of these Conditions and/or the relevant Pricing Supplement;

"**Rating Agency**" means any of (i) S&P and (ii) Moody's provided that (A) if either of S&P or Moody's, but not both, will not make a rating of the Perpetual Securities publicly available, one other "nationally recognized statistical rating organization" that is registered as such pursuant to Section 15E of the Exchange Act and Rule 17g thereunder selected by the Issuer as a replacement agency will be substituted for S&P or Moody's, as the case may be; and (B) if both S&P and Moody's will not make a rating of the Perpetual Securities publicly available, two other "nationally recognized statistical rating organizations" that are registered as such pursuant to Section 15E of the Exchange Act and Rule 17g thereunder selected by the Issuer as replacement agencies;

"**Rating Category**" means (1) with respect to S&P, any of the following categories: "AAA," "AA," "A," "BBB," "BB," "B," "CCC," "CC," "C" and "D" (or equivalent successor categories); (2) with respect to Moody's, any of the following categories: "Aaa," "Aa," "A," "Baa," "Ba," "B," "Caa," "Ca," and "C" (or equivalent successor categories); and (3) the equivalent of any such category of S&P or Moody's used by another Rating Agency. In determining whether the rating of the Perpetual Securities has decreased by one or more gradations, gradations within Rating Categories ("+" and "-" for S&P; "1," "2" and "3" for Moody's; 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 "B+" to "B-," will constitute a decrease of one gradation);

"**Ratings Decline**" means, in connection with a Change of Control Triggering Event, the occurrence on, or within 90 days after, the earlier of the date, or public notice of the occurrence, of a Change of Control or the intention by PTT Public Company Limited to effect a Change of Control (which period will be extended so long as the rating of the Perpetual Securities is under publicly announced consideration for possible downgrade by any of the Rating Agencies), the public announcement by either Rating Agency of a decrease in the rating of the Perpetual Securities by one or more gradations (including gradations within Rating Categories as well as between Rating Categories);

"**Redemption Amount**" means, as appropriate, the Early Redemption Amount (Tax), the Optional Redemption Amount (Call) or such other amount in the nature of a redemption amount as may be specified in, or determined in accordance with the provisions of, the relevant Pricing Supplement;

"**Reference Banks**" has the meaning given in the relevant Pricing Supplement or, if none, four major banks selected by the Issuer in the market that is most closely connected with the Reference Rate and notified in writing to the Trustee and the Calculation Agent;

"**Reference Price**" has the meaning given in the relevant Pricing Supplement;

"**Reference Rate**" has the meaning given in the relevant Pricing Supplement;

"**Regular Period**" means:

(a) in the case of Perpetual Securities where distribution is scheduled to be paid only by means of regular payments, each period from and including the Distribution Commencement Date to but excluding the first Distribution Payment Date and each successive period from and including one Distribution Payment Date to but excluding the next Distribution Payment Date;

(b) in the case of Perpetual Securities where, apart from the first Distribution Period, distribution is scheduled to be paid only by means of regular payments, each period from and including a Regular Date falling in any year to but excluding the next Regular Date, where "**Regular Date**" means the day and month (but not the year) on which any Distribution Payment Date falls; and

(c) in the case of Perpetual Securities where, apart from one Distribution Period other than the first Distribution Period, Distribution is scheduled to be paid only by means of regular payments, each period from and including a Regular Date falling in any year to but excluding the next Regular Date, where "**Regular Date**" means the day and month (but not the year) on which any Distribution Payment Date falls other than the Distribution Payment Date falling at the end of the irregular Distribution Period.

"**Relevant Date**" means, in relation to any payment, whichever is the later of (a) the date on which the payment in question first becomes due and (b) if the full amount payable has not been received in the Principal Financial Centre of the currency of payment by the Principal Paying Agent or the Trustee on or prior to such due date, the date on which (the full amount having been so received) notice to that effect has been given to the Securityholders;

"**Relevant Financial Centre**" has the meaning given in the relevant Pricing Supplement;

"**Relevant Indebtedness**" means any Indebtedness which is denominated in a currency other than the currency of Thailand and which has a final maturity of one year or more from its date of incurrence or issuance;

"**Relevant Screen Page**" means the page, section or other part of a particular information service (including, without limitation, Reuters) specified as the Relevant Screen Page in the relevant Pricing Supplement, or such other page, section or other part as may replace it on that information service or such other information service, in each case, as may be nominated by the Person providing or sponsoring the information appearing there for the purpose of displaying rates or prices comparable to the Reference Rate;

"**Relevant Time**" has the meaning given in the relevant Pricing Supplement;

"**Reset Distribution Rate**" has the meaning given in Condition 6(e);

"**Securityholder**" has the meaning given in Condition 3(b) (*Title*);

"**Security Interest**" means any mortgage, pledge, lien, fixed or floating charge or other encumbrance;

"**SGX-ST**" means the Singapore Exchange Securities Trading Limited;

"**Specified Currency**" has the meaning given in the relevant Pricing Supplement;

"**Specified Denomination(s)**" has the meaning given in the relevant Pricing Supplement;

"**Specified Office**" has the meaning given in the Indenture;

"**Specified Period**" has the meaning given in the relevant Pricing Supplement;

"**Subsidiary**" means any corporation or other entity of which more than 50 per cent. of the total voting power of shares, securities or other ownership interests entitled to vote in the election of

the board of directors or other persons performing similar functions is at the time directly or indirectly owned by the Company;

"**S&P**" means S&P Global Inc. and its successors;

"**TARGET Settlement Day**" means any day on which TARGET2 is open for the settlement of payments in euro;

"**TARGET2**" means the Trans-European Automated Real-Time Gross Settlement Express Transfer payment system which utilizes a single shared platform and which was launched on November 19, 2007;

"**Thailand**" means the Kingdom of Thailand;

"**TFRS**" means Thai Financial Reporting Standards; and

"**Zero Coupon Perpetual Security**" means a Perpetual Security specified as such in the relevant Pricing Supplement.

(b) ***Interpretation***

In these Conditions:

(i) any reference to principal shall be deemed to include the Redemption Amount, any Additional Amounts (as defined in Condition 12 (*Additional Amounts*)), any premium payable in respect of a Perpetual Security and any other amount in the nature of principal payable pursuant to these Conditions or the Indenture;

(ii) any reference to distribution shall be deemed to include any Additional Amounts and any other amount in the nature of distribution payable pursuant to these Conditions or the Indenture;

(iii) references to Perpetual Securities being "**outstanding**" shall be construed in accordance with the Indenture;

(iv) if an expression is stated in Condition 2(a) (*Interpretation – Definitions*) to have the meaning given in the relevant Pricing Supplement, but the relevant Pricing Supplement gives no such meaning or specifies that such expression is "**not applicable**" then such expression is not applicable to the Perpetual Securities; and

(v) any reference to the Indenture shall be construed as a reference to the Indenture as amended and/or supplemented up to and including the Issue Date of the Perpetual Securities.

3. **Form, Denomination, Title and Transfer**

(a) ***Perpetual Securities***

Perpetual Securities are in the Specified Denomination(s), which may include a minimum denomination specified in the relevant Pricing Supplement and higher integral multiples of a smaller amount specified in the relevant Pricing Supplement.

(b) ***Title***

The Registrar will maintain a register outside the United Kingdom in accordance with the provisions of the Indenture. A certificate (each, a "**Perpetual Security Certificate**") will be issued to each Holder of Perpetual Securities in respect of its registered holding. Each Perpetual Security Certificate will be numbered serially with an identifying number which will be recorded in the register (the "**Register**"). "**Holder**" means the person in whose name such Perpetual Security is for the time being registered in the Register (or, in the case of a joint holding, the first named thereof) and "**Securityholder**" shall be construed accordingly.

(c) ***Ownership***

The Holder of any Perpetual Security shall (except as otherwise required by law) be treated as its absolute owner for all purposes (whether or not it is overdue and regardless of any notice of ownership, trust or any other interest therein, any writing on the "**Perpetual Security**" Certificate relating thereto (other than the endorsed form of transfer) or any notice of any previous loss or theft thereof) and no Person shall be liable for so treating such Holder.

(d) ***Transfers of Perpetual Securities***

Subject to paragraphs (g) and (h) below, a Perpetual Security may be transferred upon surrender of the relevant Perpetual Security Certificate, with the endorsed form of transfer duly completed, at the Specified Office of the Registrar or any Transfer Agent, together with such evidence as such Registrar or (as the case may be) such Transfer Agent may reasonably require to prove the title of the transferor and the authority of the individuals who have executed the form of transfer; **provided**, **however**, **that** a Perpetual Security may not be transferred unless the principal amount of Perpetual Securities transferred and (where not all of the Perpetual Securities held by a Holder are being transferred) the principal amount of the balance of Perpetual Securities not transferred are Specified Denominations. Where not all the Perpetual Securities represented by the surrendered Perpetual Security Certificate are the subject of the transfer, a new Perpetual Security Certificate in respect of the balance of the Perpetual Securities will be issued to the transferor.

(e) ***Registration and delivery of Perpetual Security Certificates***

Within five business days of the surrender of a Perpetual Security Certificate in accordance with paragraph (d) above, the Registrar will register the transfer in question and deliver a new Perpetual Security Certificate of a like principal amount to the Perpetual Securities transferred to each relevant Holder at its Specified Office or (as the case may be) the Specified Office of any Transfer Agent or (at the request and risk of any such relevant Holder) to the address specified for the purpose by such relevant Holder. In this paragraph, "**business day**" means a day on which commercial banks are open for general business (including dealings in foreign currencies) in the city where the Registrar or (as the case may be) the relevant Transfer Agent has its Specified Office.

(f) ***No charge***

The transfer of a Perpetual Security will be effected without charge by or on behalf of the Issuer, the Guarantor (if applicable) or the Registrar or any Transfer Agent but against such indemnity by the transferor as such Registrar or (as the case may be) such Transfer Agent may require in respect of any tax or other duty of whatsoever nature which may be levied or imposed in connection with such transfer.

(g) ***Closed periods***

Securityholders may not require transfers to be registered:

(i) during the period of 15 days ending on the due date for any payment of principal or Distributions (including any Arrears of Distribution and any Additional Distribution Amounts) in respect of the Perpetual Securities; and

(ii) during the period of 15 days ending on any date on which Perpetual Securities may be called for redemption by the Issuer at its option pursuant to Condition 11 below.

(h) ***Regulations concerning transfers and registration***

All transfers of Perpetual Securities and entries on the Register are subject to the detailed regulations concerning the transfer of Perpetual Securities scheduled to the program manual relating to the Program. The regulations may be changed by the Issuer with the prior written approval of the Registrar. A copy of the current regulations will be sent by the Registrar to any Securityholder (at the cost and expense of such Securityholder) who requests in writing a copy of such regulations.

4. **Status**

(a) *Senior Perpetual Securities*: This Condition 4(a) applies to Perpetual Securities that are Senior Perpetual Securities (being the Perpetual Securities that specify their status as senior in the applicable Pricing Supplement).

(i) *Status of Senior Perpetual Securities*

The Senior Perpetual Securities constitute direct, unconditional, unsubordinated and (subject to Condition 5(a) (*Limitation on Liens*)) unsecured obligations of the Issuer which will at all times rank *pari passu* among themselves and at least *pari passu* with all other present and future unsecured and unsubordinated obligations of the Issuer, save for such obligations as may be preferred by provisions of law that are both mandatory and of general application.

(ii) *Status of Guarantee of Senior Perpetual Securities*

The Guarantee of the Senior Perpetual Securities constitute direct, unconditional, unsubordinated and (subject to Condition 5(a) (*Limitation on Liens*)) unsecured obligations of the Guarantor which will at all times rank at least *pari passu* with all other present and future unsecured and unsubordinated obligations of the Guarantor, save for such obligations as may be preferred by provisions of law that are both mandatory and of general application.

(iii) *No Voting Rights*

The Senior Perpetual Securities do not confer any voting rights on the Securityholders with respect to the ordinary shares or any other class of share capital of the Issuer or the Guarantor (as applicable).

(b) *Subordinated Perpetual Securities*: This Condition 4(b) applies to Perpetual Securities that are Subordinated Perpetual Securities (being the Perpetual Securities that specify their status as subordinated in the applicable Pricing Supplement).

(i) *Status of Subordinated Perpetual Securities*

The Subordinated Perpetual Securities constitute direct, unconditional, unsecured and subordinated obligations of the Issuer ranking *pari passu* without any preference among themselves, and with any obligations of the Issuer which rank, or is expressed to rank, *pari passu* with the Subordinated Perpetual Securities. The rights and claims of the Securityholders and in respect of the Subordinated Perpetual Securities are subordinated as provided in this Condition 4(b).

(ii) *Ranking of claims on Winding-Up – Issuer*

In a Winding-Up of the Issuer, the Holders' right to any payment under the Subordinated Perpetual Securities shall be limited to the Issuer's remaining assets, after its payment to the other preferred or secured creditors and ordinary creditors, but shall be ranked *pari passu* with the right of holders of any obligations of the Issuer which rank, or is expressed to rank, *pari passu* with the Subordinated Perpetual Securities and shall be ranked at a higher level of priority than that of any class of the Issuer's share capital or any obligations of the Issuer which rank, or is expressed to rank, junior to the Subordinated Perpetual Securities, as stated above. If the Issuer's remaining assets, after such payment, are insufficient for its full settlement of the principal and/or Distribution, Arrears of Distribution or Additional Distribution Amounts, as relevant, including any other damages arising from such Subordinated Perpetual Securities, the amounts which still remain unpaid to the Holders shall be deemed to have been extinguished, wherein the Holders agree to waive all these unpaid amounts in favor of the Issuer.

In these Conditions, "**Winding-Up**" means in respect of the Issuer or the Guarantor, a final and effective order or resolution by a competent authority in the jurisdiction of the Issuer or the Guarantor (as the case may be) for the liquidation or bankruptcy (where it leads to liquidation) or similar proceedings having the same effect as liquidation or bankruptcy (where it leads to liquidation) in respect of the Issuer or the Guarantor (as the case may be), or a final and effective resolution by the shareholders of the Issuer or the Guarantor for the liquidation of the Issuer or the Guarantor (as the case may be).

(iii) *No set-off – Issuer*

No holder of Subordinated Perpetual Securities relating to them may exercise, claim or plead any right of set-off, deduction, withholding or retention in respect of any amount owed to it by the Issuer in respect of, or arising under or in connection with the Subordinated Perpetual Securities relating to them, and each holder of Subordinated Perpetual Securities relating to them shall, by virtue of his holding of any Subordinated Perpetual Securities relating to them, be deemed to have waived all such rights of set-off, deduction, withholding or retention against the Issuer, to the extent permitted by applicable laws. Notwithstanding the preceding sentence, if any of the amounts owing to any holder of Subordinated Perpetual Securities relating to them by the Issuer in respect of, or arising under or in connection with the Subordinated Perpetual Securities relating to them is discharged by set-off, such holder of Subordinated Perpetual Securities relating to them shall immediately pay an amount equal to the amount of such discharge to the Issuer (or, in the event of the winding-up or administration of the Issuer, the liquidator or, as appropriate, administrator of the Issuer) and, until such time as payment is made, shall hold such amount for the Issuer (or the liquidator or, as appropriate, administrator of the Issuer) and accordingly any such discharge shall be deemed not to have taken place.

(iv) *Status of Guarantee of Subordinated Perpetual Securities*

The Guarantee of the Subordinated Perpetual Securities constitute direct, unconditional, unsecured and subordinated obligations of the Guarantor and will rank at least *pari passu* with any obligations of the Guarantor which rank, or is expressed to rank, *pari passu* with the Guarantee of the Subordinated Perpetual Securities. The rights and claims of the Securityholders and in respect of the Subordinated Perpetual Securities are subordinated as provided in this Condition 4(b).

(v) *Ranking of claims on Winding-Up – Guarantor*

In the event of the Winding-Up of the Guarantor, the rights and claims of Securityholders in respect of payment of principal of and distribution on the Subordinated Perpetual Securities (subject to the Maximum Guaranteed Amount) shall rank ahead of those persons whose claims are in respect of any class of the share capital of the Guarantor or any obligations of the Guarantor which rank, or is expressed to rank, junior to the Guarantee of the Subordinated Perpetual Securities, but shall be subordinated in right of payment to the claims of all other present and future creditors of the Guarantor, other than any obligations of the Guarantor which rank, or is expressed to rank, *pari passu* with the Guarantee of the Subordinated Perpetual Securities of the Guarantor.

In a Winding-Up of the Guarantor, the Holders' right to any payment under the Guarantee shall be limited to the Guarantor's remaining assets, after its payment to the other preferred or secured creditors and ordinary creditors, but shall be ranked *pari passu* with any obligations of the Guarantor which rank, or is expressed to rank, *pari passu* with the Guarantee of the Subordinated Perpetual Securities and shall be ranked at a higher level of priority than that of any class of the Guarantor's share capital or any obligations of the Guarantor which rank, or is expressed to rank, junior to the Guarantee of the Subordinated Perpetual Securities, as stated above. If the Guarantor's remaining assets, after such payment, are insufficient for its full settlement of the Guarantee, including any other damages arising from the Guarantee, the amounts

which still remain unpaid to the Holders shall be deemed to have been extinguished, wherein the Holders agree to waive all these unpaid amounts in favour of the Guarantor.

(vi) *No set-off – Guarantor*

No holder of Subordinated Perpetual Securities relating to them may exercise, claim or plead any right of set-off, deduction, withholding or retention in respect of any amount owed to it by the Guarantor in respect of, or arising under or in connection with the Subordinated Perpetual Securities relating to them, and each holder of Subordinated Perpetual Securities relating to them shall, by virtue of his holding of any Subordinated Perpetual Securities relating to them, be deemed to have waived all such rights of set-off, deduction, withholding or retention against the Guarantor, to the extent permitted by applicable law. Notwithstanding the preceding sentence, if any of the amounts owing to any holder of Subordinated Perpetual Securities relating to them by the Guarantor in respect of, or arising under or in connection with the Subordinated Perpetual Securities relating to them is discharged by set-off, such holder of Subordinated Perpetual Securities relating to them shall, subject to applicable law, immediately pay an amount equal to the amount of such discharge to the Guarantor (or, in the event of the winding-up or administration of the Guarantor, the liquidator or, as appropriate, administrator of the Guarantor) and, until such time as payment is made, shall hold such amount for the Issuer (or the liquidator or, as appropriate, administrator of the Guarantor) and accordingly any such discharge shall be deemed not to have taken place.

(vii) *No Voting Rights.*

The Subordinated Perpetual Securities do not confer any voting rights on the Securityholders with respect to the ordinary shares or any other class of share capital of the Issuer or the Guarantor.

5. **Certain Covenants**

The provisions of Condition 5 shall only apply to the extent specified as "Applicable" in the relevant Pricing Supplement.

(a) ***Limitation on Liens***

So long as any Perpetual Security remains outstanding, the Company will not, and the Company will not permit any of its Subsidiaries to, create, incur, issue or assume or guarantee any Relevant Indebtedness secured by any Security Interest on any property or assets owned by it or any Subsidiary without in any such case effectively providing that the Perpetual Securities (together with, if the Company shall so determine, any other Indebtedness of the Company or the Company's Subsidiaries then existing or thereafter created which is not subordinated to the Perpetual Securities) will be secured at least equally and ratably with or prior to such secured Relevant Indebtedness unless, after giving effect thereto, the aggregate principal amount of all such secured Relevant Indebtedness would not exceed 10 per cent. of the Company's Consolidated Net Tangible Assets.

The foregoing restrictions will not apply to Relevant Indebtedness secured by:

(i) any Security Interest existing on the Issue Date of the Perpetual Securities;

(ii) any Security Interest existing on any property or assets prior to the acquisition thereof by the Company or any of its Subsidiaries or arising after such acquisition pursuant to contractual commitments entered into prior to, and not in contemplation of, such acquisition;

(iii) any Security Interest securing Relevant Indebtedness incurred or assumed for the purpose of financing the purchase price of any property or assets or the cost of construction, improvement or repair of all or any part thereof, **provided that** such Security Interest attaches to such property or assets concurrently with or within 12

months after the acquisition thereof or the completion of construction, improvement or repair thereof;

(iv) any Security Interest existing on any property or assets of any Subsidiary prior to the time such Subsidiary becomes a Subsidiary of the Company or arising after such time pursuant to contractual commitments entered into prior to, and not in contemplation of, such Subsidiary becoming a Subsidiary of the Company; or

(v) any Security Interest arising out of the refinancing, extension, renewal or refunding of any Relevant Indebtedness secured by any Security Interest permitted by any of the foregoing clauses, to the extent of the amount of such Relevant Indebtedness; **provided that** such Relevant Indebtedness is not secured by any additional property or assets.

(b) ***Consolidation, Merger and Sale of Assets***

Neither the Issuer nor (while there are any Guaranteed Notes outstanding) the Guarantor (if applicable) will consolidate with or merge with or into any other Person in a transaction in which the Issuer or the Guarantor (if applicable) is not the surviving entity, or sell, transfer or lease or otherwise dispose of all or substantially all of its property or assets (computed on a consolidated basis) to any Person, unless:

(i) any Person formed by such consolidation or into which the Issuer or the Guarantor (if applicable) is merged or to whom the Issuer or the Guarantor (if applicable) has sold, transferred, leased or otherwise disposed of substantially all of its properties or assets (a "**Successor Issuer**" or a "**Successor Guarantor**", as applicable) is a corporation organized and validly existing under the laws of Thailand, and expressly assumes by a supplemental agreement all obligations of the Issuer or the Guarantor (if applicable) under the Perpetual Securities, the Indenture and the Paying and Transfer Agent and Registrar Appointment Letter;

(ii) immediately after giving effect to such transaction, no Change of Control, Ratings Decline or Enforcement Event shall have occurred and be continuing;

(iii) if, as a result of the transaction, any property or asset of the Company or any of the Company's Subsidiaries would become subject to a Security Interest that would not be permitted under Condition 5(a) above, the Company or such successor Person takes such steps as shall be necessary to secure the Perpetual Securities at least equally and ratably with the Relevant Indebtedness secured by such Security Interest or by such other Security Interest as shall have been approved by Holders of the Perpetual Securities pursuant to the Indenture; and

(iv) the Issuer or the Guarantor (if applicable) delivers to the Trustee an Officer's Certificate and an Opinion of Counsel, in each case stating that such consolidation, merger or transfer and the relevant supplemental agreement complies with this provision and that all conditions precedent provided for in the Indenture and the Paying and Transfer Agent and Registrar Appointment Letter relating to such transaction have been complied with and that the relevant supplemental agreement is enforceable.

References to the Issuer and the Guarantor in these Conditions shall be deemed to include any Successor Issuer or Successor Guarantor.

(c) ***Reports***

So long as any of the Perpetual Securities remain outstanding, the Issuer shall file with the Trustee and, upon request, furnish to the Holders of the Perpetual Securities, as soon as they are available but in any event not more than 10 calendar days after any financial statements of the Company are filed with the Stock Exchange of Thailand (the "**SET**") or any other recognized exchange on which the Company's common shares are at any time listed for trading, true and correct copies of any financial statements filed with such exchange if such financial statements are in the English language; *provided that*, if such financial statements are not in the English language, or at any time the common stock of the Company ceases to be listed for trading on SET or any other recognized exchange.

The Issuer shall also file with the Trustee and, upon request, furnish to the Holders of the Perpetual Securities:

(i) as soon as they are available, but in any event within 90 calendar days after the end of each fiscal year of the Company, copies of the Company's financial statements (on a consolidated basis) in respect of such fiscal year (including a statement of income, balance sheet and cash flow statement) audited by a member firm of independent accountants;

(ii) as soon as they are available, but in any event within 45 calendar days after the end of the first three fiscal quarters of the Company, copies of the Company's unaudited financial statements (on a consolidated basis) in respect of such fiscal quarter (including a statement of income, balance sheet and cash flow statement) prepared on a basis consistent with the audited financial statements of the Company, together with a certificate signed by the person then authorized to sign financial statements on behalf of the Company, to the effect that such financial statements are true in all material respects and present fairly the financial position of the Company, as at the end of, and the results of its operations for, the relevant fiscal quarter; and

provided further that, if reports other than financial statements filed with the SET or any other recognized exchange on which the Company's common shares are at any time listed for trading are not in the English language, the Issuer shall file with the Trustee and, upon request, furnish to the Holders of the Perpetual Securities, as soon as practicable after the issue or publication of such reports, English copies of such reports.

The Trustee shall have no obligation whatsoever to determine whether or not such information, documents or reports have been filed with the exchange.

6. **Fixed Rate Perpetual Security Provisions**

(a) ***Application***

This Condition 6 is applicable to the Perpetual Securities only if the Fixed Rate Perpetual Security Provisions are specified in the relevant Pricing Supplement as being applicable.

(b) ***Accrual of Distribution***

The Perpetual Securities confers a right to receive distribution from the Distribution Commencement Date at the Rate of Distribution payable in arrear on each Distribution Payment Date, subject as provided in Condition 11 (*Payments*) below. Each Perpetual Security will cease to confer a right to receive distribution from the due date for redemption unless, upon due presentation, payment of the Redemption Amount is improperly withheld or refused, in which case it will continue to confer the right to receive distribution in accordance with this Condition 6 (as well after as before judgment) until whichever is the earlier of (i) the day on which all sums due in respect of such Perpetual Security up to that day are received by or on behalf of the relevant Securityholder and (ii) the day which is seven days after the relevant Paying Agent or the Trustee has notified the Securityholders of receipt of all sums due in respect of the Perpetual Securities up to such seventh day (except to the extent that there is any subsequent default in payment).

(c) ***Fixed Coupon Amount***

Unless specified in the relevant Pricing Supplement, the amount of distribution payable in respect of each Perpetual Security for any Distribution Period shall be the relevant Fixed Coupon Amount and, if the Perpetual Securities are in more than one Specified Denomination, shall be the relevant Fixed Coupon Amount in respect of the relevant Specified Denomination.

(d) ***Calculation of distribution amount***

If the amount of distribution payable in respect of each Perpetual Security for any period for which a Fixed Coupon Amount is not specified, such distribution shall be calculated by the Paying Agent by applying the Rate of Distribution to the Calculation Amount, *multiplying* the

product by the relevant Day Count Fraction, rounding the resulting figure to the nearest sub-unit of the Specified Currency (half a sub-unit being rounded upwards) and *multiplying* such rounded figure by a fraction equal to the Specified Denomination of such Perpetual Security *divided by* the Calculation Amount. For this purpose a "**sub-unit**" means, in the case of any currency other than euro, the lowest amount of such currency that is available as legal tender in the country of such currency and, in the case of euro, means one cent.

(e) ***Step-up upon a Change of Control Triggering Event***

The Rate of Distribution payable on the Perpetual Securities will be subject to an increase of the Change of Control Step-up Rate upon the occurrence of a Change of Control Triggering Event (the Rate of Distribution subject to such increase, the "**Reset Distribution Rate**"). The Reset Distribution Rate will have effect from and including the first distribution payment date following the date of the occurrence of such Change of Control Triggering Event and shall apply to all subsequent distribution payment dates regardless of any future increase in the ratings of the Perpetual Securities.

7. **Floating Rate Perpetual Security Provisions**

(a) ***Application***

This Condition 7 is applicable to the Perpetual Securities only if the Floating Rate Perpetual Security Provisions are specified in the relevant Pricing Supplement as being applicable.

(b) ***Accrual of Distribution***

The Perpetual Securities confer a right to receive distribution from the Distribution Commencement Date at the Rate of Distribution payable in arrear on each Distribution Payment Date, subject as provided in Condition 12 (*Payments*) below. Each Perpetual Security will cease to confer a right to receive distribution from the due date for redemption unless, upon due presentation, payment of the Redemption Amount is improperly withheld or refused, in which case it will continue to confer a right to receive distribution in accordance with this Condition (as well after as before judgment) until whichever is the earlier of (i) the day on which all sums due in respect of such Perpetual Security up to that day are received by or on behalf of the relevant Securityholder and (ii) the day which is seven days after the relevant Paying Agent or the Trustee has notified the Securityholders of receipt of all sums due in respect of the Perpetual Securities up to such seventh day (except to the extent that there is any subsequent default in payment).

(c) ***Screen Rate Determination***

If Screen Rate Determination is specified in the relevant Pricing Supplement as the manner in which the Rate(s) of Distribution is/are to be determined, the Rate of Distribution applicable to the Perpetual Securities for each Distribution Period will be determined by the Calculation Agent on the following basis:

(i) if the Reference Rate is a composite quotation or customarily supplied by one entity, the Calculation Agent will determine the Reference Rate which appears on the Relevant Screen Page as of the Relevant Time on the relevant Distribution Determination Date;

(ii) if Linear Interpolation is specified as applicable in respect of an Distribution Period in the applicable Pricing Supplement, the Rate of Distribution for such Distribution Period shall be calculated by the Calculation Agent by straight-line linear interpolation by reference to two rates which appear on the Relevant Screen Page as of the Relevant Time on the relevant Distribution Determination Date, where:

(A) one rate shall be determined as if the Relevant Period were the period of time for which rates are available next shorter than the length of the relevant Distribution Period; and

(B) the other rate shall be determined as if the Relevant Period were the period of time for which rates are available next longer than the length of the relevant Distribution Period;

provided, **however**, **that** if no rate is available for a period of time next shorter or, as the case may be, next longer than the length of the relevant Distribution Period, then the Calculation Agent shall, upon seeking advice from the Reference Banks (at the cost of the Issuer (failing which, the Guarantor (if applicable))) or taking instructions from the Issuer, determine such rate at such time and by reference to such sources as it determines appropriate;

(iii) in any other case, the Calculation Agent will determine the arithmetic mean of the Reference Rates which appear on the Relevant Screen Page as of the Relevant Time on the relevant Distribution Determination Date;

(iv) if, in the case of (i) above, such rate does not appear on that page or, in the case of (ii) above, fewer than two such rates appear on that page or if, in either case, the Relevant Screen Page is unavailable, the Issuer (or an agent appointed by it) will:

(A) request the principal Relevant Financial Centre office of each of the Reference Banks to provide a quotation of the Reference Rate at approximately the Relevant Time on the Distribution Determination Date to prime banks in the Relevant Financial Centre interbank market in an amount that is representative for a single transaction in that market at that time; and

(B) the Issuer (or an agent appointed by it) shall notify the Calculation Agent of the same. The Calculation Agent will determine the arithmetic mean of such quotations;

(v) if fewer than two such quotations are provided as requested in accordance with (iv) above, the Calculation Agent will determine the arithmetic mean of the rates (being the nearest to the Reference Rate, as determined by the Calculation Agent) quoted by major banks in the Principal Financial Centre of the Specified Currency, selected by the Issuer, at approximately 11.00 a.m. (local time in the Principal Financial Centre of the Specified Currency) on the first day of the relevant Distribution Period for loans in the Specified Currency for a period equal to the relevant Distribution Period and in an amount that is representative for a single transaction in that market at that time, and the Rate of Distribution for such Distribution Period shall be the sum of the Margin and the rate or (as the case may be) the arithmetic mean so determined; **provided**, **however**, **that** if the Calculation Agent is unable to determine a rate or (as the case may be) an arithmetic mean in accordance with the above provisions in relation to any Distribution Period, the Rate of Distribution applicable to the Perpetual Securities during such Distribution Period will be the sum of the Margin and the rate or (as the case may be) the arithmetic mean last determined in relation to the Perpetual Securities in respect of a preceding Distribution Period; and

(vi) notwithstanding the foregoing, if the Reference Rate from time to time in respect of Floating Rate Perpetual Securities is specified hereon as CNH HIBOR:

(A) the Rate of Distribution for each Distribution 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 on the Relevant Screen Page as at 11.15 a.m. (Hong Kong time) or if, at or around that time it is notified that the fixing will be published at 2.30 p.m. (Hong Kong time), then 2.30 p.m. (Hong Kong time) on the Distribution Determination Date in question as determined by the Calculation Agent;

(B) if the Relevant Screen Page is not available or, if sub-paragraph (vi)(A)(1) above applies and no such offered quotation appears on the Relevant Screen Page, or, if subparagraph (vi)(A)(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 Issuer (or an agent appointed by it) shall request the principal Hong Kong office of each of the Reference Banks to provide it with its offered quotation (expressed as a percentage rate per annum) for the Reference Rate at approximately 11.15 a.m. (Hong Kong time) on the Distribution Determination Date in question. If two or more of the Reference Banks provide the Calculation Agent with such offered quotations, the Rate of Distribution for such Distribution Period shall be the arithmetic mean of such offered quotations as determined by the Calculation Agent. If all four Reference Banks provide the Calculation Agent with such offered quotations, 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;

(C) if subparagraph (vi)(B) above applies and the Calculation Agent determines that fewer than two Reference Banks are providing offered quotations, subject as provided below, the Rate of Distribution shall be the arithmetic mean of the rates per annum (expressed as a percentage) on the request of the Issuer (or an agent appointed by it) and as communicated to the Calculation Agent by the Reference Banks or any two or more of them, at which such banks were offered at approximately 11.15 a.m. (Hong Kong time) on the relevant Distribution Determination Date, deposits in CNH for a period equal to that which would have been used for the Reference Rate by leading banks in the Hong Kong inter-bank market and notified in writing to the Calculation Agent. If fewer than two of the Reference Banks provide the Calculation Agent with such offered rates, the Rate of Distribution shall be (i) the offered rate for deposits in CNH for a period equal to that which would have been used for the Reference Rate by a bank, or (ii) the arithmetic mean of the offered rates for deposits in CNH for a period equal to that which would have been used for the Reference Rate by two or more banks, in each case as informed to the Calculation Agent by such bank or banks (which shall be such bank or banks being in the opinion of the Issuer suitable for such purpose) as being quoted by each such bank at approximately 11.15 a.m. (Hong Kong time) on the relevant Distribution Determination Date to leading banks in the Hong Kong inter-bank market, **provided that**, if the Rate of Distribution cannot be determined in accordance with the foregoing provisions of this paragraph, the Rate of Distribution shall be determined as at the last preceding Distribution Determination Date (though substituting, where a different Margin or Maximum or Minimum Rate of Distribution is to be applied to the relevant Distribution Period from that which applied to the last preceding Distribution Period, the Margin or Maximum or Minimum Rate of Distribution relating to the relevant Distribution Period, in place of the Margin or Maximum or Minimum Rate of Distribution relating to that last preceding Distribution Period); and

(D) in no event shall the Rate of Distribution be less than zero per cent. per annum.

(d) ***ISDA Determination***

If ISDA Determination is specified in the relevant Pricing Supplement as the manner in which the Rate(s) of Distribution is/are to be determined, the Rate of Distribution applicable to the Perpetual Securities for each Distribution Period will be the sum of the Margin and the relevant ISDA Rate where "**ISDA Rate**" in relation to any Distribution Period means a rate equal to the Floating Rate (as defined in the ISDA Definitions) that would be determined by the Calculation Agent under an Distribution rate swap transaction if the Calculation Agent were acting as

Calculation Agent for that Distribution rate swap transaction under the terms of an agreement incorporating the ISDA Definitions and under which:

(i) the Floating Rate Option (as defined in the ISDA Definitions) is as specified in the relevant Pricing Supplement;

(ii) the Designated Maturity (as defined in the ISDA Definitions) is a period specified in the relevant Pricing Supplement;

(iii) the relevant Reset Date (as defined in the ISDA Definitions) is either (A) if the relevant Floating Rate Option is based on (x) the London inter-bank offered rate (LIBOR), (y) the Eurozone inter-bank offered rate (EURIBOR) or (z) the Hong Kong inter-bank offered rate (HIBOR) for a currency, the first day of that Distribution Period or (B) in any other case, as specified in the relevant Pricing Supplement; and

(iv) if Linear Interpolation is specified as applicable in respect of an Distribution Period in the applicable Pricing Supplement, the Rate of Distribution for such Distribution Period shall be calculated by the Calculation Agent by straight-line linear interpolation by reference to two rates based on the relevant Floating Rate Option, where:

(A) one rate shall be determined as if the Designated Maturity were the period of time for which rates are available next shorter than the length of the relevant Distribution Period; and

(B) the other rate shall be determined as if the Designated Maturity were the period of time for which rates are available next longer than the length of the relevant Distribution Period,

provided, **however**, **that** if there is no rate available for a period of time next shorter than the length of the relevant Distribution Period or, as the case may be, next longer than the length of the relevant Distribution Period, then the Calculation Agent shall determine such rate at such time and by reference to such sources as the Issuer (or an agent appointed by it) determines appropriate.

(e) ***Maximum or Minimum Rate of Distribution***

If any Maximum Rate of Distribution or Minimum Rate of Distribution is specified in the relevant Pricing Supplement, then the Rate of Distribution shall in no event be greater than the maximum or be less than the minimum so specified. If the relevant Pricing Supplement does not specify any Minimum Rate of Distribution and the Rate of Distribution as determined by the Calculation Agent according to this Condition is a negative value, the Rate of Distribution shall be zero per cent. per annum.

(f) ***Step-up upon a Change of Control Triggering Event***

The Rate of Distribution payable on the Perpetual Securities will be subject to an increase of the Change of Control Step-up Rate upon the occurrence of a Change of Control Triggering Event (the Rate of Distribution following such increase, the "**Reset Distribution Rate**"). The Reset Distribution Rate will have effect from and including the first Distribution payment date following the date of the occurrence of such Change of Control Triggering Event and shall apply to all subsequent Distribution payment dates regardless of any future increase in the ratings of the Perpetual Securities.

(g) ***Calculation of Distribution Amount***

The Calculation Agent will, as soon as practicable after the time at which the Rate of Distribution is to be determined in relation to each Distribution Period, calculate the Distribution Amount payable in respect of each Perpetual Security for such Distribution Period. The Distribution Amount will be calculated by applying the Rate of Distribution for such Distribution Period to the Calculation Amount, *multiplying* the product by the relevant Day Count Fraction, rounding the resulting figure to the nearest sub-unit of the Specified Currency (half a sub-unit being rounded upwards) and *multiplying* such rounded figure by a fraction equal

to the Specified Denomination of the relevant Perpetual Security *divided by* the Calculation Amount. For this purpose a "**sub-unit**" means, in the case of any currency other than euro, the lowest amount of such currency that is available as legal tender in the country of such currency and, in the case of euro, means one cent.

(h) ***Calculation of other amounts***

If the relevant Pricing Supplement specifies that any other amount is to be calculated by the Calculation Agent, the Calculation Agent will, as soon as practicable after the time or times at which any such amount is to be determined, calculate the relevant amount. The relevant amount will be calculated by the Calculation Agent in the manner specified in the relevant Pricing Supplement.

(i) ***Publication***

The Calculation Agent will cause each Rate of Distribution and Distribution Amount determined by it, together with the relevant Distribution Payment Date, and any other amount(s) required to be determined by it together with any relevant payment date(s) to be notified to the Issuer, the Guarantor (if applicable), the Paying Agents, and the Trustee as soon as practicable after such determination but (in the case of each Rate of Distribution, Distribution Amount and Distribution Payment Date) in any event not later than the first day of the relevant Distribution Period. Notice thereof shall also promptly be given by the Issuer to the Securityholders and each competent authority, stock exchange and/or quotation system (if any) by which the Perpetual Securities have then been admitted to listing, trading and/or quotation. The Calculation Agent will be entitled to recalculate any Distribution Amount (on the basis of the foregoing provisions) without notice in the event of an extension or shortening of the relevant Distribution Period. If the Calculation Amount is less than the minimum Specified Denomination the Issuer shall not be obliged to publish each Distribution Amount but instead may publish only the Calculation Amount and the Distribution Amount in respect of a Perpetual Security having the minimum Specified Denomination.

(j) ***Notifications etc.***

All notifications, opinions, determinations, certificates, calculations, quotations and decisions given, expressed, made or obtained for the purposes of this Condition by the Calculation Agent will (in the absence of manifest error) be binding on the Issuer, the Guarantor (if applicable), the Trustee, the Paying Agents, the Securityholders and (subject as aforesaid) no liability to any such Person will attach to the Calculation Agent in connection with the exercise or non-exercise by it of its powers, duties and discretions for such purposes.

(k) ***Benchmark Discontinuation***

If a Benchmark Event occurs in relation to the Reference Rate when any Rate of Distribution (or any component part thereof) for any Distribution Period remains to be determined by reference to such Reference Rate, the Issuer shall use its reasonable endeavours to appoint an Independent Adviser, as soon as reasonably practicable, to determine a Successor Rate, failing which an Alternative Rate (in accordance with Condition 7(k)) and, in either case, an Adjustment Spread, if any (in accordance with Condition 7(k)(iii)) and any Benchmark Amendments (in accordance with Condition 7(k)(iv)).

In the absence of bad faith or fraud, the Independent Adviser shall have no liability whatsoever to the Issuer, the Guarantor, the Trustee, Agents or the Securityholders for any determination made by it pursuant to this Condition 7(k) and the Trustee and Agents will not be liable for any loss, liability, cost, charge or expense which may arise as a result thereof.

(i) If (A) the Issuer is unable to appoint an Independent Adviser or (B) the Independent Adviser appointed by it fails to determine a Successor Rate or, failing which, an Alternative Rate in accordance with this Condition 7(k) prior to the relevant Distribution Determination Date, the Reference Rate applicable to the immediate following Distribution Period shall be the Reference Rate applicable as at the last preceding Distribution Determination Date. If there has not been a first Distribution Payment Date, the Reference Rate shall be the Reference Rate applicable to the first

Distribution Period. For the avoidance of doubt, any adjustment pursuant to this final paragraph of Condition 7(k) shall apply to the immediately following Distribution Period only. Any subsequent Distribution Period may be subject to the subsequent operation of this Condition 7(k).

(ii) If the Independent Adviser determines in its discretion that:

(A) there is a Successor Rate, then such Successor Rate shall (subject to adjustment as provided in Condition 7(k)(iii)) subsequently be used in place of the Reference Rate to determine the Rate of Distribution for the immediately following Distribution Period and all following Distribution Periods, subject to the subsequent operation of this Condition 7(k); or

(B) there is no Successor Rate but that there is an Alternative Rate, then such Alternative Rate shall (subject to adjustment as provided in Condition 7(k)(iii)) subsequently be used in place of the Reference Rate to determine the Rate of Distribution for the immediately following Distribution Period and all following Distribution Periods, subject to the subsequent operation of this Condition 7(k).

(iii) If the Independent Adviser determines in its discretion (A) that an Adjustment Spread is required to be applied to the Successor Rate or the Alternative Rate (as the case may be) and (B) the quantum of, or a formula or methodology for determining, such Adjustment Spread, then such Adjustment Spread shall apply to the Successor Rate or the Alternative Rate (as the case may be).

(iv) If any relevant Successor Rate, Alternative Rate or Adjustment Spread is determined in accordance with this Condition 7(k) and the Independent Adviser determines in its discretion (i) that amendments to these Conditions are necessary to ensure the proper operation of such Successor Rate, Alternative Rate and/or Adjustment Spread (such amendments, the "**Benchmark Amendments**") and (ii) the terms of the Benchmark Amendments, then the Issuer shall, subject to giving notice thereof in accordance with Condition 7(k)(v), without any requirement for the consent or approval of relevant Securityholders, vary these Conditions to give effect to such Benchmark Amendments with effect from the date specified in such notice (and for the avoidance of doubt, the Trustee shall, at the direction and expense of the Issuer, consent to and effect such consequential amendments to the Indenture and these Conditions as may be required in order to give effect to this Condition 7(k)).

(v) Any Successor Rate, Alternative Rate, Adjustment Spread and the specific terms of any Benchmark Amendments, determined under this Condition 7(k) will be notified promptly by the Issuer to the Trustee, the Calculation Agent, the Paying Agents and, in accordance with Condition 21 (*Notices*), the Securityholders. Such notice shall be irrevocable and shall specify the effective date of the Benchmark Amendments, if any.

(vi) No later than notifying the Trustee of the same, the Issuer shall deliver to the Trustee a certificate signed by two authorised signatories of the Issuer:

(A) confirming (x) that a Benchmark Event has occurred, (y) the relevant Successor Rate, or, as the case may be, the relevant Alternative Rate and, (z) where applicable, any relevant Adjustment Spread and/or the specific terms of any relevant Benchmark Amendments, in each case as determined in accordance with the provisions of this Condition 7(k); and

(B) certifying that the relevant Benchmark Amendments are necessary to ensure the proper operation of such relevant Successor Rate, Alternative Rate and/or Adjustment Spread.

(vii) The Successor Rate or Alternative Rate and the Adjustment Spread (if any) and the Benchmark Amendments (if any) specified in such certificate will (in the absence of manifest error or bad faith in the determination of such Successor Rate or Alternative Rate and such Adjustment Spread (if any) and such Benchmark Amendments (if any))

be binding on the Issuer, the Trustee and Principal Paying Agent, the Calculation Agent, the other Paying Agents and the Securityholders.

As used in this Condition 7(k):

"**Adjustment Spread**" means either a spread (which may be positive or negative), or the formula or methodology for calculating a spread, in either case, which the Independent Adviser determines is required to be applied to the relevant Successor Rate or the relevant Alternative Rate (as the case may be) to reduce or eliminate, to the extent reasonably practicable in the circumstances, any economic prejudice or benefit (as the case may be) to Securityholders as a result of the replacement of the Reference Rate with the Successor Rate or the Alternative Rate (as the case may be) and is the spread, formula or methodology which:

(i) in the case of a Successor Rate, is formally recommended, or formally provided as an option for parties to adopt, in relation to the replacement of the Reference Rate with the Successor Rate by any Relevant Nominating Body; or

(ii) (if no such recommendation has been made, or in the case of an Alternative Rate), the Independent Adviser, determines is customarily applied to the relevant Successor Rate or Alternative Rate (as the case may be) in international debt capital markets transactions to produce an industry-accepted replacement rate for the Reference Rate; or

(iii) (if no such recommendation has been made, or in the case of an Alternative Rate) the Independent Adviser determines, is recognised or acknowledged as being the industry standard for over-the-counter derivative transactions which reference the Reference Rate, where such rate has been replaced by the Successor Rate or the Alternative Rate (as the case may be); or

(iv) (if the Independent Adviser determines that no such industry standard is recognised or acknowledged) the Independent Adviser determines to be appropriate.

"**Alternative Rate**" means an alternative benchmark or screen rate which the Independent Adviser determines in accordance with Condition 7(k)(ii) is customary in market usage in the international debt capital markets for the purposes of determining floating rates of distribution (or the relevant component part thereof) in the Specified Currency.

"**Benchmark Event**" means:

(i) the relevant Reference Rate has ceased to be published on the Relevant Screen Page as a result of such benchmark ceasing to be calculated or administered; or

(ii) a public statement by the administrator of the relevant Reference Rate that it has ceased, or will, by a specified date within the following six months, cease, publishing such Reference Rate permanently or indefinitely (in circumstances where no successor administrator has been appointed that will continue publication of such Reference Rate); or

(iii) a public statement by the supervisor of the administrator of the relevant Reference Rate that such Reference Rate has been or will, by a specified date within the following six months, be permanently or indefinitely discontinued; or

(iv) a public statement by the supervisor of the administrator of the relevant Reference Rate that means that such Reference Rate will, by a specified date within the following six months, be prohibited from being used or that its use will be subject to restrictions or adverse consequences, either generally or in respect of the Perpetual Securities; or

(v) a public statement by the supervisor of the administrator of the relevant Reference Rate (as applicable) that, in the view of such supervisor, (i) such Reference Rate is no longer representative of an underlying market or (ii) the methodology to calculate such Reference Rate has materially changed; or

(vi) it has or will, by a specified date within the following six months, become unlawful for the Calculation Agent to calculate any payments due to be made to any Securityholder using the relevant Reference Rate (as applicable) (including, without limitation, under the Benchmarks Regulation (EU) 2016/1011, if applicable).

"**Benchmark Amendments**" has the meaning given to it in Condition 7(k)(iv).

"**Independent Adviser**" means an independent financial institution of international repute or other independent financial adviser experienced in the international capital markets, in each case appointed by the Issuer at its own expense under Condition 7(k).

"**Relevant Nominating Body**" means, in respect of a benchmark or screen rate (as applicable):

(i) the central bank for the currency to which the benchmark or screen rate (as applicable) relates, or any central bank or other supervisory authority which is responsible for supervising the administrator of the benchmark or screen rate (as applicable); or

(ii) any working group or committee sponsored by, chaired or co-chaired by or constituted at the request of (a) the central bank for the currency to which the benchmark or screen rate (as applicable) relates, (b) any central bank or other supervisory authority which is responsible for supervising the administrator of the benchmark or screen rate (as applicable), (c) a group of the aforementioned central banks or other supervisory authorities or (d) the Financial Stability Board or any part thereof.

"**Successor Rate**" means a successor to or replacement of the Reference Rate which is formally recommended by any Relevant Nominating Body.

8. **Zero Coupon Perpetual Security Provisions**

(a) ***Application***

This Condition 8 is applicable to the Perpetual Securities only if the Zero Coupon Perpetual Security Provisions are specified in the relevant Pricing Supplement as being applicable.

(i) **Late payment on Zero Coupon Perpetual Securities**

If the Redemption Amount payable in respect of any Zero Coupon Perpetual Security is improperly withheld or refused, the Redemption Amount shall thereafter be an amount equal to the sum of:

(i) the Reference Price; and

(ii) the product of the Accrual Yield (compounded annually) being applied to the Reference Price on the basis of the relevant Day Count Fraction from (and including) the Issue Date to (but excluding) whichever is the earlier of (A) the day on which all sums due in respect of such Perpetual Security up to that day are received by or on behalf of the relevant Securityholder and (B) the day which is seven days after the relevant Paying Agent or the Trustee has notified the Securityholders of receipt of all sums due in respect of the Perpetual Securities up to such seventh day (except to the extent that there is any subsequent default in payment).

9. **Dual Currency Perpetual Security Provisions**

(a) ***Application***

This Condition 9 is applicable to the Perpetual Securities only if the Dual Currency Perpetual Security Provisions are specified in the relevant Pricing Supplement as being applicable.

(i) **Rate of Distribution**

If the rate or amount of distribution falls to be determined by reference to an exchange rate, the rate or amount of distribution payable shall be determined in the manner specified in the relevant Pricing Supplement.

10. **Distribution Discretion**

(a) ***Distribution Deferral***

If Distribution Deferral is set out as "Applicable" in the relevant Pricing Supplement, the Issuer may, at its sole discretion, elect to defer, in whole or in part, payment of a Distribution which is otherwise scheduled to be paid on a Distribution Payment Date to the next Distribution Payment Date by giving notice (an "**Optional Deferral Notice**") to the Holders, the Trustee, the Principal Paying Agent and the relevant Paying Agent not more than 10 nor less than five Business Days prior to a scheduled Distribution Payment Date (an "**Optional Deferral Event**").

If the Dividend Pusher is set out as "Applicable" in the relevant Pricing Supplement, the Issuer may not elect to defer any distribution if during the Reference Period (as specified in the applicable Pricing Supplement) ending on the day before that scheduled Distribution Payment Date, a Compulsory Distribution Payment Event has occurred.

If the Dividend Pusher is set out as "Applicable" in the relevant Pricing Supplement, each Optional Deferral Notice shall be accompanied, in the case of the notice to the Trustee, the Principal Paying Agent and the relevant Paying Agent, by a certificate signed by a director or a duly authorised officer of the Issuer confirming that no Compulsory Distribution Payment Event has occurred. Any such certificate shall be conclusive evidence that no Compulsory Distribution Payment Event has occurred and the Trustee, the Principal Paying Agent and the relevant Paying Agent shall be entitled to conclusively rely without any obligation to verify the same and without liability to any Securityholder or any other person on any Optional Deferral Notice or any certificate as aforementioned. Each Optional Deferral Notice shall be conclusive and binding on the Perpetual Securityholders in the absence of manifest error.

(b) ***No Obligation to Pay***

If Distribution Deferral is set out in the relevant Pricing Supplement and subject to Condition 10(c) and Condition 10(d), the Issuer shall have no obligation to pay any distribution on any Distribution Payment Date and any failure to pay a distribution in whole or in part shall not constitute a default or a Non-Payment Event of the Issuer in respect of the Perpetual Securities.

(c) ***Non-Cumulative Deferral and Cumulative Deferral***

(i) If Non-Cumulative Deferral is set out in the relevant Pricing Supplement, any distribution deferred pursuant to this Condition 10 is non-cumulative and will not accrue distribution. The Issuer is not under any obligation to pay that or any other distributions that have not been paid in whole or in part. The Issuer may, at its sole discretion, and at any time, elect to pay an amount up to the amount of distribution which is unpaid ("**Optional Distribution**") (in whole or in part) by complying with the notice requirements in Condition 10(e). There is no limit on the number of times or the extent of the amount with respect to which the Issuer can elect not to pay distributions pursuant to this Condition 10.

Any partial payment of outstanding Optional Distribution by the Issuer shall be shared by the holders of all outstanding Perpetual Securities related to them on a *pro rata* basis.

(ii) If Cumulative Deferral is set out in the relevant Pricing Supplement, any Distribution validly deferred pursuant to this Condition 10 shall constitute "**Arrears of Distribution**". The Issuer may, at its sole discretion, elect to (in the circumstances set out in Condition 10(a) further defer any Arrears of Distribution by complying with the foregoing notice requirement applicable to any deferral of an accrued distribution. The Issuer is not subject to any limit as to the number of times distributions and Arrears of

Distribution can or shall be deferred pursuant to this Condition 10 except that this Condition 10(c) shall be complied with until all outstanding Arrears of Distribution have been paid in full.

(iii) If Additional Distribution is set out in the relevant Pricing Supplement, each amount of Arrears of Distribution shall bear distribution from and including the date which is the Distribution Payment Date falling twelve (12) months from the date on which it is first deferred and will, in accordance with applicable Thai laws, bear distribution as if it constituted the principal of the Perpetual Securities at the prevailing Distribution Rate (the amount of such additional distribution being an "**Additional Distribution Amount**"). The Additional Distribution Amount accrued up to any Distribution Payment Date shall be added for the purpose of calculating the Additional Distribution Amount accruing thereafter to the amount of Arrears of Distribution remaining unpaid on such Distribution Payment Date so that it will itself become Arrears of Distribution.

So long as the Perpetual Securities are represented by a Global Perpetual Security Certificate which is held by or on behalf of Euroclear and Clearstream, any Arrears of Distribution, Additional Distribution and distribution thereon shall be reflected in the records of Euroclear and Clearstream by application of a pool factor in accordance with the standard operating procedures of Euroclear and Clearstream.

So long as the Perpetual Securities are represented by a Global Perpetual Security Certificate which is held by or on behalf of DTC, any Arrears of Distribution, Additional Distribution and distribution thereon shall be reflected in the records of DTC by application of a pool factor or any other method as may be agreed with the relevant Issuer in accordance with the standard operating procedures of DTC.

(d) ***Restrictions in the case of Non-Payment***

If Dividend Stopper is set out as "Applicable" in the relevant Pricing Supplement and on any Distribution Payment Date, payments of all Distributions scheduled to be made on such date are not made in full by reason of this Condition 10, the Issuer or the Guarantor (if applicable), shall not:

(i) declare, pay or make any dividends, distributions or other payments on, and will procure that no dividend, distribution or other payment is declared, paid or made on any of its Junior Securities or its Parity Securities, save that such restriction shall not apply to payments in respect of an employee benefit plan or similar arrangement with or for the benefit of employees, officers, directors or consultants; or

(ii) redeem, reduce, cancel, buy-back or acquire for any consideration any of its Junior Securities or its Parity Securities, save that such restriction shall not apply to an exchange of any of its Parity Securities in whole for Junior Securities or a repurchase or other acquisition of any securities in respect of an employee benefit plan or similar arrangement. with or for the benefit of employees, officers, directors or consultants,

in each case, unless and until the Issuer or the Guarantor (if applicable) (i) has satisfied in full all outstanding Arrears of Distribution and any Additional Distribution Amounts or (ii) is permitted to do so with the consent of the Holders of at least a majority in aggregate principal amount of the Perpetual Securities then Outstanding.

(e) ***Satisfaction of Optional Distribution or Arrears of Distribution***

The Issuer:

(i) may satisfy any Arrears of Distribution (in whole or in part and including any Additional Distribution Amounts) at any time by giving notice of such election to the Holders, the Trustee, the Principal Paying Agent and the relevant Paying Agent not more than 10 nor less than five Business Days prior to the relevant payment date specified in such notice (which notice is irrevocable and shall oblige the Issuer to pay the relevant Arrears of Distribution on the payment date specified in such notice); and

(ii) in any event shall satisfy any outstanding Arrears of Distribution (in whole but not in part and including any Additional Distribution Amounts) on the earliest to occur of:

(A) the next Distribution Payment Date immediately following a breach by the Issuer or the Guarantor (if applicable) of Condition 10(d);

(B) the date on which the Perpetual Securities are to be redeemed pursuant to the provisions described in Condition 11; and

(C) the Winding-Up of the Issuer or the Guarantor (if applicable).

Any partial payment of outstanding Arrears of Distribution and Additional Distribution Amounts by the Issuer shall be shared by the Holders of all Securities then Outstanding on a *pro-rata* basis.

So long as the Perpetual Securities are represented by a Global Perpetual Security Certificate which is held by or on behalf of Euroclear and Clearstream, any satisfaction or payment of Arrears of Distribution, Additional Distribution and distribution thereon shall be reflected in the records of the Euroclear and Clearstream by application of a pool factor in accordance with the standard operating procedures of Euroclear and Clearstream.

So long as the Perpetual Securities are represented by a Global Perpetual Security Certificate which is held by or on behalf of DTC, any satisfaction or payment of Arrears of Distribution, Additional Distribution and distribution thereon shall be reflected in the records of DTC by application of a pool factor or any other measure as may be agreed with the relevant Issuer in accordance with the standard operating procedures of DTC.

11. **Redemption and Purchase**

(a) ***No Fixed Redemption Date***

The Perpetual Securities are perpetual securities in respect of which there is no fixed redemption date and the Issuer shall (subject to the provisions of Condition 4 and without prejudice to Condition 17) only have the right (but not the obligation) to redeem or purchase them in accordance with the following provisions of this Condition 11.

(b) ***Optional Tax Redemption***

The Perpetual Securities may be redeemed at the option of the Issuer in whole, but not in part, at the relevant Early Redemption Amount (Tax) *plus* accrued and unpaid distribution (including any Arrears of Distribution and any Additional Distribution Amount) (if any) to the date fixed for redemption, upon not less than 30 nor more than 60 days' written notice:

(i) at any time (if the Floating Rate Perpetual Security Provisions are not specified in the relevant Pricing Supplement as being applicable); or

(ii) on any Distribution Payment Date (if the Floating Rate Perpetual Security Provisions are specified in the relevant Pricing Supplement as being applicable),

if, as a result of any change in or amendment to, the tax laws of a Taxing Jurisdiction (as defined in Condition 13 (*Additional Amounts*)) or any regulations or ruling promulgated thereunder or any change in the official interpretation or official application of such laws, regulations or rulings, which change or amendment becomes effective on or after the Issue Date of the Perpetual Securities (or in the case of a jurisdiction that becomes a Taxing Jurisdiction at a later date, after such date):

(A) the Issuer is, or would be, obligated on the next succeeding due date for a payment with respect to the Perpetual Securities to pay Additional Amounts (as defined in Condition 13 (*Additional Amounts*)) and such obligation cannot be avoided by the use of reasonable measures available to the Issuer; or

(B) the Guarantor (if applicable) is, or would be (if a demand was made under the Guarantee), obligated on the next succeeding due date for a payment with respect to the Perpetual Securities to pay Additional Amounts (as defined in Condition 13 (*Additional Amounts*)) under the Guarantee and such obligation cannot be avoided by the use of reasonable measures available to the Guarantor (if applicable);

in each case **provided that** changing the jurisdiction of the Issuer or the Guarantor (as applicable) is not a reasonable measure, but changing the jurisdiction of the Paying Agent may be a reasonable measure, for purposes of this Condition; provided further that where any such requirement to pay Additional Amounts is due to taxes of Thailand (or any political subdivision or taxing authority thereof or therein), the Issuer shall be permitted to redeem the Perpetual Securities in accordance with the provisions above only if the rate of withholding or deduction in respect of which Additional Amounts are required is in excess of 15 per cent; and provided further that (i) no such written notice of redemption may be given earlier than 60 days prior to the earliest date on which the Issuer or the Guarantor (as applicable) would be obligated to pay such Additional Amounts if a payment in respect of the Perpetual Securities were then due or (as the case may be) a demand under the Guarantee were then made, and (ii) at the time such written notice of redemption is given, such obligation to pay such Additional Amounts remains in effect.

Prior to any redemption of any Perpetual Securities, the Issuer will deliver to the Trustee, to be made available for inspection by Holders, (a) an Opinion of Counsel of recognized standing with respect to tax matters in the relevant Taxing Jurisdiction that the requirement to pay such Additional Amounts results from such change or amendment in law occurring on or after the Issue Date (or such later date specified above) of the Perpetual Securities and (b) an Officer's Certificate stating that the Issuer is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to the right of redemption have occurred including that the Issuer's or the Guarantor's (if applicable) obligation to pay Additional Amounts giving rise to the right of redemption cannot be avoided by the use of reasonable measures available to the Issuer or the Guarantor (if applicable).

The Trustee shall be entitled without further enquiry to accept and rely upon such Opinion of Counsel and Officer's Certificate as sufficient evidence of the satisfaction of the circumstances set out above, in which event they shall be conclusive and binding on the Holders.

(c) ***Optional Redemption***

If the Call Option is specified in the relevant Pricing Supplement as being applicable, the Perpetual Securities may be redeemed at the option of the Issuer in whole or, if so specified in the relevant Pricing Supplement, in part on any Optional Redemption Date (Call) at the relevant Optional Redemption Amount (Call) (together with distribution (including any Arrears of Distribution and any Additional Distribution Amount)) on the Issuer's giving not less than 30 nor more than 60 days' notice to the Securityholders (which notice shall be irrevocable and shall oblige the Issuer to redeem the Perpetual Securities or, as the case may be, the Perpetual Securities specified in such notice on the relevant Optional Redemption Date (Call) at the Optional Redemption Amount (Call) *plus* accrued and unpaid distribution (if any) to such date), the Trustee and the Paying Agents.

(d) ***Partial redemption***

If the Perpetual Securities are to be redeemed in part only on any date in accordance with Condition 11(c) above, each Perpetual Security shall be redeemed in part in the proportion which the aggregate principal amount of the outstanding Perpetual Securities to be redeemed on the relevant Optional Redemption Date (Call) bears to the aggregate principal amount of outstanding Perpetual Securities on such date. If any Maximum Redemption Amount or Minimum Redemption Amount is specified in the relevant Pricing Supplement, then the Optional Redemption Amount (Call) shall in no event be greater than the maximum or be less than the minimum so specified.

(e) ***Redemption upon Accounting Event***

If so provided in the relevant Pricing Supplement, the Perpetual Securities may be redeemed at the option of the Issuer in whole, but not in part, on any Distribution Payment Date or, if so specified hereon, at any time on giving not less than 30 nor more than 60 days' notice to the Perpetual Securityholders (which notice shall be irrevocable) and the Trustee and the relevant Paying Agent, at the redemption price specified in the relevant Pricing Supplement (together with distribution (including any Arrears of Distribution and any Additional Distribution Amount) accrued to (but excluding) the date fixed for redemption) if, on such Distribution Payment Date or any time after that Distribution Payment Date, as a result of any changes or amendments to TFRS or any other accounting standards that may replace TFRS for the purposes of the consolidated financial statements of the Issuer or the Guarantor (if applicable) (the "**Relevant Accounting Standard**"), the Perpetual Securities will not or will no longer be recorded as "**equity**" of the Issuer or the Guarantor (if applicable) pursuant to the Relevant Accounting Standard.

Prior to the publication of any notice of redemption pursuant to this Condition 11(e), the Issuer shall deliver or procure that there is delivered to the Trustee:

(i) a certificate, signed by a duly authorised officer of the Issuer or the Guarantor (if applicable) stating that the circumstances referred to above prevail and setting out the details of such circumstances; and

(ii) an opinion of the Issuer's or the Guarantor's (if applicable) independent auditors stating that the circumstances referred to above prevail and the date on which the relevant change or amendment to the Relevant Accounting Standard is due to take effect.

Upon the expiry of any such notice as is referred to in this Condition 11(e), the Issuer shall be bound to redeem the Perpetual Securities in accordance with this Condition 11(e) **provided that** such date for redemption shall be no earlier than the last day before the date on which the Perpetual Securities must not or must no longer be recorded as "**equity**" of the Issuer or the Guarantor (if applicable) pursuant to the Relevant Accounting Standard.

(f) ***Redemption upon a Substantial Repurchase Event***

If so provided in the relevant Pricing Supplement, the Perpetual Securities may be redeemed at the option of the Issuer, in whole but not in part, on any Distribution Payment Date or, if so provided in the relevant Pricing Supplement, at any time on the Issuer giving not less than 30 nor more than 60 days' notice to the Holders (which notice shall be irrevocable), the Trustee, the Principal Payment Agent and the relevant Paying Agent, at a redemption price equal to the principal amount of the Perpetual Securities redeemed or as otherwise specified in the relevant Pricing Supplement (together with distribution including any Arrears of Distribution and any Additional Distribution Amount) accrued to (but excluding) the date fixed for redemption) if, immediately prior to giving such notice, a Substantial Repurchase Event has occurred.

In this Condition 11(f), "**Substantial Repurchase Event**" means that the Issuer, the Guarantor or any subsidiary of the Guarantor has repurchased (and effected corresponding cancellations of) 75 per cent. or more of the aggregate principal amount of the Perpetual Securities initially issued (which shall include for these purposes any further Perpetual Securities issued pursuant to Condition 20 and consolidated and forming a single series therewith).

Upon the expiry of any such notice as is referred to in this Condition 11(f), the Issuer shall be bound to redeem the Perpetual Securities in accordance with this Condition 11(f).

(g) ***No other redemption***

The Issuer shall not be entitled to redeem the Perpetual Securities otherwise than as provided in Conditions 11(b) to 11(f) above.

(h) ***Early redemption of Zero Coupon Perpetual Securities***

Unless otherwise specified in the relevant Pricing Supplement, the Redemption Amount payable on redemption of a Zero Coupon Perpetual Security shall be an amount equal to the sum of:

(i) the Reference Price; and

(ii) the product of the Accrual Yield (compounded annually) being applied to the Reference Price from (and including) the Issue Date to (but excluding) the date fixed for redemption or (as the case may be) the date upon which the Perpetual Security becomes due and payable.

Where such calculation is to be made for a period which is not a whole number of years, the calculation in respect of the period of less than a full year shall be made on the basis of such Day Count Fraction as may be specified in the Pricing Supplement for the purposes of this Condition 11(h) or, if none is so specified, a Day Count Fraction of 30E/360 (ISDA).

(i) ***Repurchase***

The Company and any of its Subsidiaries (including Treasury Center) may, in accordance with all applicable laws and regulations, at any time purchase Perpetual Securities in the open market or otherwise at any price. Any Perpetual Securities the Company or any of its Subsidiaries (including Treasury Center) repurchase may be held, cancelled or sold.

(j) ***Calculations***

Neither the Trustee nor any of the Agents (other than the Calculation Agent and solely in respect of its functions as an appointed Calculation Agent of the Issuer and the Guarantor (if applicable)) shall be responsible for calculating or verifying the calculations of any amount payable under any notice of redemption and shall not be liable to the Securityholders or any other person for not doing so.

12. **Payments**

(a) ***Principal***

Payments of principal and premium shall be made by transfer to an account denominated in that currency (or, if that currency is euro, any other account to which euro may be credited or transferred) and maintained by the payee with, a bank in the Principal Financial Centre of that currency, and (in the case of redemption) upon surrender (or, in the case of part payment only, endorsement) of the relevant Perpetual Security Certificates at the Specified Office of any Paying Agent.

(b) ***Distribution***

Payments of distribution shall be made by transfer to an account denominated in that currency (or, if that currency is euro, any other account to which euro may be credited or transferred) and maintained by the payee with, a bank in the Principal Financial Centre of that currency, and (in the case of distribution payable on redemption) upon surrender (or, in the case of part payment only, endorsement) of the relevant Perpetual Security Certificates at the Specified Office of any Paying Agent.

(c) ***Payments subject to fiscal laws***

All payments in respect of the Perpetual Securities are subject in all cases to (i) any applicable fiscal or other laws and regulations in the place of payment, but (except as described in (ii) below) subject to Condition 13 (*Additional Amounts*), and (ii) any withholding or deduction required pursuant to an agreement described in Section 1471(b) of the Code or otherwise imposed pursuant to Sections 1471 through 1474 of the Code, as of the issue date (or any amended or successor version of such sections) any regulations or agreements thereunder, any official interpretations thereof, or any similar law implementing any intergovernmental agreement between a non-U.S. jurisdiction and the United States with respect to the foregoing.

No commissions or expenses shall be charged to the Securityholders in respect of such payments.

(d) ***Payments on business days***

Where payment is to be made by transfer to an account, payment instructions (for value the due date, or, if the due date is not Payment Business Day, for value the next succeeding Payment Business Day) will be initiated (i) (in the case of payments of principal, premium and distribution payable on redemption) on the later of the due date for payment and the day on which the relevant Certificate is surrendered (or, in the case of part payment only, endorsed) at the Specified Office of a Paying Agent and (ii) (in the case of payments of interest payable other than on redemption) on the due date for payment. A Holder of a Perpetual Security shall not be entitled to any interest or other payment in respect of any delay in payment resulting from the due date for a payment not being a Payment Business Day.

(e) ***Partial payments***

If a Paying Agent makes a partial payment in respect of any Perpetual Security, the Issuer shall procure that the amount and date of such payment are noted on the Register and, in the case of partial payment upon presentation of a Perpetual Security Certificate, that a statement indicating the amount and the date of such payment is endorsed on the relevant Perpetual Security Certificate.

(f) ***Record date***

Each payment in respect of the Perpetual Securities will be made to the Person shown as the Holder in the Register at the opening of business in the place of the Registrar's Specified Office on the fifth (in the case of Renminbi) and fifteenth (in the case of a currency other than Renminbi) day before the due date for such payment (the "**Record Date**").

*So long as the Global Perpetual Security Certificate is held on behalf of Euroclear Bank SA/NV ("**Euroclear**") and/or Clearstream Banking S.A. ("**Clearstream**"), The Depository Trust Company ("**DTC**") or any other clearing system, each payment in respect of the Global Perpetual Security Certificate will be made to the person shown as the holder in the Register at the close of business of the relevant clearing system on the Clearing System Business Day before the due date for such payments, where "**Clearing System Business Day**" means a weekday (Monday to Friday, inclusive) except December 25 and January 1.*

13. **Additional Amounts**

All payments, including, without limitation, payments of principal, redemption price, purchase price, premium and distribution in respect of the Perpetual Securities or under the Guarantee (if applicable) by or on behalf of the Issuer or (with respect to the Guaranteed Perpetual Securities) the Guarantor shall be made free and clear of, and without withholding or deduction for present or future taxes, duties, assessments, fees or other governmental charges imposed by Thailand or any other jurisdiction in which the Issuer or the Guarantor (if applicable) is tax resident (or of any political subdivision or taxing authority thereof or therein) or any jurisdiction through which the Issuer, the Guarantor (if applicable) or its Agent makes payment (each such jurisdiction a "**Taxing Jurisdiction**"), unless such withholding or deduction is required by law or by regulation or any governmental policy having the force of law. In the event that any such withholding or deduction is so required, the Issuer (failing which, with respect to Guaranteed Perpetual Securities, the Guarantor) will pay additional amounts ("**Additional Amounts**") as necessary to ensure that the Holder will receive the same amount as would have been received without any such withholding or deduction.

However, no Additional Amounts will be payable by the Issuer, the Guarantor (if applicable) or its Agent if:

(i) a Holder or beneficial owner (or, if the holder or beneficial owner is a trust, partnership, limited liability company or a corporation, its beneficiaries, partners, members or shareholders) was or is connected with a Taxing Jurisdiction (including, without limitation, being a citizen or resident or national of, or carrying on a business or maintaining a permanent establishment in, or being physically present in, a Taxing

Jurisdiction) other than by merely owning the Perpetual Security, enforcing the Perpetual Security or the Guarantee or receiving income or payments on the Perpetual Security or the Guarantee;

(ii) a Holder or beneficial owner failed, after a timely request by the Issuer, the Guarantor (if applicable) or a relevant taxing authority, to (a) provide information concerning its nationality, residence or identity or connection with a Taxing Jurisdiction or (b) make any declaration or other similar claim or satisfy any information or reporting requirement which is required or imposed by a statute, treaty, regulation or administrative practice of the relevant Taxing Jurisdiction as a precondition to exemption from, or reduction in the rate of deduction or withholding of, taxes, in each case to the extent legally able to do so;

(iii) a Holder failed to present a Perpetual Security or the Guarantee for payment within 30 days of when the payment is due (when presentation is required), except that, the relevant payor will pay Additional Amounts to the extent the Holder would have been entitled to such amounts had the holder presented the Perpetual Security or the Guarantee for payment on the last day of the 30-day period;

(iv) a Holder would have been able to avoid the withholding or deduction by the presentation (where presentation is required) of the relevant Perpetual Security or the Guarantee to, or otherwise accepting payment from, another paying agent, but failed to do so;

(v) any withholding or deduction is required pursuant to an agreement described in Section 1471(b) of the Code, or otherwise imposed pursuant to Sections 1471 through 1474 of the Code, as of the issue date (or any amended or successor version of such sections), any regulations or agreements thereunder, any official interpretations thereof, or any similar law implementing an intergovernmental agreement between a non-U.S. jurisdiction and the United States with respect to the foregoing; or

(vi) any withholding or deduction that is required as a result of any combination of the above.

Neither the Issuer, the Guarantor (if applicable) nor any of their agents will pay any Additional Amounts for taxes on the Perpetual Securities or the Guarantee except for taxes payable through deduction or withholding from payments of principal, premium (if any) or distribution on the Perpetual Securities. Examples of the types of taxes for which no Additional Amounts will be paid include the following: estate or inheritance taxes, gift taxes, sales or transfer taxes, personal property or related taxes, assessments or other governmental charges. The Issuer (failing which, the Guarantor (if applicable)) will pay stamp or other similar taxes that may be imposed by any Taxing Jurisdiction as a result of entering into, registering or enforcing the Indenture or may be payable in connection with the issuance of the Perpetual Securities or any other document or instrument referred to therein, or the receipt of any payments with respect thereto (limited, solely in the case of taxes attributable to the receipt of any payments with respect thereto, to any such taxes which are not excluded under clauses (i) through (vi) above or any combination thereof).

In addition, with respect to any payment of the principal of, or premium (if any) or distribution on, a Perpetual Security, if the Holder of a Perpetual Security is a fiduciary, partnership, limited liability company or person other than the sole beneficial owner of any payment, neither the Issuer nor the Guarantor (if applicable) shall be required to pay any Additional Amounts with respect to taxes imposed by a Taxing Jurisdiction to the extent that such payment would be required to be included in the income under the laws of a Taxing Jurisdiction 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 or member, or beneficial owner been the Holder of such Perpetual Security.

If the Issuer or the Guarantor (if applicable), as the case may be, becomes aware that it will be obligated to pay Additional Amounts with respect to any payment under or with respect to the Perpetual Securities or the Guarantee, the Issuer or the Guarantor (if applicable), as the case may be, will deliver to the Trustee on a date at least 30 days prior to the date of payment (unless the obligation to pay Additional Amounts

arises after the 30th day prior to that payment date, in which case the Issuer or the Guarantor (if applicable) shall notify the trustee promptly thereafter) an officers' certificate stating the fact that Additional Amounts will be payable and the amount estimated to be so payable. The officers' certificate must also set forth any other information reasonably necessary to enable the paying agent to pay Additional Amounts on the relevant payment date. The trustee shall be entitled to rely solely on such officers' certificate as conclusive proof that such payments are necessary. The Issuer or the Guarantor (if applicable) will provide the trustee with documentation reasonably satisfactory to the trustee evidencing the payment of Additional Amounts.

14. **Non-Payment**

(a) ***Non-Payment when Due***

Notwithstanding any of the provisions below in this Condition 14, if the Issuer or the Guarantor (if applicable) fails to make payment in respect of the Perpetual Securities when due, and, in each case, where such failure continues for a period of more than 10 business days (a "**Non-Payment Event**"), the Issuer and the Guarantor (if applicable) shall be deemed to be in default under the Indenture and the Perpetual Securities and the Trustee may, (i) in respect of the Senior Perpetual Securities, institute, prove in or file a claim in any legal proceedings (including, for the avoidance of doubt, bankruptcy, reorganisation or winding-up proceedings) against the Issuer and/or the Guarantor; or (ii) in respect of the Subordinated Perpetual Securities, institute, prove in or file claim in bankruptcy, reorganisation or winding-up proceedings against the Issuer and/or the Guarantor.

(b) ***Proceedings for winding-up***

Upon the Winding-Up of the Issuer or the Guarantor (if applicable), the Issuer and the Guarantor (if applicable) shall be deemed to be in default under the Indenture and the Perpetual Securities and the Trustee may institute, prove in or file a claim in the bankruptcy proceeding against the Issuer and/or the Guarantor (as applicable) or prove in or file claim in the Winding-Up proceedings of the Issuer and/or the Guarantor (as applicable).

Notwithstanding any of the provisions in this Condition 14, the right to institute legal proceedings against the Issuer and/or the Guarantor as specified in sub-paragraphs (a) and (b) above is subject to applicable laws and limited to circumstances where a Non-Payment Event or Winding-Up (collectively, the "**Enforcement Event**") has occurred.

(c) ***Enforcement***

Without prejudice to Condition 14(a) and (b) but subject to the provisions of Condition 14(d), the Trustee may without further notice to the Issuer and/or the Guarantor (if applicable) institute, prove in or file a claim in such proceedings (as applicable, in accordance with Condition 14(a) and (b)) against the Issuer and/or the Guarantor (if applicable) as it may think fit to enforce any term or condition binding on the Issuer and/or the Guarantor (if applicable) under the Perpetual Securities or the Guarantee (other than any payment obligation of the Issuer or the Guarantor (if applicable) under or arising from the Perpetual Securities, including, without limitation, payment of any principal or premium or satisfaction of any distributions (including any Arrears of Distribution and any Additional Distribution Amount), including any damages awarded for breach of any obligations) and in no event shall the Issuer and/or the Guarantor (if applicable), by virtue of the institution of any such proceedings, be obliged to pay any sum or sums, in cash or otherwise, sooner than the same would otherwise have been payable by it.

(d) ***Entitlement of Trustee***

The Trustee shall not and shall not be obliged to take any of the actions referred to in Condition 14(a) or (b) or (c) above against the Issuer and or the Guarantor to enforce the terms of the Indenture or the Perpetual Securities unless (a) it shall have been so requested in writing by the Securityholders of at least 25 per cent. in principal amount of the Perpetual Securities then outstanding and (b) it shall have been indemnified and/or secured and/or pre-funded to its satisfaction.

(e) ***Right of Securityholders***

No Securityholder shall be entitled to proceed directly against the Issuer, or the Guarantor (if applicable) or to institute, prove in or file a claim in such proceedings (as applicable, in accordance with Condition 14(a) or (b)) against the Issuer or the Guarantor (as applicable) unless the Trustee, having become so bound to proceed or being able to institute, prove in or file a claim in such proceedings (as applicable, in accordance with Condition 14(a) or (b)), fails to do so within a reasonable period and such failure shall be continuing, in which case the Securityholder shall have only such rights against the Issuer or the Guarantor (if applicable) as those which the Trustee is entitled to exercise as set out in this Condition 14.

(f) ***Extent of Securityholders' remedy***

No remedy against the Issuer or the Guarantor (if applicable) or other than as referred to in this Condition 14, shall be available to the Trustee or the Securityholders, whether for the recovery of amounts owing in respect of the Perpetual Securities or in respect of any breach by the Issuer of any of its other obligations under or in respect of the Perpetual Securities.

15. **Prescription**

Any moneys deposited with or paid to the Trustee or any Paying Agent of the Perpetual Securities, or then held by the Issuer or the Guarantor (if applicable) for the payment of the principal of, premium (if any) or distribution on (or any Additional Amount payable in respect of) any Perpetual Security or the Guarantee (if applicable) and not applied but remaining unclaimed for two years after the date upon which such principal, premium (if any) or distribution shall have become due and payable, shall, upon the written request of the Issuer or the Guarantor (if applicable) be repaid to the Issuer or the Guarantor (if applicable) by the Trustee or such Paying Agent or (if then held by the Issuer or the Guarantor (if applicable)) be discharged unless otherwise required by mandatory provisions of applicable escheat or abandoned or unclaimed property law, and the Holder shall, unless otherwise required by mandatory provisions of applicable escheat or abandoned or unclaimed property laws, thereafter look only to the Issuer or the Guarantor (if applicable) for any payment which such Holder may be entitled to collect, and all liability of the Trustee or any Paying Agent of the Perpetual Securities with respect to such moneys shall thereupon cease.

Under New York law, any legal action upon the Perpetual Securities must be commenced within six years after the payment thereof is due. Thereafter, the Perpetual Securities will generally become unenforceable.

16. **Replacement of Perpetual Securities**

If any Perpetual Security or Perpetual Security Certificate is lost, stolen, mutilated, defaced or destroyed, it may be replaced at the Specified Office of the Registrar (and, if the Perpetual Securities are then admitted to listing, trading and/or quotation by any competent authority, stock exchange and/or quotation system which requires the appointment of a Paying Agent or Transfer Agent in any particular place, the Paying Agent or Transfer Agent having its Specified Office in the place required by such competent authority, stock exchange and/or quotation system), subject to all applicable laws and competent authority, stock exchange and/or quotation system requirements, upon payment by the claimant of the expenses incurred in connection with such replacement and on such terms as to evidence, pre-funding, security and/or indemnity and otherwise as the Trustee, the Paying Agent or the Transfer Agents may reasonably require. Mutilated or defaced Perpetual Securities or Perpetual Security Certificates must be surrendered before replacements will be issued.

17. **Modification and Waiver**

(a) ***Modification with consent of Holders***

With the consent of the Holders of more than 50 per cent. in aggregate principal amount of the outstanding Perpetual Securities, the Issuer or the Guarantor (if applicable) may execute supplemental indentures or modify, amend or supplement the Conditions or the Paying and Transfer Agent and Registrar Appointment Letter with the Trustee and Agents, as the case may be, to add provisions or change or eliminate any provision of the Indenture, any supplemental indenture, the Paying and Transfer Agent and Registrar Appointment Letter or the Conditions

to modify, amend or supplement the rights of the Holders of the Perpetual Securities. Without the consent of the Holders of all the outstanding Perpetual Securities, however, no such supplemental indenture or modification, amendment or supplementation will, with respect to the Perpetual Securities or the Guarantee:

(i) reduce the principal amount payable, reduce the stated rate of (including the Reset Distribution Rate, Arrears of Distribution or Additional Distribution Amounts), or extend the stated time for payment of, distribution (including Arrears of Distribution or Additional Distribution Amounts) on any Perpetual Security;

(ii) change the obligation of the Issuer or (with respect to Guaranteed Perpetual Securities) the Guarantor to pay Additional Amounts;

(iii) change the terms of the Guarantee;

(iv) change the place or currency in which they are payable;

(v) impair the right to institute suit for their enforcement;

(vi) waive a default in the payment of principal of, premium (if any) or distribution on the Perpetual Securities;

(vii) reduce the percentage in principal amount of the outstanding Perpetual Securities, the consent of the Holders of which is required for any such supplemental indenture or for any modification to the provisions relating to modification and waiver; or

(viii) reduce the premium payable upon the redemption or repurchase of any Perpetual Security or change the time at which any Perpetual Security may be redeemed or repurchased as described above under Condition 11(b) (*Optional Tax Redemption*), Condition 11(c) (*Optional Redemption*) or Condition 11(e) (*Redemption upon Accounting Event*).

The Holders of more than 50 per cent. in aggregate principal amount of the outstanding Perpetual Securities may (a) waive compliance by the Issuer and Guarantor (if applicable) with certain provisions of the Indenture, the Conditions, the Guarantee or the Paying and Transfer Agent and Registrar Appointment Letter and (b) waive any past default (except defaults relating to payment of principal of, premium (if any) or distribution on any Perpetual Security).

(b) ***Modification without consent of Holders***

Notwithstanding the foregoing, the Issuer, the Guarantor (if applicable), the Trustee and the Agents may, without notice to or the consent or vote of any Holder of the Perpetual Securities, amend or supplement the Indenture, the Perpetual Securities or the Guarantee (if applicable) or modify, amend or supplement the Conditions or the Paying and Transfer Agent and Registrar Appointment Letter, in each case, for one or more of the following purposes (it being understood that such modification, amendment or supplement shall not materially and adversely affect the rights of the Holders of the Perpetual Securities):

(i) to cure any ambiguity, omission, defect or inconsistency (including, without limitation, any inconsistency between the text of the Indenture, the Paying and Transfer Agent and Registrar Appointment Letter, the Guarantee or the Perpetual Securities and the description of the Indenture, the Paying and Transfer Agent and Registrar Appointment Letter, the Guarantee or the Perpetual Securities contained in the Offering Memorandum);

(ii) to comply with the covenant described under Condition 5(b) (*Certain Covenants—Consolidation, Merger and Sale of Assets*) (if applicable);

(iii) to evidence and provide for the appointment of a successor Trustee or Agent;

(iv) to add guarantors or guarantees with respect to such Perpetual Securities;

(v) to add to the covenants of the Issuer and the Guarantor (if applicable) for the benefit of Holders of such Perpetual Securities;

(vi) to surrender any right conferred by the Indenture upon the Issuer or the Guarantor (if applicable);

(vii) to enter into a supplemental indenture, in any case where a supplemental indenture is required or permitted to be entered into pursuant to the provisions of the Indenture without the consent of any Holder;

(viii) to effect any changes to the Indenture, the Conditions or the Paying and Transfer Agent and Registrar Appointment Letter in a manner necessary to comply with the procedures of DTC, Euroclear or Clearstream or any other clearing system;

(ix) to provide for the issuance of additional Perpetual Securities in accordance with the limitations set forth in the Indenture and the Conditions;

(x) to provide for Global Perpetual Security Certificates in addition to or in place of Perpetual Security Certificates;

(xi) to provide collateral to secure the Perpetual Securities; or

(xii) to make any other change that does not materially and adversely affect the rights of any Holder.

18. **Concerning the Trustee**

In case of an Enforcement Event, the Trustee shall be required to exercise its powers with the degree of care and skill of a prudent person in the conduct of his own affairs. The Trustee is, however, under no obligation to exercise any of its rights or powers under the Indenture at the request of any of the Holders, unless they have offered to the Trustee pre-funding, security and/or indemnity satisfactory to the Trustee against the costs, expenses and liabilities that might be incurred by it in compliance with such request or direction in its sole discretion.

Under the Indenture, the Trustee is entitled to be indemnified and/or provided with security to its satisfaction, as well as relieved from responsibility in certain circumstances and to be paid its fees, costs and expenses in priority to the claims of the Securityholders. In addition, the Trustee and the Agents are entitled to enter into business transactions with Treasury Center or the Company and any entity relating to Treasury Center or the Company without accounting for any profit.

In connection with the exercise by it of any of its trusts, powers, authorities and discretions (including, without limitation, any modification, waiver, authorization or determination), the Trustee shall have regard to the general interests of the Securityholders as a class (but shall not have regard to any interests arising from circumstances particular to individual Securityholders whatever their number) and, in particular but without limitation, shall not have regard to the consequences of any such exercise for individual Holders (whatever their number) resulting from their being for any purpose domiciled or resident in, or otherwise connected with, or subject to the jurisdiction of, any particular territory or any political sub-division thereof and the Trustee shall not be entitled to require, nor shall any Securityholder be entitled to claim, from the Issuer, the Guarantor (if applicable), the Trustee or any other person any indemnification or payment in respect of any tax consequences of any such exercise upon individual Securityholders except to the extent already provided for under Condition 13 (*Additional Amounts*) and/or any undertaking or covenant given in addition to, or in substitution for, Condition 13 (*Additional Amounts*) pursuant to the Indenture.

The Trustee may rely without liability to Securityholders on a report, confirmation or certificate or any advice of any lawyers, accountants, financial advisors, financial institution or any other expert, whether or not addressed to it and whether their liability in relation thereto is limited (by its terms or by any engagement letter relating thereto or in any other manner) by reference to a monetary cap, methodology or otherwise. The Trustee may accept and shall be entitled to rely on any such report, confirmation or certificate or advice and such report, confirmation or certificate or advice shall be binding on the Issuer, the Guarantor (if applicable), the Trustee and the Securityholders.

19. **The Agents**

In acting under the Indenture and the Paying and Transfer Agent and Registrar Appointment Letter and in connection with the Perpetual Securities, the Agents act solely as agents of the Issuer, the Guarantor (if applicable) and (to the extent provided therein) the Trustee and do not assume any obligations towards or relationship of agency or trust for or with any of the Securityholders.

The initial Calculation Agent (if any) is specified in the relevant Pricing Supplement. The Issuer and the Guarantor (if applicable) reserve the right (with the prior approval of the Trustee) at any time to vary or terminate the appointment of any Agent and to appoint a successor principal paying agent or registrar or Calculation Agent and additional or successor paying agents; **provided**, **however**, **that**:

(a) the Issuer and the Guarantor (if applicable) shall at all times maintain a principal paying agent and a registrar; and

(b) if a Calculation Agent is specified in the relevant Pricing Supplement, the Issuer and the Guarantor (if applicable) shall at all times maintain a Calculation Agent; and

(c) for so long as the Perpetual Securities are listed on the SGX-ST and the rules of the SGX-ST so require, the Issuer and the Guarantor (if applicable) shall maintain a paying agent in Singapore, where the Perpetual Securities may be presented or surrendered for payment or redemption, in the event that global perpetual securities are exchanged for definitive perpetual securities; and

(d) if and for so long as the Perpetual Securities are admitted to listing, trading and/or quotation by any competent authority, stock exchange and/or quotation system which requires the appointment of a paying agent and/or a transfer agent in any particular place, the Issuer and the Guarantor (if applicable) shall maintain a paying agent and/or a transfer agent having its Specified Office in the place required by such competent authority, stock exchange and/or quotation system.

Notice of any change in any of the Agents or in their Specified Offices shall promptly be given to the Securityholders by the Issuer.

20. **Further Issuance**

The Issuer may from time to time, without notice to or the consent of the Securityholders, create and issue further debt securities ranking *pari passu* with the Perpetual Securities in all respects (or in all respects except for the payment of distribution accruing prior to the issue date of the debt securities or except for the first payment of distribution following the issue date of the debt securities). The Issuer may, to the extent permitted by applicable laws and regulations, consolidate such further debt securities with the outstanding Perpetual Securities to form a single Series; **provided that**, if any further debt securities issued are not fungible for U.S. federal income tax purposes with any Perpetual Securities previously issued, such further debt securities shall trade separately from such previously issued Perpetual Securities under different CUSIP, ISIN and common codes from those assigned to the Perpetual Securities but shall otherwise be treated as a single Series with all other Perpetual Securities issued under the Indenture.

21. **Notices**

Notices to the Holders of Perpetual Securities shall be sent to them (or the first named of joint holders) at their respective addresses on the Register. Any such notice shall be deemed to have been given on the fourth day after the date of sending.

So long as the Perpetual Securities are represented by a Global Perpetual Security Certificate and such Global Perpetual Security Certificate is held on behalf of Euroclear and/or Clearstream, DTC or any other clearing system, notices to the Holders of Perpetual Securities of that Series may be given by delivery of the relevant notice to that clearing system for communication by it to entitled accountholders in substitution for publication as required by the Indenture.

22. **Indemnification for Judgment Currency Fluctuations**

To the fullest extent permitted by law, the obligations of the Issuer and the Guarantor (if applicable) to any Securityholder under the Indenture, the Guarantee or the Perpetual Securities, as the case may be, shall, notwithstanding any judgment in a currency (the "**Judgment Currency**") other the currency of the particular Series or Tranche of Perpetual Securities (the "**Agreement Currency**"), be discharged only to the extent that on the day following receipt by such Securityholder or the Trustee, as the case may be, of any amount in the Judgment Currency, such Securityholder or the Trustee, as the case may be, may in accordance with normal banking procedures purchase the Agreement Currency with the Judgment Currency. If the amount of the Agreement Currency so purchased is less than the amount originally to be paid to such Securityholder or the Trustee, as the case may be, in the Agreement Currency, the Issuer and the Guarantor (if applicable) agree, as a separate obligation and notwithstanding such judgment, to pay the difference and if the amount of the Agreement Currency so purchased exceeds the amount originally to be paid to such Securityholder, such Securityholder or the Trustee, as the case may be, agrees to pay to or for the account of the Issuer or the Guarantor (if applicable), as the case may be, such excess; **provided that** such Securityholder or the Trustee, as the case may be, shall not have any obligation to pay any such excess as long as an Enforcement Event has occurred and is continuing, in which case such excess may be applied by such Securityholder or the Trustee, as the case may be, to such obligations.

23. **Rounding**

For the purposes of any calculations referred to in these Conditions or the Indenture (unless otherwise specified in these Conditions or the relevant Pricing Supplement), (a) all percentages resulting from such calculations will be rounded, if necessary, to the nearest one hundred-thousandth of a percentage point (with 0.000005 per cent. being rounded up to 0.00001 per cent.), (b) all United States dollar amounts used in or resulting from such calculations will be rounded to the nearest cent (with one half cent being rounded up), (c) all Japanese Yen amounts used in or resulting from such calculations will be rounded downwards to the next lower whole Japanese Yen amount, and (d) all amounts denominated in any other currency used in or resulting from such calculations will be rounded to the nearest two decimal places in such currency, with 0.005 being rounded upwards.

24. **Governing Law; Consent to Jurisdiction and Waiver of Immunity**

(a) The Indenture and the Perpetual Securities shall be governed by, and construed in accordance with, the laws of the State of New York, except that the provisions set out in Condition 4(b) and 14 applicable to the Issuer and/or the Guarantor (if applicable) shall be governed by and construed in accordance with the laws of Thailand.

(b) The Issuer and the Guarantor (if applicable) shall irrevocably submit 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, New York (each a "**New York Court**") in any suit, action or proceeding arising out of or relating to the Indenture, the Perpetual Securities or any transaction contemplated thereby, and will irrevocably waive, to the fullest extent permitted by applicable law, any objection to the venue of any such suit, action or proceeding in any such New York Court and any claim of any inconvenient forum. The Issuer and the Guarantor (if applicable) has appointed Corporation Services Company as agent for service of process with respect of any such suit, action or proceeding.

(c) To the extent that the Issuer or the Guarantor (if applicable) has or hereafter may acquire any immunity (sovereign or otherwise) from any legal action, suit or proceeding, from jurisdiction of any court or from set-off or any legal process (including any immunity from non-exclusive jurisdiction or from service of process or from any execution to satisfy a final judgment or from attachment or in aid of such execution or otherwise) with respect to itself or any of its assets or properties, the Issuer and the Guarantor (if applicable) irrevocably waives, to the fullest extent permitted under applicable law, any such right or immunity or claim thereto which may now or hereafter exist, and agrees not to assert any such right or claim in any action or proceeding against it arising out of or based on the Perpetual Securities or the Indenture.

25. **No Personal Liability of Directors, Officers, Employees and Stockholders**

No director, officer, employee, incorporator or stockholder of the Issuer or the Guarantor (if applicable) shall have any personal liability for any obligations of the Issuer or the Guarantor (if applicable) under the Perpetual Securities, the Guarantee, the Indenture, or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder by accepting a Perpetual Security waives and releases all such liability. The waiver and release are part of the consideration for issuance of the Perpetual Securities. The waiver may not be effective to waive liabilities under federal securities laws.

SUMMARY OF PROVISIONS RELATING TO THE SECURITIES WHILE IN GLOBAL FORM

Clearing System Accountholders

In relation to any Series of Securities represented by one or more Global Certificates, references in the Conditions of the Securities to "**Holder**" are references to the person in whose name the relevant Global Certificate is for the time being registered in the Register which (a) in the case of a Restricted Global Certificate held by or on behalf of DTC will be Cede & Co. (or such other entity as is specified in the applicable Pricing Supplement) as nominee for DTC and (b) in the case of any Unrestricted Global Certificate which is held by or on behalf of a depositary or a common depositary for Euroclear and/or Clearstream and/or any other relevant clearing system, will be that depositary or common depositary or a nominee for that depositary or common depositary.

Each of the persons shown in the records of DTC, Euroclear, Clearstream and/or any other relevant clearing system as being entitled to an interest in a Global Certificate (each an "**Accountholder**") must look solely to DTC, Euroclear, Clearstream and/or such other relevant clearing system (as the case may be) for such Accountholder's share of each payment made by the relevant Issuer (failing which, in the case of Guaranteed Securities, the Guarantor) to the holder of such Global Certificate and in relation to all other rights arising under such Global Certificate. The extent to which, and the manner in which, Accountholders may exercise any rights arising under a Global Certificate will be determined by the respective rules and procedures of DTC, Euroclear and Clearstream and any other relevant clearing system from time to time. For so long as the relevant Securities are represented by a Global Certificate, Accountholders shall have no claim directly against the relevant Issuer or (in respect of each Series of Guaranteed Securities) the Guarantor in respect of payments due under the Securities and such obligations of the relevant Issuer or (in respect of each Series of Guaranteed Securities) the Guarantor will be discharged by payment to the holder of such Global Certificate.

Transfers of Interests in Global Certificates

Transfers of interests in Global Certificates within DTC, Euroclear and Clearstream or any other relevant clearing system will be in accordance with their respective rules and operating procedures. None of the Issuers, (in respect of each Series of Guaranteed Securities) the Guarantor, the Registrar, the Dealers or the Agents will have any responsibility or liability for any aspect of the records of any DTC, Euroclear and Clearstream or any other relevant clearing system or any of their respective participants relating to payments made on account of beneficial ownership interests in a Global Certificate or for maintaining, supervising or reviewing any of the records of DTC, Euroclear and Clearstream or any other relevant clearing system or the records of their respective participants relating to such beneficial ownership interests.

The laws of some states of the United States require that certain persons receive individual certificates in respect of their holdings of Securities. Consequently, the ability to transfer interests in a Global Certificate to such persons will be limited. Because clearing systems only act on behalf of participants, who in turn act on behalf of indirect participants, the ability of a person having an interest in a Global Certificate to pledge such interest to persons or entities which do not participate in the relevant clearing systems, or otherwise take actions in respect of such interest, may be affected by the lack of an Individual Certificate representing such interest.

Subject to compliance with the transfer restrictions applicable to the Securities described under "*Transfer Restrictions*," transfers between DTC participants, on the one hand, and Euroclear or Clearstream accountholders, on the other will be effected by the relevant clearing systems in accordance with their respective rules and through action taken by the DTC Custodian, the Registrar and the Principal Paying Agent.

On or after the issue date for any Series, transfers of Securities of such Series between accountholders in Euroclear and/or Clearstream will generally have a settlement date three business days after the trade date (T+3), unless the parties agree to an alternative settlement date at the time of the transaction. The customary arrangements for delivery versus payment will apply to such transfers. On or after the issue date for any Series transfers of Securities of such Series between participants in DTC will generally have a settlement date one business day after the trade date (T+1), unless the parties agree to an alternative settlement date at the time of the transaction. Such transfers may occur on a free delivery basis or delivery versus payment basis at the election of the parties. Transfers between DTC participants, on the one hand, and Euroclear or Clearstream accountholders, on the other will need to have an agreed settlement date between the parties to such transfer. Because there is no direct link between DTC, on the one hand, and Euroclear and Clearstream, on the other, transfers of interests in the relevant Global Certificates will be effected through the Principal Paying Agent, the DTC Custodian, the relevant Registrar and any applicable Transfer Agent receiving instructions (and where appropriate certification) from the transferor and arranging for delivery of the interests being transferred to the credit of the designated account for the

transferee. Transfers will be effected on the later of (i) three business days after the trade date for the disposal of the interest in the relevant Global Certificate resulting in such transfer and (ii) two business days after receipt by the Principal Paying Agent or the Registrar, as the case may be, of the necessary certification or information to effect such transfer. In the case of cross-market transfers, settlement between Euroclear or Clearstream accountholders and DTC participants cannot be made on a delivery versus payment basis. The securities will be delivered on a free delivery basis and arrangements for payment must be made separately. The customary arrangements for delivery versus payment between Euroclear and Clearstream accountholders or between DTC participants are not affected.

For a further description of restrictions on the transfer of Securities, see "*Subscription and Sale*" and "*Transfer Restrictions*."

Upon the issue of a Restricted Global Certificate to be held by or on behalf of DTC, DTC or the DTC Custodian will credit the respective nominal amounts of the individual beneficial interests represented by such Global Certificate to the account of DTC participants. Ownership of beneficial interests in such Global Certificate will be held through participants of DTC, including the respective depositaries of Euroclear and Clearstream. Ownership of beneficial interests in such Global Certificate will be shown on, and the transfer of such ownership will be effected only through, records maintained by DTC or its nominee. DTC has advised the Issuers that it will take any action permitted to be taken by a holder of the Securities represented by a Global Certificate held by or on behalf of DTC (including, without limitation, the presentation of such Global Certificates for exchange as described above) only at the direction of one or more participants in whose account with DTC interests in such Global Certificate are credited, and only in respect of such portion of the aggregate nominal amount of such Global Certificate as to which such participant or participants has or have given such direction. However, in certain circumstances, DTC will exchange the relevant Global Certificate for Individual Certificates (which will bear the relevant legends set out in "*Transfer Restrictions*").

Although DTC, Euroclear and Clearstream have agreed to the foregoing procedures in order to facilitate transfers of interests in the Global Certificates among participants and accountholders of DTC, Euroclear and Clearstream, they are under no obligation to perform or continue to perform such procedures, and such procedures may be discontinued at any time. None of the Issuers, (in respect of each Series of Guaranteed Securities) the Guarantor, the Registrar, the Dealers, the Trustee or the Agents will have any responsibility for the performance by DTC, Euroclear or Clearstream or their respective direct or indirect participants or account holders of their respective obligations under the rules and procedures governing their respective operations.

While a Global Certificate is lodged with DTC, Euroclear, Clearstream or any relevant clearing system, Individual Certificates for the relevant Series of Securities will not be eligible for clearing and settlement through such clearing systems.

Conditions applicable to Global Certificates

Each Global Certificate will contain provisions which modify the Conditions of the Securities as they apply to the Global Certificate. The following is a summary of certain of those provisions:

Payments: All payments in respect of the Global Certificate which, according to the Conditions of the Securities, require presentation and/or surrender of a Security or Global Certificate will be made against presentation and (in the case of payment of principal in full with all interest accrued thereon) surrender of the Global Certificate to or to the order of any Paying Agent and will be effective to satisfy and discharge the corresponding liabilities of the relevant Issuer (failing which, in the case of Guaranteed Securities, the Guarantor) in respect of the Securities. On each occasion on which a payment of principal, interest or distribution is made in respect of the Global Certificate, the relevant Issuer shall procure that the payment is noted in a schedule thereto.

Calculation of interest / distribution: the calculation of any interest amount or rate of distribution (as the case may be) in respect of any Security which is represented by a Global Certificate will be calculated on the aggregate outstanding principal amount of the Securities represented by such Global Certificate, and not by reference to the Calculation Amount.

Payment Business Day: in the case of a Global Certificate, shall be: if the currency of payment is euro, any day which is a TARGET Settlement Day and a day on which dealings in foreign currencies may be carried on in each (if any) Additional Financial Centre; or, if the currency of payment is not euro, any day which is a day on which dealings in foreign currencies may be carried on in the Principal Financial Centre of the currency of payment and in each (if any) Additional Financial Centre.

Payment Record Date: Each payment in respect of a Global Certificate will be made to the person shown as the Holder in the Register at the close of business (in the relevant clearing system) on the Clearing System Business Day before the due date for such payment (the "**Record Date**") where "**Clearing System Business Day**" means a day on which each clearing system for which the Global Certificate is being held is open for business.

Partial exercise of call option: In connection with an exercise of the option contained in Condition 10(c) (*Redemption and Purchase—Optional Redemption*) or Condition 11(c) (*Redemption and Purchase—Optional Redemption*) (as the case may be) in relation to some only of the Securities or Global Certificate may be redeemed in part in the principal amount specified by the relevant Issuer in accordance with the Conditions and the Securities to be redeemed will not be selected as provided in the Conditions but in accordance with the rules and procedures of DTC, Euroclear and/or Clearstream (to be reflected in the records of DTC, Euroclear and/or Clearstream as either a pool factor or a reduction in principal amount, at their discretion).

Notices: Notwithstanding Condition 22 (*Notices*) of the Terms and Conditions of the Notes or Condition 21 (*Notices*) of the Terms and Conditions of the Perpetual Securities (as the case may be), while all the Securities are represented by a Global Certificate and the Global Certificate is registered in the name of DTC's nominee or deposited with a depositary or a common depositary for Euroclear and/or Clearstream and/or any other relevant clearing system, notices to Holders may be given by delivery of the relevant notice to DTC and/or Euroclear and/or Clearstream and/or any other relevant clearing system and, in any case, such notices shall be deemed to have been given to the Holders in accordance with Condition 22 (*Notices*) of the Terms and Conditions of the Notes or Condition 21 (*Notices*) of the Terms and Conditions of the Perpetual Securities (as the case may be) on the date of delivery to DTC and/or Euroclear and/or Clearstream and/or any other relevant clearing system.

FORM OF PRICING SUPPLEMENT OF THE NOTES

The Pricing Supplement in respect of each Series of Notes will be substantially in the following form, duly supplemented (if necessary), amended (if necessary) and completed to reflect the particular terms of the relevant Notes and their issue.

[**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**"); and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. [Consider any negative target market.] 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. [Consider any negative target market.] 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.]

[**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 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) a customer within the meaning of Directive (EU) 2016/97 (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 (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 ("**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**"); (ii) a customer within the meaning of the provisions of the FSMA and any rules or regulations made under the Financial Services and Markets Act 2000 (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. 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.]

[**Singapore Securities and Futures Act Product Classification** – Solely for the purposes of its obligations pursuant to sections 309B(1)(a) and 309B(1)(c) of the Securities and Futures Act 2001 of Singapore, as amended or modified from time to time (the "**SFA**"), the Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A of the SFA) that the Notes are ["prescribed capital markets products"]/[capital

markets products other than "prescribed capital markets products"] (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018).][1]

Pricing Supplement dated [●]

[Thai Oil Public Company Limited] [Thaioil Treasury Center Company Limited]

Issue of [Aggregate Nominal Amount of Series] [Guaranteed] [Title of Notes] [Guaranteed by Thai Oil Public Company Limited subject to the Maximum Guaranteed Amount]

under the US$3,679,000,000 Global Medium Term Note Program

The 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 of the Notes (the "**Conditions**") set forth in the Offering Memorandum dated January 5, 2026. This Pricing Supplement contains the final terms of the Notes and must be read in conjunction with such Offering Memorandum [and the supplemental Offering Memorandum dated [*date*]].

[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 guidance for completing the Pricing Supplement.]

1.	Issuer:		[Thai Oil Public Company Limited.] / [Thaioil Treasury Center Company Limited]
2.	Guarantor:		[Thai Oil Public Company Limited] / [Not Applicable][2]
3.	[(i)	Series Number:]	[●]
	[(ii)	Tranche Number:	[●]
	(*If fungible with an existing Series, details of that Series, including the date on which the Notes become fungible*).]		
4.	Specified Currency or Currencies:		[●] *(If Notes are being cleared through DTC with interest and or principal payable in a currency other than U.S. dollars, check whether DTC will accept payments in such currency)*
5.	Aggregate Nominal Amount:		[●]
	[(i)]	[Series]:	[●]
	[(ii)	Tranche:	[●]]
	(i)	Issue Price:	[●]% of the Aggregate Nominal Amount [plus accrued interest from [*insert date*] (*in the case of fungible issues only, if applicable*)]
	(ii)	Net Proceeds:	[●] [(Required only for listed issues)]

[1] For any Notes to be offered to investors in Singapore to persons other than accredited investors and institutional investors, Issuer to provide the product classification notification pursuant to Section 309B of the SFA prior to the launch of the offer.

[2] Guarantor to be included for every Series of Notes where Thaioil Treasury Center Company Limited is Issuer.

6.	(i)	Specified Denominations[3],[4],[5]:	[●]
	(ii)	Calculation Amount:	[●]
7.	(i)	Issue Date:	[●]
	(ii)	Interest Commencement Date:	[*Specify*/Issue Date/Not Applicable]
	(iii)	Trade Date:	[●]
8.	Maturity Date:		[*Specify date or (for Floating Rate Notes) Interest Payment Date falling in or nearest to the relevant month and year*][6] [*If the Maturity Date is less than one year from the Issue Date and either (a) the issue proceeds are received by the Issuer in the United Kingdom, or (b) the activity of issuing the Notes is carried on from an establishment maintained by the Issuer in the United Kingdom, (i) the Notes must have a minimum redemption value of £100,000 (or its equivalent in other currencies) and be sold only to "professional investors" or (ii) another applicable exemption from section 19 of the FSMA must be available.*]
9.	Interest Basis:		[[●]% Fixed Rate] [[*Specify* reference rate] +/- [•]% Floating Rate] [Zero Coupon] [Index Linked Interest] [Other (*Specify*)] (further particulars specified below)
10.	Redemption/Payment Basis:		[Redemption at par] [Index Linked Redemption] [Dual Currency] [Partly Paid] [Installment] [Other (*Specify*)]

[3] Notes (including Notes denominated in sterling) in respect of which the issue proceeds are to be accepted by the Issuer in the United Kingdom or whose issue otherwise constitutes a contravention of section 19 of the FSMA and which have a maturity of less than one year and must have a minimum redemption value of £100,000 (or its equivalent in other currencies) and be issued to a limited class of professional investors.

[4] If the specified denomination is expressed to be €100,000 or its equivalent and multiples of a lower principal amount (for example €1,000), insert the additional wording as follows: €100,000 and integral multiples of [€1,000] in excess thereof up to and including [€99,000]/[€199,000]. No notes in definitive form will be issued with a denomination above [€99,000]/[€199,000].

[5] Notes to be listed on the Singapore Exchange Securities Trading Limited (the "**SGX-ST**") are required to be traded in a minimum board lot size of S$200,000 (or its equivalent in other countries).

[6] Note that for Renminbi or Hong Kong dollar denominated Fixed Rate Notes where Interest Payment Dates are subject to modification it will be necessary to use the second option here.

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.	Call Options:		[Issuer Call] [(further particulars specified below)]
13.	Listing:		[Singapore Exchange Securities Trading Limited/Other (*specify*)/None]
14.	Method of distribution:		[Syndicated/Non-syndicated]

PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE

15.	**Fixed Rate Note Provisions**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Rate[(s)] of Interest:	[●]% per annum [payable [annually/ semi-annually/quarterly/monthly/ other (*specify*)] in arrear]
	(ii)	Interest Payment Date(s):	[●] in each year [adjusted in accordance with [*specify Business Day Convention and any applicable Business Centre(s) for the definition of "Business Day"]*/not adjusted]
	(iii)	Fixed Coupon Amount[(s)]:	[●] per Calculation Amount[7]
	(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)	Other terms relating to the method of calculating interest for Fixed Rate Notes:	[Not Applicable/*give details*]
16.	**Floating Rate Note Provisions**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Interest Period(s):	[●]
	(ii)	Specified Period:	[●] (*Specified Period and Specified Interest Payment Dates are alternatives. A Specified Period, rather than Specified Interest Payment Dates, will only be relevant if the Business Day Convention is the FRN Convention,*

[7] For Renminbi or Hong Kong dollar denominated Fixed Rate Notes where the Interest Payment Dates are subject to modification the following alternative wording is appropriate: "Each Fixed Coupon Amount shall be calculated by multiplying the product of the Rate of Interest and the Calculation Amount by the Day Count Fraction and rounding the resultant figure to the nearest RMB0.01, RMB0.005 for the case of Renminbi-denominated Fixed Rate Notes and to the nearest HK$0.01, HK$0.005 for the case of Hong Kong dollar denominated Fixed Rate Notes, being rounded upwards".

		Floating Rate Convention or Eurodollar Convention. Otherwise, insert "Not Applicable")
(iii)	Specified Interest Payment Dates:	[●] (*Specified Period and Specified Interest Payment Dates are alternatives. If the Business Day Convention is the FRN Convention, Floating Rate Convention or Eurodollar Convention, insert "Not Applicable*")
(iv)	First Interest Payment Date:	[●]
(v)	Business Day Convention:	[Floating Rate Convention/FRN Convention/Eurodollar Convention/Following Business Day Convention/Modified Following Business Day Convention/Modified Business Day Convention/Preceding Business Day Convention/No Adjustment]
(vi)	Additional Business Centre(s):	[Not Applicable/*give details*]
(vii)	Manner in which the Rate(s) of Interest is/are to be determined:	[Screen Rate Determination/ISDA Determination/other (*give details*)]
(viii)	Party responsible for calculating the Rate(s) of Interest and/or Interest Amount(s) (if not the [Principal Paying Agent]):	[[*Name*] shall be the Calculation Agent (*no need to specify if the Principal Paying Agent is to perform this function*)]
(ix)	Screen Rate Determination:	
	Reference Bank:	[●]
	Reference Rate:	[*For example, LIBOR or EURIBOR*]
	Interest Determination Date(s):	[●]
	Relevant Screen Page:	[*For example, Reuters LIBOR 01/EURIB0R 01*]
	Relevant Time:	[*For example, 11.00 a.m. London time/Brussels time*]
	Relevant Financial Centre:	[*For example, London/Euro-zone (where Euro-zone means the region comprised of the countries whose lawful currency is the euro)*]
(x)	ISDA Determination:	
	Floating Rate Option:	[●]
	Designated Maturity:	[●]
	Reset Date:	[●]
(xi)	Margin(s):	[+/-][●]% per annum
(xii)	Minimum Rate of Interest:	[●]% per annum
(xiii)	Maximum Rate of Interest:	[●]% per annum
(xiv)	Linear Interpolation:	[Applicable/Not Applicable]
(xv)	Day Count Fraction:	[●]

	(xvi)	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:	[●]
17.	**Zero Coupon Note Provisions**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Accrual Yield:	[●]% per annum
	(ii)	Reference Price:	[●]
	(iii)	Any other formula/basis of determining amount payable:	[●]
18.	**Index-Linked Interest Note/other variable-linked interest Note Provisions**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Index/Formula/other variable:	[*give or annex details*]
	(ii)	Calculation Agent responsible for calculating the interest due:	[●]
	(iii)	Provisions for determining Coupon where calculated by reference to Index and/or Formula and/or other variable:	[●]
	(iv)	Interest Determination Date(s):	[●]
	(v)	Provisions for determining Coupon where calculation by reference to Index and/or Formula and/or other variable is impossible or impracticable or otherwise disrupted:	[●]
	(vi)	Interest or calculation period(s):	[●]
	(vii)	Specified Period:	[●] (*Specified Period and Specified Interest Payment Dates are alternatives. A Specified Period, rather than Specified Interest Payment Dates, will only be relevant if the Business Day Convention is the FRN Convention, Floating Rate Convention or Eurodollar Convention. Otherwise, insert "Not Applicable"*)
	(viii)	Specified Interest Payment Dates:	[●] (*Specified Period and Specified Interest Payment Dates are alternatives. If the Business Day Convention is the FRN Convention, Floating Rate Convention or Eurodollar Convention, insert "Not Applicable"*)

	(ix)	Business Day Convention:	[Floating Rate Convention/FRN Convention/Eurodollar Convention/Following Business Day Convention/Modified Following Business Day Convention/Modified Business Day Convention/Preceding Business Day Convention/No Adjustment]
	(x)	Additional Business Centre(s):	[●]
	(xi)	Minimum Rate/Amount of Interest:	[●]% per annum
	(xii)	Maximum Rate/Amount of Interest:	[●]% per annum
	(xiii)	Day Count Fraction:	[●]
19.	**Dual Currency Note Provisions**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Rate of Exchange/method of calculating Rate of Exchange:	[*give details*]
	(ii)	Calculation Agent, if any, responsible for calculating the principal and/or interest due:	[●]
	(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:	[●]

PROVISIONS RELATING TO REDEMPTION

20.	**Call Option**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Optional Redemption Date(s) (Call):	[●]
	(ii)	Optional Redemption Amount(s) (Call) of each Note and 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:	[●]

21.	**Put Option**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Optional Redemption Date(s) (Put):	[●]
	(ii)	Optional Redemption Amount(s) (Put) of each Note and method, if any, of calculation of such amount(s):	[●] per Calculation Amount
	(iii)	Notice period:	[●]
22.	**Final Redemption Amount of each Note**		[●] per Calculation Amount
	In cases where the Final Redemption Amount is Index-Linked or other variable-linked:		
	(i)	Index/Formula/variable:	[*give or annex details*]
	(ii)	Calculation Agent responsible for calculating the Final Redemption Amount:	[●]
	(iii)	Provisions for determining Final Redemption Amount where calculated by reference to Index and/or Formula and/or other variable:	[●]
	(iv)	Date for determining Final Redemption Amount where calculation by reference to Index and/or Formula and/or other variable:	[●]
	(v)	Provisions for determining Final Redemption Amount where calculation by reference to Index and/or Formula and/or other variable is impossible or impracticable or otherwise disrupted:	[●]
	(vi)	[Payment Date]:	[●]
	(vii)	Minimum Final Redemption Amount:	[●] per Calculation Amount
	(viii)	Maximum Final Redemption Amount:	[●] per Calculation Amount
23.	**Early Redemption Amount**		[Not Applicable
	Early Redemption Amount(s) per Calculation Amount payable on redemption for taxation reasons, on change of control or on event of default or other early redemption		(*If each of the Early Redemption Amount (Tax) and the Early Termination Amount are the principal amount of the Notes/specify the Early Redemption Amount (Tax)*

	and/or the method of calculating the same (if required or if different from that set out in the Conditions):	*and/or the Early Termination Amount if different from the principal amount of the Notes*)]

GENERAL PROVISIONS APPLICABLE TO THE NOTES

24.	**Form of Notes:**	
		[Unrestricted Global Certificate exchangeable for unrestricted Individual Certificates on [●] days' notice in the limited circumstances described in the Unrestricted Global Certificate][8] [and] [Restricted Global Certificate exchangeable for Restricted Individual Certificates on [●] days' notice in the limited circumstances described in the Restricted Global Certificate][9]
25.	Additional Financial Centre(s) or other special provisions relating to payment dates:	[Not Applicable/*give details*.] (Where the Notes are in global form, "**Payment Business Day**" means a day on which dealings in foreign currencies may be carried out in: (a) [New York City][10] / [Hong Kong][11] / [Singapore][12] / [London][13] / [TARGET Settlement Day (being any day on which TARGET2 is open for the settlement of payments in euro)][14]; [and] (b) [give *details as per above if applicable*][15]) [*Note that this paragraph relates to the date and place of payment, and not interest period end dates, to which sub paragraphs 16(vi) and 18(x) relate*]
26.	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	[Not Applicable/give details]

[8] If the Specified Denominations of the Notes in paragraph 6 includes language substantially to the following effect: "[€50,000]/[€100,000] and integral multiples of [€1,000] in excess thereof up to and including [€99,000]/[€199,000]," the Unrestricted Global Certificate shall not be exchangeable on [●] days' notice or at any time.

[9] If the Specified Denominations of the Notes in paragraph 6 includes language substantially to the following effect: "[€50,000]/[€100,000] and integral multiples of [€1,000] in excess thereof up to and including [€99,000]/[€199,000]," the Restricted Global Certificate shall not be exchangeable on [●] days' notice or at any time.

[10] For US$ denominated Notes.

[11] For HK$ or RMB denominated Notes.

[12] For S$ denominated Notes.

[13] For sterling denominated Notes.

[14] For euro denominated Notes.

[15] Include where an Additional Financial Centre has been indicated for the drawdown.

	Issuer to forfeit the Notes and interest due on late payment]:	
27.	Details relating to Installment Notes: amount of each installment, date on which each payment is to be made:	[Not Applicable/*give details*]
28.	Redenomination, renominalization and reconventioning provisions:	[Not Applicable/The provisions annexed to this Pricing Supplement apply]
29.	Consolidation provisions:	[The provisions in Condition [20] (*Further Issues*)] [annexed to this Pricing Supplement] apply]
30.	Any applicable currency disruption/ fallback provisions:	[Not Applicable/*give details*]
31.	Maximum Guaranteed Amount	[Not Applicable/*as further described in the Offering Memorandum*]
32.	Other terms or special conditions:	[Not Applicable/*give details*]

DISTRIBUTION

33.	(i)	If syndicated, names of Managers:	[Not Applicable/*give names*]
	(ii)	Stabilizing Manager(s) (if any):	[Not Applicable/*give name*]
34.	If non-syndicated, name and address of Dealer:		[Not Applicable/*give name and address*]
35.	Total commission and concession:		[●]% of the Aggregate Nominal Amount
36.	U.S. Selling Restrictions:		[Reg. S Category [1/2]]/[Rule 144A]; [Rule 144A Eligible/Not Rule 144A Eligible]
37.	Additional selling restrictions:		[Not Applicable/*give details*]
38.	Prohibition of Sales to EEA and UK Retail Investors:		[Applicable/Not Applicable] (*If the Notes clearly do not constitute "packaged" products, "Not Applicable" should be specified. If the offer of the Notes may constitute "packaged" products and no KID will be prepared, "Applicable" should be specified.*)

OPERATIONAL INFORMATION

39.	Legal Entity Identifier (LEI) of Issuer:	[●]
40.	ISIN Code:	[●]
41.	Common Code:	[●]
42.	[FISN:	[●]]
43.	[CFI Code:	[●]]
44.	CUSIP:	[●]

45.	Any clearing system(s) other than Euroclear/Clearstream, DTC Service and the relevant identification number(s):	[Not Applicable/*give name(s) and number(s)*]
46.	Delivery:	Delivery [against/free of] payment
47.	Additional Paying Agent(s) (if any):	[●]

GENERAL

48.	The aggregate principal amount of Notes issued has been translated into United States dollars at the rate of [●], producing a sum of (for Notes not denominated in United States dollars):	[Not Applicable/US$]
49.	[Ratings:	The Notes to be issued have been rated: [[●]: [●]]; [[●]: [●]]; [and] (each a "**Rating Agency**"). If any Rating Agency shall not make a rating of the Notes publicly available, the Issuer shall select and substitute them with [●] or [●] and its successors.]

HONG KONG SFC CODE OF CONDUCT

50.	Rebates	[A rebate of [●] bps is being offered by the [Issuer] to all private banks for orders they place (other than in relation to Notes subscribed by such private banks as principal whereby it is deploying its own balance sheet for onward selling to investors), payable upon closing of this offering based on the principal amount of the Notes distributed by such private banks to investors. Private banks are deemed to be placing an order on a principal basis unless they inform the CMIs otherwise. As a result, private banks placing an order on a principal basis (including those deemed as placing an order as principal) will not be entitled to, and will not be paid, the rebate.] / [Not Applicable]
51.	Contact email addresses of the Overall Coordinators where underlying investor information in relation to omnibus orders should be sent:	[*Include relevant contact email addresses of the Overall Coordinators where the underlying investor information should be sent – OCs to provide*] / [Not Applicable]
52.	Marketing and Investor Targeting Strategy:	[*As indicated in the Offering Memorandum*] / [*Describe if different from the Offering Memorandum*]

[USE OF PROCEEDS

Give details if different from the "Use of Proceeds" section in the Offering Memorandum.]

STABILIZING

In connection with the issue of the Notes, [*name(s) of Stabilizing Manager(s)*] (or persons acting on behalf of [*name(s) of Stabilizing Manager(s)*]) (the "**Stabilizing Manager[s]**") may over-allot Notes or effect transactions with a view to supporting the price of the Notes at a level higher than that which might otherwise

prevail for a limited period after the Issue Date. However, there is no obligation on such Stabilizing Manager[s] to do this. Such stabilizing, if commenced, may be discontinued at any time, and must be brought to an end after a limited period. Such stabilizing shall be in compliance with all applicable laws, regulations and rules.

PURPOSE OF PRICING SUPPLEMENT

This Pricing Supplement comprises the final terms required for issue [and admission to trading on the SGX-ST] of the Notes described herein pursuant to the US$3,679,000,000 Guaranteed Global Medium Term Note Program of the Issuer [and the Guarantor].

RESPONSIBILITY

The Issuer accepts responsibility for the information contained in this Pricing Supplement.

Signed on behalf of [Thai Oil Public Company Limited] [Thaioil Treasury Center Company Limited]

By: .....
Name: .....
Title: .....

FORM OF PRICING SUPPLEMENT OF THE PERPETUAL SECURITIES

The Pricing Supplement in respect of each Series of Perpetual Securities will be substantially in the following form, duly supplemented (if necessary), amended (if necessary) and completed to reflect the particular terms of the relevant Perpetual Securities and their issue.

[**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 Perpetual Securities has led to the conclusion that: (i) the target market for the Perpetual Securities is eligible counterparties and professional clients only, each as defined in [Directive 2014/65/EU (as amended, "**MiFID II**")]; and (ii) all channels for distribution of the Perpetual Securities to eligible counterparties and professional clients are appropriate. *[Consider any negative target market.]* Any person subsequently offering, selling or recommending the Perpetual Securities (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 Perpetual Securities (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 Perpetual Securities has led to the conclusion that: (i) the target market for the Perpetual Securities 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 Perpetual Securities to eligible counterparties and professional clients are appropriate. [Consider any negative target market.] Any person subsequently offering, selling or recommending the Perpetual Securities (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 Perpetual Securities (by either adopting or refining the manufacturer['s/s'] target market assessment) and determining appropriate distribution channels.]

[**PROHIBITION OF SALES TO EEA RETAIL INVESTORS** – The Perpetual Securities 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 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) a customer within the meaning of Directive (EU) 2016/97 (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 (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 Perpetual Securities or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Perpetual Securities 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 Perpetual Securities 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**"); (ii) a customer within the meaning of the provisions of the FSMA and any rules or regulations made under the Financial Services and Markets Act 2000 (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. 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 Perpetual Securities or otherwise making them available to retail investors in the UK has been prepared and therefore offering or selling the Perpetual Securities or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.]

[**Singapore Securities and Futures Act Product Classification** – Solely for the purposes of its obligations pursuant to sections 309B(1)(a) and 309B(1)(c) of the Securities and Futures Act 2001 of Singapore, *as amended or modified from time to time* (the "**SFA**"), the Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A of the SFA) that the Perpetual Securities are ["prescribed capital markets products"/[capital markets products other than "prescribed capital markets products"] (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018).][1]

[The offering of the Perpetual Securities in Thailand has not been, and will not be, approved by the Office of the Securities and Exchange Commission of Thailand. Therefore, the offering, sale, distribution or transfer of the Perpetual Securities in Thailand is not legal. This Pricing Supplement and any other documents relating to the offering of the Perpetual Securities, as well as information contained therein, may not be circulated or distributed in Thailand, as the offering of the Perpetual Securities is not an offering of securities in Thailand, nor may they be used in connection with any offer or invitation for subscription or sale of the Perpetual Securities in Thailand.]

Pricing Supplement dated [●]

[Thai Oil Public Company Limited] [Thaioil Treasury Center Company Limited]

Issue of [Aggregate Nominal Amount of Series] [Guaranteed] [Title of Perpetual Securities] [Guaranteed by Thai Oil Public Company Limited subject to the Maximum Guaranteed Amount]

under the US$3,679,000,000 Global Medium Term Note Program

The document constitutes the Pricing Supplement relating to the issue of Perpetual Securities described herein.

Terms used herein shall be deemed to be defined as such for the purposes of the Conditions of the Perpetual Securities (the "**Conditions**") set forth in the Offering Memorandum dated January 5, 2026. This Pricing Supplement contains the final terms of the Perpetual Securities and must be read in conjunction with such Offering Memorandum [and the supplemental Offering Memorandum dated [*date*]].

[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 guidance for completing the Pricing Supplement.]

1.	Issuer:		[Thai Oil Public Company Limited.] / [Thaioil Treasury Center Company Limited]
2.	Guarantor:		[Thai Oil Public Company Limited] / [Not Applicable][2]
3.	[(i)	Series Number:]	[●]
	[(ii)	Tranche Number: (*If fungible with an existing Series, details of that Series, including the date on which the Perpetual Securities become fungible*).]	[●]
4.	Specified Currency or Currencies:		[●] (*If Perpetual Securities are being cleared through DTC with distribution and or principal payable in a currency other than U.S. dollars, check whether DTC will accept payments in such currency*)
5.	Aggregate Nominal Amount:		[●]

[1] For any Perpetual Securities to be offered to investors in Singapore to persons other than accredited investors and institutional investors, Issuer to provide the product classification notification pursuant to Section 309B of the SFA prior to the launch of the offer.

[2] *Guarantor to be included for every Series of Perpetual Securities where Thaioil Treasury Center Company Limited is Issuer.*

	[(i)]	[Series]:	[●]
	[(ii) Tranche:		[●]
6.	(i)	Issue Price:	[●] per cent. of the Aggregate Nominal Amount [plus accrued distribution from [*insert date*] (*in the case of fungible issues only, if applicable*)]
	(ii)	Net Proceeds:	[●] [(Required only for listed issues)]
7.	(i)	Specified Denominations[3][4][5]	[●]
	(ii)	Calculation Amount:	[●]
8.	(i)	Issue Date:	[●]
	(ii)	Distribution Commencement Date:	[*Specify*/Issue Date/Not Applicable]
	(iii)	Trade Date:	**[●]**
9.	Distribution Basis:		[[●] per cent. Fixed Rate] [[*Specify* reference rate] +/- [●] per cent. Floating Rate] [Zero Coupon] [Other (*Specify*)] (further particulars specified below)
10.	Redemption/Payment Basis:		[Redemption at par] [Dual Currency] [Partly Paid] [Installment] [Other (*Specify*)]
11.	Call Options:		[Issuer Call] [Redemption upon Accounting Event] [Redemption upon a Substantial Repurchase Event] [(further particulars specified below)]
12.	Status of the Perpetual Securities		[Senior Perpetual Securities/Subordinated Perpetual Securities]
13.	Parity Securities		[●] (*In the case of Subordinated Perpetual Securities, the following can be included: "**Parity Securities**" means, in respect of the Issuer or the Guarantor, the preference shares or, if sub-divided into classes, the most junior class of preference share capital of the*

[3] *Perpetual Securities (including Perpetual Securities denominated in sterling) in respect of which the issue proceeds are to be accepted by the Issuer in the United Kingdom or whose issue otherwise constitutes a contravention of section 19 of the FSMA and which have a maturity of less than one year and must have a minimum redemption value of £100,000 (or its equivalent in other currencies) and be issued to a limited class of professional investors.*

[4] *If the specified denomination is expressed to be €100,000 or its equivalent and multiples of a lower principal amount (for example €1,000), insert the additional wording as follows: €100,000 and integral multiples of [€1,000] in excess thereof up to and including [€99,000]/[€199,000]. No perpetual securities in definitive form will be issued with a denomination above [€99,000]/[€199,000].*

[5] *Perpetual Securities to be listed on the Singapore Exchange Securities Trading Limited (the "SGX-ST") are required to be traded in a minimum board lot size of S$200,000 (or its equivalent in other countries).*

			Issuer or the Guarantor (as the case may be) and any instrument or security issued by the Issuer or the Guarantor (as the case may be), or entered into or guaranteed by the Issuer or the Guarantor (as the case may be): (a) which ranks or is expressed to rank, by its terms or by operation of law, pari passu *with the Perpetual Securities; and (b) the terms of which provide that the making of payments thereon or distributions in respect thereof are fully at the discretion of the Issuer or the Guarantor, as applicable*)
14.	Junior Securities		[●] (*In the case of Subordinated Perpetual Securities, the following can be included: "**Junior Securities**" means, in respect of the Issuer or the Guarantor, any class of the Issuer's or the Guarantor's (as the case may be) share capital qualifying as equity under applicable accounting rules (other than preference shares), the terms of which provide that the making of payments thereon or distributions in respect thereof are fully at the discretion of the Issuer or the Guarantor (as applicable)*)
15.	Covenants		[Applicable/Not Applicable]
16.	Listing:		[Singapore Exchange Securities Trading Limited/Other (*specify*)/None]
17.	Method of distribution:		[Syndicated/Non syndicated]

PROVISIONS RELATING TO DISTRIBUTION (IF ANY) PAYABLE

18.	**Fixed Rate Perpetual Security Provisions**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub paragraphs of this paragraph*)
	(i)	Rate[(s)] of Distribution:	[●] per cent. per annum [payable [annually/semi annually/quarterly/monthly/ other (*specify*)] in arrear]
	(ii)	Distribution Payment Date(s):	[●] in each year [adjusted in accordance with [*specify Business Day Convention and any applicable Business Centre(s) for the definition of "Business Day"*]/not adjusted]
	(iii)	Fixed Coupon Amount[(s)]:	[●] per Calculation Amount[6]
	(iv)	Broken Amount(s):	[●] per Calculation Amount, payable on the Distribution Payment Date falling [in/on] [●]
	(v)	Day Count Fraction:	[30/360/Actual/Actual (ICMA/ISDA)// other]
	(vi)	Other terms relating to the method of calculating distribution for Fixed Rate Perpetual Securities:	[Not Applicable/*give details*]

[6] *For Renminbi or Hong Kong dollar denominated Fixed Rate Perpetual Securities where the Distribution Payment Dates are subject to modification the following alternative wording is appropriate: Each Fixed Coupon Amount shall be calculated by multiplying the product of the Rate of Distribution and the Calculation Amount by the Day Count Fraction and rounding the resultant figure to the nearest RMB0.01, RMB0.005 for the case of Renminbi- denominated Fixed Rate Perpetual Securities and to the nearest HK$0.01, HK$0.005 for the case of Hong Kong dollar denominated Fixed Rate Perpetual Securities, being rounded upwards.*

19.	**Floating Rate Perpetual Security Provisions**		[Applicable/Not Applicable]
			(*If not applicable, delete the remaining sub paragraphs of this paragraph*)
	(i)	Distribution Period(s):	[●]
	(ii)	Specified Period:	[●]
			(*Specified Period and Specified Distribution Payment Dates are alternatives. A Specified Period, rather than Specified Distribution Payment Dates, will only be relevant if the Business Day Convention is the FRN Convention, Floating Rate Convention or Eurodollar Convention. Otherwise, insert "Not Applicable"*)
	(iii)	Specified Distribution Payment Dates:	[●]
			(*Specified Period and Specified Distribution Payment Dates are alternatives. If the Business Day Convention is the FRN Convention, Floating Rate Convention or Eurodollar Convention, insert "Not Applicable"*)
	(iv)	First Distribution Payment Date:	[●]
	(v)	Business Day Convention:	[Floating Rate Convention/FRN Convention/Eurodollar Convention/Following Business Day Convention/Modified Following Business Day Convention/Modified Business Day Convention/ Preceding Business Day Convention/ No Adjustment]
	(vi)	Additional Business Centre(s):	[Not Applicable/give details]
	(vii)	Manner in which the Rate(s) of Distribution is/are to be determined:	[Screen Rate Determination/ISDA Determination/other (*give details*)]
	(viii)	Party responsible for calculating the Rate(s) of Distribution and/or Distribution Amount(s) (if not the [Principal Paying Agent]):	[[*Name*] shall be the Calculation Agent (no need to specify if the Principal Paying Agent is to perform this function)]
	(ix)	Screen Rate Determination:	
		Reference Bank:	[●]
		Reference Rate:	[*For example, LIBOR or EURIBOR*]
		Distribution Determination Date(s):	[●]
		Relevant Screen Page:	[*For example, Reuters LIBOR 01/EURIB0R 01*]
		Relevant Time:	[*For example, 11.00 a.m. London time/Brussels time*]
		Relevant Financial Centre:	[*For example, London/Euro zone (where Euro zone means the region comprised of the countries whose lawful currency is the euro)*]

	(x)	ISDA Determination:	
		Floating Rate Option:	[●]
		Designated Maturity:	[●]
		Reset Date:	[●]
	(xi)	Margin(s):	[+/-][●] per cent. per annum
	(xii)	Minimum Rate of Distribution:	[●] per cent. per annum
	(xiii)	Maximum Rate of Distribution:	[●] per cent. per annum
	(xiv)	Linear Interpolation:	[Applicable/Not Applicable]
	(xv)	Day Count Fraction:	[●]
	(xvi)	Fall back provisions, rounding provisions, denominator and any other terms relating to the method of calculating distribution on Floating Rate Perpetual Security, if different from those set out in the Conditions:	[●]
20.	**Zero Coupon Perpetual Security Provisions**		[Applicable/Not Applicable]
			(*If not applicable, delete the remaining sub paragraphs of this paragraph*)
	(i)	Accrual Yield:	[●] per cent. per annum
	(ii)	Reference Price:	[●]
	(iii)	Any other formula/basis of determining amount payable:	[●]
21.	**Dual Currency Perpetual Security Provisions**		[Applicable/Not Applicable]
			(*If not applicable, delete the remaining sub paragraphs of this paragraph*)
	(i)	Rate of Exchange/method of calculating Rate of Exchange:	[*give details*]
	(ii)	Calculation Agent, if any, responsible for calculating the principal and/or distribution due:	[●]
	(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.	**Other provisions relating to Distribution**		
	(i)	Distribution Deferral:	[Applicable/Not Applicable]

			(*If applicable, please give details if different from the Conditions*)
	(ii)	Dividend Pusher:	[Applicable/Not Applicable] Reference Period: [●] (*If applicable, please give details if different from the Conditions*)
	(iii)	Non-Cumulative Deferral:	[Applicable/Not Applicable]
	(iv)	Cumulative Deferral:	[Applicable/Not Applicable]
	(v)	Additional Distribution:	[Applicable/Not Applicable]
	(vi)	Dividend Stopper:	[Applicable/Not Applicable] (*If applicable, please give details if different from the Conditions*)

PROVISIONS RELATING TO REDEMPTION

23.	**Call Option**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub paragraphs of this paragraph*)
	(i)	Optional Redemption Date(s) (Call):	[●]
	(ii)	Optional Redemption Amount(s) (Call) of each Perpetual Security and 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.	**Redemption upon Accounting Event**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub paragraphs of this paragraph*)
	(i)	Redemption Amount	[●]
25.	**Redemption upon a Substantial Repurchase Event**		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub paragraphs of this paragraph*)
	(i) Redemption Amount		[●]

26.	**Redemption Amount of each Perpetual Security**	[●] per Calculation Amount
27.	**Early Redemption Amount**	[Applicable/Not Applicable]
	Early Redemption Amount(s) per Calculation Amount payable on redemption for taxation reasons or other early redemption and/or the method of calculating the same (if required or if different from that set out in the Conditions):	(*If the Early Redemption Amount (Tax) is the principal amount of the Perpetual Security/specify the Early Redemption Amount (Tax) if different from the principal amount of the Perpetual Security*)]

GENERAL PROVISIONS APPLICABLE TO THE PERPETUAL SECURITIES

28.	Form of Perpetual Security:	[Unrestricted Global Certificate exchangeable for unrestricted Individual Perpetual Security Certificates on [●] days' notice in the limited circumstances described in the Unrestricted Global Certificate][7] [and] [Restricted Global Certificate exchangeable for Restricted Individual Perpetual Security Certificates on [●] days' notice in the limited circumstances described in the Restricted Global Certificate][8]
29.	Additional Financial Centre(s) or other special provisions relating to payment dates:	[Not Applicable/give details.] (Where the Perpetual Securities are in global form, "**Payment Business Day**" means a day on which dealings in foreign currencies may be carried out in: (a) [New York City][9] / [Hong Kong][10] / [Singapore][11] / [London][12] / [TARGET Settlement Day (being any day on which TARGET2 is open for the settlement of payments in euro)][13]; [and] (b) [give *details as per above if applicable*][14]) [*Note that this paragraph relates to the date and place of payment, and not distribution period end dates*]
30.	Details relating to Partly Paid Perpetual Securities: amount of each payment comprising the Issue Price and date on	[Not Applicable/*give details*]

[7] *If the Specified Denominations of the Perpetual Securities in paragraph 6 includes language substantially to the following effect: "[€50,000]/[€100,000] and integral multiples of [€1,000] in excess thereof up to and including [€99,000]/[€199,000]," the Unrestricted Global Certificate shall not be exchangeable on [●] days' notice or at any time.*

[8] *If the Specified Denominations of the Perpetual Securities in paragraph 6 includes language substantially to the following effect: "[€50,000]/[€100,000] and integral multiples of [€1,000] in excess thereof up to and including [€99,000]/[€199,000]," the Restricted Global Certificate shall not be exchangeable on [●] days' notice or at any time.*

[9] For US$ denominated Perpetual Securities.

[10] For HK$ or RMB denominated Perpetual Securities.

[11] For S$ denominated Perpetual Securities.

[12] For sterling denominated Perpetual Securities.

[13] For euro denominated Perpetual Securities.

[14] Include where an Additional Financial Centre has been indicated for the drawdown.

	which each payment is to be made [and consequences (if any) of failure to pay, including any right of the Issuer to forfeit the Perpetual Securities and distribution due on late payment]:	
31.	Details relating to Installment Perpetual Securities: amount of each installment, date on which each payment is to be made:	[Not Applicable/*give details*]
32.	Redenomination, renominalization and reconventioning provisions:	[Not Applicable/The provisions annexed to this Pricing Supplement apply]
33.	Consolidation provisions:	[The provisions in Condition 20 (*Further Issuance*)] [annexed to this Pricing Supplement] apply]
34.	Any applicable currency disruption/ fallback provisions:	[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 names*]
	(ii)	Stabilization Coordinator(s) (if any):	[Not Applicable/*give name*]
37.	If non-syndicated, name and address of Dealer:		[Not Applicable/*give name and address*]
38.	Total commission and concession:		[●] per cent. of the Aggregate Nominal Amount
39.	U.S. Selling Restrictions:		[Reg. S Category [1/2]]/[Rule 144A and 3(c)(7)]; [Rule 144A Eligible/Not Rule 144A Eligible]
40.	Additional selling restrictions:		[Not Applicable/*give details*]
41.	Prohibition of Sales to EEA or UK Retail Investors:		[Applicable/Not Applicable] (*If the Perpetual Securities clearly do not constitute "packaged" products, "Not Applicable" should be specified. If the offer of the Perpetual Securities may constitute "packaged" products and no KID will be prepared, "Applicable" should be specified.*)

OPERATIONAL INFORMATION

41.	Legal Entity Identifier (LEI) of Issuer:	**[●]**
42.	ISIN Code:	[●]
43.	Common Code:	[●]
44.	CUSIP:	[●]
45.	Any clearing system(s) other than Euroclear/Clearstream, Luxembourg, DTC Service and the relevant identification number(s):	[Not Applicable/*give name(s) and number(s)*]
46.	Delivery:	Delivery [against/free of] payment

47.	Additional Paying Agent(s) (if any):	[●]

GENERAL

48.	The aggregate principal amount of Perpetual Securities issued has been translated into United States dollars at the rate of [●], producing a sum of (for Perpetual Securities not denominated in United States dollars):	[Not Applicable/US$]
49.	[Ratings:	The Perpetual Securities to be issued have been rated: [[●]: [●]]; [[●]: [●]] ; [and] (each a "**Rating Agency**"). If any Rating Agency shall not make a rating of the Perpetual Securities publicly available, the Issuer shall select and substitute them with [●] or [●] and its successors.]

HONG KONG SFC CODE OF CONDUCT

50.	Rebates	[A rebate of [●] bps is being offered by the [Issuer] to all private banks for orders they place (other than in relation to Perpetual Securities subscribed by such private banks as principal whereby it is deploying its own balance sheet for onward selling to investors), payable upon closing of this offering based on the principal amount of the Perpetual Securities distributed by such private banks to investors. Private banks are deemed to be placing an order on a principal basis unless they inform the CMIs otherwise. As a result, private banks placing an order on a principal basis (including those deemed as placing an order as principal) will not be entitled to, and will not be paid, the rebate.] / [Not Applicable]
51.	Contact email addresses of the Overall Coordinators where underlying investor information in relation to omnibus orders should be sent:	[*Include relevant contact email addresses of the Overall Coordinators where the underlying investor information should be sent – OCs to provide*] / [Not Applicable]
52.	Marketing and Investor Targeting Strategy:	[*As indicated in the Offering Memorandum*] / [*Describe if different from the Offering Memorandum*]

[USE OF PROCEEDS

Give details if different from the "Use of Proceeds" section in the Offering Memorandum.]

[UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS WITH RESPECT TO PERPETUAL SECURITIES

Give details regarding the U.S. federal income tax consequences relating to the Perpetual Securities]

[STABILIZING

In connection with the issue of the Perpetual Securities, [*name(s) of Stabilization Coordinator(s)*] (or persons acting on behalf of [*name(s) of Stabilization Coordinator(s)]*) (the "**Stabilization Coordinator[s]**") may over-

allot Perpetual Securities or effect transactions with a view to supporting the price of the Perpetual Securities at a level higher than that which might otherwise prevail for a limited period after the Issue Date. However, there is no obligation on such Stabilization Coordinator[s] to do this. Such stabilizing, if commenced, may be discontinued at any time, and must be brought to an end after a limited period. Such stabilizing shall be in compliance with all applicable laws, regulations and rules.]

PURPOSE OF PRICING SUPPLEMENT

This Pricing Supplement comprises the final terms required for issue [and admission to trading on the SGX-ST] of the Perpetual Securities described herein pursuant to the US$3,679,000,000 Global Medium Term Note Program of the Issuer [and the Guarantor].

RESPONSIBILITY

The Issuer accepts responsibility for the information contained in this Pricing Supplement.

Signed on behalf of
[**Thai Oil Public Company Limited**] [**Thaioil Treasury Center Company Limited**] as Issuer

By: ……

Name: ……

Title: ……

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a summary of certain of our material related party transactions for the year ended December 31, 2024 and for the nine months ended September 30, 2025. For the purposes herein, parties are considered to be related parties if we have the ability, directly or indirectly, to control or jointly control the party or exercise significant influence over the party in making financial and operating decisions, or *vice versa*, or where we and the party are subject to common control or common significant influence. Related parties may be individuals or other entities. We believe each of these arrangements as described below have been entered into on arm's length terms or on terms that have been at least as favorable to us as similar transactions with non-related parties. For further information about our related party transactions, please see note 6 to our audited consolidated financial statements for the year ended December 31, 2024 and note 2 to our unaudited interim consolidated financial information for the nine months ended September 30, 2025.

Transactions

The table below sets forth the amounts involved in our related party transactions for the year ended December 31, 2024 and for the nine months ended September 30, 2025:

	For the year ended December 31, 2024		For the nine months ended September 30, 2025	
	(in millions)			
Transactions	**THB**	**US$**	**THB**	**US$**
Purchase of crude oil and feedstock from related parties	337,098.8	10,426.8	202,859.0	6,274.6
Revenue from sales of goods and rendering of services to related parties	217,430.8	6,725.4	132,160.7	4,087.9
Directors' remuneration	78.3	2.4	45.2	1.4
Others[(1)]	1,297.4	40.1	1,090.0	33.7
Total	555,905.3	17,194.7	336,154.9	10,397.6

Note:

(1) See "*—Others*" below.

Purchases of Crude Oil and Feedstock from Related Parties.

The Company has entered into an indefinite term agreement with PTT for the supply of crude oil. See "*Business—Our Business Units and Products—Oil Refining*" for further information.

The Company, together with certain of its subsidiaries, has entered into natural gas supply agreements with PTT at quantities and prices as stipulated in such agreements. These agreements are generally for terms of 10 to 25 years expiring between 2022 and 2041.

The Company, together with certain of its subsidiaries, has entered into power purchase agreements with Thaioil Power and TOP SPP at quantities and prices as stipulated in such agreements. These agreements are generally for terms of 24 and 25 years, expiring in 2023, 2027 and 2040.

The Company, together with certain of its subsidiaries, has entered into steam purchase agreements at quantities and prices as stipulated in such agreements. These agreements are generally for terms of 20 and 25 years, expiring in 2023, 2027 and 2040.

The Company has entered into a by-product purchase agreement with TLB, with purchase volumes and prices of the by-product as specified in the agreement. The agreement is evergreen.

Sak Chaisidhi has entered into raw materials and petrochemical products purchase and sale agreements with related companies, including PTT, IRPC and PTTGC, at quantities and prices as stipulated in the agreements. These agreements range from one year to 15 years expiring during 2019 and 2025.

The Company has entered into a raw materials purchase agreement with TPX, with purchase volumes and raw material prices as specified in the agreement. This agreement is evergreen unless terminated by either party with at least 6 months' notice in writing.

Sales of Goods and Rendering of Services to Related Parties

The Company has entered into an indefinite term agreement with PTT and OR, whereby PTT and OR agrees to purchase a certain quantity of our refined petroleum products at prevailing market prices. See "*Business—Our Business Units and Products—Oil Refining*" for further information.

We have entered into purchase and sale agreements with related parties with respect to the purchase and sale of various products, including refined petroleum and related by-products and ethanol. These related parties include TLB, TPX and UBE. These agreements have terms of at least 16 years and some are evergreen.

TPX and LABIX have entered into a services agreement for TPX to provide LABIX the use of its facilities, including lab and laboratory consumables, for a service fee as specified in the agreement.

Collaboration

On November 1, 2021, the Company and TPX (as the "**Participants**") entered into the Collaboration Agreement with PTT Public Company Limited, PTT International Trading Pte. Ltd., PTT International Trading London Ltd., PTT International Trading USA Inc. and PTT MEA Ltd., (collectively, the "**PTT Trading Group**"), for the objectives of "Project One" (operating as an integrated of inter commodity trading which covers the entire downstream value chain in order to create potential additional benefits via operating efficiency and flexibility, asset utilization and re-optimization). The collaboration period was extended from January 1, 2025 until December 31, 2028 or expiration or termination of the agreement in accordance with the terms and conditions set out therein. The PTT Trading Group will pay each Participant a collaboration fee on an annual basis.

Borrowings

We have uncommitted unsecured short term inter-company borrowing and lending agreements with PTT to manage liquidity. None of the borrowing credit lines and lending credit lines exceeds THB2,100 million. The credit lines bear interest at floating rates calculated with reference to Money Market Rate. The reference rate may include either Thai Overnight Repurchase Rate or THOR or Secured Overnight Financing Rate (SOFR). These agreements are for terms of one year and are automatically extended at the end of each term.

Directors' Remuneration

Our transactions with directors consist of directors' compensation items, such as directors' fees and variable bonuses which must be approved by the Annual General Meeting of Shareholders.

Others

We have previously entered and may from time to time enter into crack spread or other derivative arrangements with PTT to hedge our exposure to crude oil and product price fluctuations and their effect on our oil refinery's margins. Under the agreements, the floating or the actual value of the crack spread (the difference between product price and feedstock price) is swapped for the fixed or hedged value of the crack spread each month for a specified quantity. As of September 30, 2025, we had outstanding swap and option contracts with PTT for 9.7 million barrels including crude oil, crack spread and inventory.

We, as lessor, have lease and sublease agreements regarding certain parcels of land in the Sriracha Complex which we in turn either own or lease from the Treasury Department, Ministry of Finance. These lease and sublease agreements are with TPX, TLB, TOP SPP, GPSC, LABIX, Thaioil Consumers Co-Operative Limited, GPSC and Thai Tokai Carbon Product Company Limited. We also have a land lease agreement under which we lease land from PTT, which expires in August 2026.

We have entered into an Asset Sale and Purchase Agreement for the Energy Recovery Unit (ERU) with Energy Recovery Unit Co., Ltd. ("**ERU Co.**") which is a wholly-owned subsidiary of GPSC, whereby the purchase price is specified in the agreement. The Company will transfer ownership in the ERU to ERU Co. upon satisfaction of all the conditions precedent set out in the agreement. Such condition precedent includes the CFP Provisional Acceptance Certificate (PAC).

We also have entered into a Fuel and Utilities Supply Agreement, Power Purchase Agreement and Operation and Maintenance Services Agreement with ERU to support energy for CFP, utilities and supply, services of operation and maintenance of the ERU. The term of the agreement is 25 years from the from the closing date of the agreement and the parties may agree to extend the term for another 5 years.

We and our related parties have entered into various service, supply and throughput agreements in relation to various amenities, technical and support services such as consultancy, time charter and affreightment, office rentals, technology and communication services support, usage of buoy mooring facilities, throughput operating, repair and maintenance, waste water treatment, financial, accounting and human resource services, information technology, administration, procurement, ship management and crude oil storage tank services and fuel transmission. These contracts are entered into on an arm's length basis.

We are committed to complying with rules, regulations, and principles relating to disclosure of related parties and related parties' transactions. In case of potential conflict with related persons in related parties' transactions, we will present the same to the Audit Committee for consideration on appropriateness of such transaction. Where the Audit Committee does not have specialization, we will acquire the opinion of independent third party with knowledge and expertise. Such opinion will be presented for the consideration of the board of directors or shareholders as the case may be. This is to ensure that the transaction is not a transfer of benefit between us, subsidiaries, joint ventures, related parties, or shareholders, but is a transaction in the best interest of all shareholders, especially minor shareholders.

Accounts Balances

The balances due to and from our related parties as of September 30, 2025 are as follows:

	As of September 30, 2025	
	(in millions of)	
	THB	**US$**
Accounts[(1)]		
Trade and other current receivables	12,348.7	382.0
Trade and other current payables	61,669.9	1,907.5

Note:

(1) For further information, please see note 2 to our unaudited interim consolidated financial information for the nine months ended September 30, 2025.

DESCRIPTION OF OTHER MATERIAL INDEBTEDNESS

To finance working capital requirements and to fund investment projects, we have entered into financing arrangements with various financial institutions. In addition, we issue debentures from time to time which are offered to institutional investors and/or the public. As of September 30, 2025, our total outstanding borrowings, including debentures issued, totaled THB119,206.1 million (US$3,687.2 million), of which THB118,694.4 million (US$3,671.3 million) were unsecured. Of our total outstanding borrowings, foreign currency denominated indebtedness amounted to THB75,155.8 million (US$2,324.6 million), Thai Baht denominated debentures amounted to THB29,484.4 million (US$912.0 million) and Thai Baht denominated borrowings amounted to THB14,566.0 million (US$450.5 million).

We set forth below a summary of the material terms and conditions of these borrowings, debentures and other material indebtedness. This summary does not purport to be complete. Please refer to the financial statements of the Company and the notes thereto included elsewhere in this Offering Memorandum for additional information with respect to such indebtedness. Each of the Issuers is not restricted from incurring any new indebtedness, save for financial covenants set out in any agreement to which the relevant Issuer is a party.

Bank Borrowings

We have entered into loan agreements with various banks and financial institutions. These borrowings are typically unsecured and secured borrowings to finance our investment projects and working capital and to refinance our borrowings and other indebtedness. Our subsidiaries, Sapthip, TSV, and LABIX have unsecured and secured borrowings with various banks and financial institutions with terms up to 10 years.

As of September 30, 2025, the aggregate outstanding amount under these borrowings from financial institutions totaled approximately THB12,746.2 million (US$394.3 million), of which THB2,741.3 million (US$84.8 million) were short-term obligations. Out of the long-term obligations, THB846.5 million (US$26.2 million) would be due within one year, THB3,476.0 million (US$107.5 million) would be due between one and three years, THB5,423.9 million (US$167.8 million) would be due between three and five years and THB2,999.8 million (US$92.8 million) would be due in more than five years.

Interest

The principal amounts outstanding under the bank borrowings generally bear interest at floating rates calculated with reference to benchmarks, such as the Money Market Rate ("**MMR**") which is calculated and announced by the respective commercial banks, the Thai Overnight Repurchase Rate ("**THOR**") and the Bangkok Interbank Offered Rate ("**BIBOR**") which are calculated and announced by the Bank of Thailand. Interest payments are payable either monthly, quarterly, semi-annually or as specified in each promissory note, and payments must be made on each interest payment date as provided in the respective loan agreements. As of September 30, 2025, the interest rates on our long-term borrowings ranged from approximately 2.6% to 7.2% per annum, subject to applicable reference rates.

Covenants

Under the bank borrowings, we have agreed, among other things, not to take the following actions without the prior written consent from the relevant lender or group of lenders to whom we owe more than two-thirds of the total principal amount (in case of a syndicated borrowings):

- making any disposals of all or any material portion of our assets save for certain conditions prescribed in the bank loan agreements, such as disposals in the ordinary course of business and on arm's length commercial terms or disposal of obsolete or redundant vehicles, plants, machinery or equipment;
- creating or permitting to subsist any encumbrance on our current or future assets or revenues other than permitted encumbrance as prescribed in the bank loan agreements;
- materially changing the nature of our business; and
- amending, or granting any release or waiver with respect to, technical services agreements in a manner or to an extent that would have a material adverse effect on, among others, our business condition (financial or otherwise), operations, performance or assets.

Events of Default

The bank loan agreements contain certain customary events of default, such as failure to pay, cross-acceleration of repayment obligations under other borrowings or financing documents in excess of 3% of our shareholders equity, the occurrence of certain bankruptcy, reorganization, and liquidation-related events and government intervention. Upon the occurrence of any event of default, the lenders are entitled to terminate their respective commitments and/or demand immediate repayment of the borrowings and any accrued interest.

Thai Baht Debentures

From time to time, we issue and offer debentures to investors by way of private placement in Thailand. These debentures are denominated in Baht and are unsecured and unsubordinated. The proceeds from these debentures have been used to finance our investment projects and working capital and to refinance our borrowings and other indebtedness. Other than with respect to specific pricing terms of each tranche, the terms and conditions of the Thai Baht debentures are substantially similar to each other. The terms of the Thai Baht debentures range from 3 to 15 years from their respective issue date. As of September 30, 2025, the outstanding amount under these debentures totaled approximately THB29,500 million (US$912.5 million), of which THB12,300 million (US$380.5 million) would be due between one and three years, THB2,000 million (US$61.9 million) would be due between three and five years, and THB15,200 million (US$470.2 million) would be due in more than five years.

Interest

The Thai Baht debentures generally bear interest at fixed rates. Interest payments are payable semi-annually. As of September 30, 2025, the interest rates on our Thai Baht debentures ranged from 2.99% to 5.09% per annum based on the duration of the particular debentures.

Covenants

Under the terms and conditions of the Thai Baht debentures, we have agreed, among other things, not to take the following actions, unless certain conditions are met:

- creating a security interest or any other encumbrance on our assets or assets of our principal subsidiaries to secure the performance under Thai Baht-denominated, long-term and negotiable debt instruments which are or are capable of being listed on any security market in Thailand or guarantees, indemnity agreements, or similar obligations of or relating to any such debt instruments, unless we have obtained a prior consent from a meeting of the holders of the Thai Baht debentures. For the purpose of the covenant, a principal subsidiary means (i) Thai Paraxylene for so long as we, directly or indirectly, hold more than 50% of the total shares in Thai Paraxylene or (ii) any other company, in which Thai Paraxylene (for so long as it is a principal subsidiary pursuant to item (i)), directly or indirectly, hold more than 50% of the total shares of such company;

- selling or disposing of our assets, unless certain conditions prescribed in the terms and conditions of the Thai Baht debentures are met, such as where the sale or disposition of assets does not have a material adverse effect on our ability to repay the Thai Baht debentures or which is carried out for the purpose of amalgamating, merging or reorganizing our business in accordance with details approved by a meeting of the holders of the Thai Baht debentures;

- entering into any amalgamation, merger, demerger or transfer substantial part or all of our shares or assets for the purpose of amalgamation or merger, except for the amalgamation or merger, wherein (i) no event of default is constituted and continues, and (ii) we are the surviving entity, or the amalgamation or merger results in our whole business being transferred to another juristic person and the issuer's obligations under the Thai Baht debentures continue in full force and effect and binding on such juristic person, and (iii) the amalgamation or merger will not cause a material adverse effect;

- paying cash dividend to our shareholders if an event of default on interest payment or any payment under the Thai Baht debentures occurs; and

- applying proceeds derived from the issuance of Thai Baht debentures for any purposes other than as indicated in the relevant prospectus.

Events of Default

The terms and conditions of the Thai Baht debentures contain certain customary events of default, such as failure to pay the amount payable on the due date, failure to comply with other terms of the Thai Baht debentures, default on repayment obligations under other borrowings or financing documents totaling US$15.0 million or more (with respect to the debentures issued in 2012) and 3% of our shareholders equity (with respect to the debentures issued from the year 2022 onwards, i.e., in 2022 and 2023), failure to comply with a court order to repay any indebtedness which would have a material adverse effect on our ability to repay the Thai Baht debentures, our assets being subject to foreclosure which would have a material adverse effect on our ability to repay the Thai Baht debentures, our declaration of moratorium or suspension on the payment of debts, bankruptcy, liquidation, illegality of the Thai Baht debentures and entering into a debt restructuring transaction. Moreover, if PTT, directly or indirectly, holds less than 45.0% of our total issued shares, an event of default will also be deemed to have occurred under the Thai Baht debentures (with respect to the debentures issued before 2022). The holders of the Thai Baht debentures are entitled to demand immediate repayment of the Thai Baht debentures and any accrued interest upon the occurrence of an event of default.

U.S. Dollar Notes

On January 23, 2013, we issued notes in a principal amount of US$500.0 million at an interest rate of 3.625% per annum (the "**2023 USD Notes**") and notes in a principal amount of US$500.0 million at an interest rate of 4.875% per annum (the "**2043 USD Notes**").

On April 10, 2018, by way of tender offers, we repurchased US$283.6 million in principal amount of 2023 USD Notes and US$327.6 million in principal amount of 2043 USD Notes from existing holders of such notes. Concurrently with such repurchase, Treasury Center issued US$283.6 million in principal amount of senior unsecured notes due 2023 (the "**TC 2023 Notes**") and US$327.6 million in principal amount of senior unsecured notes due 2043 (the "**TC 2043 Notes**"). The Company acted as guarantor of the TC 2023 Notes and TC 2043 Notes, which have substantially identical terms as the 2023 USD Notes and the 2043 USD Notes, respectively.

On November 20, 2018, Treasury Center issued notes in a principal amount of US$400.0 million at an interest rate of 4.625% per annum due 2028 (the "**TC 2028 Notes**") and notes in a principal amount of US$600.0 million at an interest rate of 5.375% per annum due 2048 (the "**TC 2048 Notes**"). The Company acted as guarantor of the TC 2028 Notes and TC 2048 Notes, which have substantially identical terms as the TC 2023 Notes and the TC 2043 Notes, respectively. The TC 2023 Notes matured and were paid in full on January 23, 2023.

On October 17, 2019, Treasury Center issued notes in a principal amount of US$565.0 million at an interest rate of 3.50% per annum due 2049 (the "**TC 2049 Notes**"). The Company acted as guarantor of the TC 2049 Notes, which have substantially identical terms as the TC 2028 Notes and the TC 2048 Notes.

On June 18, 2020, Treasury Center issued notes in a principal amount of US$400.0 million at an interest rate of 2.50% per annum due 2030 (the "**TC 2030 Notes**") and notes in a principal amount of US$600.0 million at an interest rate of 3.75% per annum due 2050 (the "**TC 2050 Notes**"). The Company acted as guarantor of the TC 2030 Notes and TC 2050 Notes, which have substantially identical terms as the TC 2028 Notes and TC 2048 Notes, respectively.

In June 2025, Treasury Center repurchased and cancelled in an aggregate principal amount of US$65.5 million of the TC 2024 Notes, US$77.00 million of the TC 2048 Notes and US$113.0 million of the TC 2049 Notes. Subsequently, on September 25, 2025, we completed a tender offer to repurchase and cancel an aggregate principal amount of US$50.0 million of the TC 2050 Notes, US$86.4 million of TC 2043 Notes, US$73.6 million of TC 2043 Notes and US$90.0 million of TC 2048 Notes.

As of September 30, 2025, the outstanding amounts under the 2043 USD Notes, the TC 2043 Notes, the TC 2028 Notes, the TC 2048 Notes, the TC 2049 Notes, the TC 2030 Notes and the TC 2050 Notes were US$51.5 million, US$188.5 million, US$400.0 million, US$390.0 million, US$452.0 million, US$400.0 million and US$430.0 million, respectively.

Interest

The 2043 USD Notes and the TC 2043 Notes bear interest on their outstanding principal amounts at the rate of 4.875% per annum, payable semi-annually in arrears. The TC 2028 Notes bear interest on their outstanding principal amount at the rate of 4.625% per annum, payable semi-annually in arrears. The TC 2048 Notes bear interest on their outstanding principal amount at the rate of 5.375% per annum, payable semi-annually in arrears.

The TC 2049 Notes bear interest on their outstanding principal amount at the rate of 3.50% per annum, payable semi-annually in arrears. The TC 2030 Notes bear interest on their outstanding principal amount at the rate of 2.50% per annum, payable semi-annually in arrears. The TC 2050 Notes bear interest on their outstanding principal amount at the rate of 3.75% per annum, payable semi-annually in arrears.

Covenants

Under the terms and conditions of the 2043 USD Notes, TC 2043 Notes, TC 2028 Notes, TC 2048 Notes, TC 2049 Notes, TC 2030 Notes and TC 2050 Notes, we are subject to covenants that restrict us and certain of our subsidiaries from creating any security interest over our present or future business, undertaking, assets or revenues to secure certain indebtedness unless we ensure, among others, that all amounts payable under the 2043 USD Notes, TC 2043 Notes, TC 2028 Notes, TC 2048 Notes, TC 2049 Notes, TC 2030 Notes and TC 2050 Notes are secured by an equal and rateable security interest.

Events of Default

The terms and conditions of the 2043 USD Notes, TC 2043 Notes, TC 2028 Notes, TC 2048 Notes, TC 2049 Notes, TC 2030 Notes and TC 2050 Notes contain certain customary events of default, including default in the payment of any principal or interest due in respect of the such notes, and other events of default such as liquidation and insolvency. Subject to certain exceptions, an event default is also deemed to have occurred when, among other things, our debts of an amount equal to or greater than US$25 million either (a) become due and payable by reason of acceleration or (b) we fail to pay our debts as they fall due.

Increase in Interest Rate Payable Upon the Occurrence of a Change of Control Triggering Event

The interest rate payable on the 2043 USD Notes, TC 2043 Notes, TC 2028 Notes, TC 2048 Notes, TC 2049 Notes, TC 2030 Notes and TC 2050 Notes will be subject to an increase of 1.25% if (i) PTT ceases to own or control, directly or indirectly, at least 40% of our issued and outstanding share capital or any person owns (directly or indirectly) more shares of our issued and outstanding share capital than PTT, and (ii) within 90 days of the occurrence or public notice of such change of control, either S&P or Moody's publicly announces a decrease in the rating of such notes by one or more gradations.

Maturity, Purchase and Redemption

The maturity dates of the 2043 USD Notes, TC 2043 Notes, TC 2028 Notes, TC 2048 Notes, TC 2049 Notes, TC 2030 Notes and TC 2050 Notes are January 23, 2043, January 23, 2043, November 20, 2028, November 20, 2048, October 17, 2049, June 18, 2030 and June 18, 2050, respectively.

At any time, the Company may on any one or more occasions redeem all or a part of such notes, upon not less than 30 nor more than 60 days' written notice, at a redemption price equal to 100% of the principal amount of such notes redeemed, plus the applicable premium as of, and accrued and unpaid interest, if any, to the date of redemption, subject to the rights of holders of such notes on the relevant record date to receive interest due on the relevant interest payment date.

For taxation reasons, these notes may be redeemed, in whole but not in part, at the Company's option, upon not less than 30 nor more than 60 days' written notice, at any time at a redemption price equal to:

- 100% of the aggregate principal amount of the notes to be redeemed, plus;
- accrued interest to the date fixed for redemption.

Any such notes redeemed or repurchased by us shall be cancelled and may not be reissued or resold.

TAXATION

Thai Taxation

*The following is a summary of the principal Thai tax consequences of the purchase, ownership and disposition of the Securities by individual and corporate investors who are not resident in Thailand for tax purposes (referred to as "**non-resident individual holders**" and "**non-resident corporate holders**," respectively, and together as "**non-resident holders**") based on Thai 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 Thailand. It does not purport to be a comprehensive description of all of the tax considerations that may be relevant to a decision to purchase the Securities. Prospective investors in all jurisdictions are advised to consult their own tax advisors as to other tax consequences of the purchase, ownership and disposition of the Securities, including the consequences under Thai laws, the laws of the country of which they are resident and any double taxation agreement between Thailand and their country of residence for tax purposes.*

Income Tax

Non-resident Individual Holders

A non-resident individual holder is an individual owner of Securities that has not resided in Thailand at one or more times for a period or periods equal in the aggregate to 180 days or more in any calendar year, regardless of the nationality of the individual holders.

Interest

Unless the terms and conditions of applicable double taxation agreement entered into between Thailand and the resident country of the non-resident individual holders provide otherwise, interest paid or deemed to be paid on the Securities from or within Thailand to a non-resident individual holder is subject to 15% withholding tax.

Capital Gains

Capital gains (being the amount received in excess of the cost of acquisition of the Securities) received by a non-resident individual holder from the sale or other disposition of Securities outside Thailand in connection with which payment is made neither from nor within Thailand nor deemed to be made from or within Thailand are not subject to Thai withholding tax.

Unless the terms and conditions of applicable double taxation agreement entered into between Thailand and the resident country of the non-resident individual holders provide otherwise, capital gains received by a non-resident individual holder from a sale or other disposition of Securities in which payment is made or deemed to be made from or within Thailand are subject to 15% withholding tax.

Premium

Unless the terms and conditions of applicable double taxation agreement entered into between Thailand and the resident country of the non-resident individual holders provide otherwise, any premium (being the amount received in excess of the interest and the principal amount paid upon a redemption of the Securities) paid or deemed to be paid on the Securities from or within Thailand to a non-resident individual holder is subject to 15% withholding tax.

Non-resident Corporate Holders

A non-resident corporate holder is an owner of Securities that is a company, a registered partnership or any entity established pursuant to a foreign law that is not doing business in Thailand or deemed to be doing business in Thailand or does not have a taxable presence (e.g., permanent establishment, employees, agents or representatives) in Thailand but receiving from or within or deemed to be received from or within Thailand interest on the Securities or capital gains arising from the transfer of the Securities.

Interest / Distribution

Interest paid on the Securities by the Issuer to a non-resident corporate holder that is a company or limited partnership established under a foreign law that is not doing business in Thailand nor has taxable presence in

Thailand are exempted from Thai corporate income tax (including Thai withholding tax), to the extent that the Issuer remains qualified as a treasury center that has the international business center status, and fully complies with conditions and requirements, pursuant to the Royal Decree issued pursuant to the Revenue Code on Reduction and Exemption of Taxes and the rules and regulations of the Revenue Department of Thailand and the Bank of Thailand governing treasury center and international business center.

If any of the qualifications or conditions for an exemption referred to in the paragraph above are no longer met, interest or distribution paid on the Securities by the Issuer to a non-resident corporate holder will be subject to a withholding tax at the rate of 15% of the gross amount of the interest or distribution payment, unless the terms and conditions of applicable double taxation agreement between Thailand and the resident country of such non-resident corporate holder provide otherwise.

Capital Gains

Capital gains (being the amount received in excess of the cost of acquisition of the Securities) received by a non-resident corporate holder from the sale or other disposition of Securities outside Thailand in connection with which payment is made neither from nor within Thailand nor deemed to be made from or within Thailand are not subject to Thai withholding income tax.

Unless the terms and conditions of applicable double taxation agreement entered into between Thailand and the resident country of the non-resident corporate holder provide otherwise, capital gains received by a non-resident corporate holder from a sale or other disposition of Securities in which payment is made from or within Thailand or deemed to be paid from or within Thailand are subject to a 15% withholding tax.

Premium

Unless the terms and conditions of applicable double taxation agreement entered into between Thailand and the resident country of the non-resident corporate holders provide otherwise, any premium (being the amount received in excess of the interest and the principal amount paid upon a redemption of the Securities) paid or deemed to be paid on the Securities from or within Thailand to a non-resident corporate holder is subject to 15% withholding tax.

Income Tax in connection with a Guarantee Payment by the Guarantor

Thai taxation with respect to any payment made to the holders of the Securities by the Guarantor pursuant to its obligations under the Guarantee, if part of the guaranteed payment is considered by the Thai authorities as payment of interest and/or premium (as described below) from or in Thailand, is as set out below.

Non-resident Individual Holders

Interest

Interest paid on the Securities to a non-resident individual holder will be subject to a withholding tax at the rate of 15% of the gross amount of the interest payment, unless the terms and conditions of applicable double taxation agreement between Thailand and the resident country of such non-resident individual holder provide otherwise.

Premium

Any premium (being the amount received in excess of the interest and the principal amount paid in accordance with the terms of the Guarantee) paid to a non-resident individual holder will be subject to Thai withholding tax at the rate of 15% of the gross amount of the premium, unless the terms and conditions of applicable double taxation agreement between Thailand and the resident country of such non-resident individual holder provide otherwise.

Non-resident Corporate Holders

Interest

Interest paid on the Securities to a non-resident corporate holder will be subject to a withholding tax at the rate of 15% of the gross amount of the interest payment, unless the terms and conditions of applicable double

taxation agreement between Thailand and the resident country of such non-resident corporate holder provide otherwise.

Premium

Any premium (being the amount received in excess of the interest and the principal amount paid in accordance with the terms of the Guarantee) paid to a non-resident corporate holder will be subject to Thai withholding tax at the rate of 15% of the gross amount of the premium, unless the terms and conditions of applicable double taxation agreement between Thailand and the resident country of such non-resident corporate holder provide otherwise.

Double Taxation Agreement

Presently, Thailand concluded double taxation agreements with 61 countries. The rate of withholding tax applicable to individual and corporate holders of the Securities, who are regarded as tax residents and fully entitled to benefits under the double taxation agreements between Thailand and their resident countries and receive payments in respect of the Securities that are subject to Thai withholding tax, may be reduced or exempted depending on the terms and conditions of the applicable double tax agreement.

Furthermore, Thailand is also a party to the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting (MLI) which allows the modifications of identified bilateral tax treaties to prevent tax treaty abuse, prevent the artificial avoidance of permanent establishments and improve treaty dispute resolution under the mutual agreement procedure. Accordingly, non-resident holders should consider the implications of the MLI to ensure that any tax benefits obtained remain viable under its provisions.

Value Added Tax

Interest on the Securities and capital gains derived from the transfer of the Securities are not subject to value added tax in Thailand.

Specific Business Tax

Interest on the Securities and capital gains derived from the transfer of the Securities are not subject to specific business tax in Thailand. However, Thai specific business tax would apply at a rate which varies depending on the type of business and income if a person who receives the interest on the Securities and capital gains derived from the transfer of the Securities is a person carrying on a banking business, finance business, securities business or business similar to a commercial bank in Thailand.

Stamp Duty

Each Security certificate will be subject to a stamp duty of THB5.0 in Thailand. Stamp duty will be triggered when Security certificate is issued in Thailand, or is brought into Thailand if issued outside Thailand. An instrument of transfer of the Securities is exempted from stamp duty.

The Guarantee will be subject to a stamp duty of THB10 in Thailand. Stamp duty will be triggered when the Guarantee is executed in Thailand or is brought into Thailand if executed outside Thailand.

United States Federal Income Taxation

United States Federal Income Tax Considerations with respect to the Notes

The following discussion is a summary of certain U.S. federal income tax consequences of the purchase, ownership and disposition of the Notes by a U.S. holder (defined below), but does not purport to be a complete analysis of all potential tax effects.

This summary is based upon the U.S. Internal Revenue Code of 1986, as amended (the "**Code**"), Treasury regulations issued thereunder and judicial and administrative interpretations thereof, each as of the date hereof, and all of which are subject to change, possibly with retroactive effect. There can be no assurance that the United States Internal Revenue Service (the "**IRS**") will not take a different position concerning the tax consequences of the purchase, ownership or disposition of the Notes or that any such position would not be sustained. This discussion does not address state, local, foreign or tax laws other than U.S. federal income tax law. This discussion does not address all of the U.S. federal income tax consequences that may be relevant to a

U.S. holder in light of such U.S. holder's particular circumstances or to U.S. holders subject to special rules, such as banks, insurance companies and other financial institutions, certain U.S. expatriates or former long-term residents of the United States, dealers in securities, traders in securities that elect mark-to-market tax accounting, partnerships or other pass-through entities or persons holding the Notes through such entities, U.S. holders whose functional currency is not the U.S. dollar, tax-exempt organizations, regulated investment companies, real estate investment trusts, REMICs, persons subject to alternative minimum tax or Medicare tax on net investment income, persons subject to special tax accounting rules as a result of any item of gross income with respect to the Notes being taken into account in an applicable financial statement, persons holding the Notes as part of a "straddle," "hedge," "conversion transaction" or other integrated transaction and persons deemed to sell Notes under the "constructive sale" provisions of the Code. In addition, this discussion is limited to U.S. holders (except that the discussion below regarding Foreign Account Tax Compliance applies to all holders) who purchase the Notes for cash at the price set forth in the applicable Pricing Supplement and who hold the Notes as capital assets (generally, property held for investment) for U.S. federal income tax purposes.

The following discussion only addresses Notes that (i) are denominated in U.S. dollars, (ii) provide for a fixed rate of interest, (iii) have a term to maturity exceeding one year but not more than 30 years, and (iv) are issued without (1) bond premium or (2) pre-issuance accrued interest, each as defined for U.S. federal income tax purposes. If we issue Notes that do not meet all of these conditions, the applicable Pricing Supplement will describe the U.S. federal income tax consequences relating to such Notes to the extent they differ from the consequences described below. Additionally, in certain circumstances, U.S. federal income tax consequences not discussed below may apply if the issue price of the Notes is payable in more than one instalment.

THIS SUMMARY IS NOT INTENDED TO CONSTITUTE TAX ADVICE OR A COMPLETE ANALYSIS OF ALL TAX CONSEQUENCES RELATING TO THE PURCHASE, OWNERSHIP AND DISPOSITION OF THE NOTES. PROSPECTIVE PURCHASERS OF THE NOTES SHOULD CONSULT THEIR OWN TAX ADVISORS REGARDING THE U.S. FEDERAL, STATE, LOCAL, NON-U.S. INCOME AND OTHER TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF THE NOTES, INCLUDING UNDER OTHER U.S. FEDERAL TAX LAWS OR THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR ANY APPLICABLE TAX TREATY.

For purposes of this discussion, a "U.S. holder" is a beneficial owner of a Note that is for U.S. federal income tax purposes: (i) an individual who is a citizen or resident of the United States; (ii) a corporation or any entity taxable as a corporation created or organized in or 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 taxation regardless of its source; or (iv) a trust if (A) 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 (B) it has made a valid election to be treated as a domestic trust.

If an entity or arrangement that is classified as a partnership for U.S. federal income tax purposes holds Notes, the tax treatment of a partner in the partnership will generally depend upon the status of the partner and the activities of the partnership. Such partnerships and their partners should consult their tax advisors regarding the tax consequences of their particular situations.

Characterization of the Notes

The Direct Issuance Notes, when issued, are generally expected to be characterized as debt for U.S. tax purposes. By comparison, the characterization of the Guaranteed Notes as debt or equity for U.S. federal income tax purposes is not entirely clear. The Treasury Center, which is the Issuer of the Guaranteed Notes, owns only limited assets. Furthermore, in accordance with the terms of the Guaranteed Notes under the Indenture, the Guarantor's obligations are limited to a Maximum Guaranteed Amount in respect of each Series of Guaranteed Notes. We intend to treat the Guaranteed Notes as debt for U.S. federal income tax purposes, and the following discussion assumes such treatment. However, there can be no assurance that the IRS or the courts would agree with such treatment. If the Guaranteed Notes were treated as equity, they could be treated as equity interests in a passive foreign investment company, which may result in adverse U.S. tax consequences to U.S. holders of the Guaranteed Notes.

In addition, with respect to both the Guaranteed Notes and the Direct Issuance Notes, we are required to pay additional amounts with respect to Thai taxes withheld on interest payments, subject to certain exceptions and limitations. In addition, under certain circumstances, we may be obligated to pay amounts in excess of the principal and interest on the Notes. The following discussion assumes that the additional amounts we are required to pay will remain constant throughout the term of the Notes and that there is only a remote possibility that we

will be required to pay different amounts. Based on such assumption, we believe that it is unlikely that the Notes will be treated as contingent payment debt instruments. However the IRS may not agree and may treat the Notes as contingent payment debt instruments. In such case, U.S. holders may be required to accrue interest at a rate higher than the yield to maturity and recognize ordinary income rather than capital gain upon a sale, exchange or redemption of the Notes. U.S. holders should consult their tax advisors regarding the potential application of the contingent payment debt instrument rules to the Notes and the tax consequences thereof.

Stated Interest and Original Issue Discount

Payments of stated interest on the Notes that constitutes "qualified stated interest" generally will be taxable to a U.S. holder as ordinary income at the time that such payments are received or accrued, in accordance with such U.S. holder's method of accounting for U.S. federal income tax purposes. Stated interest payments on a Note that are unconditionally payable in cash at least annually at a single fixed rate would generally constitute "qualified stated interest."

A Note will be treated as issued with OID if the excess of the Note's "stated redemption price at maturity" over its issue price is greater than or equal to 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 or, in the case of an installment obligation, the weighted average maturity date of the Note, as defined in the applicable Treasury Regulations). 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 for money 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.

If the Notes are treated as issued with OID, U.S. holders must include OID in income as it accrues, using a constant-yield method generally 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 Notes. The amount of OID includible in income by a U.S. holder of a Note is the sum of the daily portions of OID with respect to the Note for each day during the taxable year or portion of the taxable year on which the U.S. holder holds the 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 Note may be of any length and may vary in length over the term of the Note as long as (i) no accrual period is longer than one year and (ii) each scheduled payment of interest or principal on the 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 Note's adjusted issue price at the beginning of the accrual period and the 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 the accrual period) over (b) the sum of the payments of qualified stated interest on the Note allocable to the accrual period. The "adjusted issue price" of a Note at the beginning of any accrual period is the issue price of the 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 Note that were not qualified stated interest payments.

It is expected that interest payments will be subject to Thai withholding taxes (see "*—Thai Taxation—Income Tax*"). Such Thai withholding taxes and any other non-U.S. tax withheld together with the gross amount of any additional amounts paid to a U.S. holder will also be included in such holder's income at the time such amount is received or accrued in accordance with such holder's method of accounting for U.S. federal income tax purposes. Any non-U.S. tax withheld on interest paid to a U.S. holder (taking into account any applicable income tax treaty) will, subject to limitations and conditions, be treated as foreign income tax eligible for credit against such holder's U.S. federal income tax liability or, at such holder's election, eligible for deduction in computing such holder's U.S. federal taxable income. Certain Treasury Regulations restrict the availability of any such foreign tax credit based on the nature of the withholding tax imposed by the non-U.S. jurisdiction, although the IRS has provided temporary relief from the application of certain aspects of these regulations until new guidance or regulations are issued. To the extent the amount of such non-U.S. withholding tax is based on a withholding rate in excess of the rate otherwise applicable to a U.S. holder (taking into account any applicable income tax treaty), such excess amount may not be eligible as foreign income tax eligible for credit or deduction in computing such holder's U.S. federal income tax liability. There are significant and complex limitations on a U.S. holder's ability to claim foreign tax credits.

Interest income on a Note as well as any additional amounts and OID generally will constitute foreign source income and generally will be considered "passive category" income in computing the foreign tax credit allowable to U.S. holders under U.S. federal income tax laws. The rules relating to the treatment of non-U.S. taxes imposed on a U.S. holder and foreign tax credits are complex, and U.S. holders should consult their tax advisors

about the impact of these rules in their particular situations, including the creditability or deductibility of any withholding taxes.

Sale, Exchange and Redemption of Notes

Generally, upon the sale, exchange or redemption of a Note, a U.S. holder will recognize taxable gain or loss equal to the difference between the amount realized on the sale, exchange or redemption (less any amount attributable to accrued but unpaid qualified stated interest, which will be taxable as interest as described above) and such U.S. holder's tax basis in the Note. A U.S. holder's tax basis in a Note will generally equal the cost of the Note to such U.S. holder, increased by the amount of any OID included in the U.S. holder's income with respect to the Note and reduced by the amount of any payments that are not qualified stated interest payments. Such gain or loss generally will be capital gain or loss and will be long-term capital gain or loss if at the time of sale, exchange or redemption the Note has been held by such U.S. holder for more than one year. Such gain or loss will generally be U.S. source, subject to the potential applicability of the sourcing rules in the income tax treaty between the United States and Thailand. The deductibility of capital losses is subject to limitations. As described in "*—Thai Taxation*," gain from the sale of a Note may be subject to Thai tax in certain circumstances. U.S. holders should consult their tax advisors regarding the creditability of any such tax.

Information Reporting and Backup Withholding

Information returns may be filed with the IRS in connection with payments on, and accrued OID on, the Notes and the proceeds from a sale or other disposition of a Note. A U.S. holder may be subject to U.S. backup withholding on these payments and accruals of OID if it fails to provide its tax identification number to the paying agent and comply with certain certification procedures or otherwise establish an exemption from backup withholding. The amount of any backup withholding from a payment to a U.S. holder will be allowed as a credit against the holder's U.S. federal income tax liability and may entitle the holder to a refund, provided that the required information is timely furnished to the IRS.

Individuals who own "specified foreign financial assets" with an aggregate value in excess of specified thresholds are generally required to file an information report with respect to such assets with their tax returns. "Specified foreign financial assets" include any financial accounts maintained by foreign financial institutions, as well as securities issued by non-U.S. persons (e.g., the Notes), but only if they are not held in accounts maintained by certain financial institutions. Individuals required to file U.S. federal income tax returns are urged to consult their tax advisors regarding the application of this rule to their ownership of the Notes.

Foreign Account Tax Compliance

Pursuant to Section 1471 through 1474 of the Code (provisions commonly known as "**FATCA**"), a "foreign financial institution" may be required to withhold U.S. tax on certain "foreign passthru payments" to the extent such payments are treated as attributable to certain U.S.-source payments. Currently, the term "foreign passthru payment" is not defined and it is unclear whether or to what extent payments on the Notes would be considered foreign passthru payments, assuming the Company were treated as a foreign financial institution. Debt obligations issued on or prior to the date that is six months after the date on which applicable final Treasury Regulations defining "foreign passthru payment" are filed with the Federal Register generally would be "grandfathered" (and therefore not subject to withholding under FATCA) unless such obligations are materially modified after such date. If the Issuer or the Guarantor is treated as a foreign financial institution, FATCA is expected to apply to payments on the Notes only if there is a significant modification of the Notes for U.S. federal income tax purposes after the expiration of the grandfathering period.

Under proposed regulations, any FATCA withholding on foreign passthru payments on debt instruments that are not otherwise grandfathered would only apply to foreign passthru payments made on or after the date that is two years after the date on which final regulations are published in the Federal Register defining foreign passthru payments. Taxpayers generally may rely on these proposed regulations until final regulations are issued. In the event any FATCA withholding is imposed with respect to any payments on the Notes, there will be no Additional Amounts payable to compensate for the withheld amount.

Certain non-U.S. governments (including Thailand) have entered into intergovernmental agreements with the United States to implement FATCA in a manner that may alter the rules described herein. Under such intergovernmental agreements, the Company may be required to report certain information regarding investors to non-U.S. tax authorities, which information may be shared with taxing authorities in the United States. Holders

should consult their tax advisors on any applicable intergovernmental agreements and how these rules may apply to their investment in the Notes.

United States Federal Income Tax Considerations with respect to the Perpetual Securities

The U.S. federal income tax consequences of the purchase, ownership and disposition of any series of Perpetual Securities will depend upon the facts and circumstances of the applicable issuance and the terms and conditions set forth in the Pricing Supplement with respect to those Perpetual Securities. If we issue Perpetual Securities, the applicable Pricing Supplement will describe the U.S. federal income tax consequences relating to such Perpetual Securities.

CLEARANCE AND SETTLEMENT

The information set out below is subject to any change in or reinterpretation of the rules, regulations and procedures of DTC, Euroclear or Clearstream (together, the "**Clearing Systems**") currently in effect. The information in this section concerning the Clearing Systems has been obtained from sources that the Issuers and the Guarantor believe to be reliable, but none of the Issuers, the Guarantors or any Dealer takes any responsibility for the accuracy thereof. 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. The Issuers 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 Securities held through the facilities of any Clearing System or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

The Clearing Systems

DTC

DTC has advised us that it is a limited purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a "clearing corporation" within the meaning of the New York Uniform Commercial Code and a "clearing agency" registered pursuant to Section 17A of the Exchange Act. DTC holds securities that its participants ("**Participants**") deposit with DTC. DTC also facilitates the clearance and settlement among Participants of securities transactions, such as transfers and pledges, in deposited securities through electronic computerized book-entry changes in Participants' accounts, thereby eliminating the need for physical movement of securities certificates. DTC is owned by a number of its direct participants ("**Direct Participants**"), which include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. Access to the DTC System is also available to others such as securities brokers and dealer, banks and trust companies that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("**Indirect Participants**").

Under the rules, regulations and procedures creating and affecting DTC and its operations (the "**Rules**"), DTC makes book-entry transfers of Securities among Direct Participants on whose behalf it acts with respect to Securities accepted into DTC's book-entry settlement system ("**DTC Securities**") as described below and receives and transmits distributions of principal, interest or distribution on DTC Securities. The Rules are on file with the U.S. Securities and Exchange Commission. Direct Participants and Indirect Participants with which beneficial owners of DTC Securities ("**Owners**") have accounts with respect to the DTC Securities similarly are required to make book-entry transfers and receive and transmit such payments on behalf of their respective Owners. Accordingly, although Owners who hold DTC Securities through Direct Participants or Indirect Participants will not possess Securities, the Rules, by virtue of the requirements described above, provide a mechanism by which Direct Participants will receive payments and will be able to transfer their interest in respect of the DTC Securities.

Purchases of DTC Securities under the DTC system must be made by or through Direct Participants, which will receive a credit for the DTC Securities on DTC's records. The ownership interest of each actual purchaser of each DTC Security ("**Beneficial Owner**") is in turn to be recorded on the Direct and Indirect Participant's records. Beneficial Owners will not receive written confirmation from DTC of their purchase, but Beneficial Owners are expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the DTC Securities are to be accomplished by entries made on the books of Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in DTC Securities, except in the event that use of the book-entry system for the DTC Securities is discontinued.

To facilitate subsequent transfers, all DTC Securities deposited by Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co. The deposit of DTC Securities with DTC and their registration in the name of Cede & Co. effect no change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the DTC Securities; DTC's records reflect only the identity of the Direct Participants to whose accounts such DTC Securities are credited, which may or may not be the Beneficial Owners. The Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

Redemption notices shall be sent to Cede & Co. If less than all of the DTC Securities within an issue are being redeemed, DTC's practice is to determine by lot the amount of the interest or distribution of each Direct Participant in such issue to be redeemed.

Neither DTC nor Cede & Co. will consent or vote with respect to DTC Securities. Under its usual procedures, DTC mails an Omnibus Proxy to the relevant Issuer as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the DTC Securities are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal, interest and distribution payments on the DTC Securities will be made to DTC. DTC's practice is to credit Direct Participants' accounts on the due date for payment in accordance with their respective holdings shown on DTC's records unless DTC has a reason to believe that it will not receive payment on the due date. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities registered in "street name," and will be the responsibility of such Participant and not of DTC, the Issuers, or the Guarantor subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal and interest to DTC is the responsibility of the relevant Issuer (failing which, in the case of Guaranteed Securities, the Guarantor), disbursement of such payments to Direct Participants is the responsibility of DTC, and disbursement of such payments to the Beneficial Owners is the responsibility of Direct and Indirect Participants.

Under certain circumstances, including if there is an Event of Default under the Notes or an Enforcement Event under the Perpetual Securities, DTC will exchange the DTC Securities for definitive Securities, which it will distribute to its Participants in accordance with their proportionate entitlements and which, if representing interests in a Rule 144A Global Certificate, will be legended as set forth under "*Transfer Restrictions*."

Since DTC may only act on behalf of Direct Participants, who in turn act on behalf of Indirect Participants, any Owner desiring to pledge DTC Securities to persons or entities that do not participate in DTC, or otherwise take actions with respect to such DTC Securities, will be required to withdraw its Securities from DTC as described below.

Euroclear and Clearstream

Euroclear and Clearstream each hold securities for its customers and facilitate the clearance and settlement of securities transactions by electronic book-entry transfer between their respective account holders. Euroclear and Clearstream provide various services including safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Euroclear and Clearstream also deal 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 across which their respective participants may settle trades with each other.

Euroclear and Clearstream customers are world-wide financial institutions, including underwriters, securities brokers and dealers, banks, trust companies and clearing corporations. Indirect access to Euroclear and Clearstream is available to other institutions that clear through or maintain a custodial relationship with an account holder of either system.

Book-entry Ownership of and Payments in respect of DTC Securities

The relevant Issuer may apply to DTC in order to have any Series of Securities represented by a Global Certificate accepted in its book-entry settlement system. Upon the issue of any such Global Certificate, DTC or its custodian will credit, on its internal book-entry system, the respective nominal amounts of the individual beneficial interests represented by such Global Certificate to the accounts of persons who have accounts with DTC. Such accounts initially will be designated by or on behalf of the relevant Dealer. Ownership of beneficial interests in such a Global Certificate will be limited to Direct Participants or Indirect Participants, including, in the case of any Regulation S Global, the respective depositaries of Euroclear and Clearstream. Ownership of beneficial interests in a Global Certificate accepted by DTC will be shown on, and the transfer of such ownership will be effected only through, records maintained by DTC or its nominee (with respect to the interests of Direct Participants) and the records of Direct Participants (with respect to interests of Indirect Participants).

Payments in U.S. dollars of principal, interest or distribution in respect of a Global Certificate accepted by DTC will be made to the order of DTC or its nominee as the registered holder of such Security. In the case of any payment in a currency other than U.S. dollars, payment will be made to the Exchange Agent on behalf of DTC or its nominee and the Exchange Agent will (in accordance with instructions received by it) remit all or a

portion of such payment for credit directly to the beneficial holders of interests in the Global Certificate in the currency in which such payment was made and/or cause all or a portion of such payment to be converted into U.S. dollars and credited to the applicable Participants' account.

The Issuers expect DTC to credit accounts of Direct Participants on the applicable payment date in accordance with their respective holdings as shown in the records of DTC unless DTC has reason to believe that it will not receive payment on such payment date. The Issuers also expect that payments by Participants to beneficial owners of Securities will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers, and will be the responsibility of such Participant and not the responsibility of DTC, the Principal Paying Agent, the Registrar, the Issuers or the Guarantor. Payment of principal, premium, if any, and interest or distribution, if any, on Securities to DTC is the responsibility of the relevant Issuer (failing which, in the case of Guaranteed Securities, the Guarantor).

Transfers of Securities Represented by Global Certificates

Transfers of any interests in Securities represented by a Global Certificate within DTC, Euroclear and Clearstream will be effected in accordance with the customary rules and operating procedures of the relevant clearing system. The laws in some States within the United States require that certain persons take physical delivery of securities in definitive form. Consequently, the ability to transfer Securities represented by a Global Certificate to such persons may depend upon the ability to exchange such Securities for Securities in definitive form. Similarly, because DTC can only act on behalf of Direct Participants in the DTC system who in turn act on behalf of Indirect Participants, the ability of a person having an interest in Securities represented by a Global Certificate accepted by DTC to pledge such Securities to persons or entities that do not participate in the DTC system or otherwise to take action in respect of such Securities may depend upon the ability to exchange such Securities for Securities in definitive form. The ability of any holder of Securities represented by a Global Certificate accepted by DTC to resell, pledge or otherwise transfer such Securities may be impaired if the proposed transferee of such Securities is not eligible to hold such Securities through a direct or indirect participant in the DTC system.

Subject to compliance with the transfer restrictions applicable to the Securities described under "*Transfer Restrictions*," cross-market transfers between DTC, on the one hand, and directly or indirectly through Clearstream or Euroclear accountholders, on the other, will be effected by the relevant clearing system in accordance with its rules and through action taken by the Registrar, the Paying Agent and the DTC Custodian with whom the relevant Securities have been deposited.

On or after the Issue Date for any Series, transfers of Securities of such Series between accountholders in Clearstream and Euroclear will generally have a settlement date three business days after the trade date (T+3), unless the parties agree to an alternative settlement date at the time of the transaction. The customary arrangements for delivery versus payment will apply to such transfers. On or after the issue date for any Series, transfers of Securities of such Series between participants in DTC will generally have a settlement one business day after the trade date (T+1), unless the parties agree to an alternative settlement date at the time of the transaction. Such transfers may occur on a free delivery basis or delivery versus payment basis at the election of the parties.

Cross-market transfers between accountholders in Clearstream or Euroclear and DTC participants will need to have an agreed settlement date between the parties to such transfer. Because there is no direct link between DTC, on the one hand, and Clearstream and Euroclear, on the other, transfers of interests in the relevant Registered Global Certificates will be effected through the Registrar, the Paying Agent and the DTC Custodian receiving instructions (and, where appropriate, certification) from the transferor and arranging for delivery of the interests being transferred to the credit of the designated account for the transferee. Transfers will be effected on the later of (i) three business days after the trade date for the disposal of the interest in the relevant Global Certificate resulting in such transfer and (ii) two business days after receipt by the Paying Agent or the Registrar, as the case may be, of the necessary certification or information to effect such transfer. In the case of cross-market transfers, settlement between Euroclear or Clearstream accountholders and DTC participants cannot be made on a delivery versus payment basis. The securities will be delivered on a free delivery basis and arrangements for payment must be made separately. The customary arrangements for delivery versus payment between Euroclear and Clearstream, Luxembourg accountholders or between DTC participants are not affected.

Although DTC, Clearstream and Euroclear have agreed to the foregoing procedures in order to facilitate transfers of beneficial interests in Securities among participants and accountholders of DTC, Clearstream and Euroclear, they are under no obligation to perform or continue to perform such procedures, and such procedures may be discontinued or changed at any time. None of the Issuers, the Guarantor, the Agents or any Dealer will be

responsible for any performance by DTC, Clearstream or Euroclear or their respective direct or indirect participants or accountholders of their respective obligations under the rules and procedures governing their operations and none of them will have any liability for any aspect of the records relating to or payments made on account of beneficial interests in the Securities represented by Global Certificates or for maintaining, supervising or reviewing any records relating to such beneficial interests.

While a Global Certificate is lodged with DTC, Euroclear, Clearstream or any relevant clearing system, Individual Certificates for the relevant Series of Series will not be eligible for clearing and settlement through such clearing systems.

SUBSCRIPTION AND SALE

Summary of Dealer Agreement

The Dealers have, in an amended and restated dealer agreement dated January 5, 2026 (the "**Dealer Agreement**"), agreed with the Issuers and the Guarantor a basis upon which they or any of them may from time to time agree to severally, and not jointly, purchase Securities. Any such agreement will extend to those matters stated under "*Form of the Securities*", "*Terms and Conditions of the Notes*" and "*Terms and Conditions of the Perpetual Securities*." The relevant Issuer will pay each relevant Dealer a commission as agreed between them in respect of Securities purchased by it. Where the relevant Issuer agrees to sell to the Dealer(s), who agree to purchase and pay for, or to procure purchasers to purchase and pay for, Securities at an issue price (the "**Issue Price**"), any subsequent offering of those Securities to investors may be at a price different from such Issue Price. The Issuers are responsible for the payment of certain of the expenses incurred in connection with the establishment, and maintenance of the Program and certain other activities in connection with the Program. The commissions in respect of an issue of Securities on a syndicated basis may be stated in the relevant Pricing Supplement.

The Issuers and the Guarantor have agreed to indemnify the Dealers against certain liabilities in connection with the offer and sale of the Securities. The Dealer Agreement entitles the Dealers to terminate any agreement that they make to purchase Securities in certain circumstances prior to payment for such Securities being made to the Issuer.

In connection with the issue of any Series of Securities, the Stabilizing Manager may over-allot Securities or effect transactions with a view to supporting the price of the Securities at a level higher than that which might otherwise prevail for a limited period after the issue date of the Securities. However, there is no obligation on such Stabilizing Manager(s) to do this. Such stabilizing, if commenced, may be discontinued at any time, and must be brought to an end after a limited period. Such stabilizing shall be in compliance with all applicable laws, regulations and rules.

In connection with each Series of Securities issued under the Program, the Dealers or certain of their affiliates may purchase Securities and be allocated Securities for asset management and/or proprietary purposes but not with a view to distribution. Further, the Dealers or their respective affiliates may purchase Securities for its or their own account and enter into transactions, including credit derivatives, such as asset swaps, repackaging and credit default swaps relating to such Securities and/or other securities of the Issuers, the Guarantor or their respective subsidiaries or affiliates at the same time as the offer and sale of each Series of Securities or in secondary market transactions. Such transactions would be carried out as bilateral trades with selected counterparties and separately from any existing sale or resale of the Series of Securities to which a particular Pricing Supplement relates (notwithstanding that such selected counterparties may also be purchasers of such Series of Securities).

The Dealers and their affiliates are full service financial institutions engaged in various activities which may include securities trading, commercial and investment banking, financial advice, investment management, principal investment, hedging, financing and brokerage activities. Each of the Dealers may have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with the Issuers, the Guarantor or their subsidiaries, joint ventures or associated companies from time to time for which it has or will receive fees and expenses. In the ordinary course of their various business activities, the Dealers and their 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 Issuers, the Guarantor or their subsidiaries, joint ventures or associated companies, including Securities issued under the Program, may be entered into at the same time or proximate to offers and sales of Securities or at other times in the secondary market and be carried out with counterparties that are also purchasers, holders or sellers of Securities. Securities issued under the Program may be purchased by or be allocated to any Dealer or an affiliate for asset management and/or proprietary purposes but not with a view to distribution.

If a jurisdiction requires that the offering be made by a licensed broker or dealer and a Dealer or any affiliate of that Dealer is a licensed broker or dealer in that jurisdiction, the offering shall be deemed to be made

by that Dealer or such affiliate on behalf of the relevant Issuer (as defined in this Offering Memorandum) in such jurisdiction.

Important Notice to CMIs (including private banks)

This notice to CMIs (including private banks) is a summary of certain obligations the SFC Code imposes on CMIs, which require the attention and cooperation of other CMIs (including private banks). Certain CMIs may also be acting as OCs for the relevant CMI Offering and are subject to additional requirements under the SFC Code. The application of these obligations will depend on the role(s) undertaken by the relevant Dealer(s) in respect of each CMI Offering.

Prospective investors who are the directors, employees or major shareholders of the Issuers, the Guarantor, a CMI or its group companies would be considered under the SFC Code as having an Association with the Issuers, the Guarantor, the CMI or the relevant group company. CMIs should specifically disclose whether their investor clients have any Association when submitting orders for the relevant Securities. In addition, private banks should take all reasonable steps to identify whether their investor clients may have any Associations with the Issuers, the Guarantor or any CMI (including its group companies) and inform the relevant Dealer(s) accordingly.

CMIs are informed that, unless otherwise notified, the marketing and investor targeting strategy for the relevant CMI Offering includes institutional investors, sovereign wealth funds, pension funds, hedge funds, family offices and high net worth individuals, in each case, subject to the selling restrictions and any MiFID II product governance language or any UK MiFIR product governance language set out elsewhere in this Offering Memorandum and/or the applicable Pricing Supplement.

CMIs should ensure that orders placed are bona fide, are not inflated and do not constitute duplicated orders (i.e. two or more corresponding or identical orders placed via two or more CMIs). CMIs should enquire with their investor clients regarding any orders which appear unusual or irregular. CMIs should disclose the identities of all investors when submitting orders for the relevant Securities (except for omnibus orders where underlying investor information may need to be provided to any OCs when submitting orders). Failure to provide underlying investor information for omnibus orders, where required to do so, may result in that order being rejected. CMIs should not place "X-orders" into the order book.

CMIs should segregate and clearly identify their own proprietary orders (and those of their group companies, including private banks as the case may be) in the order book and book messages.

CMIs (including private banks) should not offer any rebates to prospective investors or pass on any rebates provided by the Issuers or the Guarantor. In addition, CMIs (including private banks) should not enter into arrangements which may result in prospective investors paying different prices for the relevant Securities. CMIs are informed that a private bank rebate may be payable as stated above and in the applicable Pricing Supplement, or otherwise notified to prospective investors.

The SFC Code requires that a CMI disclose complete and accurate information in a timely manner on the status of the order book and other relevant information it receives to targeted investors for them to make an informed decision. In order to do this, those Dealer(s) in control of the order book should consider disclosing order book updates to all CMIs.

When placing an order for the relevant Securities, private banks should disclose, at the same time, if such order is placed other than on a "principal" basis (whereby it is deploying its own balance sheet for onward selling to investors). Private banks who do not provide such disclosure are hereby deemed to be placing their order on such a "principal" basis. Otherwise, such order may be considered to be an omnibus order pursuant to the SFC Code. Private banks should be aware that placing an order on a "principal" basis may require the relevant affiliated Dealer(s) (if any) to categorise it as a proprietary order and apply the "proprietary orders" requirements of the SFC Code to such order and will result in that private bank not being entitled to, and not being paid, any rebate.

In relation to omnibus orders, when submitting such orders, CMIs (including private banks) that are subject to the SFC Code should disclose underlying investor information in respect of each order constituting the relevant omnibus order (failure to provide such information may result in that order being rejected). Underlying investor information in relation to omnibus orders should consist of:

- the name of each underlying investor;

- a unique identification number for each investor;
- whether an underlying investor has any "Associations" (as used in the SFC Code);
- whether any underlying investor order is a "Proprietary Order" (as used in the SFC Code); and
- whether any underlying investor order is a duplicate order.

Underlying investor information in relation to omnibus order should be sent to the Managers named in the relevant Pricing Supplement.

To the extent information being disclosed by CMIs and investors is personal and/or confidential in nature, CMIs (including private banks) agree and warrant: (A) to take appropriate steps to safeguard the transmission of such information to any OCs; and (B) that they have obtained the necessary consents from the underlying investors to disclose such information to any OCs. By submitting an order and providing such information to any OCs, each CMI (including private banks) further warrants that they and the underlying investors have understood and consented to the collection, disclosure, use and transfer of such information by any OCs and/or any other third parties as may be required by the SFC Code, including to the Issuers and the Guarantor, relevant regulators and/or any other third parties as may be required by the SFC Code, for the purpose of complying with the SFC Code, during the bookbuilding process for the relevant CMI Offering. CMIs that receive such underlying investor information are reminded that such information should be used only for submitting orders in the relevant CMI Offering. The relevant Dealers may be asked to demonstrate compliance with their obligations under the SFC Code, and may request other CMIs (including private banks) to provide evidence showing compliance with the obligations above (in particular, that the necessary consents have been obtained). In such event, other CMIs (including private banks) are required to provide the relevant Dealer with such evidence within the timeline requested.

By placing an order, prospective investors (including any underlying investors in relation to omnibus orders) are deemed to represent to the Dealers that it is not a Sanctions Restricted Person. A "Sanctions Restricted Person" means an individual or entity (a "**Person**"): (a) that is, or is directly or indirectly owned or controlled by a Person that is, described or designated in (i) the most current "Specially Designated Nationals and Blocked Persons" list (which as of the date hereof can be found at: http://www.treasury.gov/ofac/downloads/sdnlist.pdf) or (ii) the Foreign Sanctions Evaders List (which as of the date hereof can be found at: http://www.treasury.gov/ofac/downloads/fse/fselist.pdf) or (iii) the most current "Consolidated list of persons, groups and entities subject to EU financial sanctions" (which as of the date hereof can be found at: https://data.europa.eu/data/datasets/consolidated-list-of-persons-groups-and-entities-subject-to-eu-financial-sanctions?locale=en); or (b) that is otherwise the subject of any sanctions administered or enforced by any Sanctions Authority, other than solely by virtue of the following (i) – (vi) to the extent that it will not result in violation of any sanctions by the CMIs: (i) their inclusion in the most current "Sectoral Sanctions Identifications" list (which as of the date hereof can be found at: https://www.treasury.gov/ofac/downloads/ssi/ssilist.pdf) (the "**SSI List**"), (ii) their inclusion in Annexes 3, 4, 5 and 6 of Council Regulation No. 833/2014, as amended by Council Regulation No. 960/2014 (the "**EU Annexes**"), (iii) their inclusion in any other list maintained by a Sanctions Authority, with similar effect to the SSI List or the EU Annexes, (iv) them being the subject of restrictions imposed by the U.S. Department of Commerce's Bureau of Industry and Security ("**BIS**") under which BIS has restricted exports, re-exports or transfers of certain controlled goods, technology or software to such individuals or entities; (v) them being an entity listed in the Annex to the new Executive Order of 3 June 2021 entitled "Addressing the Threat from Securities Investments that Finance Certain Companies of the People's Republic of China" (known as the Non-SDN Chinese Military- Industrial Complex Companies List), which amends the Executive Order 13959 of 12 November 2020 entitled "Addressing the threat from Securities Investments that Finance Chinese Military Companies"; or (vi) them being subject to restrictions imposed on the operation of an online service, Internet application or other information or communication services in the United States directed at preventing a foreign government from accessing the data of U.S. persons; or (c) that is located, organized or a resident in a comprehensively sanctioned country or territory, including Cuba, Iran, North Korea, the Crimea region of Ukraine, the Donetsk's People's Republic or Luhansk People's Republic. "Sanctions Authority" means: (a) the United Nations; (b) the United States; (c) the European Union (or any of its member states); (d) the United Kingdom; (e) the People's Republic of China; (f) any other equivalent governmental or regulatory authority, institution or agency which administers economic, financial or trade sanctions; and (g) the respective governmental institutions and agencies of any of the foregoing including, without limitation, the Office of Foreign Assets Control of the U.S. Department of the Treasury, the United States Department of State, the United States Department of Commerce and His Majesty's Treasury.

Selling Restrictions

United States of America

The Securities have not been and will not be registered under the Securities Act and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons (as defined in Regulation S) except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act.

Compliance with United States securities laws

(a) In relation to each Tranche of Securities issued in reliance on Regulation S under the Securities Act:

(i) the Securities and the Guarantee have been offered and sold, and will be offered and sold:

(A) as part of their distribution, at any time; and

(B) *otherwise*, until 40 days after the issue date in respect of the relevant Securities (the period described herein as "**distribution compliance period**");

only in accordance with Rule 903 of Regulation S or an applicable exemption from registration under the Securities Act and, accordingly, that

(A) neither it nor any of its affiliates (including any person acting on behalf of a Dealer or any of its affiliates) has engaged or will engage in any directed selling efforts with respect to the Securities and the Guarantee; and

(B) it and its affiliates have complied and will comply with the offering restrictions requirements of Regulation S under the Securities Act; and

(ii) *Prescribed form of confirmation*: At or prior to confirmation of sale, each distributor, dealer or person receiving a selling concession, fee or other remuneration which purchases Securities from a Dealer during the distribution compliance period will receive a confirmation or notice in substantially the following form:

"The Securities covered hereby have not been and will not be registered under the United States Securities Act of 1933, as amended, (the "**Securities Act**") 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 in Regulation S), (a) as part of their distribution at any time or (b) otherwise until 40 days after the completion of the distribution of the Tranche of Securities of which such Securities are a part, as determined by [*Name of Dealer or Dealers, as the case may be*], except in either case pursuant to a valid exemption from registration in accordance with Regulation S or Rule 144A under the Securities Act.";

(iii) *Completion of distribution*: Each Dealer, which has purchased Securities of such Tranche in accordance with the related subscription agreement, shall determine and certify to the Principal Paying Agent or the Issuer the completion of the distribution of the Securities of such Tranche purchased by it. In the case of a subscription agreement between the relevant Issuer, (in respect of each Series of Guaranteed Securities) the Guarantor and more than one Dealer, the Principal Paying Agent, the relevant Issuer or (in respect of each Series of Guaranteed Securities) the Guarantor shall notify each relevant Dealer when all relevant Dealers have certified as provided in this paragraph. In order to facilitate compliance by each Dealer with the foregoing, the Issuers and (in respect of each Series of Guaranteed Securities) the Guarantor undertake that, prior to such certification with respect to such Tranche, it will notify each Dealer in writing of each acceptance by the relevant Issuer of an offer to purchase and of any issuance of, Securities or other debt obligations of the relevant Issuer which are denominated in the same currency or composite currency and which have substantially the same interest or distribution rate and maturity date as the Securities of such Tranche;

(b) In relation to each Tranche of Securities issued in reliance on Rule 144A under the Securities Act:

(i) each Dealer has acknowledged and agreed that (i) Restricted Securities have not been and will not be registered under the Securities Act or the securities laws of any other place; (ii) Restricted Securities may not be offered or sold within the United States except pursuant to an exemption from the registration requirements of the Securities Act or in transactions not subject to those registration requirements; and (iii) each purchaser of Restricted Securities will be deemed to have made the acknowledgements, representations and agreements as described under "*Transfer Restrictions*". Each Dealer has acknowledged, represented and warranted that: (A) during the initial distribution of Restricted Securities, it will directly, or indirectly through its U.S. broker-dealer affiliates, offer or sell Restricted Securities (I) within the United States only to persons who are both "qualified institutional buyers" (as defined in Rule 144A) and "qualified purchasers" as defined in the U.S. Investment Company Act, in compliance with Rule 144A, and (II) outside of the United States only to persons that are not U.S. persons or that are not persons acquiring for the account or benefit of U.S. persons in offshore transactions pursuant to Regulation S; and (B) until forty (40) days following the commencement of the relevant offering, an offer or sale of Restricted Securities within the United States by a dealer (whether or not participating in the offering) may violate the registration requirements of the Securities Act unless the dealer makes the offer or sale in compliance with Rule 144A or another exemption from the registration requirements of the Securities Act. Each Dealer has acknowledged that the Issuers and the Guarantor have disclosed in this Offering Memorandum that the relevant offering is being conducted in reliance on Section 3(c)(7) of the U.S. Investment Company Act and agrees that they will notify any of its affiliates participating in the relevant offering that the Issuers and the Guarantor are relying on Section 3(c)(7) of that act Each Dealer has represented and warranted to and agreed with the Issuers and the Guarantor that its U.S. broker-dealer affiliate that has assisted the Issuers and the Guarantor in contacting purchasers in the United States (i) has restricted and will restrict its solicitation of purchasers of Restricted Securities in the United States to purchasers who are both qualified institutional buyers and qualified purchasers; and (ii) will restrict its execution of customer orders to purchase Restricted Securities from persons in the United States to purchasers who are both qualified institutional buyers and qualified purchasers;

(ii) neither the Issuer nor the Guarantor have been, and they will not be, registered under the U.S. Investment Company Act, and investors will not be entitled to the benefits of the U.S. Investment Company Act. The Issuer is relying on the exemption from the registration requirements of the U.S. Investment Company Act provided by Section 3(c)(7) of that Act, and as a result the Securities may only be purchased within the United States by persons who are both qualified institutional buyers as defined in Rule 144A and qualified purchasers as defined in the U.S. Investment Company Act; and

(iii) no Dealer nor any of its affiliates (including any person acting on behalf of such Dealer or any of its affiliates) has solicited or will solicit any offer to buy or offer to sell the Securities by any form of general solicitation or general advertising (as those terms are used in Rule 502(c) under the Securities Act) in the United States.

Interpretation

Terms used in the paragraph "*Compliance with United States securities laws*" have the meanings given to them by Regulation S under the Securities Act.

Index-linked Notes, commodity- or currency-linked Securities

Each issuance of index-linked Notes, commodity- or currency-linked Securities shall be subject to additional U.S. selling restrictions as the relevant Dealers shall agree as a term of the issuance and purchase of such Securities. Each Dealer has agreed that it shall offer, sell and deliver such Securities only in compliance with such additional U.S. selling restrictions.

European Economic Area

If the Pricing Supplement in respect of any Securities includes a legend entitled "Prohibition of Sales to EEA Retail Investors", each Dealer 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 Securities which are the subject of the offering contemplated by the 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, 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; or

(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.

If the Pricing Supplement in respect of any Securities does not include a legend entitled "Prohibition of Sales to EEA Retail Investors", in relation to each Member State of the European Economic Area, each Dealer has represented, warranted and agreed that it has not made and will not make an offer of Securities which are the subject of an offering contemplated by this Offering Memorandum as completed by the Pricing Supplement in relation thereto to the public in that Member State except that it may make an offer of Securities to the public in that Relevant State:

(a) *Qualified Investors*: At any time to any legal entity which is a qualified investor as defined in the Prospectus Regulation;

(b) *Fewer than 150 offerees*: 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

(c) *Other exempt offers*: At any time in any other circumstances falling within Article 1(4) of the Prospectus Regulation.

provided that no such offer of Securities referred to in (a) to (c) 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 Securities to the public**" in relation to any Securities 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 Securities to be offered so as to enable an investor to decide to purchase or subscribe for the Securities and the expression "**Prospectus Regulation**" means Regulation (EU) 2017/1129.

United Kingdom

If the Pricing Supplement in respect of any Securities includes a legend entitled "Prohibition of Sales to UK Retail Investors", each Dealer has represented and agreed, and each further Dealer appointed under the Program 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 Securities which are the subject of the offering contemplated by the 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, the expression "**retail investor**" means a person who is one (or more) of the following:

(a) 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

(b) 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.

If the Pricing Supplement in respect of any Securities does not include a legend entitled "Prohibition of Sales to UK Retail Investors", each Dealer has represented and agreed, and each further Dealer appointed under the Program will be required to represent and agree, that it has not made and will not make an offer of Securities which are the subject of the offering contemplated by the Offering Memorandum as completed by the Pricing Supplement to the public in the United Kingdom except that it may make an offer of Securities to the public in the United Kingdom:

(a) *Qualified investors:* At any time to any legal entity which is a qualified investor as defined in Article 2 of the UK Prospectus Regulation;

(b) *Fewer than 150 offerees*: At any time to fewer than 150 persons (other than qualified investors as defined in Article 2 of the UK Prospectus Regulation) 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

(c) *Other exempt offers*: At any time in any other circumstances falling within section 86 of the FSMA,

provided that no such offer of Securities referred to in (a) to (c) 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 Securities to the public**" in relation to any Securities means the communication in any form and by any means of sufficient information on the terms of the offer and the Securities to be offered so as to enable an investor to decide to purchase or subscribe the Securities and the expression "**UK Prospectus Regulation**" means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the EUWA.

(a) ***Other regulatory restrictions***

No deposit-taking: in relation to any Securities having a maturity of less than one year:

(i) each Dealer shall be 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

(ii) Securities may only be sold to persons:

(A) whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses; or

(B) 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 Securities would otherwise constitute a contravention of Section 19 of the FSMA by the Issuers or the Guarantor.

(b) ***Financial promotion***: No communication or invitation or inducement to engage in investment activity (within the meaning of section 21 of the FSMA) in connection with the issue or sale of any Securities will be made in circumstances in which section 21(1) of the FSMA does not apply to the Issuers or the Guarantor.

(c) ***General compliance***: all applicable provisions of the FSMA with respect to anything done by it in relation to any Securities in, from or otherwise involving the United Kingdom shall be complied with.

PRC

No Securities may be offered or sold in the PRC (excluding Hong Kong, Macau and Taiwan) as part of the initial distribution of the Securities, except as permitted by the securities laws of the PRC.

Hong Kong

In relation to each Series of Securities to be issued by an Issuer under the Program:

(a) no Securities may be offered or sold in Hong Kong, by means of any document, any Securities, except for Securities which are a "structured product" as defined in the Securities and Futures Ordinance (Chapter 571 of the laws of Hong Kong) (the "**SFO**"), other than (i) to "professional investors" as defined in the SFO and any rules made under the SFO; or (ii) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions)

Ordinance (Chapter 32 of the Laws of Hong Kong) (the "**Companies Ordinance**") or which do not constitute an offer to the public within the meaning of the Companies Ordinance; and

(b) no person may have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or document relating to the Securities, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to Securities which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made under the SFO.

Japan

Each Dealer has acknowledged that the Securities 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, accordingly, each Dealer has undertaken that it will not offer or sell any Securities, directly or indirectly, in Japan or to, or for the benefit of, any Japanese Person or to others for re-offering or resale, directly or indirectly, in Japan or to any Japanese Person except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEA and other relevant laws and regulations of Japan. For the purposes of this paragraph, "**Japanese Person**" shall mean any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

Singapore

Each Dealer has acknowledged and each further Dealer appointed under the Program will be required to acknowledge that this Offering Memorandum has not been and will not be registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each Dealer has represented, warranted and agreed that, and each further Dealer appointed under the Program will be required to represent, warrant and agree that it has not offered or sold any Securities or caused the Securities to be made the subject of an invitation for subscription or purchase and will not offer or sell any Securities or cause the Securities 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 and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Securities, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act 2001 of Singapore (the "**SFA**")) pursuant to Section 274 of the SFA, or (ii) to an accredited investor (as defined in Section 4A of the SFA) pursuant to and in accordance with the conditions specified in Section 275 of the SFA.

Thailand

(i) No Securities may be offered or sold, whether directly or indirectly, in Thailand; (ii) no person has made, or will make, whether directly or indirectly, any invitation in Thailand to purchase or subscribe for the Securities; and (iii) no person has circulated or distributed, or will 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 the Securities, whether directly or indirectly, in Thailand.

General

These selling restrictions may be modified by the agreement of each of the Issuers, the Guarantor and the Dealers following a change in a relevant law, regulation or directive. Any such modification will be set out in the relevant Pricing Supplement issued in respect of the issue of the Securities to which it relates or in a supplement to this Offering Memorandum.

TRANSFER RESTRICTIONS

Thailand

By accepting delivery of this Offering Memorandum and the Securities, the holders of the Securities will be deemed to have agreed for the benefit of the Issuers and the Guarantor that the Securities may not be resold, pledged, transferred or otherwise in Thailand.

United States

The Securities may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons (as defined in Regulation S) except (i) in reliance on Rule 144A to persons who are both qualified institutional buyers and qualified purchasers and (ii) outside the United States to non-U.S. persons in offshore transactions in reliance on Regulation S.

Regulation S Securities

Each purchaser of or Unrestricted Securities outside the United States pursuant to Regulation S and each subsequent purchaser of such Securities in resales prior to the expiration of the distribution compliance period, by accepting delivery of this Offering Memorandum and the Securities, will be deemed to have represented, agreed and acknowledged that:

(i) it is, or at the time Securities are purchased will be, the beneficial owner of such Securities 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 Issuers, the Guarantor or a person acting on behalf of such an affiliate;

(ii) it understands that such Securities have not been and will not be registered under the Securities Act and that, prior to the expiration of the distribution compliance period (as defined in Regulation S) it will not offer, sell, pledge or otherwise transfer such Securities except:

  (a) in an offshore transaction in accordance with Rule 903 or Rule 904 of Regulation S; or

  (b) to the Issuers or the Guarantor; or

  (c) in the case of Unrestricted Securities only, in accordance with Rule 144A to a person that it and any person acting on its behalf reasonably believe is a both a QIB and a QP purchasing for its own account or the account of a person that is both a QIB and a QP,

  in each case in accordance with any applicable securities laws of any state of the United States;

(iii) it understands that the Issuers, the Guarantor, the Principal Paying Agent, the Registrar, the Dealers and their affiliates, and others will rely upon the truth and accuracy of the foregoing acknowledgements, representations and agreements.

On or prior to the fortieth day after the relevant issue date, Securities represented by an interest in an Unrestricted Global Certificate may be transferred to a person who wishes to hold such Securities in the form of an interest in a Restricted Global Certificate only upon receipt by the Registrar of a written certification from the transferor to the effect that such transfer is being made to a person whom the transferor reasonably believes is both a QIB and a QP, in a transaction meeting the requirements of Rule 144A and in accordance with any applicable securities laws of any state of the United States. After such fortieth day, such certification requirements will no longer apply to such transfers, but such transfers will continue to be subject to the transfer restrictions contained in the legend appearing on the face of such Global Certificate, as described above under "*Form of the Securities*."

Securities represented by an interest in a Restricted Global Certificate may also be transferred to a person who wishes to hold such Securities in the form of an interest in an Unrestricted Global Certificate, but only upon

receipt by the Registrar of a written certification from the transferor to the effect that such transfer is being made in accordance with Regulation S or Rule 144 (if available) under the Securities Act.

Any interest in a Security represented by an Unrestricted Global Certificate that is transferred to a person who takes delivery in the form of an interest in a Security represented by a Restricted Global Certificate will, upon transfer, cease to be an interest in a Security represented by an Unrestricted Global Certificate and become an interest in a Security represented by a Restricted Global Certificate and, accordingly, will thereafter be subject to all transfer restrictions and other procedures applicable to Securities represented by a Restricted Global Certificate.

Rule 144A Securities

Each purchaser of Restricted Securities in reliance on Rule 144A, by accepting delivery of this Offering Memorandum, will be deemed to have represented, agreed and acknowledged as follows (terms used in the following paragraphs that are defined in Rule 144A have the respective meanings given to them in Rule 144A):

(i) the purchaser is both (a) a QIB and a QP, (b) acquiring the Securities for its own account or for the account of one or more persons who are both a QIB and a QP, (c) not formed for the purpose of investing in the Securities or the relevant Issuer and (d) is aware, and each beneficial owner of such Securities has been advised that the sale of the Securities to it is being made in reliance on Rule 144A;

(ii) the purchaser understands that (1) the Securities 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 believes is both a QIB and a QP purchasing for its own account or for the account of one or more persons who are both a QIB and a QP, (b) in an offshore transaction in accordance with Rule 903 or Rule 904 of Regulation S under the Securities Act, (c) pursuant to an exemption from registration under the Securities Act provided by Rule 144 thereunder (if available), (d) pursuant to an effective registration statement under the Securities Act or (e) to the Issuers, the Guarantor or any of their respective affiliates, in each case in accordance with any applicable securities laws of any State of the United States and (2) it will, and each subsequent holder of the Restricted Securities is required to, notify any purchaser of the Restricted Securities from it of the resale restrictions applicable to the Restricted Securities;

(iii) the purchaser understands that the Restricted Global Certificate and any restricted Individual Certificate (a "**Restricted Individual Certificate**") will bear a legend to the following effect, unless the relevant Issuer determines otherwise in accordance with applicable law:

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "**SECURITIES ACT**") OR ANY SECURITIES LAW OF ANY STATE OF THE UNITED STATES. THE HOLDER HEREOF, BY PURCHASING THE SECURITIES REPRESENTED HEREBY, AGREES FOR THE BENEFIT OF THE ISSUER [AND THE GUARANTOR] THAT THE SECURITIES REPRESENTED HEREBY MAY BE REOFFERED, RESOLD, PLEDGED OR OTHERWISE TRANSFERRED ONLY IN COMPLIANCE WITH THE SECURITIES ACT AND OTHER APPLICABLE LAWS. AND ONLY (1) PURSUANT TO RULE 144A UNDER THE SECURITIES ACT TO A PERSON THAT THE HOLDER REASONABLY BELIEVES IS BOTH A QUALIFIED INSTITUTIONAL BUYER WITHIN THE MEANING OF RULE 144A AND A "QUALIFIED PURCHASER" (AS DEFINED IN SECTION 2(A)(51) OF THE U.S. INVESTMENT COMPANY ACT OF 1940, AS AMENDED) PURCHASING FOR ITS OWN ACCOUNT OR A PERSON PURCHASING FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER WHOM THE HOLDER HAS INFORMED, IN EACH CASE, THAT THE REOFFER, RESALE, PLEDGE OR OTHER TRANSFER IS BEING MADE IN RELIANCE ON RULE 144A, (2) IN AN OFFSHORE TRANSACTION IN ACCORDANCE WITH RULE 903 OR 904 OF REGULATION S UNDER THE SECURITIES ACT OR (3) TO THE ISSUER, [THE GUARANTOR] OR [ITS/THEIR] AFFILIATES.

(iv) if it is acquiring any Securities for the account of one or more persons who are both a QIB and a QP, the purchaser 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; and

(v) the purchaser understands that the Issuers, the Guarantor, the Principal Paying Agent, the Registrar, the Dealers and their affiliates, and others will rely upon the truth and accuracy of the foregoing acknowledgements, representations and agreements.

By purchasing or accepting a subsequent transfer of Securities (or a beneficial interest therein), you will be deemed to have made the following acknowledgements, representations to and agreements with the Company:

(i) if you are a U.S. person (as defined in Regulation S), you represent that:

(A) you are not a broker-dealer who owns and invests on a discretionary basis less than US$25,000,000 in securities of unaffiliated issuers;

(B) you are not a participant-directed employee plan, such as a 401(k) plan, or a trust holding the assets of such a plan;

(C) you were not formed, reformed or recapitalized for the specific purpose of investing in the Securities and/or other securities of the Issuer, unless all of the beneficial owners of your securities are both QIBs and QPs;

(D) if you are an investment company excepted from the U.S. Investment Company Act pursuant to Section 3(c)(1) or Section 3(c)(7) thereof and were formed on or before April 30, 1996, you have received the consent of your beneficial owners who acquired their interests on or before April 30, 1996, with respect to your treatment as a qualified purchaser in the manner required by Section 2(a)(51)(C) of the U.S. Investment Company Act and the rules promulgated thereunder;

(E) you are not a partnership; common trust fund; or corporation, special trust, pension fund or retirement plan, or other entity, in which the partners, beneficiaries, beneficial owners, participants, shareholders or other equity owners, as the case may be, may designate the particular investment to be made, or the allocation thereof, unless all such partners, beneficiaries, beneficial owners, participants, shareholders or other equity owners are both QIBs and QPs; and

(F) you have not invested more than 40% of your assets in the Securities (or beneficial interests therein) and/or other securities of the Issuer after giving effect to the purchase of the Securities (or beneficial interests therein) (unless all of the beneficial owners of your securities are both QIBs and QPs).

(ii) you understand and acknowledge that the Securities (or any interest therein) may be purchased, sold, pledged or otherwise transferred only in minimum principal amounts of US$200,000 and integral multiples of US$1,000 in excess thereof; and

(iii) you understand and acknowledge that if your purchase of the Securities, or any sale or transfer of the Securities (or a beneficial interest therein) to any other person, does not comply with the requirements set forth in these "*Transfer Restrictions*," such transaction may, at the discretion of the Issuer, be considered void and of no effect. The Issuer may compel you or such other person to sell or transfer, as applicable, such Securities (or such beneficial interest), within 30 days after notice of the sale requirement is given, to a person acceptable to the Issuer who is able to, and who does make, all of the representations and agreements set forth herein. If you fail to effect the sale or transfer, as applicable, within such 30-day period, the Issuer has the right, without further notice to you, to compel you to sell or transfer, as applicable, such Securities (or such beneficial interest) to a purchaser selected by the Issuer who meets the requirements set forth hereunder on such terms as the Issuer may choose. The Issuer may select the purchaser by soliciting one or more bids from one or more brokers or other market professionals that regularly deal in securities similar to the Securities, and selling such Securities to the highest such bidder. However, the Issuer may select a purchaser by any other means determined by the Issuer in its sole discretion.

Upon the transfer, exchange or replacement of a Restricted Global Certificate or a Restricted Individual Certificate, or upon specific request for removal of the legend, the relevant Issuer will deliver only a Restricted Global Certificate or one or more Restricted Individual Certificates that bear such legend or will refuse to remove such legend, unless there is delivered to the relevant Issuer, (in respect of each Series of Guaranteed Securities) the Guarantor, and the Registrar such satisfactory evidence (which may include a legal opinion) as may reasonably be required by the relevant Issuer or (in respect of each Series of Guaranteed Securities) the Guarantor, that neither the legend nor the restrictions on transfer set forth therein are required to ensure compliance with the provisions of the Securities Act.

Any interest in a Restricted Global Certificate that is transferred to a person who takes delivery in the form of an interest in an Unrestricted Global Certificate will, upon transfer, cease to be an interest in a Restricted Global Certificate and become an interest in an Unrestricted Global Certificate and, accordingly, will thereafter be subject to all transfer restrictions and other procedures applicable to an interest in an Unrestricted Global Certificate.

Prospective purchasers are hereby notified that sellers of the Restricted Securities may be relying on the exemption from the provisions of Section 5 of the Securities Act provided by Rule 144A.

ERISA CONSIDERATIONS

The following is a summary of certain considerations associated with the purchase and holding of the Direct Issuance Securities (or any interest therein) by employee benefit plans that are subject to Title I of the 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 Code or provisions under any federal, state, local, non-U.S. or other laws or regulations that are similar to such provisions of ERISA or the Code (collectively, "**Similar Laws**"), and entities whose underlying assets are considered to include "plan assets" (within the meaning of the U.S. Department of Labor (the "**DOL**") regulation at 29 C.F.R. § 2510.3-101, as modified by Section 3(42) of ERISA (the "**Plan Asset Regulation**"), and any Similar Laws) of such plans, accounts and arrangements (each, a "**Plan**").

General fiduciary matters

ERISA and the Code impose certain duties on persons who are fiduciaries of a Plan subject to Title I of ERISA or Section 4975 of the Code, as well as entities whose underlying assets are considered to include "plan assets" of such Plans (an "**ERISA Plan**"), and prohibit certain transactions involving the assets of an ERISA Plan and its fiduciaries or other interested parties. Under ERISA and the Code, any person who exercises any discretionary authority or control over the administration of an ERISA Plan or the management or disposition of the assets of an ERISA Plan, or who renders investment advice to an ERISA Plan for a fee or other compensation (an "**investment advice fiduciary**"), is generally considered to be a fiduciary of the ERISA Plan.

When considering an investment in the Direct Issuance Securities (or any interest therein) of the assets of any Plan, a fiduciary should determine whether the investment is in accordance with the documents and instruments governing the Plan and the applicable provisions of ERISA, the Code or any Similar Laws. In addition, a fiduciary of any 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 Code and any applicable Similar Laws.

Each ERISA Plan should consider the fact that none of the Issuer, the Arranger, the Dealers, the Trustee, the Principal Paying Agent, the Exchange Agent, the Transfer Agent, the Registrar or the Guarantor or any of their respective affiliates (collectively, the "**Transaction Parties**") is acting, or will act, as a fiduciary to any ERISA Plan with respect to the decision to purchase or hold the Direct Issuance Securities (or any interest therein), and that the Transaction Parties have financial interests in the ERISA Plan's purchase and holding of the Direct Issuance Securities, which interests may conflict with the interest of the ERISA Plan. 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 Direct Issuance Securities (or any interest therein). All communications, correspondence and materials from the Transaction Parties with respect to the Direct Issuance Securities (or any interest therein) are intended to be general in nature and are not directed at any specific purchaser of the Direct Issuance Securities (or any interest therein), and do not constitute advice regarding the advisability of investment in the Direct Issuance Securities (or any interest therein) for any specific purchaser. The decision to purchase and hold the Direct Issuance Securities (or any interest therein) must be made solely by each prospective ERISA Plan purchaser on an arm's length basis.

Prohibited transaction issues

Section 406 of ERISA and Section 4975 of the 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 Section 3(14) of ERISA, or "disqualified persons," within the meaning of Section 4975 of the Code (collectively, "**Parties in Interest**"), unless an exemption is available. A party in interest or disqualified person, including a fiduciary, of an ERISA Plan who engages in a non-exempt prohibited transaction may be subject to excise taxes and other penalties and liabilities under ERISA and the Code.

The acquisition and/or holding of Direct Issuance Securities (or any interest therein) by an ERISA Plan with respect to which a Transaction Party is considered a Party in Interest may constitute or result in a direct or indirect prohibited transaction under Section 406 of ERISA and/or Section 4975 of the Code, unless the investment is acquired and is held in accordance with an applicable statutory, class or individual prohibited transaction exemption. Included among these statutory exemptions are Section 408(b)(17) of ERISA and Section 4975(d)(20) of the Code, which exempt certain transactions (including, without limitation, a sale and purchase of securities) between a Plan and a Party in Interest so long as (i) such Party in Interest is treated as such solely by reason of providing services to the Plan, (ii) such Party in Interest is not a fiduciary which renders

investment advice, or has or exercises discretionary authority or control, with respect to the plan assets involved in such transaction, or an affiliate of any such person and (iii) the Plan neither receives less than nor pays more than "adequate consideration" (as defined in such Sections) in connection with such transaction. In addition, the U.S. Department of Labor has issued prohibited transaction class exemptions ("**PTCEs**") that may apply to the acquisition and holding of the Direct Issuance Securities (or any interest therein). These class exemptions include, without limitation, 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. There can be no assurance that all of the conditions of any such exemptions will be satisfied.

Because of the foregoing, the Direct Issuance Securities (or any interest therein) may not be purchased or held by any person investing "plan assets" of any Plan, unless such purchase and holding will not constitute a non-exempt prohibited transaction under ERISA and the Code or violate any 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 investing in the Direct Issuance Securities (or any interest therein) on behalf of, or with the assets of, any Plan, consult with their counsel regarding the potential applicability of ERISA, Section 4975 of the Code and any Similar Laws to such transactions and whether an exemption would be applicable.

Representation

Accordingly, by its acceptance of a Direct Issuance Security (or any interest therein), each purchaser and subsequent transferee will be deemed to have represented and warranted that (A) either (1) no portion of the assets used by such purchaser or transferee to acquire or hold the Direct Issuance Securities (or any interest therein) constitutes assets of any Plan or (2) (a) the purchase and holding of the Direct Issuance Securities (or any interest therein) by such purchaser or transferee will not constitute or result in a non-exempt prohibited transaction under Section 406 of ERISA or Section 4975 of the Code or a violation under any applicable Similar Laws, and (b) none of the Transaction Parties 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, and (B) it will not sell or otherwise transfer such notes or any interest therein otherwise than to a purchaser or transferee that is deemed to make these same representations, warranties and agreements with respect to its purchase and holding of such note or any interest therein.

Further, if the purchaser or subsequent transferee is an ERISA Plan, such purchaser or subsequent transferee will be deemed to have represented and warranted that none of the Transaction Parties has acted as the ERISA Plan's fiduciary (within the meaning of ERISA or the Code), or has been relied upon for any advice, with respect to the purchaser or transferee's decision to acquire and hold the Direct Issuance Securities (or any interest therein), and none of the Transaction Parties shall at any time be relied upon as the ERISA Plan's fiduciary with respect to any decision to acquire, continue to hold or transfer the Direct Issuance Securities (or any interest therein).

Certain ERISA Considerations With Respect to Guaranteed Securities

Guaranteed Securities (or any interest therein) are not permitted to be acquired or held by ERISA Plans. Subject to certain restrictions described below, Guaranteed Securities are permitted to be acquired and held by Plans that are not subject to ERISA or Section 4975 of the Code and are not ERISA Plans (collectively, "**Non-ERISA Plans**").

ERISA imposes fiduciary standards and certain other requirements on ERISA Plans and on those persons who are fiduciaries with respect to ERISA Plans. Non-ERISA Plans are subject to applicable state, local or federal law, as well as the restrictions of duties of common law, and may also be subject to prohibited transaction provisions that operate similarly to those under ERISA.

Under the Plan Asset Regulation, unless certain exceptions apply, if an ERISA Plan invests in an "equity interest" of an entity, that is neither a "publicly offered security" nor a security issued by an investment company registered under the U.S. Investment Company Act, the ERISA Plan's assets include both the equity interest and an undivided interest in each of the entity's underlying assets. An equity interest is defined generally under the

DOL regulations as an interest other than an instrument which is treated as indebtedness under applicable local law and which has no substantial equity features. This "look through" rule will only apply where ERISA Plans own 25 percent or more of the value of any class of equity interest in the entity. For purposes of this 25 percent determination, the value of equity interests held by persons (other than ERISA Plans) that have discretionary authority or control with respect to the assets of the entity or that provide investment advice for a fee (direct or indirect) with respect to such assets (or any affiliate of such person) is disregarded. An equity interest does not include debt (as determined by applicable local law) which does not have substantial equity features.

If the underlying assets of an entity are deemed to be plan assets, those with discretionary authority or control over the entity would be fiduciaries with respect to the entity's assets. The assets of the entity would also be subject to the prohibited transaction rules of ERISA and Section 4975 of the Code, as well as other rules applicable to "plan assets".

The Issuer believes that the proper characterization of the Guaranteed Securities for U.S. federal income tax purposes is uncertain. The DOL may view the Guaranteed Securities as having substantial equity features. Further, the Issuer will not be able to monitor the holders' status as ERISA Plans. Accordingly, the Guaranteed Securities (or any interest therein) are not permitted to be acquired or held by any ERISA Plan.

Non-ERISA Plans are permitted to acquire and hold the Guaranteed Securities (or any interest therein), subject to certain restrictions described below. Each Non-ERISA Plan acquiring and holding the Guaranteed Securities (or any interest therein) will be deemed to have represented and warranted that the acquisition, holding and disposition of the Guaranteed Securities (or any interest therein) do not and will not violate applicable Similar Law and the acquisition, holding and disposition of the Guaranteed Securities or any interest therein do not and will not result in the assets of the Issuer being considered plan assets of such Non-ERISA Plan. Non-ERISA Plans are generally not subject to ERISA nor do the prohibited transaction provisions of ERISA or Section 4975 of the Code apply to these types of plans. However, governmental plans (as described in Section 3(32) of ERISA), are subject to prohibitions on related-party transactions under Section 503 of the Code, which prohibitions operate similarly to the prohibited transaction rules under ERISA or Section 4975 of the Code, and other Non-ERISA Plans may be subject to similar prohibitions. Accordingly, the fiduciary of a Non-ERISA Plan must consider applicable Similar Laws, if any, imposed upon such Non-ERISA Plan before purchasing and holding a Guaranteed Security (or any interest therein).

BY ITS PURCHASE AND HOLDING OF A GUARANTEED SECURITY OR ANY INTEREST THEREIN, THE PURCHASER AND/OR HOLDER THEREOF AND EACH TRANSFEREE WILL BE DEEMED TO HAVE REPRESENTED AND WARRANTED AT THE TIME OF ITS PURCHASE AND THROUGHOUT THE PERIOD THAT IT HOLDS SUCH GUARANTEED SECURITY OR INTEREST THEREIN, THAT (1) IT IS NOT AND WILL NOT BE AN ERISA PLAN, (2) IF IT IS A GOVERNMENTAL PLAN, AS DEFINED IN SECTION 3(32) OF ERISA, OR OTHER PLAN OR ARRANGEMENT THAT IS NOT SUBJECT TO TITLE I OF ERISA OR SECTION 4975 OF THE CODE, THE ACQUISITION, HOLDING AND DISPOSITION OF THE GUARANTEED SECURITIES OR ANY INTEREST THEREIN DO NOT AND WILL NOT VIOLATE ANY STATUTE, REGULATION, ADMINISTRATIVE DECISION, POLICY OR ANY OTHER LEGAL AUTHORITY APPLICABLE TO SUCH GOVERNMENTAL PLAN OR OTHER PLAN OR ARRANGEMENT THAT IS NOT SUBJECT TO TITLE I OF ERISA OR SECTION 4975 OF THE CODE, AND THE ACQUISITION, HOLDING AND DISPOSITION OF THIS GUARANTEED SECURITY OR ANY INTEREST HEREIN DO NOT AND WILL NOT RESULT IN THE ASSETS OF THE ISSUER OF THE GUARANTEED SECURITIES BEING CONSIDERED PLAN ASSETS OF SUCH GOVERNMENTAL PLAN OR OTHER PLAN NOT SUBJECT TO TITLE I OF ERISA OR SECTION 4975 OF THE CODE, AND (3) IT WILL NOT SELL OR OTHERWISE TRANSFER ANY GUARANTEED SECURITY OR INTEREST THEREIN TO ANY PERSON WITHOUT FIRST OBTAINING THE SAME FOREGOING REPRESENTATIONS, WARRANTIES AND COVENANTS FROM THAT PERSON.

The foregoing is not intended to be exhaustive and the law governing investments by ERISA Plans and Non-ERISA Plans is subject to extensive administrative and judicial interpretations. The foregoing discussion should not be construed as legal advice. Any potential purchaser or holder of Guaranteed Securities (or any interest therein) should consult counsel with respect to issues arising under ERISA, the Code and other applicable laws and make their own independent decisions.

SUMMARY OF CERTAIN SIGNIFICANT DIFFERENCES BETWEEN TFRS AND IFRS

The following is a general summary of certain significant differences between TFRS and IFRS that we believe are applicable to us.

We have prepared our audited financial statements as of and for the years ended December 31, 2024 and 2023, including comparative information presented as corresponding figures as of and for the year ended December 31, 2022, contained in this Offering Memorandum, in accordance with TFRS. Our unaudited interim financial information as of and for the nine months ended September 30, 2025, including comparative information presented as corresponding figures for the nine months ended September 30, 2024, have been prepared in accordance with TAS 34, "Interim Financial Reporting".

For the purposes of this Offering Memorandum, we have provided below a summary of certain significant differences between TFRS and IFRS. The differences identified below are limited to those significant differences that are applicable to our financial statements. They should not be construed as being exhaustive and no attempt has been made to identify all differences in disclosure, presentation and classification that would affect the manner in which transactions and events are presented in the financial statements. No attempt has been made to identify future differences as a result of prescribed changes in accounting standards nor to identify all future differences that may affect our financial statements as a result of transactions or events that may occur in the future.

In making an investment decision, investors must rely upon their own examination of the Group, the terms of the relevant offering and our financial information. Potential investors should consult their own professional advisers for an understanding of the differences between TFRS and IFRS and how these differences might affect the financial information in this Offering Memorandum.

General Information

TFRS are issued by the Thailand Federation of Accounting Professions (the "**TFAC**") and announced in the Royal Gazette of Thailand.

TFRS are currently translated and adopted according to IFRS. TFRS normally are based on IFRS latest bound volume with one year delay from the related IFRS effective date. Summary of TFRS can be divided into two parts as follows:

(a) TFRS, which is generally in line with the international financial reporting standards announced by IFRS.

(b) Thai Accounting Guidances, the guidances adopted in Thailand by the Stock Exchange of Thailand and the Thai Securities and Exchange Commission, as well as announcements of the TFAC, since there is no principle or guidance for international financial reporting standards.

Interest Rate Benchmark Reform - Phase 2

The amendments to IFRS 9, "Financial Instruments" ("**IFRS 9**"), IFRS 7, "Financial Instruments: Disclosures" ("**IFRS 7**"), and IFRS 16, "Leases" ("**IFRS 16**") relating to Interest Rate Benchmark Reform – Phase 2 have been effective for annual periods beginning on or after January 1, 2021. The amendments provide temporary reliefs which address the financial reporting effects when an interbank offered rate ("**IBOR**") is replaced with an alternative nearly risk-free interest rate ("**RFR**"). The amendments include the following practical expedients:

(a) a practical expedient to require contractual changes, or changes to cash flows that are directly required by the reform, to be treated as changes to a floating interest rate, equivalent to a movement in a market rate of interest;

(b) permit changes required by IBOR reform to be made to hedge designations and hedge documentation without the hedging relationship being discontinued; and

(c) provide temporary relief to entities from having to meet the separately identifiable requirement when an RFR instrument is designated as a hedge of a risk component.

TFRS amendments equivalent to the above IFRS amendments were adopted in TFRS 9, "Financial Instruments" ("**TFRS 9**"), TFRS 7, "Disclosure of Financial Instruments" ("**TFRS 7**") and TFRS 16, "Leases" ("**TFRS 16**"), which are aligned with IFRS 9, IFRS 7 and IFRS 16, respectively. The amendments have been effective for annual periods beginning on or after January 1, 2022. The Group has adopted the temporary reliefs as mentioned above and did not have any significant impact on the Group's financial statements.

International Tax Reform – Pillar Two Model Rules

The amendments to IAS 12, "Income Taxes" (**"IAS 12"**) relating to International Tax Reform – Pillar Two Model Rules have been introduced in response to the OECD's BEPS Pillar Two rules, and include:

(a) a mandatory temporary exception to the recognition and disclosure of deferred taxes arising from the jurisdictional implementation of the Pillar Two model rules which applied immediately; and

(b) disclosure requirements for affected entities to help users of the financial statements better understand the entity's exposure to Pillar Two income taxes arising from that legislation, particularly before its effective date which have been applied for annual periods beginning on or after January 1, 2023 (but not for any interim periods ending on or before December 31, 2023).

TFRS amendments equivalent to the above IFRS amendments were adopted in TAS 12, "Income Taxes" ("**TAS 12**"), which is aligned with IAS 12. The amendments have been effective for annual reporting periods beginning on or after January 1, 2024, but not for any interim periods ending on or before December 31, 2024. The Group has applied the temporary exception as mentioned above and did not have any significant impact on the Group's financial statements.

LEGAL MATTERS

Certain matters in connection with this offering as to New York law and U.S. federal law will be passed upon for the Company by Latham & Watkins LLP, and for the Arranger and Dealers by Clifford Chance Pte. Ltd. Certain matters in connection with this offering as to Thai law will be passed upon for the Company by Baker & McKenzie Ltd., and for the Arranger and Dealers by Chandler Mori Hamada Limited.

INDEPENDENT AUDITORS

The unaudited interim consolidated and separate financial information of Thai Oil Public Company Limited as of and for the nine months ended September 30, 2025, including comparative information presented as corresponding figures as of and for the nine months ended September 30, 2024, included in this Offering Memorandum have been reviewed by EY Office Limited, independent auditors, as stated in their report appearing herein.

The consolidated and separate financial statements of Thai Oil Public Company Limited as of and for the year ended December 31, 2024, including comparative information presented as corresponding figures as of and for the year ended December 31, 2023, included in this Offering Memorandum have been audited by EY Office Limited, independent auditors, as stated in their report appearing herein.

The consolidated and separate financial statements of Thai Oil Public Company Limited as of and for the year ended December 31, 2023, including comparative information presented as corresponding figures as of and for the year ended December 31, 2022, included in this Offering Memorandum have been audited by EY Office Limited, independent auditors, as stated in their report appearing herein.

GLOSSARY OF TECHNICAL TERMS

aframax	An aframax is a medium-sized crude tanker with a dead weight tonnage typically ranging between 80,000 and 120,000.
aromatics	A group of unsaturated cyclic hydrocarbons containing one or more benzene rings of six carbon atoms. They are highly reactive and chemically versatile. The group name is derived from the strong and not unpleasant odor characteristic of most chemicals in this family.
attributed installed capacity	The power generation capacity attributable to an entity based on the entity's equity ownership in a power generation plant.
bbl or bbls	Barrels (1 Bbl = 158.984 liters).
benzene	An aromatic hydrocarbon in the form of a colorless, flammable liquid. It is created by catalytically reforming naphtha, in the thermal cracking process, and is used in the production of other chemicals such as styrene, cumene, cyclohexane, aniline and chlorobenzene.
biodiesel	Vegetable oil or animal fat-based diesel fuel.
bitumen	Heavy oil product normally used for road pavement and construction.
bpd	Barrels per day.
capacity utilization rate	Capacity utilization rate refers to total production expressed as a percentage of nameplate capacity during the relevant year or period.
cassava-based ethanol	Ethanol produced from cassava, a root vegetable.
complex refinery	A refinery that has manufacturing processes (conversion units or upgrading units) to upgrade lower value hydrocarbon products to higher value products. The type of processing facilities indicates the degree of complexity of the refinery.
condensate	Liquid that is formed when a vapor cools.
continuous catalyst regeneration platformers ("CCR")	Refinery units that change the molecular structure of lower octane gasoline components to higher octane in the presence of catalyst.
conversion unit	Manufacturing units that chemically transform structure of low value hydrocarbon molecule to higher value hydrocarbon molecule. Light hydrocarbon conversion units are catalytic reforming and ISOMs. Heavy hydrocarbon conversion units are thermal cracking, hydrocracking and catalytic cracking units.
cost and freight ("CFR")	A trade term requiring the seller to arrange for the carriage of goods by sea to a port of destination, and provide the buyer with the documents necessary to obtain the goods from the carrier.
cracking ("CCU")	A process of breaking down larger molecules of heavy oil into smaller ones by the action of heat, with the aid of catalyst.

crude distillation unit ("CDU")	A refinery unit that separates crude oil into fractions, by the aid of heat, based on the difference in boiling point of hydrocarbons. The lightest fraction includes refinery fuel gas, LPG and gasoline. The middle fraction includes kerosene and diesel. The heaviest fraction (bottom stream) is mainly fuel oil, which has the lowest value. Fuel oil can be further processed in the conversion unit to produce more valuable products.
crude oil	Crude oil is a mixture of hydrocarbon which is used as the principal feedstock in the refinery for the production of petroleum products.
diesel	A general term of fuel used in diesel (compression ignition) engines.
distillates	Distillates may refer to any refined oil products.
export parity	Refers to how export sales of refined petroleum products are priced, which is derived from the Singapore spot market price for the relevant product quoted on MOPS plus or minus a premium or discount that is subject to the market conditions and negotiation with potential purchasers. Also premium or discount is adjusted in accordance with the freight rate from Thailand to Singapore.
fatty acid	Fatty acid is an oleochemical derived from vegetable feedstock, such as coconut and palm-kernel oils. During the production process, vegetable oils are first converted into an intermediary chemical, such as methyl ester, which is then fractionated to produce fatty alcohols.
feedstock	Hydrocarbon compounds, such as crude oil, natural gas liquid and imported residue that are fed into processing units and/or blended into refined products.
fluidized catalytic cracking unit ("FCCU")	A refinery process unit that uses catalyst to convert low value, heavy components to higher value, lighter components such as high octane gasoline and other products.
fractionation	Process of separating crude oil into different compounds or fractions, each with its own boiling range, by heating the crude oil to a certain temperature and sending it to the fractionation tower.
free on board ("FOB")	A trade term under which the price invoiced or quoted by a seller includes all charges up to the port of shipment, plus loading costs.
fuel oil	Oil generally used as furnace fuel. It is also widely used as a main source of energy for electricity generators and bunkering.
gas separation	Gas separation is the separation of natural gas.
gas treating unit ("ADIP Unit")	A refinery unit that removes undesirable components, such as hydrogen sulfide, from gaseous and LPG streams with Di-IsoPropanol-Amine (DIPA or ADIP) liquid. Used ADIP liquid can be re-used by a regeneration process. Gaseous product from the regeneration process is called acid gas.
gasohol	A fuel consisting of a blend of ethanol and unleaded gasoline.

gross refining margin ("GRM")	Value of production ("**VOP**") minus cost of intake ("**COI**") and cost of purchased utilities. VOP is calculated based on the quantity of products from the refinery during a certain period multiplied by the prices of each product type. This VOP is automatically reduced by used fuel and loss in the processing system. COI is calculated based on the quantity of crude oil and other feedstock used in the refinery process during a certain period multiplied by cost of crude based on a LIFO basis, insurance and freight price of each crude type.
group I lube base oil	Group I base oils are classified as less than 90% saturates, greater than 0.03% sulfur and with a viscosity-index range of 80 to 120. The temperature range for these oils is from 32 to 150 degrees Fahrenheit. Group I base oils are solvent-refined, which is a simpler refining process. They are generally the least costly group of lube base oil.
group II lube base oil	Group II base oils are defined as being more than 90% saturates, less than 0.03% sulfur and with a viscosity index of 80 to 120. They are often manufactured by hydrocracking, which is a more complex process than what is used for Group I base oils. Since all the hydrocarbon molecules of these oils are saturated, Group II base oils have better antioxidation properties. They also have a clearer color and cost more in comparison to Group I base oils.
group III lube base oil	Group III base oils are greater than 90% saturates, less than 0.03% sulfur and have a viscosity index above 120. These oils are refined even more than Group II base oils and generally are severely hydrocracked through higher pressure and in greater heat. This longer process is designed to achieve a purer base oil.
heavy products	Fuel oil, long residue and bitumen.
high vacuum unit ("HVU")	A refinery unit that further fractionates the black fuel oil fraction produced by the CDU, which is also known as long residue, to produce a light fuel oil fraction (light vacuum gasoil and heavy vacuum gasoil) and a heavy fuel oil fraction (short residue). In the HVU, separation occurs in the fractionation column at a high temperature and under vacuum conditions to prevent a cracking reaction.
hydrocarbons	Hydrocarbons is used to describe all compounds that consist of hydrogen and carbon. These include crude oil, natural gas, aromatics, olefins and their derivatives.
hydrocracker unit ("HCU")	A refinery process unit using catalyst and hydrogen that converts low value, heavy components to higher value, lighter components such as high cetane diesel and other products.
hydrocracking	A process of breaking down larger molecules of heavy oil into smaller ones with the aid of catalyst under hydrogen pressure.
hydrodesulfurization unit ("HDS")	A refinery process unit using catalyst and hydrogen that removes sulfur from components to produce low sulfur diesel.
hydrogen manufacturing unit ("HMU")	A refinery unit that produces hydrogen gas from light hydrocarbons and steam under the presence of catalyst and the aid of heat.

hydrotreating unit ("HDT")	A refinery process unit that removes contaminants such as sulfur, nitrogen from naphtha and lighter components.
import parity	Refers to how domestic sales of refined petroleum products are priced, which is derived from the Singapore spot market price for the relevant product quoted on MOPS, plus the logistics costs of transporting such product from Singapore to Thailand, such as insurance, freight, ocean losses, deemed import duty and deemed legal reserve.
isomerate	A main product, which is produced from an isomerization unit. It is used as a gasoline blending component to improve the octane rating and to reduce petrochemical of automotive gasoline.
isomerization unit ("ISOM")	A refinery unit that processes light naphtha (low octane gasoline component) and converts it to high-octane gasoline by using a catalyst and hydrogen. Also known as a penex/molex unit.
jet fuel	A refined product used for both commercial aviation and military aircraft. There are several jet fuel specifications. It is also known as turbine fuel. The primary source of jet fuel blending stocks is kerosene from CDU and hydrocracking unit.
jetty	A breakwater constructed to protect or defend a harbor, stretch of coast, or riverbank.
kerosene	A refined middle-distillate petroleum product that is used for jet fuel, cooking, heating, lighting, solvent and for blending into diesel and fuel oil.
light products	LPG, unleaded gasoline, reformate and isomerate.
linear alkyl benzene ("LAB")	A family of organic compound commonly used as a raw material in the manufacture of biodegradable household detergents.
long residue	The black fuel oil fraction produced by the CDU, which is usually sold as fuel oil for simple refineries. For complex refineries, long residue is further processed through the conversion process to produce higher value oil products.
LPG	Liquefied petroleum gas. Consists primarily of propane and butane and is produced for use for cooking, home heating and as an intermediate material in the manufacture of petrochemicals.
lube base oil	The main component of finished lubricants derived from heavy crude oil fraction in vacuum distillation.
major turnaround activities ("MTAs")	Activities, such as inspection and replacement of components, carried out with the aim of restoring the capability, performance, integrity and reliability of the various refinery process units.
mean of Platts Singapore ("MOPS")	The arithmetic average of the high and low price published by Platts Asia-Pacific on each day for the relevant grade of fuel.
methyl Tertiary Butyl Ether	An oxygenate to enhance the octane number in ULG.

middle distillates	Diesel (or automotive gasoil and industrial gasoil) and jet fuel.
mild extract solvate ("MES")	A mildly refined paraffinic base oil that can be used as substitute for distillate aromatic extract in the production of synthetic rubber.
mixed xylenes	Mixed-xylenes are highly volatile, colorless petroleum- based industrial chemicals used in the production of many products, such as plastics, fabrics, solvent, cleaning agents, adhesives, dyes, and paints. Mixed-xylenes are also used as a high octane blending component in gasoline. As the name "mixed" suggests, there are actually four different chemicals in mixed-xylenes: orthoxylene, metaxylene, paraxylene and ethylbenzene. The greatest demand is for paraxylene (used for Polyester production).
molasses-based ethanol	Ethanol produced from malasses, a viscous by-product of the refining of sugarcane or sugar beets into sugar.
mono-ethylene glycol	An organic chemical compound derived from the oxidation of ethylene.
monomer	A feedstock material for the manufacture of polymers and derivative products.
MW	Megawatt (million watts), unit of power measurement.
naphtha	A general term used for low boiling range (and low octane rating) hydrocarbon fractions that are a product of crude oil or condensate refining. Naphtha is generally used as feedstock for catalytic reforming unit and ethylene plant. It is also used as gasoline blending component.
natural gas	A colorless, highly flammable gaseous hydrocarbon, which occurs naturally with crude oil, consisting primarily of methane and small amounts of heavier gaseous hydrocarbon compounds such as propane.
octane number	A number indicates the relative antiknock (self-ignition) characteristics of Gasoline. The higher Octane number, the higher the anti-knock quality of Gasoline. Gasoline component produced from CDU has a relatively low Octane number and is of little value for Gasoline blending.
official Selling Price ("OSP")	Price of crude oil sold during a particular month, set by the owner of the crude and can be quoted at a fixed price or benchmarked to other crude with a premium or discount.
paraxylene	An aromatic hydrocarbon in the form of a colorless, flammable liquid that is recovered from mixed xylenes streams by adsorption and by isomerization of aromatics.
petrochemicals	Chemicals derived from petroleum or natural gas, of which there are almost 200 that can be so described. Certain products from oil refining are used as petrochemical feedstock in the production of plastics, synthetic fibers, synthetic rubbers and other products.
plant utilization rate	A measurement of fraction of the capacity of manufacturing unit used for processing. It is expressed as the ratio of actual

	intake (or production) to refining capacity over specified period.
ppm	Parts per million.
propane	A gaseous hydrocarbon in its natural state but can be easily liquefied. Its major end uses are as a fuel and as a feedstock for petrochemicals.
refining	The conversion of crude oil into useful products, such as naphtha, the most important feedstock for the petrochemical industry. The general refinery process begins with the separation of crude oil into different fractions by distillation. The fractions are further treated to convert them into mixtures of more useful products by various methods such as cracking, reforming, alkylation, polymerization and isomerization. These mixtures of new compounds are then separated using methods such as fractionation and solvent extraction.
refining capacity	Designed capacity of a refinery per stream day, assuming a specific slate of crude. A refinery may operate in excess of its designed capacity if there is an optimization of its operating conditions, a change in the slate of crude from that which its designed capacity is based on, or a continuous improvement in its production facilities.
reformate, or platformate	A reformed naphtha, which is upgraded in octane by means of catalytic reforming.
selective toluene dis-proportionation ("STDP")	A conversion process that produces paraxylene-rich mixed xylenes along with high purity benzene streams from toluene. STDP produces a higher purity stream of paraxylene (i.e., greater than 80%) and benzene as opposed to conventional TDP which produces an equilibrium mixture of xylenes (i.e., approximately 20% paraxylene) together with benzene.
single buoy mooring ("SBM")	Used for discharging oil into storage tanks in the open sea, the principle being that the vessel can moor to discharge oil whatever the direction of wind or current and swing at the mooring to present least resistance to the prevailing conditions.
slack wax	A minimally refined oil product derived from lubricating oil and is used in the production of candles, shoes polish, wax, cosmetics and binding materials.
solvent	A substance used to dissolve solids and keep them in liquid form.
special boiling points ("SBPs")	A group of solvents with narrow boiling ranges typically used in the adhesives, rubber, cleaning products, pharmaceuticals and surface coating industries.
thermal cracking unit ("TCU")	A refinery unit that breaks up heavy oil molecules into lighter, more valuable fractions (e.g. gasoline, kerosene) by the use of high temperature without the aid of catalysts.
toluene	An aromatic hydrocarbon used as an octane enhancer in gasoline, as a chemical intermediate in the production of benzene, paraxylene, TDI and as a solvent in paints.

treated distillate aromatics extract ("TDAE")	A low aromatics content-extract oil which is a refined oil product derived from the production of lube base oil and is used in the production of synthetic rubber.
treating	The process of removing contaminants, such as nitrogen and sulfur compounds from the oil fractions and also to improve their physical properties, such as thermal and color stability. In most cases, a catalytic reaction is required for this purification process.
turnaround.....	The temporary shutdown of a refinery or petrochemical production facility for required maintenance.
unleaded gasoline ("ULG")	Automotive gasoline where lead compounds have not been added to enhance octane rating.
very large crude carriers ("VLCC").....	A supertanker with a capacity between 160,000 and 320,000 deadweight tons. Deadweight tonnage ("**DWT**") is the amount of cargo, fuel, water, stores and crew that a tanker can carry when fully loaded.

INDEX TO THE FINANCIAL STATEMENTS

Unaudited but reviewed interim financial information of the Company as of and for the three-month and nine-month periods ended September 30, 2025, including comparative information presented as corresponding figures as of December 31, 2024 and for the three-month and nine-month periods ended September 30, 2024

Independent Auditor's Report on Review of Interim Financial Information F-2

Statement of Financial Position F-4

Statement of Income (for the three-month period ended September 30, 2025) F-7

Statement of Comprehensive Income (for the three-month period ended September 30, 2025) F-8

Statement of Income (for the nine-month period ended September 30, 2025) F-9

Statement of Comprehensive Income (for the nine-month period ended September 30, 2025) F-10

Statement of Changes in Shareholders' Equity F-11

Statement of Cash Flows F-13

Condensed Notes to Interim Financial Information F-16

Annual financial statements of the Company as of and for the year ended December 31, 2024, including comparative information presented as corresponding figures as of and for the year ended December 31, 2023

Independent Auditor's Report F-50

Statement of Financial Position F-55

Statement of Income F-58

Statement of Comprehensive Income F-59

Statement of Changes in Shareholders' Equity F-60

Statement of Cash Flows F-62

Notes to the Financial Statements F-65

Annual financial statements of the Company as of and for the year ended December 31, 2023, including comparative information presented as corresponding figures as of and for the year ended December 31, 2022

Independent Auditor's Report F-165

Statement of Financial Position F-170

Statement of Income F-173

Statement of Comprehensive Income F-174

Statement of Changes in Shareholders' Equity F-175

Statement of Cash Flows F-177

Notes to the Financial Statements F-180

Independent Auditor's Report on Review of Interim Financial Information

To the Shareholders of Thai Oil Public Company Limited

I have reviewed the accompanying consolidated financial information of Thai Oil Public Company Limited and its subsidiaries (the Group), which comprises the consolidated statement of financial position as at 30 September 2025, and the related consolidated statements of income and comprehensive income for the three-month and nine-month periods then ended, and the related consolidated statements of changes in shareholders' equity and cash flows for the nine-month period then ended, as well as the condensed notes to the interim consolidated financial statements. I have also reviewed the separate financial information of Thai Oil Public Company Limited for the same periods (collectively "the interim financial information"). Management is responsible for the preparation and presentation of this interim financial information in accordance with Thai Accounting Standard 34 *Interim Financial Reporting*. My responsibility is to express a conclusion on this interim financial information based on my review.

Scope of Review

I conducted my review in accordance with Thai Standard on Review Engagements 2410, *Review of Interim Financial Information Performed by the Independent Auditor of the Entity*. 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 Thai Standards on Auditing and consequently does not enable me to obtain assurance that I would become aware of all significant matters that might be identified in an audit. Accordingly, I do not express an audit opinion.

Conclusion

Based on my review, nothing has come to my attention that causes me to believe that the accompanying interim financial information is not prepared, in all material respects, in accordance with Thai Accounting Standard 34 *Interim Financial Reporting*.

Emphasis of Matter

I draw attention to the condensed Note 5 to the interim financial statements regarding the business combination undertaken by an overseas associate in April 2025. The associate recognised a gain from a bargain purchase arising from the business combination. Therefore, the share of profit from investments in associates using the equity method in the consolidated statements of income for the nine-month period ended 30 September 2025 includes the share of the gain from a bargain purchase arising from the business combination in proportion to the Group's interest. At present, the management of the associate and the seller are still negotiating the value of the consideration transferred at the acquisition date, which remains subject to adjustment of the value, including the gain from a bargain purchase, upon completion of the transaction. My conclusion is not modified in respect of this matter.

Kessirin Pinpuvadol
Certified Public Accountant (Thailand) No. 7325

EY Office Limited
Bangkok: 7 November 2025

Thai Oil Public Company Limited and its subsidiaries

Statement of financial position

As at 30 September 2025

(Unit: Thousand Baht)

		Consolidated financial statements		Separate financial statements	
	Note	30 September 2025 (Unaudited but reviewed)	31 December 2024 (Audited)	30 September 2025 (Unaudited but reviewed)	31 December 2024 (Audited)
Assets					
Current assets					
Cash and cash equivalents		28,072,155	29,042,414	22,336,627	25,571,834
Short-term investments in financial assets		5,088,958	10,695,314	4,928,220	10,526,504
Trade receivables	*3*	25,997,717	27,600,683	25,990,166	28,032,856
Other current receivables		1,472,829	2,212,275	1,605,279	2,284,007
Current portion of finance lease receivables		-	-	348,963	348,996
Receivables from oil fuel fund		9,683	144,306	9,683	144,306
Short-term loans to related parties	*2*	-	-	144,617	232,885
Inventories		37,674,533	40,577,074	32,516,043	35,750,471
Derivative assets	*13*	364,091	58,417	364,504	55,170
Prepaid corporate income tax		1,320,841	1,367,687	934,501	920,793
Value added tax receivables		396,957	523,671	691	-
Total current assets		100,397,764	112,221,841	89,179,294	103,867,822
Non-current assets					
Financial assets measured at fair value through profit or loss	*13*	697,079	685,885	264,922	274,213
Financial assets measured at fair value through other comprehensive income	*13*	11,371,496	11,313,204	10,927,951	10,786,965
Investments in subsidiaries	*4*	-	-	41,280,365	41,280,365
Investments in associates	*5*	35,899,670	31,427,043	981,870	981,870
Long-term loans to related party	*2*	-	-	9,988,529	9,987,401
Finance lease receivables, net of current portion		-	-	870,195	837,977
Investment properties		102,520	102,520	1,185,364	1,185,364
Property, plant and equipment	*6*	214,083,243	224,152,543	188,235,806	197,165,193
Right-of-use assets		19,168,129	20,381,870	18,564,198	19,737,295
Goodwill		753,623	798,332	-	-
Intangible assets		2,424,521	2,457,119	1,021,937	979,066
Deferred tax assets		6,908,291	3,460,469	6,737,786	3,290,865
Other non-current assets		2,669,640	2,009,606	2,660,489	1,979,309
Total non-current assets		294,078,212	296,788,591	282,719,412	288,485,883
Total assets		394,475,976	409,010,432	371,898,706	392,353,705

The accompanying notes to interim financial statements are an integral part of the financial statements.

Thai Oil Public Company Limited and its subsidiaries

Statement of financial position (continued)

As at 30 September 2025

(Unit: Thousand Baht)

	Note	Consolidated financial statements		Separate financial statements	
		30 September 2025 (Unaudited but reviewed)	31 December 2024 (Audited)	30 September 2025 (Unaudited but reviewed)	31 December 2024 (Audited)
Liabilities and shareholders' equity					
Current liabilities					
Short-term loans from financial institutions		2,741,289	2,724,908	-	-
Short-term loans from related parties	*2*	-	-	6,405,943	7,648,230
Trade payables		62,905,383	51,579,312	65,122,407	55,024,571
Other current payables		3,285,241	3,698,075	3,217,347	3,285,288
Current portion of long-term loans from financial institutions	*7*	846,515	3,776,683	498,742	3,100,836
Current portion of debentures	*8, 13*	1,399,944	1,399,902	1,399,944	1,399,902
Derivative liabilities	*13*	114,829	2,522	116,337	2,675
Current portion of lease liabilities		1,394,542	1,444,930	1,395,490	1,423,313
Income tax payables		1,111,073	445,422	341,726	-
Excise duty payables		1,455,737	2,536,116	1,455,056	2,535,199
Other current provisions		103,182	55,223	103,182	55,223
Total current liabilities		75,357,735	67,663,093	80,056,174	74,475,237
Non-current liabilities					
Long-term loans from financial institutions, net of current portion	*7*	11,899,696	19,225,919	9,743,559	17,738,613
Long-term loans from a third party		-	178,938	-	-
Long-term loans from related party, net of current portion	*2, 13*	-	-	72,784,731	94,983,244
Debentures, net of current portion	*8, 13*	102,318,719	127,491,540	29,723,934	33,856,580
Derivative liabilities	*13*	5,487,343	2,645,709	5,487,343	2,645,709
Lease liabilities, net of current portion		17,206,053	18,111,686	17,433,660	18,324,587
Deferred tax liabilities		34,982	17,741	-	-
Non-current provision for employee benefits		2,592,177	2,644,907	1,853,761	1,934,350
Other non-current liabilities		4,863,177	4,846,002	5,096,117	5,032,642
Total non-current liabilities		144,402,147	175,162,442	142,123,105	174,515,725
Total liabilities		219,759,882	242,825,535	222,179,279	248,990,962

The accompanying notes to interim financial statements are an integral part of the financial statements.

Thai Oil Public Company Limited and its subsidiaries

Statement of financial position (continued)

As at 30 September 2025

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	30 September 2025 (Unaudited but reviewed)	31 December 2024 (Audited)	30 September 2025 (Unaudited but reviewed)	31 December 2024 (Audited)
Shareholders' equity				
Share capital				
Registered				
2,233,835,566 ordinary shares of Baht 10 each	22,338,356	22,338,356	22,338,356	22,338,356
Issued and fully paid up				
2,233,835,566 ordinary shares of Baht 10 each	22,338,356	22,338,356	22,338,356	22,338,356
Share premium on ordinary shares	10,698,724	10,698,724	10,698,724	10,698,724
Other deficits	(4,338,888)	(4,344,397)	(9,146,634)	(9,146,634)
Retained earnings				
Appropriated - statutory reserve	2,315,148	2,315,148	2,315,148	2,315,148
Appropriated - other reserves	244,500	244,500	244,500	244,500
Unappropriated	151,199,451	142,423,975	132,448,589	127,829,355
Other components of shareholders' equity	(10,453,536)	(10,229,973)	(9,179,256)	(10,916,706)
Equity attributable to owners of the Company	172,003,755	163,446,333	149,719,427	143,362,743
Non-controlling interests of the subsidiaries	2,712,339	2,738,564	-	-
Total shareholders' equity	174,716,094	166,184,897	149,719,427	143,362,743
Total liabilities and shareholders' equity	394,475,976	409,010,432	371,898,706	392,353,705

The accompanying notes to interim financial statements are an integral part of the financial statements.

Directors

(Unaudited but reviewed)

Thai Oil Public Company Limited and its subsidiaries

Statement of income

For the three-month period ended 30 September 2025

(Unit: Thousand Baht, except earnings per share expressed in Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2025	2024	2025	2024
Revenue					
Revenue from sales		80,048,890	110,018,064	81,040,035	117,821,613
Subsidy from oil fuel fund		49,280	1,170,699	49,280	1,170,699
Total revenue		80,098,170	111,188,763	81,089,315	118,992,312
Cost of sales		(77,927,129)	(116,804,052)	(80,116,287)	(126,807,454)
Gross profit (loss)		2,171,041	(5,615,289)	973,028	(7,815,142)
Dividend income		142,141	127,940	5,871,264	3,183,243
Gain (loss) from financial instruments		(91,887)	156,270	(110,623)	139,579
Gain on exchange		321,366	1,645,194	356,151	2,052,254
Gain on repurchase of debentures		1,371,671	-	362,673	-
Other income		381,365	402,234	891,551	999,088
Selling and distribution expenses		(230,813)	(301,971)	(42,017)	(41,959)
Administrative expenses		(599,962)	(663,754)	(732,843)	(729,092)
Share of loss from investments in associates		(2,060)	(30,268)	-	-
Operating profit (loss)		3,462,862	(4,279,644)	7,569,184	(2,212,029)
Finance cost		(835,393)	(1,011,143)	(849,747)	(976,331)
Profit (loss) before income tax expenses		2,627,469	(5,290,787)	6,719,437	(3,188,360)
Tax income (expenses)	*9*	(497,772)	1,057,019	(132,345)	1,249,469
Profit (loss) for the period		2,129,697	(4,233,768)	6,587,092	(1,938,891)
Profit (loss) attributable to:					
Equity holders of the Company		2,146,840	(4,217,861)	6,587,092	(1,938,891)
Non-controlling interests of the subsidiaries		(17,143)	(15,907)		
		2,129,697	(4,233,768)		
Earnings (loss) per share					
Basic earnings (loss) per share					
Profit (loss) attributable to equity holders of the Company		0.96	(1.89)	2.95	(0.87)

The accompanying notes to interim financial statements are an integral part of the financial statements.

(Unaudited but reviewed)

Thai Oil Public Company Limited and its subsidiaries

Statement of comprehensive income

For the three-month period ended 30 September 2025

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2025	2024	2025	2024
Profit (loss) for the period	2,129,697	(4,233,768)	6,587,092	(1,938,891)
Other comprehensive income:				
Other comprehensive income to be reclassified				
to profit or loss in subsequent periods:				
Cash flow hedges, net of income tax	(118,112)	7,038,187	(118,112)	7,038,187
Cost of hedging, net of income tax	959,668	106,283	959,668	106,283
Exchange differences on translation of financial statements in foreign currency	(288,050)	(4,302,782)	-	-
Share of other comprehensive income from investments in associates under equity method, net of income tax	31,882	(34,824)	-	-
Other comprehensive income to be reclassified to profit or loss in subsequent periods, net of income tax	585,388	2,806,864	841,556	7,144,470
Other comprehensive income not to be reclassified				
to profit or loss in subsequent periods:				
Changes in fair value of financial assets at fair value through other comprehensive income, net of income tax	2,143,948	1,876,546	2,142,994	1,861,022
Other comprehensive income not to be reclassified to profit or loss in subsequent periods, net of income tax	2,143,948	1,876,546	2,142,994	1,861,022
Other comprehensive income for the period	2,729,336	4,683,410	2,984,550	9,005,492
Total comprehensive income for the period	4,859,033	449,642	9,571,642	7,066,601
Total comprehensive income attributable to:				
Equity holders of the Company	4,874,798	468,090	9,571,642	7,066,601
Non-controlling interests of the subsidiaries	(15,765)	(18,448)		
	4,859,033	449,642		

The accompanying notes to interim financial statements are an integral part of the financial statements.

(Unaudited but reviewed)

Thai Oil Public Company Limited and its subsidiaries

Statement of income

For the nine-month period ended 30 September 2025

(Unit: Thousand Baht, except earnings per share expressed in Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2025	2024	2025	2024
Revenue					
Revenue from sales		285,404,653	343,895,240	299,116,852	368,755,559
Subsidy from oil fuel fund		920,988	10,345,281	920,988	10,345,281
Total revenue		286,325,641	354,240,521	300,037,840	379,100,840
Cost of sales		(278,855,774)	(342,832,290)	(298,442,809)	(374,777,039)
Gross profit		7,469,867	11,408,231	1,595,031	4,323,801
Dividend income		282,475	268,087	8,201,536	6,106,368
Gain (loss) from financial instruments		(462,188)	130,491	(476,695)	124,498
Gain on exchange		17,305	539,584	190,854	669,051
Gain on repurchase of debentures	*8*	4,067,348	1,147,815	536,371	-
Other income		1,430,723	1,302,565	3,053,637	3,078,215
Selling and distribution expenses		(769,012)	(850,803)	(130,806)	(139,597)
Administrative expenses		(1,896,456)	(1,891,227)	(2,247,503)	(2,148,501)
Share of profit (loss) from investments in associates	*5*	6,469,913	(194,333)	-	-
Operating profit		16,609,975	11,860,410	10,722,425	12,013,835
Finance cost		(2,786,888)	(3,066,157)	(2,785,730)	(3,017,415)
Profit before income tax expenses		13,823,087	8,794,253	7,936,695	8,996,420
Tax income (expenses)	*9*	(1,672,591)	(1,560,637)	33,188	(604,527)
Profit for the period		12,150,496	7,233,616	7,969,883	8,391,893
Profit attributable to:					
Equity holders of the Company		12,126,125	7,191,869	7,969,883	8,391,893
Non-controlling interests of the subsidiaries		24,371	41,747		
		12,150,496	7,233,616		
Earnings per share					
Basic earnings per share					
Profit attributable to equity holders of the Company		5.43	3.22	3.57	3.76

The accompanying notes to interim financial statements are an integral part of the financial statements.

(Unaudited but reviewed)

Thai Oil Public Company Limited and its subsidiaries

Statement of comprehensive income

For the nine-month period ended 30 September 2025

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2025	2024	2025	2024
Profit for the period	12,150,496	7,233,616	7,969,883	8,391,893
Other comprehensive income:				
Other comprehensive income to be reclassified				
to profit or loss in subsequent periods:				
Cash flow hedges, net of income tax	2,282,648	2,910,630	2,282,648	2,910,630
Cost of hedging, net of income tax	(657,987)	411,954	(657,987)	411,954
Exchange differences on translation of financial statements in foreign currency	(1,919,607)	(1,924,535)	-	-
Share of other comprehensive income from investments in associates under equity method, net of income tax	19,813	(51,873)	-	-
Other comprehensive income to be reclassified to profit or loss in subsequent periods, net of income tax	(275,133)	1,346,176	1,624,661	3,322,584
Other comprehensive income not to be reclassified				
to profit or loss in subsequent periods:				
Changes in fair value of financial assets at fair value through other comprehensive income, net of income tax	53,559	(97,265)	112,789	(112,789)
Other comprehensive income not to be reclassified to profit or loss in subsequent periods, net of income tax	53,559	(97,265)	112,789	(112,789)
Other comprehensive income for the period	(221,574)	1,248,911	1,737,450	3,209,795
Total comprehensive income for the period	11,928,922	8,482,527	9,707,333	11,601,688
Total comprehensive income attributable to:				
Equity holders of the Company	11,902,561	8,441,777	9,707,333	11,601,688
Non-controlling interests of the subsidiaries	26,361	40,750		
	11,928,922	8,482,527		

The accompanying notes to interim financial statements are an integral part of the financial statements.

(Unaudited but reviewed)

Thai Oil Public Company Limited and its subsidiaries

Statement of changes in shareholders' equity

For the nine-month period ended 30 September 2025

(Unit: Thousand Baht)

	Consolidated financial statements															
	Equity attributable to owners of the Company															
									Other components of shareholders' equity							
									Other comprehensive income							
			Other surpluses (deficits)			Retained earnings										
	Issued and fully paid-up share capital	Share premium on ordinary shares	Surplus on business combination under common control	Deficits from the change in the ownership interests in subsidiaries	Deficits from the change in the net assets in an associate	Appropriated - statutory reserve	Appropriated - other reserves	Unappropriated	Changes in value of financial assets designated at fair value through other comprehensive	Exchange differences on translation of financial statements in foreign currency	Cash flow hedges	Cost of hedging	Share of other comprehensive income from an associate	Total equity attributable to owners of the Company	Non-controlling interests of the subsidiaries	Total shareholders' equity
Balance as at 1 January 2024	22,338,356	10,698,724	330,836	(4,673,495)	-	2,315,148	244,500	141,288,330	(4,368,512)	1,631,174	(3,804,377)	(659,984)	227,059	165,567,759	2,743,932	168,311,691
Profit for the period	-	-	-	-	-	-	-	7,191,869	-	-	-	-	-	7,191,869	41,747	7,233,616
Other comprehensive income for the period	-	-	-	-	-	-	-	-	(97,265)	(1,923,538)	2,910,630	411,954	(51,873)	1,249,908	(997)	1,248,911
Total comprehensive income for the period	-	-	-	-	-	-	-	7,191,869	(97,265)	(1,923,538)	2,910,630	411,954	(51,873)	8,441,777	40,750	8,482,527
Dividend paid (Note 11)	-	-	-	-	-	-	-	(8,822,983)	-	-	-	-	-	(8,822,983)	(29,272)	(8,852,255)
Deficits from the change in the net assets in an associate	-	-	-	-	(1,739)	-	-	-	-	-	-	-	-	(1,739)	-	(1,739)
Balance as at 30 September 2024	22,338,356	10,698,724	330,836	(4,673,495)	(1,739)	2,315,148	244,500	139,657,216	(4,465,777)	(292,364)	(893,747)	(248,030)	175,186	165,184,814	2,755,410	167,940,224
Balance as at 1 January 2025	22,338,356	10,698,724	330,836	(4,673,495)	(1,738)	2,315,148	244,500	142,423,975	(6,737,847)	1,246,630	(3,612,640)	(1,326,240)	200,124	163,446,333	2,738,564	166,184,897
Profit for the period	-	-	-	-	-	-	-	12,126,125	-	-	-	-	-	12,126,125	24,371	12,150,496
Other comprehensive income for the period	-	-	-	-	-	-	-	-	53,559	(1,921,596)	2,282,648	(657,987)	19,813	(223,563)	1,990	(221,573)
Total comprehensive income for the period	-	-	-	-	-	-	-	12,126,125	53,559	(1,921,596)	2,282,648	(657,987)	19,813	11,902,562	26,361	11,928,923
Dividend paid (Note 11)	-	-	-	-	-	-	-	(3,350,649)	-	-	-	-	-	(3,350,649)	(39,878)	(3,390,527)
Changes of interest in an investment in a subsidiary	-	-	-	5,509	-	-	-	-	-	-	-	-	-	5,509	(12,708)	(7,199)
Balance as at 30 September 2025	22,338,356	10,698,724	330,836	(4,667,986)	(1,738)	2,315,148	244,500	151,199,451	(6,684,288)	(674,966)	(1,329,992)	(1,984,227)	219,937	172,003,755	2,712,339	174,716,094

The accompanying notes to interim financial statements are an integral part of the financial statements.

(Unaudited but reviewed)

Thai Oil Public Company Limited and its subsidiaries

Statement of changes in shareholders' equity (continued)

For the nine-month period ended 30 September 2025

(Unit: Thousand Baht)

	Separate financial statements									
							Other components of shareholdes' equity			
							Other comprehensive income			
	Issued and fully paid-up share capital	Share premium on ordinary shares	Other deficits: Deficits on business combination under common control	Retained earnings: Appropriated - statutory reserve	Retained earnings: Appropriated - other reserves	Retained earnings: Unappropriated	Change in value of financial assets disinaged at fair value through other comprehensive income	Cash flow hedges	Cost of hedging	Total shareholders' equity
Balance as at 1 January 2024	22,338,356	10,698,724	(9,146,634)	2,315,148	244,500	126,766,514	(3,665,648)	(3,804,377)	(659,984)	145,086,599
Profit for the period	-	-	-	-	-	8,391,893	-	-	-	8,391,893
Other comprehensive income for the period	-	-	-	-	-	-	(112,789)	2,910,630	411,954	3,209,795
Total comprehensive income for the period	-	-	-	-	-	8,391,893	(112,789)	2,910,630	411,954	11,601,688
Dividend paid (Note 11)	-	-	-	-	-	(8,822,983)	-	-	-	(8,822,983)
Balance as at 30 September 2024	22,338,356	10,698,724	(9,146,634)	2,315,148	244,500	126,335,424	(3,778,437)	(893,747)	(248,030)	147,865,304
Balance as at 1 January 2025	22,338,356	10,698,724	(9,146,634)	2,315,148	244,500	127,829,355	(5,977,826)	(3,612,640)	(1,326,240)	143,362,743
Profit for the period	-	-	-	-	-	7,969,883	-	-	-	7,969,883
Other comprehensive income for the period	-	-	-	-	-	-	112,789	2,282,648	(657,987)	1,737,450
Total comprehensive income for the period	-	-	-	-	-	7,969,883	112,789	2,282,648	(657,987)	9,707,333
Dividend paid (Note 11)	-	-	-	-	-	(3,350,649)	-	-	-	(3,350,649)
Balance as at 30 September 2025	22,338,356	10,698,724	(9,146,634)	2,315,148	244,500	132,448,589	(5,865,037)	(1,329,992)	(1,984,227)	149,719,427

The accompanying notes to interim financial statements are an integral part of the financial statements.

(Unaudited but reviewed)

Thai Oil Public Company Limited and its subsidiaries

Statement of cash flows

For the nine-month period ended 30 September 2025

(Unit: Thousand Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2025	2024	2025	2024
Cash flows from operating activities					
Profit before income tax expenses		13,823,087	8,794,253	7,936,695	8,996,420
Adjustments to reconcile profit before tax to					
net cash provided by (paid from) operating activities:					
Depreciation and amortisation		5,956,802	6,079,695	3,985,027	4,083,273
Expected credit loss		18,586	31,732	-	-
Loss of reduction of inventory to net realisable value		28,261	2,478,527	399	2,500,674
Finance cost		2,786,888	3,066,157	2,785,730	3,017,415
Unrealised loss (gain) on exchange		164,049	(301,529)	202,899	(368,984)
Share of loss (profit) from investments in associates	*5*	(6,469,913)	194,333	-	-
Dividends income		(282,475)	(268,087)	(8,201,536)	(6,106,368)
Difference on lease termination		(36)	(1,693)	(36)	-
Difference on lease modification		51	-	51	-
Gain on repurchase of debentures	*8*	(4,067,348)	(1,147,815)	(536,371)	-
Gain on disposal of property, plant and equipment		(592)	(535)	(431)	(445)
Loss on write-off of property, plant and equipment		51,108	28	51,105	-
Short-term provision (reversal)		47,959	(47,805)	47,959	(47,805)
Loss on hedging of forecasted revenue transaction		336,495	220,717	336,495	220,717
Loss from changes in fair value of financial assets		5,562	56,719	9,291	12,909
Unrealised loss (gain) from changes in fair value of derivatives		(105,997)	214,275	(108,302)	193,665
Loss from unwinding cross currency swap contracts		1,087,900	-	1,087,900	-
Amortisation of advance receipts for land lease and others		(21,821)	(26,545)	(635,110)	(671,304)
Profit from operating activities before					
changes in operating assets and liabilities		13,358,566	19,342,427	6,961,765	11,830,167
Operating assets (increase) decrease					
Trade receivables		1,625,024	3,297,443	2,057,618	4,140,834
Other current receivables		784,548	433,433	637,659	87,779
Receivables from oil fuel fund		134,623	(22,091)	134,623	(22,091)
Inventories		2,874,280	3,966,065	3,234,030	4,106,317
Value added tax receivables		126,714	492,240	(691)	551,426
Other non-current assets		(711,239)	(41,135)	(709,991)	(48,495)
Operating liabilities increase (decrease)					
Trade payables		11,307,559	(3,098,490)	10,096,728	(4,304,974)
Other current payables		(835,787)	(420,463)	(478,186)	580,417
Excise duty payables		(1,080,380)	(363,414)	(1,080,143)	(363,118)
Other non-current liabilities		(53,486)	137,144	(29,805)	136,553
Cash from operating activities		27,530,422	23,723,159	20,823,607	16,694,815
Corporate income tax paid		(4,815,696)	(4,319,248)	(3,520,077)	(3,395,669)
Net cash flows from operating activities		22,714,726	19,403,911	17,303,530	13,299,146

The accompanying notes to interim financial statements are an integral part of the financial statements.

Thai Oil Public Company Limited and its subsidiaries

Statement of cash flows (continued)

For the nine-month period ended 30 September 2025

(Unit: Thousand Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2025	2024	2025	2024
Cash flows from investing activities					
Dividends received		677,462	533,696	8,201,536	6,106,368
Proceeds from (repayment of) short-term investments in financial assets		5,416,041	(2,017,547)	5,416,041	(2,017,547)
Cash payment for purchase of financial assets measured at fair value through profit or loss		(38,249)	(34,789)	-	-
Cash receipt from short-term loans to related parties	*2*	-	-	325,845	703,157
Cash payment for short-term loans to related parties	*2*	-	-	(230,288)	(10,000)
Proceeds from long-term loans to savings co-operative of employees		30,996	29,339	30,727	28,784
Cash payment for long-term loans to savings co-operative of employees		(876)	(1,950)	-	-
Proceeds from disposal of property, plant and equipment		685	672	523	505
Cash payment for acquisition of property, plant and equipment		(6,214,641)	(7,738,028)	(5,012,408)	(7,021,121)
Cash payment for acquisition of intangible assets		(193,957)	(286,950)	(175,825)	(146,832)
Cash payment for right-of-use assets		-	(234,676)	-	(235,230)
Proceeds from enforcement of security under contract	*6*	14,312,438	-	14,312,438	-
Net cash flows from (used in) investing activities		13,989,899	(9,750,233)	22,868,589	(2,591,916)
Cash flows from financing activities					
Finance costs paid		(4,647,092)	(5,105,740)	(4,905,698)	(5,710,406)
Dividends paid to the shareholders of the Company	*11*	(3,350,649)	(8,822,983)	(3,350,649)	(8,822,983)
Dividends paid to non-controlling interests		(39,878)	(29,272)	-	-
Cash paid for acquisition of non-controlling interests	*4*	(7,199)	-	-	-
Proceeds from short-term loans from financial institutions		15,108,167	8,175,148	-	-
Repayment of short-term loans from financial institutions		(15,049,019)	(8,247,742)	-	-
Proceeds from short-term loans from related parties		-	-	-	391,277
Repayment of short-term loans from related parties	*2*	-	-	(1,242,287)	-
Proceeds from long-term loans from financial institutions	*7*	2,223,680	7,042,778	-	7,000,000
Repayment of long-term loans from financial institutions	*7*	(12,510,373)	(1,985,590)	(10,650,000)	(1,550,000)
Repayment of long-term loans from a third party		(178,938)	(12,500)	-	-
Repayment of long-term loans from related parties	*2*	-	-	(18,209,872)	(3,239,633)
Cash payment for loans financing fee		-	(4,125)	-	(4,125)
Redemption and repurchase of debentures	*8*	(16,827,209)	(10,288,982)	(3,396,669)	(7,000,000)
Cash payment for unwinding cross currency swap contracts		(1,087,900)	-	(1,087,900)	-
Payment of principal portion of lease liabilities		(731,648)	(665,967)	(689,588)	(612,029)
Net cash flows used in financing activities		(37,098,058)	(19,944,975)	(43,532,663)	(19,547,899)

The accompanying notes to interim financial statements are an integral part of the financial statements.

(Unaudited but reviewed)

Thai Oil Public Company Limited and its subsidiaries

Statement of cash flows (continued)

For the nine-month period ended 30 September 2025

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2025	2024	2025	2024
Net decrease in cash and cash equivalents	(393,433)	(10,291,297)	(3,360,544)	(8,840,669)
Cash and cash equivalents at beginning of period	29,042,414	28,431,621	25,571,834	23,736,907
Effect of exchange rate changes	(576,826)	(473,663)	125,337	(466,545)
Cash and cash equivalents at end of period	28,072,155	17,666,661	22,336,627	14,429,693
Supplemental disclosure of cash flows information				
Payables on acquisition of property, plant and equipment	449,270	269,493	346,768	102,710
Payables on acquisition of intangible assets	15,081	31,803	14,868	31,803
Increase in right-of-use assets and lease liabilities	254,089	148,634	268,446	156,656

The accompanying notes to interim financial statements are an integral part of the financial statements.

1. General information

1.1 Corporate information

Thai Oil Public Company Limited (the Company) is a public limited company which is incorporated and domiciled in Thailand and is listed on the Stock Exchange of Thailand. The address of the Company's registered offices and refinery plant as follows:

Head office:	555/1 Energy Complex Building A, 11th Floor, Vibhavadi Rangsit Road, Kwang Chatuchak, Khet Chatuchak, Bangkok 10900
Sriracha office and refinery plant:	42/1 Moo 1, Sukhumvit Road Km. 124, Tambol Tungsukla, Amphur Sriracha, Chonburi 20230

The principal business operations of the Group is oil refinery and distributions, petrochemicals, lube base oil and other businesses in domestic and overseas.

This interim consolidated and separate financial statements is presented in Thai Baht and rounded to the nearest thousand, unless otherwise stated.

1.2 Basis for the preparation of interim financial statements

These interim financial statements are prepared in accordance with Thai Accounting Standard No. 34 Interim Financial Reporting, with the Company presenting condensed interim financial statements. The Company has presented the statements of financial position, income, comprehensive income, changes in shareholders' equity, and cash flows in the same format as that used for the annual financial statements and has presented notes to the interim financial statements on a condensed basis.

The interim financial statements are intended to provide information additional to that included in the latest annual financial statements. Accordingly, they focus on new activities, events and circumstances so as not to duplicate information previously reported. These interim financial statements should therefore be read in conjunction with the latest annual financial statements.

The interim financial statements in Thai language are the official statutory financial statements of the Company. The interim financial statements in English language have been translated from the Thai language financial statements.

1.3 Basis of consolidation

The interim consolidated financial statements include the financial statements of Thai Oil Public Company Limited ("the Company") and its subsidiary companies ("the subsidiaries") (collectively as "the Group") and have been prepared on the same basis as that applied for the consolidated financial statements for the year ended 31 December 2024, with no change in shareholding structure of subsidiaries during the current period.

1.4 Accounting policies

The interim financial statements are prepared using the same accounting policies and methods of computation as were used for the financial statements for the year ended 31 December 2024.

The revised financial reporting standards which are effective for fiscal years beginning on or after 1 January 2025, do not have any significant impact on the Group's financial statements.

2. Related party transactions

During the period, the Group had significant business transactions with related parties. Such transactions, which are summarised below, arose in the ordinary course of business.

The pricing policies for particular types of transactions are explained further below:

Transactions	Pricing policies
Revenue from sales, lease income, purchase of goods and assets	Market prices or, where no market price exists, at contractually agreed prices
Interest income and expense	Agreed rates as stipulated in the agreements
Dividend income	Right to receive dividends
Other income and expenses	Contractually agreed prices
Directors' remuneration	Amounts approved by the Group's shareholders

Summaries significant business transactions with related parties as follows:

(Unit: Million Baht)

	For the three-month periods ended 30 September			
	Consolidated financial statements		Separate financial statements	
	2025	2024	2025	2024
Parent company				
Revenue from sale	8	-	-	-
Purchase of crude oil and feedstock	49,632	80,910	47,958	78,693
Other income	3	3	3	3
Other expenses	24	25	23	26
Purchase of assets	-	6	-	6
Subsidiaries				
(eliminated from the consolidated financial statements)				
Revenue from sale	-	-	11,805	25,076
Purchase of crude oil and feedstock	-	-	7,817	16,501
Interest income	-	-	116	117
Dividend income	-	-	5,654	3,057
Land lease income	-	-	25	25
Other income	-	-	497	466
Interest expense	-	-	175	177
Interest expense capitalised as cost of assets	-	-	755	860
Other expenses	-	-	589	443
Purchase of assets	-	-	40	84

(Unit: Million Baht)

	For the three-month periods ended 30 September			
	Consolidated financial statements		Separate financial statements	
	2025	2024	2025	2024
Associates				
Revenue from sale	46	30	-	-
Purchase of crude oil and feedstock	312	352	-	-
Dividend income	-	-	77	-
Other expenses	120	120	119	121
Purchase of assets	26	14	26	14
Subsidiaries of the parent company				
Revenue from sale	36,723	52,248	34,019	48,070
Purchase of crude oil and feedstock	1,395	1,340	619	273
Other income	141	-	141	-
Other expenses	45	31	14	16
Purchase of assets	4	15	4	15
Other related parties				
Revenue from sale	2	2	-	-
Purchase of crude oil and feedstock	-	3	-	3
Dividend income	141	127	141	127
Other income	3	5	3	5
Other expenses	3	4	-	-
Purchase of assets	-	2	-	2

(Unit: Million Baht)

	For the nine-month periods ended 30 September			
	Consolidated financial statements		Separate financial statements	
	2025	2024	2025	2024
Parent company				
Revenue from sale	8	7	-	-
Purchase of crude oil and feedstock	197,719	250,708	191,719	244,111
Other income	9	8	9	8
Other expenses	88	97	87	97
Purchase of assets	-	8	-	8
Subsidiaries				
(eliminated from the consolidated financial statements)				
Revenue from sale	-	-	53,789	76,717
Purchase of crude oil and feedstock	-	-	35,633	50,166
Interest income	-	-	344	354
Dividend income	-	-	7,686	5,741
Land lease income	-	-	76	76
Other income	-	-	1,384	1,428
Interest expense	-	-	703	668
Interest expense capitalised as cost of assets	-	-	2,511	2,917
Other expenses	-	-	1,622	1,448
Purchase of assets	-	-	123	178

(Unit: Million Baht)

	For the nine-month periods ended 30 September			
	Consolidated financial statements		Separate financial statements	
	2025	2024	2025	2024
Associates				
Revenue from sale	135	106	-	-
Purchase of crude oil and feedstock	1,230	1,148	-	-
Dividend income	-	-	248	108
Other income	1	-	1	-
Other expenses	312	281	310	280
Purchase of assets	51	21	51	21
Subsidiaries of the parent company				
Revenue from sale	132,014	163,855	122,224	150,459
Purchase of crude oil and feedstock	3,910	10,101	1,787	7,039
Other income	191	51	191	51
Interest expense	1	-	1	-
Other expenses	96	147	42	103
Purchase of assets	39	28	39	28
Other related parties				
Revenue from sale	4	5	-	-
Purchase of crude oil and feedstock	-	6	-	6
Dividend income	279	259	268	251
Other income	12	15	12	15
Other expenses	11	11	-	-
Purchase of assets	-	2	-	2

The balances of the accounts between the Group and those related companies are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	30 September 2025	31 December 2024 (Audited)	30 September 2025	31 December 2024 (Audited)
Trade receivables - related parties (Note 3)				
Parent company	-	6	-	-
Subsidiaries	-	-	6,558	8,098
An associate	-	13	-	-
Subsidiaries of the parent company	11,723	13,219	10,650	11,705
Other related parties	-	1	-	-
Total	11,723	13,239	17,208	19,803
Other current receivables - related parties				
Parent company	352	676	345	671
Subsidiaries	-	-	490	362
Associates	43	113	43	113
Subsidiaries of the parent company	228	504	224	500
Other related party	3	3	3	3
Total	626	1,296	1,105	1,649
Finance lease receivables - related parties				
Subsidiaries	-	-	1,219	1,187
Total	-	-	1,219	1,187
Derivative assets - related party				
Subsidiaries of the parent company	60	18	60	18
Total	60	18	60	18

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	30 September 2025	31 December 2024	30 September 2025	31 December 2024
		(Audited)		(Audited)
Other non-current assets - related parties				
Subsidiaries	-	-	137	117
A subsidiary of the parent company	15	15	15	15
Total	15	15	152	132
Trade payables - related parties				
Parent company	61,179	49,852	60,186	48,754
Subsidiaries	-	-	4,192	5,201
An associate	100	150	-	-
Subsidiaries of the parent company	350	304	137	86
Total	61,629	50,306	64,515	54,041
Other current payables - related parties				
Parent company	-	1	-	1
Subsidiaries	-	-	1,583	922
Associates	33	163	33	162
Subsidiaries of the parent company	7	46	4	42
Other related parties	1	3	-	-
Total	41	213	1,620	1,127
Finance lease payables - related parties				
Parent company	-	2	-	2
Subsidiaries	-	-	538	534
An associate	3	4	3	4
A subsidiary of the parent company	51	58	51	58
Total	54	64	592	598

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	30 September 2025	31 December 2024 (Audited)	30 September 2025	31 December 2024 (Audited)
Derivative liability - related party				
Subsidiary	-	-	2	-
Total	-	-	2	-
Other non-current liabilities - related parties				
Subsidiaries	-	-	761	733
A subsidiary of the parent company	3,092	3,092	3,092	3,092
Other related party	3	3	3	3
Total	3,095	3,095	3,856	3,828

Short-term loans to related parties

Movements of short-term loans to related parties during the nine-month period ended 30 September 2025 are as follows:

(Unit: Million Baht)

	Separate financial statements				
	Balance as at 1 January 2025	Increase	Decrease	Effect of exchange rate	Balance as at 30 September 2025
Subsidiaries	233	230	(326)	8	145
Total	233	230	(326)	8	145

Interest rates for the nine-month period ended 30 September 2025 based on BIBOR 3M plus certain fixed margin per annum and SOFR 3M plus certain fixed margin per annum.

Long-term loans to related party

Movements of long-term loans to related party during the nine-month period ended 30 September 2025 are as follows:

(Unit: Million Baht)

	Separate financial statements				
	Balance as at 1 January 2025	Increase	Decrease	Amortise of deferred financing fee	Balance as at 30 September 2025
A subsidiary	9,987	-	-	2	9,989
Total	9,987	-	-	2	9,989

Short-term loans from related parties

Movements of short-term loans from related parties during the nine-month period ended 30 September 2025 are as follows:

(Unit: Million Baht)

	Separate financial statements			
	Balance as at 1 January 2025	Increase	Decrease	Balance as at 30 September 2025
Subsidiaries	7,648	-	(1,242)	6,406
Total	7,648	-	(1,242)	6,406

Interest rates for nine-month period ended 30 September 2025 are charged based on BIBOR 1M plus certain fixed margin per annum.

Long-term loans from related party

Movements of long-term loans from related party during the nine-month period ended 30 September 2025 are as follows:

(Unit: Million Baht)

	Separate financial statements					
	Balance as at 1 January 2025	Increase	Decrease	Amortise of deferred financing fee	Effect of Exchange rate	Balance as at 30 September 2025
A subsidiary	94,983	-	(18,210)	69	(4,057)	72,785
Total	94,983	-	(18,210)	69	(4,057)	72,785

Directors and management's benefits

During the three-month and nine-month periods ended 30 September 2025 and 2024, the Group had employee benefit expenses payable to their directors and management as below.

(Unit: Million Baht)

	For the three-month periods ended 30 September			
	Consolidated financial statements		Separate financial statements	
	2025	2024	2025	2024
Short-term employee benefits	6	6	6	5
Total	6	6	6	5

(Unit: Million Baht)

	For the nine-month periods ended 30 September			
	Consolidated financial statements		Separate financial statements	
	2025	2024	2025	2024
Short-term employee benefits	45	70	44	67
Total	45	70	44	67

3. Trade receivables

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	30 September 2025	31 December 2024	30 September 2025	31 December 2024
		(Audited)		(Audited)
Trade receivables - related parties				
Age of outstanding debts by due date				
Not yet due	11,723	13,239	17,208	19,803
Trade receivables - non-related parties				
Age of outstanding debts by due date				
Not yet due	14,214	14,019	8,782	8,230
Past due				
Up to 3 months	61	343	-	-
3 - 6 months	-	45	-	-
6 - 12 months	59	-	-	-
Over 12 months	4	3	-	-
Total trade receivables - non-related parties	14,338	14,410	8,782	8,230
Less: Allowance for expected credit losses	(63)	(48)	-	-
Total trade receivables - non-related parties - net	14,275	14,362	8,782	8,230
Total	25,998	27,601	25,990	28,033

The normal credit term granted by the Group ranges from 7 days to 180 days.

4. Investments in subsidiaries

The details of subsidiaries are as follows:

(Unit: Million Baht)

	Separate financial statements			
	Cost method		Dividend income for the nine-month periods	
	30 September 2025	31 December 2024	30 September 2025	30 September 2024
		(Audited)		
Thai Paraxylene Co., Ltd.	2,161	2,161	514	1,945
Thai Lube Base Public Company Limited	1,979	1,979	2,637	1,143
Thaioil Energy Services Co., Ltd.	40	40	40	20
Thaioil Solvent Co., Ltd.	1,250	1,250	150	575
Thaioil Ethanol Co., Ltd.	1,450	1,450	-	-
TOP SPP Co., Ltd.	3,500	3,500	1,304	1,907
Thaioil Treasury Center Co., Ltd.	956	956	3,041	151
PT TOP Investment Indonesia	29,944	29,944	-	-
Total investment in subsidiaries	41,280	41,280	7,686	5,741

Significant transactions during the nine-month period ended 30 September 2025

Indirect subsidiary

TOPNEXT International Co., Ltd (TX) and JSKEM Private Limited (JSKEM)

On 1 July 2025, TOPNEXT International Co., Ltd. (“TX”), a subsidiary, acquired an additional 20% equity interest in JSKEM Private Limited (“JSKEM”) from the existing shareholders of JSKEM for a total consideration of Baht 7.20 million, equivalent to US dollar 0.22 million.

TOP Ventures Hong Kong Limited (TVHK) and TOP Ventures America LLC (TVUS)

On 18 July 2025, Thaioil Treasury Center Co., Ltd. (“TTC”), a subsidiary, made an additional investment in TOP Ventures Hong Kong Limited (“TVHK”), an indirect subsidiary, amounting to US dollar 0.18 million, equivalent to Baht 5.96 million. In addition, TVHK made an additional investment in TOP Ventures America LLC (“TVUS”), also an indirect subsidiary, for the same amount.

5. Investments in associates

Movements of investments in associates for the nine-month period ended 30 September 2025 are as follows:

(Unit: Million Baht)

	Consolidated financial statements	Separate financial statements
Net book value as at 1 January 2025	31,427	982
Increase in investment	2	-
Share of profit of investments in associates	6,470	-
Share of other comprehensive income from investment in an associate, net of income tax	20	-
Dividend income	(398)	-
Exchange differences on translation	(1,621)	-
Net book value as at 30 September 2025	35,900	982

On 1 April 2025, CAPGC Pte. Ltd., a subsidiary of PT Chandra Asri Pacific Tbk ("CAP") (in which CAP holds a 80% shareholding interest), acquired 100% of the ordinary shares of Aster Chemicals and Energy Pte. Ltd. (formerly "Shell Singapore Energy Park Pte. Ltd."), a company incorporated in Singapore. The management of the associate engaged an independent appraiser to measure the fair value of the identifiable assets acquired and liabilities assumed of Aster Chemicals and Energy Pte. Ltd. at the acquisition date. At present, the management of the associate and the seller are still negotiating the value of the consideration transferred at the acquisition date, which remains subject to adjustment of the value, including the gain from a bargain purchase, upon completion of the transaction. The associate recognised the gain from a bargain purchase arising from the business combination. Accordingly, the Group recognised its share of profit from investments in associates accounted for under the equity method of Baht 6,470 million in the consolidated statements of income for the nine-month period ended 30 September 2025 as mentioned above, which includes the gain from a bargain purchase arising from the business combination in proportion to the Group's interest of approximately US dollar 213 million, or equivalent to approximately Baht 7,044 million.

The details of associates are as follows:

(Unit: Million Baht)

	Consolidated financial statements			
	Equity method		Dividend income for the nine-month periods	
	30 September 2025	31 December 2024	30 September 2025	30 September 2024
		(Audited)		
PTT Digital Solutions Co., Ltd.	899	826	27	37
PTT Energy Solutions Co., Ltd.	20	20	-	-
Thai Petroleum Pipeline Co., Ltd.	892	1,004	221	71
PT Chandra Asri Pacific Tbk	34,089	29,577	150	161
Total investments in associates	35,900	31,427	398	269

(Unit: Million Baht)

	Separate financial statements			
	Cost less allowance for impairment		Dividend income for the nine-month periods	
	30 September 2025	31 December 2024	30 September 2025	30 September 2024
		(Audited)		
PTT Digital Solutions Co., Ltd.	30	30	27	37
PTT Energy Solutions Co., Ltd.	19	19	-	-
Thai Petroleum Pipeline Co., Ltd.	933	933	221	71
Total investments in associates	982	982	248	108

PT Chandra Asri Pacific Tbk

In September 2021, PT TOP Investment Indonesia ("TII"), a subsidiary of the Group, entered into the share acquisition of PT Chandra Asri Pacific Tbk ("CAP"), a registered company in the Republic of Indonesia. The Group has 15% of shareholding interest in CAP.

Furthermore, the Group will acquire an additional 0.38% of shareholding interest in CAP with the contingent considerations not exceeding of US dollar 3.9 million or not exceeding US dollar 270 million which will depend on the condition of the approval for the final investment decision on the petrochemical plant construction project by PT Chandra Asri Perkasa (CAP2), a subsidiary of CAP within 5 years from the date of investment acquisition.

Other associates are private companies and do not have a quoted market price available for their shares. There are no contingent liabilities relating to the Group's interest in these associates.

6. Property, plant and equipment

(Unit: Million Baht)

	Consolidated financial statements	Separate financial statements
Net book value as at 1 January 2025	224,152	197,165
Additions	8,676	7,993
Disposal and write-off	(51)	(51)
Reclassification	(3)	(1)
Depreciation charged for the period	(4,334)	(2,558)
Decrease from proceeds from enforcement of security from Clean Fuel Project (Note 14)	(14,312)	(14,312)
Exchange differences	(45)	-
Net book value as at 30 September 2025	214,083	188,236

As at 30 September 2025, the Group had assets under construction for The Clean Fuel Project. The construction has been financed with loans. Borrowing costs amounting to Baht 2,561 million were capitalised during the nine-month period ended 30 September 2025 (the Company only: Baht 2,767 million). The weighted average rate of 2.16% to 5.39% per annum (The Company only: 3.51% to 5.99% per annum) has been used to determine the amount of borrowing costs eligible for capitalisation. The borrowing costs were included in 'Additions' during the period.

7. Long-term loans from financial institutions

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	30 September 2025	31 December 2024 (Audited)	30 September 2025	31 December 2024 (Audited)
Long-term loans from financial institutions	12,746	23,003	10,242	20,839
Less: Current portion	(846)	(3,777)	(499)	(3,101)
Long-term loans from financial institutions, net of current portion	11,900	19,226	9,743	17,738

Movements of the long-term loans from financial institutions for the nine-month period ended 30 September 2025 are summaries below:

(Unit: Million Baht)

	Consolidated financial statements	Separate financial statements
Balance as at 1 January 2025	23,003	20,839
Add: Additional borrowings	2,224	-
Less: Repayments	(12,510)	(10,650)
Add: Amortisation of financing fee	57	53
Exchange differences	(28)	-
Balance as at 30 September 2025	12,746	10,242

In September 2025, an indirect subsidiary completed the refinancing of its long-term borrowings by repaying the portion of secured borrowings from financial institutions and all long-term borrowings from a third party, and entering into a new unsecured long-term loan facility agreement with a financial institution in Thailand amounting to Baht 2,300 million. The purpose of the refinancing was to restructure the funding sources and enhance financial cost efficiency. The new loan carries a floating interest rate based on THOR 6-month (THOR 6M) plus a fixed margin per annum and are repayable on a semi-annual basis by 2033.

The Group's long-term loans are secured by collateral of land and machinery in accordance with the Credit Facilities Agreement.

The Group is required to comply with certain criteria and conditions; for example, maintaining shareholders' portion, maintaining debt to equity ratio at the level as specified in the contract and providing financial supports based on ownership percentage.

Partial Long-term loans associated with sustainability initiatives (Sustainability-Linked Loans), are subject to interest rate reductions upon fulfilment of predetermined conditions outlined within the agreement, contingent upon the achievement of specified Sustainability Performance Targets.

8. Debentures

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	30 September 2025	31 December 2024	30 September 2025	31 December 2024
		(Audited)		(Audited)
Debentures	104,184	129,622	31,172	35,387
Less: Discount/ financing fee on debentures	(465)	(730)	(48)	(130)
Total	103,719	128,892	31,124	35,257
Less: Current portion of debentures, net	(1,400)	(1,400)	(1,400)	(1,400)
Debentures, net of current portion	102,319	127,492	29,724	33,857

Movements of debentures for the nine-month period ended 30 September 2025 are summarised below:

(Unit: Million Baht)

	Consolidated financial statements	Separate financial statements
Balance as at 1 January 2025	128,892	35,257
Cash flows		
Repurchase of debentures	(16,827)	(3,397)
Other non-cash movements		
Interest of discount on debenture	238	82
Exchange differences	(4,517)	(282)
Gain on repurchase of debentures	(4,067)	(536)
Balance as at 30 September 2025	103,719	31,124

Repurchase and cancellation of debentures

During the nine-month period ended 30 September 2025, the Company and Thaioil Treasury Center Co., Ltd. ("TTC"), a subsidiary, repurchased and cancelled of a portion of debentures as below;

- The Company repurchased and cancelled of a portion of debentures for the unsecured and unsubordinated debentures from the secondary market that the Company issued and offered to foreign institutional investors in January 2013, amount of US dollar 172.41 million. The Company partially repurchased and cancelled debentures totaling US dollar 120.89 million. As at 30 September 2025, the Company has an outstanding balance of the debentures due in the year 2043 amounted to US dollar 51.52 million.
- TTC repurchased and cancelled of a portion of debentures for the unsecured and unsubordinated debentures from the secondary market with the details as follows:
    1. Debentures that issued and offered to foreign institutional investors in April 2018, amount of US dollar 327.59 million. TTC partially repurchased and cancelled debentures totaling US dollar 139.11 million. As at 30 September 2025, TTC has an outstanding balance of such debentures amounting to US dollar 188.48 million.
    2. Debentures that issued and offered to foreign institutional investors in November 2018, amount of US dollar 600 million. TTC partially repurchased and cancelled debentures totaling US dollar 210 million. As at 30 September 2025, TTC has an outstanding balance of such debentures amounting to US dollar 390 million.
    3. Debentures that issued and offered to foreign institutional investors in October 2019, amount of US dollar 565 million. TTC partially repurchased and cancelled debentures totaling US dollar 113 million. As at 30 September 2025, TTC has an outstanding balance of such debentures amounting to US dollar 452 million.
    4. Debentures that issued and offered to foreign institutional investors in June 2020, amount of US dollar 480 million. TTC partially repurchased and cancelled debentures totaling US dollar 50 million. As at 30 September 2025, TTC has an outstanding balance of such debentures amounting to US dollar 430 million.

9. Income tax

Interim corporate income tax was calculated on profit before income tax for the period, using the estimated effective tax rate for the year.

Income tax expenses for the three-month and nine-month periods ended 30 September are made up as follows:

(Unit: Million Baht)

	For the three-month periods ended 30 September			
	Consolidated financial statements		Separate financial statements	
	2025	2024	2025	2024
Current income tax:				
Interim corporate income tax charge	620	(1,977)	266	(2,114)
Deferred tax:				
Relating to origination and reversal of temporary differences	(122)	920	(133)	865
Tax expenses (income) reported in profit or loss	498	(1,057)	133	(1,249)
Income tax reported in other comprehensive income	738	690	736	684

(Unit: Million Baht)

	For the nine-month periods ended 30 September			
	Consolidated financial statements		Separate financial statements	
	2025	2024	2025	2024
Current income tax:				
Interim corporate income tax charge	4,929	1,771	3,251	1,195
Deferred tax:				
Relating to origination and reversal of temporary differences	(3,256)	(210)	(3,284)	(590)
Tax expenses (income) reported in profit or loss	1,673	1,561	(33)	605
Income tax reported in other comprehensive income	(174)	90	(162)	85

The Group is within the scope of the Pillar Two model rules published by the Organisation for Economic Co-operation and Development (OECD). The Group operates in several countries where Pillar Two legislation has been enacted and is effective for fiscal years beginning on or after 1 January 2024. However, no current tax expense related to Pillar Two income taxes was recognised in 2024 and 2025 because the Group benefits from the "Transitional Safe Harbour" relief under the Pillar Two legislation.

10. Segment information

The Group is organised into business units based on their products and services. During the current period, the Group has not changed the organisation of their reportable segments from the last annual financial statements.

The Group comprises the following main business segments:

Segment 1:	Oil refinery
Segment 2:	Lube base oil refinery
Segment 3:	Aromatics and LAB
Segment 4:	Power generation
Segment 5:	Solvent
Segment 6:	Ethanol
Segment 7:	Olefins
Segment 8:	Others

The following tables present revenue and operating results information regarding the Group's operating segments for the three-month and nine-month periods ended 30 September 2025 and 2024:

(Unit: Million Baht)

	Consolidated financial statements for the three-month period ended 30 September 2025									
	Oil refinery	Lube base oil refinery	Aromatics and LAB	Power generation	Solvent	Ethanol	Olefins	Others	Elimination	Total
Revenue from sales										
- External customers	69,234	2,972	2,931	976	3,793	143	-	-	-	80,049
- Inter-segment	11,806	825	6,313	1,319	30	86	-	1,558	(21,937)	-
Total	81,040	3,797	9,244	2,295	3,823	229	-	1,558	(21,937)	80,049
Segment profit (loss) before income tax expense	6,720	576	(302)	258	147	(50)	(86)	1,105	(5,740)	2,628
Timing of revenue recognition										
- At a point in time	81,040	3,797	9,244	2,015	3,823	229	-	1,558	(21,832)	79,874
- Over time	-	-	-	280	-	-	-	-	(105)	175
Total revenue	81,040	3,797	9,244	2,295	3,823	229	-	1,558	(21,937)	80,049

(Unit: Million Baht)

	Consolidated financial statements for the three-month period ended 30 September 2024									
	Oil refinery	Lube base oil refinery	Aromatics and LAB	Power generation	Solvent	Ethanol	Olefins	Others	Elimination	Total
Revenue from sales										
- External customers	92,745	5,047	5,864	1,034	5,047	281	-	-	-	110,018
- Inter-segment	25,076	1,814	14,538	1,887	52	193	-	1,729	(45,289)	-
Total	117,821	6,861	20,402	2,921	5,099	474	-	1,729	(45,289)	110,018
Segment profit (loss) before income tax expense	(3,189)	396	295	389	(3)	(32)	(71)	63	(3,139)	(5,291)
Timing of revenue recognition										
- At a point in time	117,821	6,861	20,402	2,619	5,099	474	-	1,729	(45,150)	109,855
- Over time	-	-	-	302	-	-	-	-	(139)	163
Total revenue	117,821	6,861	20,402	2,921	5,099	474	-	1,729	(45,289)	110,018

(Unit: Million Baht)

	Consolidated financial statements for the nine-month period ended 30 September 2025									
	Oil refinery	Lube base oil refinery	Aromatics and LAB	Power generation	Solvent	Ethanol	Olefins	Others	Elimination	Total
Revenue from sales										
- External customers	245,327	11,953	12,398	3,272	12,057	398	-	-	-	285,405
- Inter-segment	53,790	3,801	29,931	5,001	114	365	-	5,016	(98,018)	-
Total	299,117	15,754	42,329	8,273	12,171	763	-	5,016	(98,018)	285,405
Segment profit (loss) before income tax expense	7,937	2,104	288	1,308	243	(58)	6,262	3,725	(7,985)	13,823
Timing of revenue recognition										
- At a point in time	299,117	15,754	42,329	7,269	12,171	763	-	5,016	(97,630)	284,789
- Over time	-	-	-	1,004	-	-	-	-	(388)	616
Total revenue	299,117	15,754	42,329	8,273	12,171	763	-	5,016	(98,018)	285,405

(Unit: Million Baht)

	Consolidated financial statements for the nine-month period ended 30 September 2024									
	Oil refinery	Lube base oil refinery	Aromatics and LAB	Power generation	Solvent	Ethanol	Olefins	Others	Elimination	Total
Revenue from sales										
- External customers	292,038	13,650	18,945	3,412	15,060	790	-	-	-	343,895
- Inter-segment	76,717	5,491	43,621	5,619	126	545	-	5,246	(137,365)	-
Total	368,755	19,141	62,566	9,031	15,186	1,335	-	5,246	(137,365)	343,895
Segment profit (loss) before income tax expense	8,996	940	2,052	1,447	424	(41)	(365)	1,336	(5,995)	8,794
Timing of revenue recognition										
- At a point in time	368,755	19,141	62,566	7,966	15,186	1,335	-	5,246	(136,933)	343,262
- Over time	-	-	-	1,065	-	-	-	-	(432)	633
Total revenue	368,755	19,141	62,566	9,031	15,186	1,335	-	5,246	(137,365)	343,895

11. Dividends

Dividends	Approved by	Total dividends	Dividend per share
		(Million Baht)	(Baht)
Final dividends for 2023	Annual General Meeting of the shareholders on 11 April 2024	6,142	2.75
The Interim dividends for 2024	Director meeting on 30 August 2024	2,681	1.20
Total for 2024		8,823	3.95
Final dividends for 2024	Annual General Meeting of the shareholders on 9 April 2025	1,564	0.70
The Interim dividends for 2025	Director meeting on 28 August 2025	1,787	0.80
Total for 2025		3,351	1.50

12. Commitments and contingent liabilities

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	30 September 2025	31 December 2024	30 September 2025	31 December 2024
		(Audited)		(Audited)
Capital commitments				
Project construction agreements	19,144	11,376	18,934	10,912
Total	19,144	11,376	18,934	10,912
Other commitments				
Letters of guarantee issued by financial institutions	2,036	1,850	1,347	1,230
Crude oil and raw material purchase agreements	51,601	58,156	51,601	58,156
Total	53,637	60,006	52,948	59,386

Interest Rate Swap Contracts

The Company has entered into interest rate swap contracts with various financial institutions to manage exposure and fluctuations in interest rate on long-term loans in Thai Baht. As at 30 September 2025, the Company had contracts with a notional amount of Baht 7,500 million to exchange the fixed interest rate to floating interest rate based on THOR plus certain fixed margin per annum (31 December 2024: Baht 7,500 million). The swap contracts are effective from July 2022 to March 2027.

Cross Currency Swap Contracts

The Company has entered into cross currency swap contracts with local financial institutions for hedging foreign exchange and interest rate exposure of its current and future long-term debts in US dollar currency. As at 30 September 2025, the Company had notional amount totaling US dollar 1,532 million (31 December 2024: US dollar 623 million). A counterparty agrees to pay the interest and the notional amount according to the terms and conditions in the contracts. The swap contracts are effective from March 2020 to October 2039. The contract that hedges against foreign exchange and interest rate risks, which is linked to sustainability operations, will have its interest payments reduced upon meeting the conditions specified in the contract, if the Sustainability Performance Targets are achieved.

Forward Foreign Exchange Contracts

The Company has entered into a Forward Foreign Exchange Contract with several financial institutions in the country to hedge against the risk of exchange rate fluctuations on long-term financial liabilities denominated in US dollar, which had an outstanding balance of US dollar 200 million as of 30 September 2025 (31 December 2024: US dollar 200 million). The contracting parties have agreed to settle payments between each other according to the conditions and terms specified in the contract. The contract period is from September 2024 to November 2028. Some parts of the Forward Foreign Exchange Contract that are linked to sustainability operations will have their exchange rates reduced when the conditions specified in the contract are met, if the Sustainability Performance Targets are achieved.

Oil Price Crack Spread Swap Contracts

The Group and the Company have oil price crack spread swap and time spread swap contracts with foreign companies and related parties (counterparties). The Company has or the counterparties have commitments to make payments for the differences between the fixed price and floating price of each period.

As at 30 September 2025, the Group had oil volume under the contracts totaling 23.71 million barrels and 0.01 million metric tons and the Company had oil volume totaling 23.70 million barrels and 0.02 million metric tons (31 December 2024: The Group had oil volume under the contracts totaling 1.58 million barrels and the Company had oil volume totaling 1.58 million barrels).

13. Financial Instruments

13.1 Fair value of financial instruments

The majority of the Group's financial instruments are short-term in nature or carrying interest at rates close to the market interest rates.The estimated fair value of financial liabilities, in comparison with the related amounts carried in the statement of financial position, is as follows:

(Unit: Million Baht)

	Consolidated financial statements			
	30 September 2025		31 December 2024	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial Liability				
Debentures	103,719	95,573	128,892	108,398

(Unit: Million Baht)

	Separate financial statements			
	30 September 2025		31 December 2024	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial Liabilities				
Long-term loans from related party	72,785	71,910	94,983	73,272
Debentures	31,124	34,077	35,257	36,067

13.2 Fair value hierarchy

As at 30 September 2025, the Group had the financial assets and financial liabilities that were measured at fair value using different levels of inputs as follows:

(Unit: Million Baht)

	Consolidated financial statements as at 30 September 2025			
	Level 1	Level 2	Level 3	Total
Assets				
Financial assets at fair value through profit or loss				
Debt investments	265	-	432	697
Financial assets at fair value through other comprehensive income				
Equity investments of listed company	11,174	-	-	11,174
Equity investments of non-listed company	-	-	197	197
Derivatives				
Current				
Oil price crack spread swap and time spread swap contracts	-	364	-	364
Liabilities				
Derivatives				
Current				
Oil price crack spread swap and time spread swap contracts	-	114	-	114
Forward foreign exchange contracts	-	1	-	1
Non-current				
Forward foreign exchange contracts	-	289	-	289
Interest rate swap contracts	-	34	-	34
Derivatives used for hedge accounting				
Cross currency swap contracts	-	5,164	-	5,164
Financial liabilities not measured at fair value				
Debentures	-	95,573	-	95,573

(Unit: Million Baht)

	Consolidated financial statements as at 31 December 2024			
	Level 1	Level 2	Level 3	Total
Assets				
Financial assets at fair value through profit or loss				
Debt investments	274	-	412	686
Financial assets at fair value through other comprehensive income				
Equity investments of listed company	11,106	-	-	11,106
Equity investments of non-listed company	-	-	207	207
Derivatives				
Current				
Oil price crack spread swap and time spread swap contracts	-	55	-	55
Forward foreign exchange contracts	-	3	-	3
Liabilities				
Derivatives				
Current				
Oil price crack spread swap and time spread swap contracts	-	3	-	3
Non-current				
Forward foreign exchange contracts	-	50	-	50
Interest rate swap contracts	-	188	-	188
Derivatives used for hedge accounting				
Cross currency swap contracts	-	2,408	-	2,408
Financial liabilities not measured at fair value				
Debentures	-	108,398	-	108,398

(Unit: Million Baht)

	Separate financial statements as at 30 September 2025			
	Level 1	Level 2	Level 3	Total
Assets				
Financial assets at fair value through profit or loss				
Debt investments	265	-	-	265
Financial assets at fair value through other comprehensive income				
Equity investments of listed company	10,926	-	-	10,926
Equity investments of non-listed company	-	-	2	2
Derivatives				
Current				
Oil price crack spread swap and time spread swap contracts	-	365	-	365
Liabilities				
Derivatives				
Current				
Oil price crack spread swap and time spread swap contracts	-	116	-	116
Non-current				
Forward foreign exchange contracts	-	289	-	289
Interest rate swap contracts	-	34	-	34
Derivatives used for hedge accounting				
Cross currency swap contracts	-	5,164	-	5,164
Financial liabilities not measured at fair value				
Long-term loans from related party	-	71,910	-	71,910
Debentures	-	34,077	-	34,077

(Unit: Million Baht)

	Separate financial statements as at 31 December 2024			
	Level 1	Level 2	Level 3	Total
Assets				
Financial assets at fair value through profit or loss				
Debt investments	274	-	-	274
Financial assets at fair value through other comprehensive income				
Equity investments of listed company	10,785	-	-	10,785
Equity investments of non-listed company	-	-	2	2
Derivatives				
Current				
Oil price crack spread swap and time spread swap contracts	-	55	-	55
Liabilities				
Derivatives				
Current				
Oil price crack spread swap and time spread swap contracts	-	3	-	3
Non-current				
Forward foreign exchange contracts	-	50	-	50
Interest rate swap contracts	-	188	-	188
Derivatives used for hedge accounting				
Cross currency swap contracts	-	2,408	-	2,408
Financial liabilities not measured at fair value				
Long-term loans from related party	-	73,272	-	73,272
Debentures	-	36,067	-	36,067

During the current period, there were no changes in the methods and the assumptions used to estimate the fair value of financial instruments and there were no transfers between the levels of the fair value hierarchy.

14. Investment in Clean Fuel Project

Increase of the investment cost

As disclosed in Note 37 to financial statements for the year ended 2024, the Extraordinary General Meeting of Shareholders No. 1/2025 held on 21 February 2025 resolved to approve an increase of the investment cost in an amount of approximately Baht 63,028 million, approximately equivalent US dollar 1,776 million, with the interest during construction of approximately Baht 17,922 million, approximately equivalent US dollar 505 million. The total investment value of the CFP project to be approximately Baht 241,472 million, approximately equivalent US dollar 7,151 million, with the interest during construction of approximately Baht 37,216 million, approximately equivalent US dollar 1,078 million. During the period, the Company has engaged several new contractors for continue projects in accordance with the Company's plan.

The Enforcement of security in respect of the Clean Fuel Project (CFP)

During the nine-month period ended 30 September 2025, the Company has enforced security provided under the EPC contract between the Company and the Consortium of PSS Netherlands B.V. (Offshore Contractor) and an unincorporated joint venture of Samsung E&A (Thailand) Co., Ltd., Petrofac South East Asia Pte. Ltd., and Saipem Singapore Pte. Ltd. (Onshore Contractor) (collectively, the "Consortium"), in accordance with the EPC contract in an amount of approximately Baht 15,084 million, approximately equivalent to US dollar 441 million. The Company received such enforcement proceeds and recorded the transaction by deducting the cost of construction in progress of the CFP Project amounting to approximately Baht 14,312 million, recording other income amounting to approximately Baht 106 million and deducting advance payment amounting to approximately Baht 666 million.

Termination of the Engineering, Procurement and Construction Contract (EPC contract)

On 24 April 2025, the Company exercised its right to terminate the EPC contract with immediate effect due to the Contractor's failure to perform its obligations in accordance with the EPC contract. The Company assures that the termination of the EPC Contract will not impact the completion of the CFP Project. The Company already has a plan to complete the CFP Project in place which aims for completion of the CFP Project in the third quarter of 2028 and has engaged a consultant with expertise and experience to enhance efficiency in engineering, procurement, and construction management to support the Company in managing each stage of the project until completion. The remaining work of the CFP Project will be performed by contractors with proven capabilities and experience to ensure that all remaining work on the CFP Project will be successfully completed in accordance with the Company's plan.

Arbitration proceedings relating to the Clean Fuel Project

On 19 February 2025, Samsung E&A (Thailand) Co., Ltd. and Saipem Singapore Pte. Ltd. (together "the Claimants"), who are members of the Consortium which the Company entered the EPC contract with, initiated arbitration proceedings against the Company at the Singapore International Arbitration Centre to dispute between the Claimants and the Company in connection with the EPC contract, in relation to the Company's enforcement of security provided by the Consortium in an amount of approximately US dollar 358 million. The Claimants allege that the Company's exercise of its rights under the security was premature and improper and claim for damages against the Company for losses which are yet to be particularized. However, the Company affirms that it complied with the terms of the EPC Contract and the Claimants' claims are without merit and, on 25 March 2025, the Company filed its response to defend such claims and bring counterclaims against the Claimants in the Arbitration.

15. Approval of interim financial statements

These interim financial statements were authorised for issue by the Company's Board of Audit Committee on 7 November 2025

Independent Auditor's Report

To the Shareholders of Thai Oil Public Company Limited

Opinion

I have audited the accompanying consolidated financial statements of Thai Oil Public Company Limited and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2024, and the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for the year then ended, and notes to the consolidated financial statements, including material accounting policy information, and have also audited the separate financial statements of Thai Oil Public Company Limited for the same period (collectively "the financial statements").

In my opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Thai Oil Public Company Limited and its subsidiaries and of Thai Oil Public Company Limited as at 31 December 2024, their financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards.

Basis for Opinion

I conducted my audit in accordance with Thai Standards on Auditing. My responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of my report. I am independent of the Group in accordance with the *Code of Ethics for Professional Accountants including Independence Standards* issued by the Federation of Accounting Professions (Code of Ethics for Professional Accountants) that are relevant to my audit of the financial statements, and I have fulfilled my other ethical responsibilities in accordance with the Code of Ethics for Professional Accountants. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Key Audit Matters

Key audit matters are those matters that, in my professional judgement, were of most significance in my audit of the financial statements of the current period. These matters were addressed in the context of my audit of the financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on these matters.

I have fulfilled the responsibilities described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of my report, including in relation to these matters. Accordingly, my audit included the performance of procedures designed to respond to my assessment of the risks of material misstatement of the financial statements. The results of my audit procedures, including the procedures performed to address the matters below, provide the basis for my audit opinion on the accompanying financial statements as a whole.

Key audit matters and how audit procedures respond to each matter are described below.

Allowance for diminution in value of inventories

The balance of the Group's inventories is significant to the financial statements while the Group's raw materials and finished goods are commodities, which are exposed to price volatility. The inventories are measured at the lower of cost or net realisable value. I focused on the estimation of the net realisable value of inventory, as disclosed in Note 11 to the financial statements, since it is an area requiring significant management judgment and may affect the valuation of inventories at the end of the reporting period.

I have examined the allowance for diminution in value of inventories of the Group as follows.

- Gained an understanding of and assessed the design and implementation of internal controls and tested the effectiveness of the controls related to the estimation of allowance for diminution in value of inventories.
- Evaluated the methodology used to calculate the net realisable value of inventories at the end of reporting period, considering the market price used through comparison with the expected selling price of commodity, and tested the calculation.
- Assessed the disclosures made in the notes to the financial statements in relation to the allowance for diminution in value of inventories.

Other Information

Management is responsible for the other information. The other information comprise the information included in annual report of the Group, but does not include the financial statements and my auditor's report thereon.

My opinion on the financial statements does not cover the other information and I do not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work I have performed, I conclude that there is a material misstatement of this other information, I am required to report that fact. I have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Thai Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Thai Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Thai Standards on Auditing, I exercise professional judgement and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit 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 Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide those charged with governance with a statement that I have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on my independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, I determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. I describe these matters in my auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, I determine that a matter should not be communicated in my report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

I am responsible for the audit resulting in this independent auditor's report.

Kessirin Pinpuvadol
Certified Public Accountant (Thailand) No. 7325

EY Office Limited
Bangkok: 14 February 2025

Thai Oil Public Company Limited and its subsidiaries

Statement of financial position

As at 31 December 2024

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2024	2023	2024	2023
Assets					
Current assets					
Cash and cash equivalents	*7*	29,042,414,201	28,431,620,650	25,571,833,933	23,736,906,709
Short-term investments in financial assets	*8*	10,695,313,674	5,944,539,560	10,526,504,000	5,774,645,000
Trade receivables	*9*	27,600,682,542	31,154,418,362	28,032,855,839	31,899,944,117
Other receivables	*10*	2,212,275,254	2,353,195,206	2,284,007,201	2,398,157,893
Current portion of finance lease receivables		-	-	348,995,897	307,103,777
Receivables from oil fuel fund		144,305,894	624,548,280	144,305,894	624,548,280
Short-term loans to related parties	*6*	-	-	232,884,660	934,382,650
Inventories	*11*	40,577,073,852	52,655,827,049	35,750,471,175	47,174,183,274
Derivative assets	*35*	58,417,303	218,987,454	55,170,187	188,127,115
Prepaid corporate income tax		1,367,686,941	2,197,393,961	920,793,407	1,769,103,579
Value added tax receivables		523,671,031	1,790,795,406	-	1,285,504,086
Total current assets		112,221,840,692	125,371,325,928	103,867,822,193	116,092,606,480
Non-current assets					
Financial assets measured at fair value through profit or loss	*35*	685,885,445	721,837,723	274,212,827	314,353,497
Financial assets measured at fair value through other comprehensive income	*35*	11,313,204,350	14,252,714,196	10,786,964,840	13,677,187,445
Investments in subsidiaries	*12*	-	-	41,280,364,907	41,280,364,907
Investments in joint ventures and associates	*13*	31,427,042,900	32,039,270,297	981,869,921	981,869,921
Long-term loans to related party	*6*	-	-	9,987,401,324	9,985,938,541
Finance lease receivables, net of current portion		-	-	837,977,171	837,111,270
Investment properties	*14*	102,520,270	102,520,270	1,185,363,847	1,185,363,847
Property, plant and equipment	*15*	224,152,542,964	217,479,180,745	197,165,193,042	188,182,742,991
Right-of-use assets	*16*	20,381,870,278	22,223,561,873	19,737,295,242	21,508,999,826
Goodwill	*17*	798,331,641	826,150,184	-	-
Intangible assets	*18*	2,457,118,737	2,403,654,692	979,066,346	860,863,095
Deferred tax assets	*19*	3,460,468,779	2,502,706,442	3,290,865,040	1,906,800,870
Other non-current assets		2,009,605,683	2,069,778,702	1,979,308,217	1,999,440,398
Total non-current assets		296,788,591,047	294,621,375,124	288,485,882,724	282,721,036,608
Total assets		409,010,431,739	419,992,701,052	392,353,704,917	398,813,643,088

The accompanying notes to financial statements are an integral part of the financial statements.

Thai Oil Public Company Limited and its subsidiaries

Statement of financial position (continued)

As at 31 December 2024

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2024	2023	2024	2023
Liabilities and shareholders' equity					
Current liabilities					
Short-term loans from financial institutions	*20*	2,724,907,771	3,198,430,994	-	-
Short-term loans from related parties	*6*	-	-	7,648,229,779	5,185,565,423
Trade payables	*21*	51,579,311,499	50,184,442,001	55,024,570,837	54,495,483,064
Other payables	*22*	3,698,074,325	3,910,475,893	3,285,287,957	3,218,319,234
Current portion of long-term loans from financial institutions	*23*	3,776,683,165	3,060,928,045	3,100,835,791	2,374,126,219
Current portion of debentures	*24*	1,399,902,447	7,000,000,000	1,399,902,447	7,000,000,000
Derivative liabilities	*35*	2,522,011	29,222,411	2,674,647	47,259,392
Current portion of lease liabilities	*16*	1,444,930,111	1,402,283,432	1,423,313,177	1,355,538,212
Income tax payables		445,422,211	3,153,972,139	-	2,729,195,655
Excise duty payables		2,536,116,442	1,463,127,267	2,535,199,427	1,461,835,339
Short-term provision		55,222,957	98,436,300	55,222,957	98,436,300
Total current liabilities		67,663,092,939	73,501,318,482	74,475,237,019	77,965,758,838
Non-current liabilities					
Long-term loans from financial institutions, net of current portion	*23*	19,225,919,235	16,034,540,475	17,738,612,905	13,837,711,964
Long-term loans from a third party	*23*	178,937,500	191,437,500	-	-
Long-term loans from related party	*6*	-	-	94,983,244,353	98,651,501,113
Debentures, net of current portion	*24*	127,491,540,413	133,631,605,245	33,856,580,087	35,292,022,580
Derivative liabilities	*35*	2,645,709,471	1,109,069,159	2,645,709,471	1,109,069,159
Lease liabilities, net of current portion	*16*	18,111,685,878	19,688,452,996	18,324,587,462	19,866,558,337
Deferred tax liabilities	*19*	17,740,807	15,751,580	-	-
Provision for long-term employee benefits	*25*	2,644,907,143	2,714,494,330	1,934,349,520	2,069,970,365
Other non-current liabilities		4,846,001,318	4,794,340,688	5,032,642,225	4,934,452,286
Total non-current liabilities		175,162,441,765	178,179,691,973	174,515,726,023	175,761,285,804
Total liabilities		242,825,534,704	251,681,010,455	248,990,963,042	253,727,044,642

The accompanying notes to financial statements are an integral part of the financial statements.

Thai Oil Public Company Limited and its subsidiaries

Statement of financial position (continued)

As at 31 December 2024

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2024	2023	2024	2023
Shareholders' equity					
Share capital					
Registered					
2,233,835,566 ordinary shares of Baht 10 each		22,338,355,660	22,338,355,660	22,338,355,660	22,338,355,660
Issued and fully paid up					
2,233,835,566 ordinary shares of Baht 10 each		22,338,355,660	22,338,355,660	22,338,355,660	22,338,355,660
Share premium on ordinary shares		10,698,724,259	10,698,724,259	10,698,724,259	10,698,724,259
Other deficits		(4,344,397,287)	(4,342,658,559)	(9,146,634,394)	(9,146,634,394)
Retained earnings					
Appropriated - statutory reserve	*26*	2,315,147,873	2,315,147,873	2,315,147,873	2,315,147,873
Appropriated - other reserves		244,500,000	244,500,000	244,500,000	244,500,000
Unappropriated		142,423,975,363	141,288,329,958	127,829,354,558	126,766,514,243
Other components of shareholders' equity		(10,229,972,816)	(6,974,640,316)	(10,916,706,081)	(8,130,009,195)
Equity attributable to owners of the Company		163,446,333,052	165,567,758,875	143,362,741,875	145,086,598,446
Non-controlling interests of the subsidiaries		2,738,563,983	2,743,931,722	-	-
Total shareholders' equity		166,184,897,035	168,311,690,597	143,362,741,875	145,086,598,446
Total liabilities and shareholders' equity		409,010,431,739	419,992,701,052	392,353,704,917	398,813,643,088

The accompanying notes to financial statements are an integral part of the financial statements.

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Directors

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Thai Oil Public Company Limited and its subsidiaries

Statement of income

For the year ended 31 December 2024

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2024	2023	2024	2023
Revenue					
Revenue from sales		455,856,874,971	459,402,194,950	486,610,365,532	492,054,518,624
Subsidy from oil fuel fund		10,920,126,475	9,841,693,460	10,920,126,475	9,841,693,460
Total revenue		466,777,001,446	469,243,888,410	497,530,492,007	501,896,212,084
Cost of sales		(450,010,192,381)	(436,163,527,244)	(490,182,395,136)	(477,488,207,787)
Gross profit		16,766,809,065	33,080,361,166	7,348,096,871	24,408,004,297
Dividend income		269,115,182	200,774,430	6,442,367,800	6,905,946,641
Gain (loss) from financial instruments		360,350,957	(2,849,952,347)	297,677,202	(2,873,490,433)
Gain on exchange		52,470,488	212,826,718	24,896,366	253,985,452
Gain on repurchase of debentures	*24*	1,134,184,913	-	-	-
Other income	*27*	1,739,188,788	1,138,175,482	4,116,970,135	3,477,187,708
Selling and distribution expenses		(1,140,438,218)	(949,961,377)	(190,008,521)	(108,638,695)
Administrative expenses		(2,733,670,103)	(2,570,854,449)	(3,219,278,594)	(3,097,255,409)
Share of profit (loss) from investments in joint ventures and associates	*13*	(131,683,267)	83,753,805	-	-
Operating profit		16,316,327,805	28,345,123,428	14,820,721,259	28,965,739,561
Finance cost		(4,051,967,126)	(4,088,509,884)	(3,999,275,061)	(3,754,545,176)
Profit before income tax expenses		12,264,360,679	24,256,613,544	10,821,446,198	25,211,194,385
Income tax expenses	*19*	(2,283,366,383)	(4,671,722,061)	(935,623,371)	(3,698,311,432)
Profit for the year		9,980,994,296	19,584,891,483	9,885,822,827	21,512,882,953
Profit attributable to:					
Equity holders of the Company		9,958,627,917	19,443,165,644	9,885,822,827	21,512,882,953
Non-controlling interests of the subsidiaries		22,366,379	141,725,839		
		9,980,994,296	19,584,891,483		
Earnings per share	*30*				
Basic earnings per share					
Profit attributable to equity holders of the Company		4.46	8.70	4.43	9.63

The accompanying notes to financial statements are an integral part of the financial statements.

Thai Oil Public Company Limited and its subsidiaries

Statement of comprehensive income

For the year ended 31 December 2024

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2024	2023	2024	2023
Profit for the year		9,980,994,296	19,584,891,483	9,885,822,827	21,512,882,953
Other comprehensive income:					
Other comprehensive income to be reclassified					
to profit or loss in subsequent periods:					
Cash flow hedges, net of income tax	*34*	191,736,649	1,481,858,771	191,736,649	1,434,589,915
Cost of hedging, net of income tax	*34*	(666,255,452)	11,112,355	(666,255,452)	11,112,355
Exchange differences on translation of financial statements in foreign currency		(383,005,579)	(405,977,626)	-	-
Share of other comprehensive income from investments in associates under equity method, net of income tax	*13*	(26,934,926)	45,781,296	-	-
Other comprehensive income to be reclassified to profit or loss in subsequent periods, net of income tax		(884,459,308)	1,132,774,796	(474,518,803)	1,445,702,270
Other comprehensive income not to be reclassified					
to profit or loss in subsequent periods					
Actuarial loss, net of income tax	*25*	-	(2,151,044)	-	-
Changes in fair value of financial assets at fair value through other comprehensive income, net of income tax		(2,369,335,300)	(5,793,057,494)	(2,312,178,083)	(5,526,669,565)
Other comprehensive income not to be reclassified to profit or loss in subsequent periods, net of income tax		(2,369,335,300)	(5,795,208,538)	(2,312,178,083)	(5,526,669,565)
Other comprehensive income for the year		(3,253,794,608)	(4,662,433,742)	(2,786,696,886)	(4,080,967,295)
Total comprehensive income for the year		6,727,199,688	14,922,457,741	7,099,125,941	17,431,915,658
Total comprehensive income attributable to:					
Equity holders of the Company		6,703,295,417	14,782,358,010	7,099,125,941	17,431,915,658
Non-controlling interests of the subsidiaries		23,904,271	140,099,731		
		6,727,199,688	14,922,457,741		

The accompanying notes to financial statements are an integral part of the financial statements.

Thai Oil Public Company Limited and its subsidiaries

Statement of changes in shareholders' equity

For the year ended 31 December 2024

(Unit: Baht)

	Consolidated financial statements															
	Equity attributable to owners of the Company															
									Other components of shareholders' equity							
									Other comprehensive income							
			Other surpluses (deficits)													
	Issued and fully paid-up share capital	Share premium on ordinary shares	Surplus on business combination under common control	Deficits from the change in the ownership interests in subsidiaries	Deficits from the change in the net assets in an associate	Retained earnings: Appropriated - statutory reserve	Retained earnings: Appropriated - other reserves	Retained earnings: Unappropriated	Changes in value of financial assets designated at fair value through other comprehensive	Exchange differences on translation of financial statements in foreign currency	Cash flow hedges	Cost of hedging	Share of other comprehensive income from an associate	Total equity attributable to owners of the Company	Non-controlling interests of the subsidiaries	Total shareholders' equity
Balance as at 1 January 2023	22,338,355,660	10,698,724,259	330,835,954	(4,673,494,513)	-	2,315,147,873	244,500,000	127,095,140,237	1,424,545,139	2,036,600,865	(5,286,235,619)	(671,096,521)	181,277,933	156,034,301,267	2,623,070,199	158,657,371,466
Profit for the year	-	-	-	-	-	-	-	19,443,165,644	-	-	-	-	-	19,443,165,644	141,725,839	19,584,891,483
Other comprehensive income for the year	-	-	-	-	-	-	-	(1,075,521)	(5,793,057,494)	(405,427,041)	1,481,858,771	11,112,355	45,781,296	(4,660,807,634)	(1,626,108)	(4,662,433,742)
Total comprehensive income for the year	-	-	-	-	-	-	-	19,442,090,123	(5,793,057,494)	(405,427,041)	1,481,858,771	11,112,355	45,781,296	14,782,358,010	140,099,731	14,922,457,741
Dividend paid (Note 32)	-	-	-	-	-	-	-	(5,248,900,402)	-	-	-	-	-	(5,248,900,402)	(19,238,208)	(5,268,138,610)
Balance as at 31 December 2023	22,338,355,660	10,698,724,259	330,835,954	(4,673,494,513)	-	2,315,147,873	244,500,000	141,288,329,958	(4,368,512,355)	1,631,173,824	(3,804,376,848)	(659,984,166)	227,059,229	165,567,758,875	2,743,931,722	168,311,690,597
Balance as at 1 January 2024	22,338,355,660	10,698,724,259	330,835,954	(4,673,494,513)	-	2,315,147,873	244,500,000	141,288,329,958	(4,368,512,355)	1,631,173,824	(3,804,376,848)	(659,984,166)	227,059,229	165,567,758,875	2,743,931,722	168,311,690,597
Profit for the year	-	-	-	-	-	-	-	9,958,627,917	-	-	-	-	-	9,958,627,917	22,366,379	9,980,994,296
Other comprehensive income for the year	-	-	-	-	-	-	-	-	(2,369,335,300)	(384,543,471)	191,736,649	(666,255,452)	(26,934,926)	(3,255,332,500)	1,537,892	(3,253,794,608)
Total comprehensive income for the year	-	-	-	-	-	-	-	9,958,627,917	(2,369,335,300)	(384,543,471)	191,736,649	(666,255,452)	(26,934,926)	6,703,295,417	23,904,271	6,727,199,688
Dividend paid (Note 32)	-	-	-	-	-	-	-	(8,822,982,512)	-	-	-	-	-	(8,822,982,512)	(29,272,010)	(8,852,254,522)
Deficits from the change in the net assets in an associate	-	-	-	-	(1,738,728)	-	-	-	-	-	-	-	-	(1,738,728)	-	(1,738,728)
Balance as at 31 December 2024	22,338,355,660	10,698,724,259	330,835,954	(4,673,494,513)	(1,738,728)	2,315,147,873	244,500,000	142,423,975,363	(6,737,847,655)	1,246,630,353	(3,612,640,199)	(1,326,239,618)	200,124,303	163,446,333,052	2,738,563,983	166,184,897,035

The accompanying notes to financial statements are an integral part of the financial statements.

Thai Oil Public Company Limited and its subsidiaries

Statement of changes in shareholders' equity (continued)

For the year ended 31 December 2024

(Unit: Baht)

	Separate financial statements									
							Other components of shareholdes' equity			
							Other comprehensive income			
	Issued and fully paid-up share capital	Share premium on ordinary shares	Other deficits Deficits on business combination under common control	Retained earnings Appropriated - statutory reserve	Appropriated - other reserves	Unappropriated	Change in value of financial assets disinaged at fair value through other comprehensive income	Cash flow hedges	Cost of hedging	Total shareholders' equity
Balance as at 1 January 2023	22,338,355,660	10,698,724,259	(9,243,166,763)	2,315,147,873	244,500,000	110,599,064,061	1,861,021,384	(5,238,966,763)	(671,096,521)	132,903,583,190
Profit for the year	-	-	-	-	-	21,512,882,953	-	-	-	21,512,882,953
Other comprehensive income for the year	-	-	-	-	-	-	(5,526,669,565)	1,434,589,915	11,112,355	(4,080,967,295)
Total comprehensive income for the year	-	-	-	-	-	21,512,882,953	(5,526,669,565)	1,434,589,915	11,112,355	17,431,915,658
Dividend paid (Note 32)	-	-	-	-	-	(5,248,900,402)	-	-	-	(5,248,900,402)
Disposal of assets acquired from business combination under common control	-	-	96,532,369	-	-	(96,532,369)	-	-	-	-
Balance as at 31 December 2023	22,338,355,660	10,698,724,259	(9,146,634,394)	2,315,147,873	244,500,000	126,766,514,243	(3,665,648,181)	(3,804,376,848)	(659,984,166)	145,086,598,446
Balance as at 1 January 2024	22,338,355,660	10,698,724,259	(9,146,634,394)	2,315,147,873	244,500,000	126,766,514,243	(3,665,648,181)	(3,804,376,848)	(659,984,166)	145,086,598,446
Profit for the year	-	-	-	-	-	9,885,822,827	-	-	-	9,885,822,827
Other comprehensive income for the year	-	-	-	-	-	-	(2,312,178,083)	191,736,649	(666,255,452)	(2,786,696,886)
Total comprehensive income for the year	-	-	-	-	-	9,885,822,827	(2,312,178,083)	191,736,649	(666,255,452)	7,099,125,941
Dividend paid (Note 32)	-	-	-	-	-	(8,822,982,512)	-	-	-	(8,822,982,512)
Balance as at 31 December 2024	22,338,355,660	10,698,724,259	(9,146,634,394)	2,315,147,873	244,500,000	127,829,354,558	(5,977,826,264)	(3,612,640,199)	(1,326,239,618)	143,362,741,875

The accompanying notes to financial statements are an integral part of the financial statements.

Thai Oil Public Company Limited and its subsidiaries

Statement of cash flows

For the year ended 31 December 2024

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2024	2023	2024	2023
Cash flows from operating activities					
Profit before income tax expenses		12,264,360,679	24,256,613,544	10,821,446,198	25,211,194,385
Adjustments to reconcile profit before tax to					
net cash provided by (paid from) operating activities:					
Depreciation and amortisation	*28*	8,105,923,279	7,799,461,684	5,444,994,100	5,175,044,946
Expected credit loss		44,887,250	2,990,407	-	-
Loss (reversal) of reduction of inventory to net realisable value	*11*	(581,989,391)	(55,459,025)	(643,694,265)	221,343,137
Finance cost		4,051,967,126	4,088,509,884	3,999,275,061	3,754,545,176
Unrealised loss on exchange		220,061,224	778,724,483	359,640,408	730,525,498
Share of loss (profit) from investments in joint ventures					
and associates	*13*	131,683,267	(83,753,805)	-	-
Dividends income		(269,115,182)	(200,774,430)	(6,442,367,800)	(6,905,946,641)
Difference on lease termination		(1,630,411)	-	-	-
Gain on repurchase of debentures		(1,134,184,913)	-	-	-
Loss (gain) on disposal of property, plant and equipment		(861,322)	34,151	(341,689)	(61,859,575)
Loss on write-off of property, plant and equipment		31,414	8,922,645	80	8,899,721
Short-term provision (reversal)		(43,213,343)	98,436,300	(43,213,343)	98,436,300
Loss on hedging of forecasted revenue transaction		300,882,833	224,946,715	300,882,833	224,946,715
Loss from changes in fair value of financial assets		76,144,576	117,814,302	40,140,670	66,827,060
Unrealised loss from changes in fair value of derivatives		223,077,655	130,507,872	177,580,088	156,696,406
Amortisation of advance receipts for land lease and others		(33,838,569)	(23,680,612)	(896,998,030)	(673,343,161)
Profit from operating activities before					
changes in operating assets and liabilities		23,354,186,172	37,143,294,115	13,117,344,311	28,007,309,967
Operating assets (increase) decrease					
Trade receivables		3,612,746,669	(2,531,565,450)	3,860,718,528	(2,198,325,874)
Other receivables		177,710,761	2,041,682,804	44,390,637	1,921,268,029
Receivables from oil fuel fund		480,242,386	15,259,071,699	480,242,386	15,259,071,699
Inventories		12,660,742,588	2,742,775,472	12,067,406,364	2,458,682,448
Value added tax receivables		1,267,124,375	166,331,913	1,285,504,086	(153,031,411)
Other non-current assets		(77,916,518)	43,238,973	(84,766,964)	10,967,051
Operating liabilities increase (decrease)					
Trade payables		1,358,053,052	(23,967,425,095)	529,083,839	(24,132,659,907)
Other payables		(153,593,506)	(1,586,943,196)	1,075,807,048	(621,552,848)
Excise duty payables		1,072,989,175	1,011,289,680	1,073,364,088	1,010,080,202
Other non-current liabilities		(59,409,406)	(51,053,506)	(63,844,203)	(40,616,901)
Cash from operating activities		43,692,875,748	30,270,697,409	33,385,250,120	21,521,192,455
Corporate income tax paid		(4,338,173,443)	(2,182,928,753)	(3,428,678,094)	(1,336,374,046)
Net cash flows from operating activities		39,354,702,305	28,087,768,656	29,956,572,026	20,184,818,409

The accompanying notes to financial statements are an integral part of the financial statements.

Thai Oil Public Company Limited and its subsidiaries

Statement of cash flows (continued)

For the year ended 31 December 2024

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2024	2023	2024	2023
Cash flows from investing activities					
Dividends received		531,789,355	594,809,552	6,442,367,800	6,905,946,641
Decrease in deposits at a financial institution used as collateral		-	342,942,122	-	-
Repayment of short-term investments in financial assets		(4,961,284,613)	(5,766,216,853)	(4,961,284,000)	(5,589,161,000)
Cash payment for purchase of financial assets measured at fair value through other comprehensive income		(22,186,689)	(99,662,001)	-	-
Cash payment for purchase of financial assets measured at fair value through profit or loss		(43,258,313)	(45,276,631)	-	-
Cash receipt from short-term loans to related parties	*6*	-	-	743,157,440	1,135,281,727
Cash payment for short-term loans to related parties	*6*	-	-	(40,000,000)	-
Cash receipt from long-term loans to related party	*6*	-	-	-	2,000,000,000
Cash payment for long-term loans to related party	*6*	-	-	-	(9,985,000,000)
Proceeds from long-term loans to savings co-operative of employees		42,566,623	187,259	40,941,101	-
Cash payment for long-term loans to savings co-operative of employees		(1,950,000)	(118,225,368)	-	(116,975,368)
Proceeds from disposal of property, plant and equipment		1,226,022	133,899	629,458	72,837,832
Cash payment for acquisition of property, plant and equipment		(8,955,471,314)	(14,503,557,443)	(7,888,489,839)	(12,912,018,397)
Cash payment for acquisition of intangible assets		(364,862,478)	(96,266,773)	(223,319,520)	(90,542,213)
Cash payment for right-of-use assets		(235,150,138)	(814,139)	(235,150,138)	(814,139)
Proceeds from liquidation of joint ventures		-	4,769	-	-
Net cash flows used in investing activities		(14,008,581,545)	(19,691,941,607)	(6,121,147,698)	(18,580,444,917)

The accompanying notes to financial statements are an integral part of the financial statements.

Thai Oil Public Company Limited and its subsidiaries

Statement of cash flows (continued)

For the year ended 31 December 2024

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2024	2023	2024	2023
Cash flows from financing activities					
Finance costs paid		(7,618,362,343)	(7,653,521,747)	(8,572,279,120)	(8,323,443,642)
Dividends paid to the shareholders of the Company	*32*	(8,822,982,512)	(5,248,900,402)	(8,822,982,512)	(5,248,900,402)
Dividends paid to non-controlling interests		(29,272,011)	(19,238,208)	-	-
Proceeds from short-term loans from financial institutions	*20*	12,184,371,803	11,480,657,635	-	-
Repayment of short-term loans from financial institutions	*20*	(12,634,399,332)	(10,150,168,786)	-	-
Proceeds from short-term loans from related parties	*6*	-	-	2,462,664,356	4,864,627,766
Proceeds from long-term loans from financial institutions	*23*	7,054,106,886	6,012,208,056	7,000,000,000	6,000,000,000
Repayment of long-term loans from financial institutions	*23*	(3,159,714,033)	(9,651,308,085)	(2,400,000,000)	(1,700,000,000)
Repayment of long-term loans from a third party	*23*	(12,500,000)	(25,000,000)	-	-
Repayment of long-term loans from related parties	*6*	-	-	(3,239,632,734)	(9,365,156,104)
Cash payment for loans financing fee	*23*	(4,125,000)	(28,178,562)	(4,125,000)	(28,133,562)
Proceeds from issuance of debentures	*24*	-	10,000,000,000	-	10,000,000,000
Redemption and repurchase of debentures	*24*	(10,302,612,049)	(16,381,352,255)	(7,000,000,000)	(7,109,024,651)
Cash payment for debenture financing fee	*24*	-	(3,944,712)	-	(3,944,712)
Payment of principal portion of lease liabilities		(1,281,649,884)	(1,403,133,971)	(1,228,939,233)	(1,346,015,721)
Net cash flows used in financing activities		(24,627,138,475)	(23,071,881,037)	(21,805,294,243)	(12,259,991,028)
Net increase (decrease) in cash and cash equivalents		718,982,285	(14,676,053,988)	2,030,130,085	(10,655,617,536)
Cash and cash equivalents at beginning of the year		28,431,620,650	43,576,141,447	23,736,906,709	34,787,150,811
Effect of exchange rate changes		(108,188,734)	(468,466,809)	(195,202,861)	(394,626,566)
Cash and cash equivalents at end of the year	*7*	29,042,414,201	28,431,620,650	25,571,833,933	23,736,906,709
Supplemental disclosure of cash flows information					
Payables on acquisition of property, plant and equipment		371,659,723	350,341,399	193,002,181	176,741,783
Payables on acquisition of intangible assets		55,953,735	134,122,039	39,192,217	15,309,165
Increase in right-of-use assets and lease liabilities		275,175,113	131,946,159	278,206,467	122,155,829

The accompanying notes to financial statements are an integral part of the financial statements.

1. General information

Thai Oil Public Company Limited (the Company) is a public limited company which is incorporated and domiciled in Thailand and is listed on the Stock Exchange of Thailand. The parent company is PTT Public Company Limited (45.03% of shareholding as at 31 December 2024).

The principal business operations of the Group is oil refinery and distributions, petrochemicals, lube base oil and other businesses in domestic and overseas. The address of the Company's registered offices and refinery plant as follows:

Head office:	555/1 Energy Complex Building A, 11th Floor, Vibhavadi Rangsit Road, Kwang Chatuchak, Khet Chatuchak, Bangkok 10900
Sriracha office and refinery plant:	42/1 Moo 1, Sukhumvit Road Km. 124, Tambol Tungsukla, Amphur Sriracha, Chonburi 20230

2. Basis of preparation

2.1 The financial statements have been prepared in accordance with Thai Financial Reporting Standards enunciated under the Accounting Professions Act B.E. 2547 and their presentation has been made in compliance with the stipulations of the Notification of the Department of Business Development, issued under the Accounting Act B.E. 2543, including guidelines promulgated by the Federation of Accounting Professions (TFAC), and the financial reporting requirements of the Securities and Exchange Commission under the Securities and Exchange Act, B.E. 2535.

The financial statements have been prepared on a historical cost basis except where otherwise disclosed in the accounting policies.

The financial statements in Thai language are the official statutory financial statements of the Company. The financial statements in English language have been translated from the Thai language financial statements.

2.2 Basis of consolidation

a) The consolidated financial statements include the financial statements of Thai Oil Public Company Limited ("the Company") and the following subsidiary companies ("the subsidiaries") (collectively as "the Group"). The details of subsidiaries as disclosed in Note 12.2.

b) The financial statements of the subsidiaries are prepared using the same accounting policies as the Company.

3. New financial reporting standards

3.1 Financial reporting standards that became effective in the current year

During the year, the Group has adopted the revised financial reporting standards which are effective for fiscal years beginning on or after 1 January 2024. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and providing accounting guidance for users of the standards.

The adoption of these financial reporting standards does not have any significant impact on the Group's financial statements.

3.2 Financial reporting standards that will become effective for fiscal years beginning on or after 1 January 2025

The Federation of Accounting Professions issued a number of revised financial reporting standards, which are effective for fiscal years beginning on or after 1 January 2025. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and providing accounting guidance for users of the standards.

The management of the Group believes that adoption of these amendments will not have any significant impact on the Group's financial statements.

4. Accounting policies

4.1 Principles of consolidation

a) Subsidiaries

Subsidiaries are all entities over which the Group has control. The Group controls an entity when the Group is exposed to, 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. Subsidiaries are consolidated from the date on which control is transferred to the Group until the date that control ceases.

In the separate financial statements, investments in subsidiaries are accounted for using cost method.

b) Associates

Associates are all entities over which the Group has significant influence but does not have control or joint control. Investments in associates are accounted for using the equity method of accounting, in consolidated financial statements.

In the separate financial statements, investments in associates are accounted for using cost method.

c) Equity method

The investment is initially recognised at cost which is consideration paid and directly attributable costs.

The Group's subsequently recognises shares of its associates and joint ventures' profits or losses and other comprehensive income in the profit or loss and other comprehensive income. The subsequent cumulative movements are adjusted against the carrying amount of the investment.

When the Group's share of losses in associates and joint ventures equals or exceeds its interest in the associates and joint ventures, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associates and joint ventures.

d) Changes in ownership interests

The Group treats transactions with non-controlling interests that do not result in a loss of control as transactions with equity owners of the Group. A difference between the amount of the adjustment to non-controlling interests to reflect their relative interest in the subsidiary and any consideration paid or received is recognised within equity.

If the ownership interest in associates and joint ventures is reduced but significant influence and joint control is retained, only a proportionate share of the amounts previously recognised in other comprehensive income is reclassified to profit or loss where appropriate. Profit or loss from reduce of the ownership interest in associates and joint ventures is recognise in profit or loss.

When the Group losses control, joint control or significant influence over investments, any retained interest in the investment is remeasured to its fair value, with the change in carrying amount recognised in profit or loss. The fair value becomes the initial carrying amount of the retained interest which is reclassified to investment in an associate, or a joint venture or a financial asset accordingly.

Upon the disposal of investments, the difference between the net disposal proceeds and the carrying amount of the investments is recorded in profit or loss.

e) Intercompany transactions on consolidation

Intra-group transactions, balances and unrealised gains on transactions are eliminated. Unrealised gains on transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interest in the associates and joint ventures. Unrealised losses are also eliminated in the same manner unless the transaction provides evidence of an impairment of the asset transferred.

4.2 Foreign currency translation

a) Functional and presentation currency

The financial statements are presented in Thai Baht, which is the Group's and the Company's functional and presentation currency.

b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions.

Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the profit or loss.

When the group recognises gains and losses on a non-monetary item that recognised in other comprehensive income, all of gains and losses on foreign exchange components will also be recognised in other comprehensive income. On the other hand, if gains and losses on a non-monetary item is recognised in profit and loss, all gains and losses on foreign exchange components will be recognised in profit and loss.

c) Group companies

The operational results and financial position of the Group's entities (none of which has the currency of a hyper-inflationary economy) that have a different functional currency from the Group's presentation currency are translated into the presentation currency as follows.

- Assets and liabilities are translated at the closing rate at the date of respective statement of financial position
- Income and expenses in statement of profit or loss and statement of comprehensive income are translated at average exchange rates and
- All resulting exchange differences are recognised in other comprehensive income.

4.3 Cash and cash equivalents

Cash and cash equivalents consist of cash in hand and at banks, and all highly liquid investments with an original maturity of three months or less and not subject to withdrawal restrictions.

Bank overdrafts are included in current liabilities in the statements of financial position.

4.4 Inventories

Inventories are stated at the lower of cost and net realisable value.

Cost of inventories is determined by the weighted average method. Cost of raw materials comprise all purchase cost and costs directly attributable to the acquisition of the inventory less all attributable discounts. The cost of finished goods and work in progress comprises raw materials, direct labour, other direct costs, overhead costs and directly attributable costs to bring the inventories to their present location and condition.

4.5 Investment property

Investment property, which is land, is held for long-term rental yields or for capital appreciation and is not occupied by the Group.

Investment properties are measured initially at cost, including transaction costs. Subsequently to initial recognition, investment properties are stated at cost less allowance for loss on impairment (if any). Land is not depreciated.

On disposal of investment properties, the difference between the net disposal proceeds and the carrying amount of the asset is recognised in profit or loss in the period when the asset is derecognised.

4.6 Property, plant and equipment

Land is stated at cost. Buildings and equipment are stated at cost less accumulated depreciation and allowance for loss on impairment of assets (if any). The costs comprise any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating. These include decommissioning costs, delivery and restoration costs, and any obligation associated with either its acquisition or a consequence of having used the items.

Subsequent costs are included carrying value of replace items, only when it is probable that future economic benefit associated with the items will flow to the group. In the case of replacement, the Group writes off carrying value of replaced items. Repair and maintenance costs are recognized in profit or loss during the financial period in which they are incurred.

Depreciation of plant and equipment is calculated by reference to their costs on the straight-line basis over the following estimated useful lives:

	Years
Buildings	10 - 30
Leasehold improvements	5 - 20
Refinery plant and equipment	20 - 35
Lube base oil refinery plants and equipment	16 - 30
Petrochemical plants	10 - 30
Power plants	20 - 25
Machinery, equipment and plant equipment	3 - 20
Oil and liquid chemical tankers and crew boats	10 - 25
Furniture, fixtures, office equipment and others	3 - 10
Vehicles	5

Depreciation is included in determining income.

No depreciation is provided on land and assets under construction.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on disposal of an asset is included in profit or loss when the asset is derecognised.

4.7 Goodwill

Goodwill is initially recorded at cost, which equals to the excess of cost of business combination over the fair value of the net assets acquired. If the fair value of the net assets acquired exceeds the cost of business combination, the excess is immediately recognised as gain in profit or loss.

Goodwill is carried at cost less any accumulated impairment losses. Goodwill is tested for impairment annually and when circumstances indicate that the carrying value may be impaired.

For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the Company's cash-generating units (or group of cash-generating units) that are expected to benefit from the synergies of the combination. The Company estimates the recoverable amount of each cash-generating unit (or group of cash-generating units) to which the goodwill relates. Where the recoverable amount of the cash-generating unit is less than the carrying amount, an impairment loss is recognised in profit or loss. Impairment losses relating to goodwill cannot be reversed in future periods.

4.8 Intangible assets

Intangible assets acquired through business combination are initially recognised at their fair value on the date of business acquisition while intangible assets acquired in other cases are recognised at cost. Following the initial recognition, the intangible assets are carried at cost less any accumulated amortisation and any accumulated impairment losses (if any).

Intangible assets with finite lives are amortised on the straight-line basis over the economic useful life and tested for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method of such intangible assets are reviewed at least at each financial year end. The amortisation expense is charged to profit or loss.

A summary of the intangible assets with finite useful lives is as follows:

	Years
License fee	10 - 25
Computer software	5 - 10
Patent	10

4.9 Impairment of non-financial assets

At the end of each reporting period, the Group performs impairment reviews in respect of the property, plant and equipment, right-of-use assets, investment properties and other intangible assets whenever events or changes in circumstances indicate that an asset may be impaired. The Group also carries out annual impairment reviews in respect of goodwill. An impairment loss is recognised when the recoverable amount of an asset, which is the higher of the asset's fair value less costs to sell and its value in use, is less than the carrying amount.

An impairment loss is recognised in profit or loss.

In the assessment of asset impairment (except for goodwill), if there is any indication that previously recognised impairment losses may no longer exist or may have decreased, the Group estimates the asset's recoverable amount. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised. The increased carrying amount of the asset attributable to a reversal of an impairment loss shall not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in profit or loss.

4.10 Leases

At inception of contract, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The Group as a lessee

The Group applied a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. At the commencement date of the lease (i.e. the date the underlying asset is available for use), the Group recognises right-of-use assets representing the right to use underlying assets and lease liabilities based on lease payments.

Right-of-use assets

Right-of-use assets are measured at cost, less accumulated depreciation, any accumulated impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities initially recognised, initial direct costs incurred, [and] lease payments made at or before the commencement date of the lease, and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located less any lease incentives received.

Depreciation of right-of-use assets are calculated by reference to their costs, on the straight-line basis over the shorter of their estimated useful lives and the lease term.

Land	33	years
Buildings	3	years
Equipment	5	years
Oil tanker	10	years
Motor vehicles	5	years

If ownership of the leased asset is transferred to the Group at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

Lease liabilities

Lease liabilities are measured at the present value of the lease payments to be made over the lease term. The lease payments include fixed payments less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be payable under residual value guarantees. Moreover, the lease payments include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating the lease, if the lease term reflects the Group exercising an option to terminate. Variable lease payments that do not depend on an index or a rate are recognised as expenses in the period in which the event or condition that triggers the payment occurs.

The Group discounted the present value of the lease payments by the interest rate implicit in the lease or the Group's incremental borrowing rate. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a change in the lease term, a change in the lease payments or a change in the assessment of an option to purchase the underlying asset.

Short-term leases and leases of low-value assets

A lease that has a lease term less than or equal to 12 months from commencement date or a lease of low-value assets is recognised as expenses on a straight-line basis over the lease term.

The Group as a lessor

A lease that transfers substantially all the risks and rewards incidental to ownership of an underlying asset to a lessee is classified as finance leases. As at the commencement date, an asset held under a finance lease is recognised as a receivable at an amount equal to the net investment in the lease or the present value of the lease payments receivable and any unguaranteed residual value. Subsequently, finance income is recognised over the lease term to reflect a constant periodic rate of return on the net investment in the lease.

A lease is classified as an operating lease if it does not transfer substantially all the risks and rewards incidental to ownership of an underlying asset to a lessee. Lease receivables from operating leases is recognised as income in profit or loss on a straight-line basis over the lease term. Initial direct costs incurred in obtaining an operating lease are added to the carrying amount of the underlying assets and recognised as an expense over the lease term on the same basis as the lease income.

4.11 Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of the respective assets. All other borrowing costs are expensed in the period they are incurred. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

4.12 Employee benefits

a) Short-term employee benefits

Salaries, wages, bonuses and contributions to the social security fund are recognised as expenses when incurred.

b) Post-employment benefits and other long-term employee benefits

Defined contribution plans

The Company and its employees have jointly established a provident fund. The fund is monthly contributed by employees and by the Company. The fund's assets are held in a separate trust fund and the Company's contributions are recognised as expenses when incurred.

Defined benefit plans and other long-term employee benefits

The Group has obligations in respect of the severance payments it must make to employees upon retirement under labor law and other employee benefit plans. The Group treats these severance payment obligations as a defined benefit plan. In addition, the Group provides other long-term employee benefit plan, namely long service awards.

The obligation under the defined benefit plan and other long-term employee benefit plans is determined by a professionally qualified independent actuary based on actuarial techniques, using the projected unit credit method.

Actuarial gains and losses arising from defined benefit plans are recognised immediately in other comprehensive income.

Actuarial gains and losses arising from other long-term benefits are recognised immediately in profit and loss.

Past service costs are recognised in profit or loss on the earlier of the date of the plan amendment or curtailment and the date that the Group recognises restructuring-related costs.

4.13 Provisions

Provisions are recognised when the Group has a present obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation. The increase in the provision due to passage of time is recognised as finance costs.

4.14 Government grants

Grants from the government are recognised at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with attached conditions.

Government grants relating to income are deferred and recognised in profit or loss as subsidy over the period necessary to match them with the costs they are intended to compensate.

Subsidy from oil fuel fund is calculated based on the conditions and rates announced by the Energy Policy and Planning committees.

The Group separately presents government grants from revenue from sales in profit or loss.

4.15 Revenue recognition

Sales of goods

Revenue from contracts with customers that is derived in connection with oil refinery, lube base oil refinery, aromatics and LAB, solvent and ethanol business is recognised when the Group satisfies a performance obligation by transferring the petroleum products, petrochemical products and other products to customers via vessel, truck, or pipeline. A transfer of goods generally occurs at the same time when legal ownerships are transferred to customers and customers have physical goods in their possession. In that case, the Group satisfies a performance obligation at a point in time.

Electricity and steam sales are recognised on delivery of electricity and steam and customers' acceptance, and measured based on actual electricity and steam delivered and the price as set out in the electricity and steam purchase agreements.

Revenue is measured at the amount of the consideration received or receivable, excluding value added tax.

4.16 Financial instruments

The Group initially measures financial assets at its fair value plus, in the case of financial assets that are not measured at fair value through profit or loss, transaction costs. However, trade receivables, that do not contain a significant financing component, are measured at the transaction price as disclosed in the accounting policy relating to revenue recognition.

Classification and measurement of financial assets

Financial assets are classified, at initial recognition, as to be subsequently measured at amortised cost, fair value through other comprehensive income ("FVOCI"), or fair value through profit or loss ("FVTPL"). The classification of financial assets at initial recognition is driven by the Group's business model for managing the financial assets and the contractual cash flows characteristics of the financial assets.

Financial assets at amortised cost

The Group measures financial assets at amortised cost if the financial asset is held in order to collect contractual cash flows and 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 at amortised cost are subsequently measured using the effective interest rate ("EIR") method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

Financial assets designated at FVOCI (equity instruments)

Upon initial recognition, the Group can elect to irrevocably classify its equity investments which are not held for trading as equity instruments designated at FVOCI. The classification is determined on an instrument-by-instrument basis.

Gains and losses recognised in other comprehensive income on these financial assets are never recycled to profit or loss.

Dividends are recognised as other income in profit or loss, except when the dividends clearly represent a recovery of part of the cost of the financial asset, in which case, the gains are recognised in other comprehensive income.

Equity instruments designated at FVOCI are not subject to impairment assessment.

Financial assets at FVTPL

Financial assets measured at FVTPL are carried in the statement of financial position at fair value with net changes in fair value including interest income recognised in profit or loss.

These financial assets include derivatives, security investments held for trading, equity investments which the Group has not irrevocably elected to classify at FVOCI and financial assets with cash flows that are not solely payments of principal and interest.

Dividends on listed equity investments are recognised as other income in profit or loss.

Classification and measurement of financial liabilities

Except for derivative liabilities, at initial recognition the Group's financial liabilities are recognised at fair value net of transaction costs and classified as liabilities to be subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR amortisation process. In determining amortised cost, the Group takes into account any *discounts or premiums on acquisition and* fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance costs in profit or loss.

Financial guarantee contracts

Provisions on financial guarantee contracts are initially recognised in the financial statements at fair value. The provision under each guarantee contract is subsequently measured at the higher of the amount initially recognised less cumulative amortisation, and the allowance for expected credit losses.

The guarantee fee income is recognised as other income in profit or loss by amortising the initial fair value on a straight-line basis over the life of the guarantee.

Derecognition of financial instruments

A financial asset is primarily derecognised when the rights to receive cash flows from the asset have expired or have been transferred and either the Group has transferred substantially all the risks and rewards of the asset, or the Group has transferred control of the asset.

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in profit or loss.

Impairment of financial assets

The Group recognises an allowance for expected credit losses ("ECLs") for all debt instruments not held at FVTPL. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate.

For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure (a lifetime ECL).

The Group considers a significant increase in credit risk to have occurred when contractual payments are more than 30 days past due and considers a financial asset as credit impaired or default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to have a significant increase in credit risk and to be in default using other internal or external information, such as credit rating of issuers.

For trade receivables and contract assets, the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date.

ECLs are calculated based on its historical credit loss experience and adjusted for forward-looking factors specific to the debtors and the economic environment.

A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

Impairment of financial guarantee contract

The Company estimates the expected credit losses of financial guarantee contracts based on the present value of the payments expected to be made to the holder of the contract if a default occurs, discounted using a risk-adjusted interest rate relevant to the exposure. The expected credit losses related to financial guarantee contracts are recognised under.

Offsetting of financial instruments

Financial assets and financial liabilities are offset, and the net amount is reported in the statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

4.17 Derivatives and hedge accounting

The Group uses derivatives, such as forward currency contracts, cross currency swaps, interest rate swaps and commodity forward contracts, to hedge its foreign currency risks, interest rate risks and commodity price risks, respectively.

Derivatives are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. The subsequent changes including interest income are recognised in profit or loss unless the derivative is designated and effective as a hedging instrument under cash flow hedge. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

Derivatives are presented as non-current assets or non-current liabilities if the remaining maturity of the instrument is more than 12 months and it is not due to be realised or settled within 12 months. Other derivatives are presented as current assets or current liabilities.

Hedge accounting

For the purpose of hedge accounting, hedges are classified as:

- Fair value hedges when hedging the exposure to changes in the fair value of a recognised asset or liability or an unrecognised firm commitment
- Cash flow hedges when hedging the exposure to a variability in cash flows that is either attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction or the foreign currency risk in an unrecognised firm commitment
- Hedges of a net investment in a foreign operation

At the inception of a hedging relationship, the Group formally designates and documents the hedging relationship to which it wishes to apply hedge accounting and the risk management objective and strategy for undertaking the hedge.

A hedging relationship qualifies for hedge accounting if it meets all of the following hedge effectiveness requirements:

- There is ‘an economic relationship’ between the hedged item and the hedging instrument.
- The effect of credit risk is not the dominant factor in the value changes that result from that economic relationship.
- The hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Group actually hedges and the quantity of the hedging instrument that the Group actually uses to hedge that quantity of hedged item.

Hedges that meet all of the qualifying criteria for hedge accounting are accounted for, as described below:

Cash flow hedges

The effective portion of the gain or loss on the hedging instrument is recognised in other comprehensive income in the cash flow hedge reserve, while any ineffective portion is recognised immediately in profit or loss.

The way cash flow hedge reserve accumulated in other comprehensive income are subsequently accounted for, depends on the nature of the underlying hedged transaction. If the hedged transaction subsequently results in the recognition of a non-financial item, the reserve accumulated in equity is removed from the separate component of equity and included in the initial cost or other carrying amount of the hedged asset or liability. This is not a reclassification adjustment and is not recognised in other comprehensive income for the period. For any other cash flow hedges, the reserve accumulated in other comprehensive income is subsequently reclassified to profit or loss as a reclassification adjustment in the same period which the hedged cash flows affect profit or loss.

When a hedging instrument expires, is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, any cumulative deferred gain or loss and deferred costs of hedging in equity at that time remains in equity until the forecast transaction occurs. When the forecast transaction is no longer expected to occur, the cumulative gain or loss and deferred costs of hedging that were reported in equity are immediately reclassified to profit or loss.

4.18 Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between buyer and seller (market participants) at the measurement date. The Group applies a quoted market price in an active market to measure their assets and liabilities that are required to be measured at fair value by relevant financial reporting standards. Except in case of no active market of an identical asset or liability or when a quoted market price is not available, the Group measures fair value using valuation technique that are appropriate in the circumstances and maximises the use of relevant observable inputs related to assets and liabilities that are required to be measured at fair value.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy into three levels based on categorise of input to be used in fair value measurement as follows:

Level 1 - Use of quoted market prices in an active market for such assets or liabilities

Level 2 - Use of other observable inputs for such assets or liabilities, whether directly or indirectly

Level 3 - Use of unobservable inputs such as estimates of future cash flows

At the end of each reporting period, the Group determines whether transfers have occurred between levels within the fair value hierarchy for assets and liabilities held at the end of the reporting period that are measured at fair value on a recurring basis.

5. Significant accounting judgements and estimates

The preparation of financial statements in conformity with financial reporting standards at times requires management to make subjective judgements and estimates regarding matters that are inherently uncertain. These judgements and estimates affect reported amounts and disclosures; and actual results could differ from these estimates. Significant judgements and estimates are as follows:

Allowance for diminution in value of inventories

Net realisable value is the estimate of the selling price in the ordinary course of business, less applicable variable selling expenses. Allowance is made, where necessary, for obsolete, slow-moving and defective inventories.

Goodwill

The initial recognition and measurement of goodwill, and subsequent impairment testing, require management to make estimates of cash flows to be generated by the asset or the cash-generating units and to choose a suitable discount rate in order to calculate the present value of those cash flows.

Investment in associate

The management of the Company determined that the Group has significant influence on PT Chandra Asri Pacific Tbk (CAP) and classified investment as an investment in associate, even though the Group only holds less than 20% of shares and voting rights. This is because the Company hold 15% of the shares in CAP through its subsidiary, PT TOP Investment Indonesia. The Company has delegated representatives to serve as the directors of CAP's Board of Commissioners and executives to serve as the members of CAP's Board of Directors. In addition, the Company also entered into the Feedstock Sale and Purchase Agreement with CAP.

Lease

Determining the lease term with extension and termination options - The Group as a lessee

In determining the lease term, the management is required to exercise judgement in assessing whether the Group is reasonably certain to exercise the option to extend or terminate the lease considering all relevant facts and circumstances that create an economic incentive for the Group to exercise either the extension or termination option.

Estimating the incremental borrowing rate - The Group as a lessee

The Group cannot readily determine the interest rate implicit in the lease, therefore, the management is required to exercise judgement in estimating its incremental borrowing rate to discount lease liabilities. The incremental borrowing rate is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment.

Post-employment benefits under defined benefit plans and other long-term employee benefits

The obligation under the defined benefit plan and other long-term employee benefit plans is determined based on actuarial techniques. Such determination is made based on various assumptions, including discount rate, future salary increase rate, mortality rate and staff turnover rate.

6. Related party transactions

During the years, the Group had significant business transactions with related parties. Such transactions, which are summarised below, arose in the ordinary course of business.

Relationships with key management and other related parties were as follows:

Name of entities	Country of incorporation	Nature of relationships
PTT Public Company Limited	Thailand	Parent company
Thai Paraxylene Co., Ltd.	Thailand	Subsidiary and/or common directors and/or the Company's management as a director
LABIX Co., Ltd.	Thailand	Indirect subsidiary and/or common directors and/or the Company's management as a director
Thai Lube Base Public Company Limited	Thailand	Subsidiary and/or the Company's management as a director
PT TOP Investment Indonesia	Republic of Indonesia	Subsidiary and/or the Company's management as a director
PT Chandra Asri Pacific Tbk.	Republic of Indonesia	Indirect associate and/or common directors
Thaioil Energy Services Co., Ltd.	Thailand	Subsidiary and/or the Company's management as a director
Thaioil Solvent Co., Ltd.	Thailand	Subsidiary and/or the Company's management as a director
TOPNEXT International Co., Ltd	Thailand	Indirect subsidiary and/or common directors/ or the Company's management as a director
Sak Chaisidhi Co., Ltd.	Thailand	Indirect subsidiary and/or the Company's management as a director
TOP Solvent (Vietnam) LLC.	Socialist Republic of Vietnam	Indirect subsidiary and/or the Company's management as a director
PT Tirta Surya Raya	Republic of Indonesia	Indirect subsidiary

Name of entities	Country of incorporation	Nature of relationships
JSKEM Private Limited	Republic of Singapore	Indirect subsidiary and/or the Company's management as a director
TOPNEXT India Private Limited	Republic of India	Subsidiary of indirect subsidiary
TOP SPP Co., Ltd.	Thailand	Subsidiary and/or the Company's management as a director
Thaioil Ethanol Co., Ltd.	Thailand	Subsidiary and/or the Company's management as a director
Sapthip Co., Ltd.	Thailand	Indirect subsidiary and/or common directors and/ or the Company's management as a director
Sapthip Green Energy Co., Ltd.	Thailand	Subsidiary of indirect subsidiary and/or the Company's management as a director
Ubon Bio Ethanol Public Co., Ltd.	Thailand	Other related and/or the Company's management as a director
Thaioil Treasury Center Co., Ltd.	Thailand	Subsidiary and/or the Company's management as a director
TOP Ventures Company Limited	Thailand	Indirect subsidiary and/or the Company's management as a director
TOP Ventures Hong Kong Limited	Hong Kong Special Administrative Region	Indirect subsidiary and/or the Company's management as a director
TOP Ventures America LLC	United States of America	Indirect subsidiary and/or the Company's management as a director
PTT Digital Solutions Co., Ltd.	Thailand	Associate and/or the Company's management as a director
PTT Energy Solutions Co., Ltd. (1)	Thailand	Associate and/or common directors and/or the Company's management as a director
Thai Petroleum Pipeline Co., Ltd.	Thailand	Associate and/or the Company's management as a director
Global Power Synergy Public Co., Ltd.	Thailand	Other related and/or common directors
Sarn Palung Social Enterprise Company Limited	Thailand	Other related and/or the Company's management as director
PTT Oil and Retail Business Public Company Limited	Thailand	Subsidiary of the parent company and/or common directors
Business Services Alliance Co., Ltd.	Thailand	Subsidiary of the parent company

Name of entities	Country of incorporation	Nature of relationships
PTT Exploration and Production Public Company Limited	Thailand	Subsidiary of the parent company
PTT International Trading Pte. Ltd.	Republic of Singapore	Subsidiary of the parent company
PTT Treasury Center Co., Ltd.	Thailand	Subsidiary of the parent company
Energy Complex Co., Ltd.	Thailand	Subsidiary of the parent company
IRPC Public Company Limited	Thailand	Subsidiary of the parent company
PTT Tank Terminal Co., Ltd.	Thailand	Subsidiary of the parent company and/or common directors
PTT Global Chemical Public Company Limited	Thailand	Subsidiary of the parent company
PTT LNG Co., Ltd.	Thailand	Subsidiary of the parent company
PTT International Trading London Ltd.	England	Subsidiary of the parent company
PTT International Trading USA Inc.	United States of America	Subsidiary of the parent company
PTT MEA Ltd.	United Arab Emirates	Indirect subsidiary of the parent company
Siam Management Holding Co., Ltd.	Thailand	Indirect subsidiary of the parent company
Mekha V Co., Ltd.	Thailand	Indirect subsidiary of the parent company
Energy Recovery Unit Co., Ltd.	Thailand	Indirect subsidiary of the parent company
Combined Heat and Power Producing Co., Ltd.	Thailand	Indirect subsidiary of the parent company
Nuplex Resins (Vietnam) Pty Ltd.	Socialist Republic of Vietnam	Indirect subsidiary of the parent company
GC Maintenance & Engineering Co., Ltd.	Thailand	Indirect subsidiary of the parent company
NPC Safety and Environmental	Thailand	Indirect subsidiary of the parent company
Global Green Chemicals Public Company Limited	Thailand	Indirect subsidiary of the parent company
PTT Phenol Co., Ltd.	Thailand	Indirect subsidiary of the parent company
Vencorex (Thailand) Co., Ltd.	Thailand	Indirect subsidiary of the parent company
GC Polyols Co., Ltd.	Thailand	Indirect subsidiary of the parent company
GC-M PTA Company Limited	Thailand	Indirect subsidiary of the parent company
Thai Tank Terminal Ltd.	Thailand	Joint venture of subsidiary of the parent company
IRPC Polyol Co., Ltd.	Thailand	Joint venture of subsidiary of the parent company
Brighter PTT Oil and Retail Business Company Limited	Myanmar	Joint venture of subsidiary of the parent company

(1) On 29 August 2022, the Extraordinary General Meeting of Shareholders of PTT Energy Solutions Company Limited (“PTTES”) passed a resolution approving the dissolution of PTTES. The liquidation process is expected to be completed within 2 years from the date of approval.

The pricing policies for particular types of transactions are explained further below:

Transactions	Pricing policies
Revenue from sale and services, lease income, purchase of goods and assets	Market prices or, where no market price exists, at contractually agreed prices
Interest income and expense	Agreed rates as stipulated in the agreements
Dividend income	Right to receive dividends
Other income and expenses	Contractually agreed prices
Directors' remuneration	Amounts approved by the Group's shareholders

Summarised significant business transactions with related parties are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Parent company				
Revenue from sale	7	2	-	-
Purchase of crude oil and feedstock	323,882	339,577	315,239	329,904
Other income	12	25	12	25
Other expenses	125	122	124	122
Purchase of assets	9	121	9	-
Subsidiaries				
(eliminated from the consolidated financial statements)				
Revenue from sale	-	-	98,513	100,623
Purchase of crude oil and feedstock	-	-	64,988	64,762
Interest income	-	-	470	373
Dividend income	-	-	6,077	6,487
Land lease income	-	-	102	112
Other income	-	-	1,940	1,956
Interest expense	-	-	892	795
Interest expense capitalised as cost of assets	-	-	3,927	3,931
Other expenses	-	-	2,237	1,763
Purchase of assets	-	-	247	230

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Associates				
Revenue from sale	149	317	-	-
Purchase of crude oil and feedstock	1,622	1,131	-	-
Dividend income	-	-	108	242
Other expenses	422	346	419	345
Purchase of assets	74	43	74	43
Subsidiaries of the parent company				
Revenue from sale	217,268	227,341	199,591	212,049
Purchase of crude oil and feedstock	11,589	7,169	7,764	4,314
Other income	90	15	90	15
Interest expense	-	1	-	1
Other expenses	173	60	116	15
Purchase of assets	92	41	92	41
Other related parties				
Revenue from sale	7	2,487	-	2,482
Purchase of crude oil and feedstock	6	-	6	-
Dividend income	259	189	251	169
Other income	21	25	21	25
Other expenses	18	14	-	-
Purchase of assets	3	-	3	-

As at 31 December 2024 and 2023, the balances of the accounts between the Group and those related companies are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Trade receivables - related parties (Note 9)				
Parent company	6	-	-	-
Subsidiaries	-	-	8,098	9,076
An associate	13	146	-	-
Subsidiaries of the parent company	13,219	15,127	11,705	13,872
Other related parties	1	-	-	-
Total	13,239	15,273	19,803	22,948
Other receivables - related parties				
Parent company	676	586	671	582
Subsidiaries	-	-	362	309
An associate	113	68	113	68
Subsidiaries of the parent company	504	670	500	666
Other related party	3	5	3	5
Total	1,296	1,329	1,649	1,630
Derivative liability - related party				
A subsidiary of the parent company	18	-	18	-
Total	18	-	18	-
Finance lease receivables- related parties				
Subsidiaries	-	-	1,187	1,144
Total	-	-	1,187	1,144
Other non-current assets - related parties				
Subsidiaries	-	-	117	88
A subsidiary of the parent company	15	15	15	15
Total	15	15	132	103

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Trade payables - related parties (Note 21)				
Parent company	49,852	48,344	48,754	46,699
Subsidiaries	-	-	5,201	6,443
An associate	150	103	-	-
Subsidiaries of the parent company	304	339	86	188
Total	50,306	48,786	54,041	53,330
Other payables - related parties				
Parent company	1	94	1	-
Subsidiaries	-	-	922	890
Associates	163	134	162	134
Subsidiaries of the parent company	46	17	42	11
Other related parties	3	1	-	-
Total	213	246	1,127	1,035
Finance lease payables - related parties				
Parent company	2	3	2	3
Subsidiaries	-	-	534	508
An associate	4	5	4	5
A subsidiary of the parent company	58	20	58	20
Total	64	28	598	536
Derivative liability - related parties				
Subsidiaries	-	-	-	19
Total	-	-	-	19
Other non-current liabilities - related parties				
Subsidiaries	-	-	733	671
A subsidiary of the parent company	3,092	3,092	3,092	3,092
Other related party	3	3	3	3
Total	3,095	3,095	3,828	3,766

Short-term loans to related parties

Movements of short-term loans to related parties during year ended 31 December 2024 are as follows:

(Unit: Million Baht)

	Separate financial statements				
	Balance as at 1 January 2024	Increase	Decrease	Effect of exchange rate	Balance as at 31 December 2024
Subsidiaries	934	40	(743)	2	233
Total	934	40	(743)	2	233

Interest rates for the year ended 31 December 2024 and 2023 is charged based on BIBOR 3M plus certain fixed margin per annum and SOFR 3M plus certain fixed margin per annum.

Long-term loans to related party

Movements of long-term loans to related party during the year ended 31 December 2024 are as follows:

(Unit: Million Baht)

	Separate financial statements				
	Balance as at 1 January 2024	Increase	Decrease	Amortise of deferred financing fee	Balance as at 31 December 2024
A subsidiary	9,986	-	-	1	9,987
Total	9,986	-	-	1	9,987

On 3 May 2023, the Company entered into a loan agreement with a subsidiary in an amount not exceeding of Baht 10,000 million, with an average interest rate of not exceeding 4.05% per annum throughout the contract period. The agreement is effective for 5 - 15 years. The loan serves the purposes of repaying loans to various financial institutions and financing the operations of an electricity and steam generating expansion project for the subsidiary within the Group.

Short-term loans from related parties

Movements of short-term loans from related parties during the year ended 31 December 2024 are as follows:

(Unit: Million Baht)

	Separate financial statements			
	Balance as at 1 January 2024	Increase	Decrease	Balance as at 31 December 2024
Subsidiaries	5,186	2,462	-	7,648
Total	5,186	2,462	-	7,648

Interest rates for year ended 31 December 2024 and 2023 are charged based on BIBOR 1M plus certain fixed margin per annum.

Long-term loans from related party

Movements of long-term loans from related party during the year ended 31 December 2024 are as follows:

(Unit: Million Baht)

	Separate financial statements					
	Balance as at 1 January 2024	Increase	Decrease	Amortise of deferred financing fee	Effect of exchange rate	Balance as at 31 December 2024
A subsidiary	98,652	-	(3,240)	26	(455)	94,983
Total	98,652	-	(3,240)	26	(455)	94,983

The Company entered into multiple loan agreements with a subsidiary, with repayment due ranging from 2023 to 2050. As at 31 December 2024, the outstanding balance of loans were US dollar 2,779 million. (2023: US dollar 2,878 million) The loans bear fixed interest rates of 3.03% to 5.96% per annum.

Directors and management's benefits

During the years ended 31 December 2024 and 2023, the Group had employee benefit expenses payable to their directors and management as below.

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Short-term employee benefits	78	77	74	71
Total	78	77	74	71

Significant agreements with related parties

During the year ended 31 December 2024, the Group had the following significant agreements with related parties.

Asset Sale and Purchase Agreement for the Energy Recovery Unit (ERU)

The Company has entered into the Asset Sale and Purchase Agreement for the ERU with a related company to support energy and utilities for Clean Fuel Project (CFP) whereby the purchase price is specified in the agreement. The Company will transfer ownership in the ERU to the purchaser upon satisfaction of all the conditions precedent set out in the agreement (Closing Date). Such conditions precedent include the Company's countersigning of the Provisional Acceptance Certificate (PAC) to the contractor and purchaser and seller receive all necessary certification from relevant authorities.

Fuel and Utilities Supply Agreement

The Company has entered into the Fuel and Utilities Supply Agreement with a related company to supply pitch, other fuels and utilities used in the operation of the ERU. The term of the agreement is 25 years from the Closing Date and the parties may agree to extend the term for another 5 years.

Power Purchase Agreement

The Company has entered into the Power Purchase Agreement with a related company to purchase electricity, steam and other by-products generated by the ERU. The term of the agreement is 25 years from the Closing Date and the parties may agree to extend the term for another 5 years.

Operation and Maintenance Services Agreement

The Company has entered into the Operation and Maintenance Services Agreement with a related company to provide the services of operation and maintenance of the ERU. The term of the agreement is 25 years from the Closing Date and the parties may agree to extend the term for another 5 years.

Master Agreement for Business Collaboration

The Company has entered into Master Agreement for Business Collaboration with a parent company in order to assign rules, conditions and guidelines for credit term extension of crude and condensate from 30 days to not exceeding 90 days. Term of the contract is 1 years which will be expired in 31 December 2024. The Company renewed the agreement for another year which will be expired on 31 December 2025.

Feedstock Supply Agreement

The Company has entered into Feedstock Supply Agreement with a parent company. A parent company will supply crude and condensate for the Company's refinery production including hire vessels to deliver crude. Term of the contracts is 3 years which will be expired on 31 December 2024. The Company renewed the agreement with an indefinite term until either party decides to terminate the agreement.

P1 Collaboration Agreement

The Company and subsidiaries have entered into P1 Collaboration Agreement to assign a collaboration guideline between PTT group, the Company and one of the Company's subsidiaries for supplying crude and condensate, petroleum product and petrochemical product, hire vessel, and derivatives related to an export and import of crude and condensate petroleum products and petrochemical products, including managing time charter vessel of the Company. These services will be managed by a related party in order to get a maximum benefit among PTT Group. The term of the contracts is 3 years which will be expired on 31 December 2024. The Company renewed the agreement with an indefinite term until either party decides to terminate the agreement.

7. Cash and cash equivalents

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Cash on hand	1	1	-	-
Deposits held at bank				
- savings and current accounts	21,009	26,461	17,540	21,767
- fixed deposit accounts less than 3 months	8,032	1,970	8,032	1,970
Total	29,042	28,432	25,572	23,737

As at 31 December 2024, the interest rates on deposits in saving accounts are 0.01% - 5.20% per annum (2023: 0.01% - 5.30% per annum).

As at 31 December 2024, the interest rates on deposits in fixed accounts less than 3 months are 4.67% - 4.92% per annum (2023: 6.01% per annum).

8. Short-term investments in financial assets

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Fixed deposit accounts held at bank	10,695	5,945	10,527	5,775
Total	10,695	5,945	10,527	5,775

As at 31 December 2024, fixed deposit accounts held at bank was denominated in US dollar amounting to US dollar 315 million (2023: US dollar 175 million) and bore interest at rates of 4.64% to 5.52% per annum (2023: 5.85% to 6.00% per annum).

9. Trade receivables

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Trade receivables - related parties				
Age of outstanding debts by due date				
Not yet due	13,239	15,273	19,803	22,948
Trade receivables - non related parties				
Age of outstanding debts by due date				
Not yet due	14,019	15,708	8,230	8,952
Past due				
Up to 3 months	343	170	-	-
3 - 6 months	45	7	-	-
Over 1 year	3	2	-	-
Total trade receivables - non related parties	14,410	15,887	8,230	8,952
Less: Allowance for expected credit losses	(48)	(6)	-	-
Total trade receivables - non related parties, net	14,362	15,881	8,230	8,952
Total	27,601	31,154	28,033	31,900

The normal credit term granted by the Group ranges from 7 days to 120 days.

10. Other receivables

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Other accounts receivables	1,721	1,835	2,024	2,114
Prepaid expenses	470	497	239	264
Current portion of long-term loans to savings co-operative of employees	21	21	21	20
Total	2,212	2,353	2,284	2,398

11. Inventories

(Unit: Million Baht)

	Consolidated financial statements					
	Cost		Reduce cost to net realisable value		Inventories - net	
	2024	2023	2024	2023	2024	2023
Crude oil and feedstock	12,844	17,979	(112)	-	12,732	17,979
Materials, spare parts and supplies	2,305	1,863	(13)	(13)	2,292	1,850
Finished and semi-finished oil products	9,703	13,124	(50)	(744)	9,653	12,380
Goods in transit						
Crude oil	15,783	20,298	-	-	15,783	20,298
Materials, spare parts and supplies	40	34	-	-	40	34
Finished and semi-finished oil products	77	115	-	-	77	115
Total	40,752	53,413	(175)	(757)	40,577	52,656

(Unit: Million Baht)

	Separated financial statements					
	Cost		Reduce cost to net realisable value		Inventories - net	
	2024	2023	2024	2023	2024	2023
Crude oil and feedstock	11,759	16,592	-	-	11,759	16,592
Materials, spare parts and supplies	1,769	1,317	-	-	1,769	1,317
Finished and semi-finished oil products	6,422	9,579	-	(644)	6,422	8,935
Goods in transit						
Crude oil	15,783	20,298	-	-	15,783	20,298
Materials, spare parts and supplies	17	32	-	-	17	32
Total	35,750	47,818	-	(644)	35,750	47,174

As at 31 December 2024, the inventories as stated above included a legal reserve amounting to Baht 13,708 million (2023: Baht 12,664 million).

As at 31 December 2024, a subsidiary has pledged inventories of approximately Baht 250 million (2023: Baht 250 million) to secure short-term loans from financial institutions.

Inventories recognised as expenses in cost of sale of goods for the year ended 31 December 2024 and 2023 are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Cost of sale of goods	345,639	359,534	396,374	402,594
(Reversal) reduction of inventory to net realisable value	(582)	(55)	(644)	221
Net	345,057	359,479	395,730	402,815

12. Investments in subsidiaries

12.1 Movements of investments in subsidiaries are as follows:

(Unit: Million Baht)

	Separate financial statements	
	2024	2023
At 1 January	41,280	41,280
Increase in investment	-	-
At 31 December	41,280	41,280

Significant transactions during the year ended 31 December 2024

Indirect subsidiaries

TOP Ventures Hong Kong Limited (TVHK)

In December 2024, Thaioil Treasury Centre Co., Ltd. (“TTC”), a subsidiary of the Group, has paid for additional shares to TOP Ventures Hong Kong Limited (“TVHK”), an indirect subsidiary of the Group, amounting to US dollar 0.84 million or equivalent to Baht 29 million and TTC has fully paid for the shares.

TOP Ventures America LLC (TVUS)

In December 2024, TOP Ventures Hong Kong Limited (“TVHK”), an indirect subsidiary of the Group, has paid for additional shares to TOP Ventures America LLC (“TVUS”), amounting to US dollar 0.67 million or equivalent to Baht 23 million and TVHK has fully paid for the shares.

Significant transactions during the year ended 31 December 2023

Indirect subsidiaries

TOP Ventures Hong Kong Limited (TVHK)

During the year 2023, Thaioil Treasury Centre Co., Ltd. ("TTC"), a subsidiary of the Group, has paid for additional shares to TOP Ventures Hong Kong Limited ("TVHK"), an indirect subsidiary of the Group, amounting to US dollar 5.08 million or equivalent to Baht 176 million and TTC has fully paid for the shares.

TOP Ventures America LLC (TVUS)

In September 2023, TOP Ventures Hong Kong Limited ("TVHK"), an indirect subsidiary of the Group, has paid for additional shares to TOP Ventures America LLC ("TVUS"), amounting to US dollar 2.58 million or equivalent to Baht 91 million and TVHK has fully paid for the shares in September 2023.

TOP Ventures Company Limited (TVTH)

In December 2023, Thaioil Treasury Centre Co., Ltd. ("TTC"), a subsidiary of the Group, has paid for additional shares to TOP Ventures Company Limited ("TVTH"), an indirect subsidiary of the Group, amounting to Baht 10 million.

12.2 The details of subsidiaries are as follows:

(Unit: Million Baht)

			Separate financial statements							
			Percentage of direct shareholding		Paid-up capital		Cost method		Dividend received during the year	
	Country of incorporation	Nature of the business	2024	2023	2024	2023	2024	2023	2024	2023
			(percent)	(percent)						
Thai Paraxylene Co., Ltd. and its subsidiary	Thailand	Paraxylene manufacturing and distribution	99.99	99.99	2,572	2,572	2,161	2,161	1,945	-
- Subsidiary										
LABIX Co., Ltd.	Thailand	Linear Alkyl Benzene manufacturing and distribution	75.00	75.00	4,655	4,655	-	-	-	-
Thai Lube Base Public Company Limited	Thailand	Lube base oil refining and distribution	99.99	99.99	1,758	1,758	1,979	1,979	1,143	2,792
Thaioil Energy Services Co., Ltd.	Thailand	Providing human resource management	99.99	99.99	40	40	40	40	20	3

(Unit: Million Baht)

			Separate financial statements							
			Percentage of direct shareholding		Paid-up capital		Cost method		Dividend received during the year	
	Country of incorporation	Nature of the business	2024	2023	2024	2023	2024	2023	2024	2023
			(percent)	(percent)						
Thaioil Solvent Co., Ltd. and its subsidiaries - Subsidiaries	Thailand	Investment in solvent and chemical business	99.99	99.99	1,250	1,250	1,250	1,250	575	180
TOPNEXT International Company Limited and its subsidiaries	Thailand	Distribution of solvent and chemical products	99.99	99.99	1,200	1,200	-	-	-	-
Sak Chaisidhi Co., Ltd.	Thailand	Solvent and chemical products manufacturing	80.52	80.52	190	190	-	-	-	-
TOP Solvent (Vietnam) LLC.	Socialist Republic of Vietnam	Distribution of solvent and chemical products	100.00	100.00	634	634	-	-	-	-
PT Tirta Surya Raya	Republic of Indonesia	Distribution of solvent and chemical products	77.71	77.71	50	50	-	-	-	-
JSKEM Private Limited and its subsidiary	Republic of Singapore	Distribution of solvent and chemical products	60.00	60.00	2	2	-	-	-	-
TOPNEXT India Private Limited	Republic of India	Distribution of solvent and chemical products	99.99	99.99	-(1)	-(1)	-	-	-	-

(Unit: Million Baht)

			Separate financial statements							
			Percentage of direct shareholding		Paid-up capital		Cost method		Dividend received during the year	
	Country of incorporation	Nature of the business	2024	2023	2024	2023	2024	2023	2024	2023
			(percent)	(percent)						
Thaioil Ethanol Co., Ltd. and its subsidiaries - Subsidiaries	Thailand	Investment in ethanol businesses and alternative	99.99	99.99	1,450	1,450	1,450	1,450	-	5
Sapthip Co., Ltd. and its subsidiaries	Thailand	Ethanol products manufacturing and distribution	50.00	50.00	800	800	-	-	-	-
Sapthip Green Energy Co., Ltd.	Thailand	Biogas power generation and distribution	99.99	99.99	25	25	-	-	-	-
TOP SPP Co., Ltd.	Thailand	Power and stream generation and distribution	99.99	99.99	3,500	3,500	3,500	3,500	2,243	3,360
Thaioil Treasury Center Co., Ltd., and its subsidiaries - Subsidiaries	Thailand	Treasury centre services for the Group's business	99.99	99.99	956	956	956	956	151	147
TOP Ventures Company Limited	Thailand	Investment in venture capital and/or start-up business	99.99	99.99	29	29	-	-	-	-

(Unit: Million Baht)

			Separate financial statements							
			Percentage of direct shareholding		Paid-up capital		Cost method		Dividend received during the year	
	Country of incorporation	Nature of the business	2024	2023	2024	2023	2024	2023	2024	2023
			(percent)	(percent)						
TOP Ventures Hong Kong Limited and its subsidiaries	Hong Kong Special Administrative Region	Investment in venture capital and/or start-up business	100.00	100.00	762	733	-	-	-	-
TOP Ventures America LLC.	United States of America	Investment in venture capital and/or start-up business	100.00	100.00	507	484	-	-	-	-
PT TOP Investment Indonesia	Republic of Indonesia	Investment in Olefins petrochemical business	100.00	100.00	29,944	29,944	29,944	29,944	-	-
Total investments in subsidiaries							41,280	41,280	6,077	6,487

(1) The balance is below Baht 1 million.

12.3 Summarised financial information on subsidiaries with material non-controlling interests

Set out below are the summarised financial information for each subsidiary that has non-controlling interests and are material to the Group. The amounts disclosed for each subsidiary are before inter-company eliminations.

Summarised statement of financial position

(Unit: Million Baht)

	LABIX Co., Ltd.		Other individually immaterial subsidiaries		Total	
	2024	2023	2024	2023	2024	2023
As at 31 December						
Non-controlling interest percentage	25	25				
Current assets	4,280	5,647				
Non-current assets	8,876	9,280				
Current liabilities	(2,798)	(4,189)				
Non-current liabilities	(2,346)	(3,051)				
Net assets	8,012	7,687				
Carrying amount of non-controlling interests	2,003	1,922	736	822	2,739	2,744

Summarised statement of comprehensive income

(Unit: Million Baht)

	LABIX Co., Ltd.		Other individually immaterial subsidiaries		Total	
	2024	2023	2024	2023	2024	2023
For the year ended 31 December						
Revenue from sales	25,837	26,615				
Profit	325	630				
Other comprehensive income	-	-				
Total comprehensive income	325	630				
Profit allocated to non-controlling interests	81	158	(59)	(16)	22	142
Total comprehensive income allocated to non-controlling interests	81	158	(57)	(17)	24	141

Summarised statement of cash flows

(Unit: Million Baht)

	LABIX Co., Ltd.	
	2024	2023
For the year ended 31 December		
Cash flows from operating activities	936	1,479
Cash flows used in investing activities	(266)	(27)
Cash flows used in financing activities	(863)	(1,014)
Net increase (decrease) in cash and cash equivalents	(193)	438
Cash and cash equivalents at the beginning of the year	812	369
Exchange gains (losses) on cash and cash equivalents	(22)	5
Cash and cash equivalents at the end of the year	597	812

13. Investments in joint ventures and associates

13.1 Movements of investments in joint ventures and associates are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Net book value at beginning of year	32,039	32,603	982	982
Increase in investment	4	3	-	-
Share of profit (loss) of joint ventures and associates	(132)	84	-	-
Dividend income	(267)	(398)	-	-
Exchange differences on translation	(188)	(299)	-	-
Share of other comprehensive income of associates, net of tax	(27)	46	-	-
Share loss from the change in the net assets in an associate	(2)	-	-	-
Net book value at ending of year	31,427	32,039	982	982

Significant transactions during the year ended 31 December 2023

Indirect joint ventures

Chaibadan Community Power Plant 1 Co., Ltd. and Chaibadan Community Power Plant 2 Co., Ltd.

The extraordinary meeting of Chaibadan Community Power Plant 1 Co., Ltd. (“CCPP1”) and Chaibadan Community Power Plant 2 Co., Ltd. (“CCPP2”) have approved the dissolution of the companies. CCPP1 and CCPP2 were liquidated and closed on 27 March 2023.

13.2 Investments in associates

The details of associates are as follows:

(Unit: Million Baht)

			Consolidated financial statements							
			Ownership interest held by the Group		Cost method		Equity method		Dividend received during the year	
	Country of incorporation	Nature of business	2024	2023	2024	2023	2024	2023	2024	2023
			(percent)	(percent)						
PTT Digital Solutions Co., Ltd.	Thailand	Provide information technology and computer service activities	20.00	20.00	30	30	826	767	37	30
PTT Energy Solutions Co., Ltd.	Thailand	Provide technical and operational services	20.00	20.00	19	19	20	20	-	-
Thai Petroleum Pipeline Co., Ltd.	Thailand	Oil transportation through the pipeline	9.19	9.19	933	933	1,004	929	71	212
PT Chandra Asri Pacific Tbk[1]	Republic of Indonesia	Chemical products manufacturing and distribution	15.00	15.00	29,920	29,920	29,577	30,323	159	156
Total investments in associates					30,902	30,902	31,427	30,902	267	398

(1) On 29 December 2023, the Extraordinary General Meeting of Shareholders of PT Chandra Asri Petrochemical Tbk approved the change its company name to "PT Chandra Asri Pacific Tbk". The change has been received approval on 3 January 2024.

(Unit: Million Baht)

			Separate financial statements					
			Ownership interest held by the Group		Cost method		Dividend received during the year	
	Country of incorporation	Nature of business	2024	2023	2024	2023	2024	2023
			(percent)	(percent)				
PTT Digital Solutions Co., Ltd.	Thailand	Provide information technology and computer service activities	20.00	20.00	30	30	37	30
PTT Energy Solutions Co., Ltd.	Thailand	Provide technical and operational services	20.00	20.00	19	19	-	-
Thai Petroleum Pipeline Co., Ltd.	Thailand	Oil transportation through the pipeline	9.19	9.19	933	933	71	212
Total investments in associates					982	982	108	242

As at 31 December 2024, the fair value of the Group and the Company's interest in PT Chandra Asri Pacific Tbk listed in the Stock Exchange of the Republic of Indonesia was Indonesian Rupiah 97,325 billion or equivalent to Baht 205,678 million (2023: Indonesian Rupiah 68,128 billion or equivalent to Baht 151,700 million).

Other associates are private companies and do not have a quoted market price available for their shares. There are no contingent liabilities relating to the Group's interest in these associates.

13.3 Summarised financial information for associates

Set out below are the summarised financial information for the associates that are material to the Group. The information disclosed reflects the amounting presented in the financial statements of the relevant associates (not only the Group's shares of those amounts). They have been amended to reflect adjustments made using the equity method, including fair value adjustments and modifications for differences in accounting policy.

Summarised statement of financial position

(Unit: Million Baht)

	PT Chandra Arsi Pacific Tbk	
	2024	2023
Current assets	98,694	107,557
Non-current assets	90,441	80,473
Current liabilities	(25,150)	(23,524)
Non-current liabilities	(64,187)	(61,824)
Net assets	99,798	102,682
Shareholding percentage (%)	15.00	15.00
Share of net assets	14,970	15,402
Adjustment and elimination entries	14,607	14,921
Carrying amounts of associates based on equity method	29,577	30,323

Summarised statement of comprehensive income

(Unit: Million Baht)

	PT Chandra Arsi Pacific Tbk	
	2024	2023
Revenue	67,971	75,379
Loss	(2,024)	(1,089)
Other comprehensive income	(151)	(56)
Total comprehensive income	(2,175)	(1,145)

Reconciliation of summarised financial information

Reconciliation of the summarised financial information presented to the carrying amount of its interest in associates.

(Unit: Million Baht)

	PT Chandra Arsi Pacific Tbk	
	2024	2023
Group's interest in net assets of associates at 1 January	30,323	30,924
Addition of investment	4	3
Share of loss from investments in associates	(374)	(195)
Share of other comprehensive income from associates, net of income tax	(27)	46
Currency translation differences	(188)	(299)
Dividends received	(159)	(156)
Loss from the change in the net assets of an associate	(2)	-
Carrying amount of interest in associates at 31 December	29,577	30,323

13.4 Individually immaterial associates

In addition to the interests in associates disclosed above, the Group also has interests in a number of individually immaterial associates that are accounted for using the equity method.

(Unit: Million Baht)

	Individually immaterial associates	
	2024	2023
Aggregate carrying amount of individually immaterial associates	1,850	1,716
The total amount of the group's share in associates		
Profit	242	280
Other comprehensive income	-	-
Total comprehensive income	242	280

14. Investment properties

Investment properties of the Group is land and land improvement.

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
As at 1 January				
Cost	103	103	1,185	1,124
Less Provision for impairment	-	-	-	-
Book value	103	103	1,185	1,124
For the year ended 31 December				
Beginning book value	103	103	1,185	1,124
Transfer to property, plant and equipment (Note 15)	-	-	-	61
Ending book value	103	103	1,185	1,185
As at 31 December				
Cost	103	103	1,185	1,185
Less Provision for impairment	-	-	-	-
Book value	103	103	1,185	1,185
Fair value	571	458	3,592	2,759

Fair value Measurement

The fair value of investment property was determined by external, independent property valuers, having appropriate recognised professional qualifications and experiences in valuing the property. The independent valuers provide the fair value of the Group's investment property portfolio on a regular basis.

The fair value measurement for all investment property has been categorised as a level 3 fair value based on the inputs to the valuation technique used.

The following table shows the valuation technique used in measuring the fair value of investment property, as well as the significant unobservable inputs used.

Valuation technique	Significant unobservable inputs	Inter-relationship between key unobservable inputs and fair value measurement
- Discounted cash flows: The valuation model considers the present value of net cash flows to be generated from the property, taking into account expected rental growth rate. The expected net cash flows are discounted using risk-adjusted discount rates. Among other factors, the discount rate estimation considers the quality of its location (prime vs secondary), tenant credit quality and lease terms.	• Contractually agreed lease income over the remaining period. • The risk-adjusted discount rates (6%-7%)	The estimated fair value increase (decrease) if: • Expected market rental growth was higher (lower) • The risk-adjusted discount rate was lower (higher).
- Market approach	The adjusted quoted price and the actual selling price of comparable investment properties	The estimated fair value increase (decrease) if land price was higher (lower).

Amounts recognised in profit and loss that related to investment property are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
For the year ended 31 December				
Rental income	22	22	92	92

15. Property, plant and equipment

Movements of property, plant and equipment for the years ended 31 December 2024 and 2023 are summarised below.

(Unit: Million Baht)

	Consolidated financial statements										
	Land	Buildings	Leasehold improvements	Refinery plant and equipment	Petro-chemical plants	Power plants	Machinery, equipment and plant equipment	Furniture, fixtures, office equipment and others	Vehicles	Construction in progress	Total
Cost											
At 1 January 2023	7,358	5,109	212	118,034	36,135	17,752	7,801	1,102	16	137,602	331,121
Additions	-	1	-	258	-	27	15	10	-	17,466	17,777
Disposals and write-off	-	-	-	(1)	-	(462)	(5)	(2)	-	-	(470)
Transfers in (out)	-	36	-	1,998	24	3,612	102	54	-	(3,781)	2,045
Exchange differences	-	(4)	-	-	-	-	(30)	-	-	(1)	(35)
At 31 December 2023	7,358	5,142	212	120,289	36,159	20,929	7,883	1,164	16	151,286	350,438
Additions	-	-	-	650	95	-	24	18	-	11,786	12,573
Disposals and write-off	-	-	-	-	-	-	(1)	(3)	(1)	-	(5)
Transfers in (out)	-	715	-	3,920	52	83	252	65	-	(5,055)	32
Exchange differences	-	(5)	-	-	-	-	(41)	(1)	-	-	(47)
At 31 December 2024	7,358	5,852	212	124,859	36,306	21,012	8,117	1,243	15	158,017	362,991

(Unit: Million Baht)

	Consolidated financial statements										
	Land	Buildings	Leasehold improvements	Refinery plant and equipment	Petro-chemical plants	Power plants	Machinery, equipment and plant equipment	Furniture, fixtures, office equipment and others	Vehicles	Construction in progress	Total
Accumulated depreciation											
At 1 January 2023	-	2,098	55	87,537	22,729	8,792	5,009	925	13	-	127,158
Depreciation charged during the year	-	233	8	3,071	1,173	701	342	59	1	-	5,588
Depreciation on disposals and write-off	-	-	-	(34)	-	(410)	(5)	(2)	-	-	(451)
Transfers in	-	2	-	-	-	-	-	-	-	-	2
Exchange differences	-	(1)	-	-	-	-	(11)	-	-	-	(12)
At 31 December 2023	-	2,332	63	90,574	23,902	9,083	5,335	982	14	-	132,285
Depreciation charged during the year	-	265	8	3,363	1,177	699	325	64	1	-	5,902
Depreciation on disposals and write-off	-	-	-	-	-	-	(1)	(3)	(1)	-	(5)
Transfers in	-	2	-	-	-	-	-	-	-	-	2
Exchange differences	-	(2)	-	-	-	-	(17)	-	-	-	(19)
At 31 December 2024	-	2,597	71	93,937	25,079	9,782	5,642	1,043	14	-	138,165
Impairment allowance											
At 31 December 2023	-	-	-	-	674	-	-	-	-	-	674
At 31 December 2024	-	-	-	-	674	-	-	-	-	-	674
Net book value											
At 31 December 2023	7,358	2,810	149	29,715	11,583	11,846	2,548	182	2	151,286	217,479
At 31 December 2024	7,358	3,255	141	30,922	10,553	11,230	2,475	200	1	158,017	224,152

Depreciation for the year	
2023 (Baht 5,398 million included in manufacturing cost, and the balance in selling and administrative expenses)	5,588
2024 (Baht 5,584 million included in manufacturing cost, and the balance in selling and administrative expenses)	5,902

(Unit: Million Baht)

	Separate financial statements								
	Land	Buildings	Refinery plant and equipment	Power plants	Machinery, equipment and plant equipment	Furniture, fixtures, office equipment and others	Vehicles	Construction in progress	Total
Cost									
At 1 January 2023	4,941	3,747	109,246	5,784	1,588	711	1	135,177	261,195
Additions	-	-	259	-	5	6	-	16,708	16,978
Disposals and write-off	-	-	(1)	(462)	(2)	-	-	-	(465)
Transfers in (out)	(61)	-	1,696	-	-	49	-	300	1,984
At 31 December 2023	4,880	3,747	111,200	5,322	1,591	766	1	152,185	279,692
Additions	-	-	648	-	13	15	-	11,779	12,455
Disposals and write-off	-	-	-	-	-	(1)	-	-	(1)
Transfers in (out)	-	691	3,838	43	25	60	-	(4,625)	32
At 31 December 2024	4,880	4,438	115,686	5,365	1,629	840	1	159,339	292,178
Accumulated depreciation									
At 1 January 2023	-	1,214	79,930	5,580	1,384	603	1	-	88,712
Depreciation charged during the year	-	173	2,918	52	46	52	-	-	3,241
Depreciation on disposals and write-off	-	-	(34)	(408)	(2)	-	-	-	(444)
At 31 December 2023	-	1,387	82,814	5,224	1,428	655	1	-	91,509
Depreciation charged during the year	-	203	3,207	-	39	56	-	-	3,505
Depreciation on disposals and write-off	-	-	-	-	-	(1)	-	-	(1)
At 31 December 2024	-	1,590	86,021	5,224	1,467	710	1	-	95,013

(Unit: Million Baht)

	Separate financial statements								
	Land	Buildings	Refinery plant and equipment	Power plants	Machinery, equipment and plant equipment	Furniture, fixtures, office equipment and others	Vehicles	Construction in progress	Total
Impairment allowance									
At 31 December 2023	-	-	-	-	-	-	-	-	-
At 31 December 2024	-	-	-	-	-	-	-	-	-
Net book value									
At 31 December 2023	4,880	2,360	28,386	98	163	111	-	152,185	188,183
At 31 December 2024	4,880	2,848	29,665	141	162	130	-	159,339	197,165
Depreciation for the year									
2023 (Baht 3,080 million included in manufacturing cost, and the balance in selling and administrative expenses)									3,241
2024 (Baht 3,218 million included in manufacturing cost, and the balance in selling and administrative expenses)									3,505

As at 31 December 2024, the Group had assets under construction for The Clean Fuel Project. The construction has been financed with loans. Borrowing costs amounting to Baht 4,022 million were capitalised during the year ended 31 December 2024 (the Company only: Baht 4,464 million). The weighted average rate of 2.47% - 5.39% per annum (The Company only: 3.69% - 5.99% per annum) has been used to determine the amount of borrowing costs eligible for capitalisation. The borrowing costs were included in ‘Additions’ during the year.

The gross amounts of the Group’s and the Company’s fully depreciated plant and equipment that were still in use as at 31 December 2024, were Baht 75,636 million (2023: Baht 69,890 million) and Baht 61,526 million (2023: Baht 55,109 million), respectively.

As at 31 December 2024, certain subsidiaries mortgaged their land, building, petrochemical plant and machines as collateral for credit facilities. The book value of land, building, petrochemical plant, and machines amounted to Baht 6,716 million (2023: Baht 7,051 million).

16. Leases

The Group as a lessee

The Group has lease contracts for assets used in its operations.

a) Right-of-use assets

Movements of right-of-use assets for the years ended 31 December 2024 and 2023 are summarised below:

(Unit: Million Baht)

	Consolidated financial statements					
	Land	Buildings	Equipment	Oil tankers	Motor vehicles	Total
1 January 2023	11,946	149	97	11,773	73	24,038
Additions	7	2	94	-	30	133
Lease modification	-	-	-	(14)	-	(14)
Exchange differences	(2)	-	-	-	-	(2)
Depreciation for the year	(429)	(62)	(66)	(1,332)	(42)	(1,931)
31 December 2023	11,522	89	125	10,427	61	22,224
Additions	235	73	115	-	86	509
Lease modification	-	-	2	(465)	-	(463)
Exchange differences	(2)	-	-	-	-	(2)
Depreciation for the year	(431)	(62)	(63)	(1,290)	(40)	(1,886)
31 December 2024	11,324	100	179	8,672	107	20,382

(Unit: Million Baht)

	Separate financial statements					
	Land	Buildings	Equipment	Oil tankers	Motor vehicles	Total
1 January 2023	11,303	50	74	11,773	66	23,266
Additions	7	-	94	-	22	123
Lease modification	(14)	-	-	(14)	-	(28)
Depreciation for the year	(411)	(27)	(46)	(1,332)	(36)	(1,852)
31 December 2023	10,885	23	122	10,427	52	21,509
Additions	256	70	116	-	71	513
Lease modification	-	-	2	(465)	-	(463)
Depreciation for the year	(412)	(26)	(60)	(1,290)	(34)	(1,822)
31 December 2024	10,729	67	180	8,672	89	19,737

The movements of right-of-use assets exclude the right-of-use assets which are classified as investment property which is presented in Note 14.

b) Lease liabilities

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Lease payments	28,503	30,440	28,910	30,793
Less: Deferred interest expenses	(8,946)	(9,350)	(9,162)	(9,571)
Total	19,557	21,090	19,748	21,222
Less: Portion due within one year	(1,445)	(1,402)	(1,423)	(1,355)
Lease liabilities - net of current portion	18,112	19,688	18,325	19,867

Movements of the lease liability account during the years ended 31 December 2024 and 2023 are summarised below:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Balance at beginning of year	21,090	22,508	21,222	22,606
Additions	275	132	278	122
Interest expenses	777	753	784	757
Repayments	(2,059)	(2,156)	(2,013)	(2,103)
Lease modification	(463)	(14)	(463)	(28)
Unrealised gain on exchange	(60)	(132)	(60)	(132)
Contract termination	(1)	-	-	-
Exchange differences	(2)	1	-	-
Balance at end of year	19,557	21,090	19,748	21,222

A maturity analysis of lease payments is disclosed in Note 34.1.3 under the liquidity risk.

c) Expenses relating to leases that are recognised in profit or loss

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Depreciation expenses of right-of-use assets	1,886	1,931	1,822	1,852
Interest expenses on lease liabilities	777	753	784	757
Expenses relating to short-term leases	4	4	-	-
Expenses relating to leases of low-value assets	38	4	38	4

d) Group as a lessor

The Group has entered into operating leases for its investment property portfolio consisting of (see Note 14). During the year 2024, the Group has sublease income amounting to Baht 22 million (2023: Baht 22 million) (The Company only: Baht 92 million, 2023: Baht 92 million).

17. Goodwill

(Unit: Million Baht)

	Consolidated financial statements	
	2024	2023
At 1 January		
Cost	826	849
Book value	826	849
For the year ended 31 December		
Book value at the beginning of year	826	849
Exchange differences	(28)	(23)
Book value at end of year	798	826
At 31 December		
Cost	798	826
Book value	798	826

Goodwill is allocated to the Group's cash-generating units (CGUs) identified according to business segment which is solvent segment.

Impairment testing for goodwill

The Group tests goodwill impairment on an annual basis. The recoverable amount was based on its value-in-use, determined by discounting future cash flows to be generated in the future from the continuing use of CGU which based on the management approved five-year financial budget. Those cash flows are determined by annual earnings before interest, taxes, depreciation, and amortisation (EBITDA) estimated by management, adjusted by corporate income tax, change in working capital and relevant capital expenditures. The estimate also included a long-term growth rate with reference to gross domestic product (GDP) growth rates for the countries in which the CGUs operates and experiences by management.

The key assumptions used for value-in-use calculations are as follows:

	Goodwill - Thailand	Goodwill - Vietnam
	%	%
Gross margin	7.01 - 7.48	5.46 - 6.47
Long-term growth rate	3.00	6.23
Discount rate from weighted average cost of capital (WACC)	8.69	11.87

The recoverable amount of CGU in which goodwill is allocated is estimated to exceed the carrying amount of the CGU. Management has considered the above and believes that there is no occurrence of impairment of goodwill.

18. Intangible assets

The net book value of intangible assets as at 31 December 2024 and 2023 are presented below.

(Unit: Million Baht)

	Consolidated financial statements				
	License fee	Computer software	Patent	Intangible assets under processing	Total
As at 31 December 2023					
Cost	3,577	1,485	2	293	5,357
Less: Accumulated amortisation	(1,969)	(983)	(1)	-	(2,953)
Net book value	1,608	502	1	293	2,404
As at 31 December 2024					
Cost	3,634	1,688	2	358	5,682
Less: Accumulated amortisation	(2,069)	(1,155)	(1)	-	(3,225)
Net book value	1,565	533	1	358	2,457

(Unit: Million Baht)

	Separate financial statements				
	License fee	Computer software	Patent	Intangible assets under processing	Total
As at 31 December 2023					
Cost	966	1,237	2	292	2,497
Less: Accumulated amortisation	(869)	(766)	(1)	-	(1,636)
Net book value	97	471	1	292	861
As at 31 December 2024					
Cost	989	1,435	2	357	2,783
Less: Accumulated amortisation	(886)	(917)	(1)	-	(1,804)
Net book value	103	518	1	357	979

19. Income tax

Income tax expenses for the years ended 31 December 2024 and 2023 are summarised as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Current income tax:				
Income tax for the year	2,373	4,788	1,465	4,035
Deferred tax:				
Relating to origination and reversal of temporary differences	(90)	(116)	(529)	(337)
Income tax expense reported in profit or loss	2,283	4,672	936	3,698

The amounts of income tax relating to each component of other comprehensive income for the years ended 31 December 2024 and 2023 are presented in the movement in deferred tax assets and liabilities.

The reconciliation between accounting profit and income tax expense are shown below.

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Accounting profit before tax	12,264	24,257	10,821	25,211
Applicable tax rate	20%	20%	20%	20%
Accounting profit before tax multiplied by income tax rate	2,453	4,851	2,164	5,042
Decrease in deferred tax in current year	29	91	-	-
Adjustment from prior period	(46)	(59)	(59)	(48)
Effects of:				
Promotional privileges and dividends	(180)	(350)	(1,288)	(1,381)
Non-deductible expenses	264	210	125	150
Additional expense deductions allowed	(237)	(71)	(6)	(65)
Total	(153)	(211)	(1,169)	(1,296)
Income tax expense reported in profit or loss	2,283	4,672	936	3,698

Revenue, profit before finance costs and income tax expenses and income tax expenses from overseas operations of the Group for the year ended 31 December 2024 are as follows:

(Unit: Million Baht)

	Revenue [1]	Profit (loss) before finance costs and income tax expenses	Income tax expense
Thailand	460,188	12,686	2,255
Vietnam	4,325	53	12
Indonesia	4,003	(455)	15
Singapore	1,847	12	1
Hong Kong [2]	9	8	-
United States of America [2]	(40)	(40)	-
Total	470,332	12,264	2,283

Note:

[1] Taxable income consists of: Sales, Subsidy from oil fuel fund, Dividend Income, Gain (loss) from hedging derivatives, Foreign exchange gain (loss) and Other income etc.

[2] No income tax expenses due to income tax loss.

The analysis of deferred tax assets and deferred tax liabilities is as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Deferred tax assets, net	3,460	2,503	3,291	1,907
Deferred tax liabilities, net	(18)	(16)	-	-
Deferred tax, net	3,442	2,487	3,291	1,907

The movements in deferred tax assets and liabilities during the year are as follows:

(Unit: Million Baht)

	Consolidated financial statements									
	Employee benefit obligation	Impairment losses on assets	Unused tax losses	Lease liabilities	Cash flow hedges	Borrowing cost	Loss from exchange rate in construction in progress	Unrealised loss on changes in fair value of investment FVOCI	Others	Total
Deferred tax assets										
At 1 January 2023	560	140	624	303	157	227	2,498	-	77	4,586
Charged (credited) to profit or loss	(10)	(23)	(182)	17	235	19	-	-	55	111
Charged (credited) to other comprehensive income	1	-	-	-	(197)	-	-	-	-	(196)
Reclassification	-	-	-	-	-	-	-	1,073	-	1,073
Exchange differences	1	-	-	-	-	-	-	-	-	1
At 31 December 2023	552	117	442	320	195	246	2,498	1,073	132	5,575
At 1 January 2024	552	117	442	320	195	246	2,498	1,073	132	5,575
Charged (credited) to profit or loss	(17)	(25)	(423)	(29)	48	19	72	-	8	(347)
Charged to other comprehensive income	-	-	-	-	277	-	-	590	-	867
Reclassification	-	-	-	-	-	-	-	-	11	11
Exchange differences	-	-	(1)	-	-	-	-	-	-	(1)
At 31 December 2024	535	92	18	291	520	265	2,570	1,663	151	6,105

(Unit: Million Baht)

	Consolidated financial statements					
	Accumulated depreciation	Deferred cost of debentures	Gain on reclassification of investments	Unrealised gain on changes in fair value of investment FVOCI	Others	Total
Deferred tax liabilities						
At 1 January 2023	(396)	(51)	(2,052)	(373)	(592)	(3,464)
(Charged) credited to profit or loss	(81)	2	-	-	83	4
Credited to other comprehensive income	-	-	-	1,446	-	1,446
Reclassification	-	-	-	(1,073)	-	(1,073)
Exchange differences	-	(1)	-	-	-	(1)
At 31 December 2023	(477)	(50)	(2,052)	-	(509)	(3,088)
At 1 January 2024	(477)	(50)	(2,052)	-	(509)	(3,088)
(Charged) credited to profit or loss	(56)	(8)	-	-	500	436
Reclassification	-	-	-	-	(11)	(11)
At 31 December 2024	(533)	(58)	(2,052)	-	(20)	(2,663)

(Unit: Million Baht)

	Separate financial statements								
	Employee benefit obligation	Impairment losses on assets	Lease liabilities	Cash flow Hedges	Borrowing cost	Loss from exchange rate in construction in progress	Unrealised loss on changes in fair value of investment FVOCI	Others	Total
Deferred tax assets									
At 1 January 2023	542	2	247	146	227	2,498	-	63	3,725
Charged (credited) to profit or loss	(8)	-	12	235	19	-	-	54	312
Credited in other comprehensive income	-	-	-	(186)	-	-	-	-	(186)
Reclassification	-	-	-	-	-	-	917	-	917
At 31 December 2023	534	2	259	195	246	2,498	917	117	4,768
At 1 January 2024	534	2	259	195	246	2,498	917	117	4,768
Charged (credited) to profit or loss	(14)	-	(35)	48	19	73	-	8	99
Credited in other comprehensive income	-	-	-	276	-	-	578	-	854
Reclassification	-	-	-	-	-	-	-	5	5
At 31 December 2024	520	2	224	519	265	2,571	1,495	130	5,726

(Unit: Million Baht)

	Separate financial statements					
	Accumulated depreciation	Deferred cost of debentures	Gain on reclassification of investments	Unrealised gain on changes in fair value of investment FVOCI	Others	Total
Deferred tax liabilities						
At 1 January 2023	(288)	(57)	(1,947)	(465)	(593)	(3,350)
(Charged) credited to profit or loss	(59)	2	-	-	81	24
Credited to other comprehensive income	-	-	-	1,382	-	1,382
Reclassification	-	-	-	(917)	-	(917)
At 31 December 2023	(347)	(55)	(1,947)	-	(512)	(2,861)
At 1 January 2024	(347)	(55)	(1,947)	-	(512)	(2,861)
(Charged) credited to profit or loss	(34)	(7)	-	-	472	431
Reclassification	-	-	-	-	(5)	(5)
At 31 December 2024	(381)	(62)	(1,947)	-	(45)	(2,435)

Deferred income tax assets are recognised for tax loss carried forwards only to the extent that realisation of the related tax benefit through the future taxable profits is probable. As at 31 December 2024, the Group did not recognise deferred income tax assets of Baht 36 million (2023: Baht 26 million) in respect of losses that can be carried forward against future taxable income amounting to Baht 180 million which will expire during 2025 to 2029 (2023: Baht 130 million will expire during 2024 to 2028).

Effect from international tax reform - Pillar Two model rules

The Group is within the scope of the Pillar Two model rules published by the Organisation for Economic Co-operation and Development (OECD). Accordingly, the Group has applied the mandatory exception requiring that entities shall neither recognise nor disclose information about deferred tax assets and liabilities related to Pillar Two income taxes.

The Group operates in Vietnam where Pillar Two legislation has been enacted and is effective for fiscal years beginning on or after 1 January 2024. However, no current tax expense related to Pillar Two income taxes was recognised in 2024 because the Group benefits from the "Transitional Safe Harbour" relief under the Pillar Two legislation.

In addition, the Group operates in several countries where Pillar Two legislation have been enacted or substantially enacted and will be effective for fiscal years beginning on or after 1 January 2025. The management of the Group is currently in the process of assessing the potential exposure to Pillar Two income taxes in the financial statements. Based on the preliminary assessment, the Group might not have significant top-up taxes related to the Pillar Two legislation for the year ended 31 December 2025.

20. Short-term loans from financial institutions

Short-term loans from financial institutions for the Group are as follows:

(Unit: Million Baht)

	Consolidated financial statements	
	2024	2023
Short-term loans from financial institutions		
- Secured	515	515
- Unsecured	2,210	2,683
Total short-term loans from financial institutions	2,725	3,198

Movements of short-term loans from financial institutions for the Group are as follows:

(Unit: Million Baht)

	Consolidated financial statements	
	2024	2023
Opening balance	3,198	1,892
Cash flows:		
Proceeds from short-term loans	12,184	11,480
Repayments of short-term loans	(12,634)	(10,150)
Other non-cash movements:		
Exchange differences	(23)	(24)
Closing balance	2,725	3,198

As at 31 December 2024, short-term loans from financial institutions represented promissory notes of the subsidiaries which denominated in Thai Baht amounting to Baht 2,165 million, Vietnamese Dong 173,000 million (equivalent to Baht 231 million) and Indonesian Rupiah currency amounting to 155,658 million Indonesian Rupiahs (equivalent to Baht 329 million), and bore interest at rates of 2.50% - 10.00% per annum (2023: subsidiaries' short-term loans denominated in Thai Baht amounting to Baht 2,515 million, Vietnamese Dong 357,700 million (equivalent to Baht 503 million) and Indonesian Rupiah currency amounting to 81,224 million Indonesian Rupiahs (equivalent to Baht 181 million) with bore interest rates of 2.00% to 10.00% per annum). These short-term loans of a subsidiary are secured by the pledge of inventories, the mortgage of land, buildings and machines. The short-term credit facilities of a subsidiary is guaranteed by another subsidiary, and jointed collateral with the short-term loans under the terms and condition in the Credit Facilities Agreement.

21. Trade payables

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Related parties (Note 6)	50,306	48,786	54,041	53,330
Other parties	1,273	1,398	984	1,165
Total	51,579	50,184	55,025	54,495

22. Other payables

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Other payables	1,289	1,717	1,190	1,405
Accrued interest	1,031	1,187	1,107	1,260
Accrued operating expenses	340	320	151	116
Oil Fuel Fund payable	526	156	526	156
Others	512	530	311	281
Total	3,698	3,910	3,285	3,218

23. Long-term loans from financial institutions and a third party

Long-term loans from financial institutions and a third party are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Current portion of long-term loans from financial institutions, net				
- Secured	611	611	-	-
- Unsecured	3,166	2,450	3,101	2,374
Long-term loans from financial institutions, net of current portion				
- Secured	1,208	1,887	-	-
- Unsecured	18,018	14,148	17,738	13,838
Long-term loans from a third party				
- Unsecured	179	191	-	-
Total long-term loans	23,182	19,287	20,839	16,212

Movements of long-term loans from financial institutions and a third party are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Opening balance	19,287	22,907	16,212	11,906
Cash flows:				
Proceeds from long-term loans	7,054	6,012	7,000	6,000
Repayments of long-term loans	(3,172)	(9,676)	(2,400)	(1,700)
Financing fee	(4)	(28)	(4)	(28)
Other non-cash movements:				
Amortisation of deferred financing fee	35	90	31	34
Exchange differences	(18)	(18)	-	-
Closing balance	23,182	19,287	20,839	16,212

The weighted average effective interest rate of the long-term loans of the Group were 4.13% per annum (2023: 4.21% per annum), the Company was 4.20 % per annum (2023: 4.37% per annum).

The detail of long-term loans of the Group are as follows:

			As at 31 December						
			2024		2023				
No.	Loans by	Currency in agreement	Original currency (Million)	Equivalent to Million Baht	Original currency (Million)	Equivalent to Million Baht	Interest rate per annum (%)	Principal repayment term	Interest payment period
1	Subsidiaries	Baht	21	21	31	31	THOR plus a certain margin	Semi-Annual	Semi-Annual
2	Subsidiaries	Baht	3	3	6	6	THOR plus a certain margin	Semi-Annual	Semi-Annual
3	Subsidiaries	Baht	-	-	12	12	MLR minus a certain margin	Semi-Annual	Semi-Annual
4	Subsidiaries	Baht	-	-	1	1	MLR minus a certain margin	Semi-Annual	Semi-Annual
5	Subsidiaries	Baht	-	-	2	2	THOR plus a certain margin	Semi-Annual	Monthly
6	Subsidiaries	Baht	1,795	1,795	2,460	2,460	THOR plus a certain margin	Semi-Annual	Monthly
7	Subsidiaries	Baht	179	179	191	191	THOR plus a certain margin	A specified in the agreement	A specified in the agreement
8	Subsidiaries	Vietnamese Dong	258,199	345	264,438	371	COF plus a certain margin	Semi-Annual	Semi-Annual
9	The Company	Baht	4,868	4,868	6,247	6,247	MLR minus a certain margin	Quarterly	Quarterly
10	The Company	Baht	3,494	3,494	3,989	3,989	6MBIBOR plus a certain margin	Semi-Annual	Semi-Annual
11	The Company	Baht	497	497	497	497	3MBIBOR plus a certain margin	End of the contract	Quarterly
12	The Company	Baht	499	499	499	499	THOR plus a certain margin	End of the contract	Quarterly
13	The Company	Baht	995	995	994	994	THOR plus a certain margin	Quarterly	Quarterly
14	The Company	Baht	2,495	2,495	2,994	2,994	THOR plus a certain margin	Semi-Annual	Quarterly
15	The Company	Baht	995	995*	993	993*	MLR minus a certain margin	Quarterly	Quarterly
16	The Company	Baht	1,000	1,000	-	-	THOR plus a certain margin	End of the contract	Quarterly
17	The Company	Baht	1,498	1,498	-	-	1MBIBOR plus a certain margin	End of the contract	Monthly
18	The Company	Baht	1,498	1,498*	-	-	THOR plus a certain margin	End of the contract	Semi-Annual
19	The Company	Baht	3,000	3,000	-	-	MLR minus a certain margin	Semi-Annual	Quarterly
Total				23,182		19,287			

* Long-term loans associated with sustainability initiatives (Sustainability-Linked Loans), are subject to interest rate reductions upon fulfilment of predetermined conditions outlined within the agreement, contingent upon the achievement of specified Sustainability Performance Targets.

In November 2023, the Company entered into long-term loan facility agreements with various financial institutions in Thailand totalling of Baht 7,000 million, with the drawdown on 8 March 2024 with interest rates and repayment schedule for 5 - 7 years as stipulated in such agreements to be used in normal business operations. Under the terms, the Company agrees to maintain certain financial ratios and comply with conditions stipulated in the agreements.

The Group's long-term loans are secured by collateral of land, building, petrochemical plants, and machinery (Note 15) in accordance with the Credit Facilities Agreement.

The Group is required to comply with certain criteria and conditions; for example, maintaining shareholders' portion, maintaining debt to equity ratio at the level as specified in the contract and providing financial supports based on ownership percentage.

24. Debentures

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Debentures	129,622	141,423	35,387	42,429
Less: Discount on/ Issuance of debentures	(730)	(791)	(130)	(137)
Total	128,892	140,632	35,257	42,292
Less: Current portion of debentures, net	(1,400)	(7,000)	(1,400)	(7,000)
Debentures, net	127,492	133,632	33,857	35,292

Movements of debentures of the Group and the Company are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Beginning balance	140,632	148,952	42,292	39,871
Cash flows:				
Additions	-	10,000	-	10,000
Redemption and repurchase of debentures	(10,303)	(16,381)	(7,000)	(7,109)
Financing fee	-	(4)	-	(4)
Other non-cash movements:				
Interest of discount on debenture	58	36	6	-
Exchange differences	(361)	(1,971)	(41)	(466)
Gain on repurchase of debentures	(1,134)	-	-	-
Ending balance	128,892	140,632	35,257	42,292

Debentures issued by the Group are owned by the Company and a subsidiary, which are unsecured and unsubordinated. The debentures issued by a subsidiary are fully guaranteed by the Company. Detail are as follows:

Consolidated financial statements

Issuance date	Maturity date	Years	Currency	2024 (Million)	2023 (Million)	Interest rate (% p.a.)	Interest payment term
23 March 2012	23 March 2027	15	Baht	7,500	7,500	5.05	Semi-annual basis
23 January 2013	23 January 2043	30	US dollar	172.4	172.4	4.875	Semi-annual basis
12 March 2014	12 March 2024	10	Baht	-	7,000	4.84	Semi-annual basis
10 April 2018	23 January 2043	30	US dollar	327.6	327.6	4.875	Semi-annual basis
20 November 2018	20 November 2028	10	US dollar	400	400	4.625	Semi-annual basis
20 November 2018	20 November 2048	30	US dollar	600	600	5.375	Semi-annual basis
17 October 2019	17 October 2049	30	US dollar	565	565	3.50	Semi-annual basis
18 June 2020	18 June 2030	10	US dollar	400	400	2.50	Semi-annual basis
18 June 2020	18 June 2050	30	US dollar	480	600	3.75	Semi-annual basis
11 November 2022	11 November 2025	3	Baht	1,400	1,400	2.99	Semi-annual basis
11 November 2022	11 November 2027	5	Baht	600	600	3.64	Semi-annual basis
11 November 2022	11 November 2029	7	Baht	2,000	2,000	4.13	Semi-annual basis
11 November 2022	11 November 2032	10	Baht	1,700	1,700	4.49	Semi-annual basis
11 November 2022	11 November 2034	12	Baht	3,100	3,100	4.79	Semi-annual basis
11 November 2022	11 November 2037	15	Baht	3,200	3,200	5.09	Semi-annual basis
3 May 2023	3 May 2028	5	Baht	2,800	2,800	3.32	Semi-annual basis
3 May 2023	3 May 2033	10	Baht	2,300	2,300	3.84	Semi-annual basis
3 May 2023	3 May 2038	15	Baht	4,900	4,900	4.24	Semi-annual basis

Separate financial statements

Issuance date	Maturity date	Years	Currency	2024 (Million)	2023 (Million)	Interest rate (% p.a.)	Interest payment term
23 March 2012	23 March 2027	15	Baht	7,500	7,500	5.05	Semi-annual basis
23 January 2013	23 January 2043	30	US dollar	172.4	172.4	4.875	Semi-annual basis
12 March 2014	12 March 2024	10	Baht	-	7,000	4.84	Semi-annual basis
11 November 2022	11 November 2025	3	Baht	1,400	1,400	2.99	Semi-annual basis
11 November 2022	11 November 2027	5	Baht	600	600	3.64	Semi-annual basis
11 November 2022	11 November 2029	7	Baht	2,000	2,000	4.13	Semi-annual basis
11 November 2022	11 November 2032	10	Baht	1,700	1,700	4.49	Semi-annual basis
11 November 2022	11 November 2034	12	Baht	3,100	3,100	4.79	Semi-annual basis
11 November 2022	11 November 2037	15	Baht	3,200	3,200	5.09	Semi-annual basis
3 May 2023	3 May 2028	5	Baht	2,800	2,800	3.32	Semi-annual basis
3 May 2023	3 May 2033	10	Baht	2,300	2,300	3.84	Semi-annual basis
3 May 2023	3 May 2038	15	Baht	4,900	4,900	4.24	Semi-annual basis

Repurchase and cancellation of debentures

During the year 2024, Thaioil Treasury Center Co., Ltd. ("TTC"), a subsidiary of the Company, has repurchased and cancelled of a portion of debentures as below;

- For the unsecured and unsubordinated debentures of US dollar 600 million with 30-year tenor and fixed coupon rate of 3.75% per annum, which were issued and offered to investors and foreign institutional investors in June 2020, TTC has partially repurchased and cancelled debentures in the principal amount of US dollar 120 million for the aforementioned debentures, totalling US dollar 87.84 million from the secondary market. As at 31 December 2024, TTC has an outstanding balance of the debentures due in the year 2050 amounted to US dollar 480 million.

The Company and a subsidiary are required to comply with certain criteria and conditions; for example, maintaining shareholders' portion at the level as specified in the contract.

25. Provision for long-term employee benefits

The movement in the provision for long-term employee benefits during the year is as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
At 1 January	2,714	2,753	2,070	2,173
Current service cost	152	155	84	88
Interest cost	77	75	55	57
Actuarial loss	-	3	-	-
Benefits paid during the year	(298)	(272)	(275)	(248)
At 31 December	2,645	2,714	1,934	2,070

Actuarial loss (gain) recognised in other comprehensive income arising from:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Experience	-	(1)	-	-
Demographic assumptions	-	8	-	-
Financial assumptions	-	(4)	-	-
Total	-	3	-	-

The principal actuarial assumptions used were as follows:

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Discount rate	2.5% - 3.9%	2.5% - 3.9%	2.5% - 2.8%	2.5% - 2.8%
Salary increases rate	5.0% - 6.0%	5.0% - 6.0%	5.0%	5.0%
Employee turnover	0.2% - 5.7%	0.2% - 5.7%	0.2% - 2.3%	0.2% - 2.3%

Assumptions regarding future mortality have been based on published statistics and mortality tables.

The result of sensitivity analysis for significant assumptions that affect the present value of the provision for long-term employee benefit as at 31 December 2024 and 2023 are summarised below:

(Unit: Million Baht)

	Consolidated financial statements					
	Change in assumption		Increase in assumption		Decrease in assumption	
	2024	2023	2024	2023	2024	2023
Discount rate	1%	1%	(353)	(350)	438	405
Salary growth rate	1%	1%	306	340	(377)	(299)

(Unit: Million Baht)

	Separate financial statements					
	Change in assumption		Increase in assumption		Decrease in assumption	
	2024	2023	2024	2023	2024	2023
Discount rate	1%	1%	(267)	(271)	301	308
Salary growth rate	1%	1%	229	272	(313)	(243)

The above sensitivity analysis is based on a change in an assumption while all other assumptions remain constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions the same method which is the present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting period has been applied when calculating the pension liability recognised within the consolidated statement of financial position. The methods and types of assumptions used in preparing the sensitivity analysis did not change when compared to the previous period.

The weighted average reserve long-term employee benefit of the Group is 10 years (2023: 10 years).

Expected maturity analysis of undiscounted retirement benefits are as follows:

(Unit: Million Baht)

	Consolidated financial statements				
	Less than 1 year	Between 1 - 2 years	Between 2 - 5 years	Over 5 years	Total
At 31 December 2024					
Retirement benefits	208	310	289	2,918	3,725
At 31 December 2023					
Retirement benefits	234	376	309	3,040	3,959

(Unit: Million Baht)

	Separate financial statements				
	Less than 1 year	Between 1 - 2 years	Between 2 - 5 years	Over 5 years	Total
At 31 December 2024					
Retirement benefits	199	296	242	2,169	2,906
At 31 December 2023					
Retirement benefits	229	360	279	2,267	3,135

26. Statutory reserve

Pursuant to Section 116 of the Public Limited Companies Act B.E. 2535, the Company is required to set aside a statutory reserve at least 5 percent of its net profit after deducting accumulated deficit brought forward (if any), until the reserve reaches 10 percent of the registered capital. The statutory reserve is not available for dividend distribution. At present, the statutory reserve has fully been set aside.

27. Other income

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Interest income	1,137	786	1,709	1,087
Service income and others	422	352	2,408	2,390
Total	1,739	1,138	4,117	3,477

28. Expenses by nature

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Changes in finished goods and work in progress	3,126	(91)	2,513	110
Purchase and raw materials used	354,100	356,343	403,232	406,039
Natural gas used	11,016	12,847	2,359	3,166
Employee benefit expenses	4,450	4,366	2,008	2,074
Depreciation and amortisation	8,106	7,799	5,445	5,175
Excise tax	58,826	36,935	58,782	36,901
Oil fuel fund contribution/ Energy conservation fund contribution	8,536	16,502	8,536	16,502

29. Promotional privileges

Certain local subsidiaries have been granted privileges by the Board of Investment relating to power and steam generation, petrochemical product production and chemical product production. The summary of privileges granted are as follows:

a) an exemption from payment of import duty and tax on machinery and equipment as approved by the Board of Investment.

b) an exemption from payment of corporate income tax for promoted operations for periods of 3 to 8 years from the dates on which the income is first derived from such operations or 3 years from the date on which the income is received subsequent to when the privileges were granted.

c) a 50% reduction in the normal corporate income tax rate on the net profit derived from certain promotional operations for a period of 5 years, commencing from the expiry date in (b) above.

As promoted companies, the Company and its subsidiaries must comply with certain conditions and restrictions provided for in the promotional certificates.

Revenues from promoted businesses were as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Revenues from promoted businesses	213,214	15,803	207,804	-

30. Earnings per share

Basic earnings per share is calculated by dividing profit for the year attributable to equity holders of the Company (excluding other comprehensive income) by the weighted average number of ordinary shares that issue during the year.

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Profit for the year attributable to equity holders of the Company (Million Baht)	9,959	19,443	9,886	21,513
Weighted average number of ordinary shares (Million shares)	2,234	2,234	2,234	2,234
Basic earnings per share (Baht/share)	**4.46**	**8.70**	**4.43**	**9.63**

31. Segment information

Segment information is presented in respect of the Group's business segments. The primary format, business segments, is based on the Group's management and the internal reporting structure provided to the chief operating decision maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as President and Chief Executive Officer who make strategic decisions.

Segment results, assets and liabilities include items directly attributable to a segment as well as those that can be allocated on a reasonable basis.

Reportable segments

The Group is organised into business units based on their products and services. During the current period, the Group has not changed the organisation of their reportable segments from the last annual financial statements.

Segment 1: Oil refinery
Segment 2: Lube base oil refinery
Segment 3: Aromatics and LAB
Segment 4: Power generation
Segment 5: Solvent
Segment 6: Ethanol
Segment 7: Olefins
Segment 8: Others

The following tables present assets, revenue, and operating results information regarding the Group's operating segments for the years ended 31 December 2024 and 2023:

(Unit: Million Baht)

	Consolidated financial statements for the year ended 31 December 2024									
	Oil refinery	Lube base oil refinery	Aromatics and LAB	Power generation	Solvent	Ethanol	Olefins	Others	Adjustments	Total
Revenue from sales										
- External customers	388,097	18,527	24,243	4,483	19,567	940	-	-	-	455,857
- Inter - segment	98,513	7,212	56,286	7,342	158	741	4	7,350	(177,606)	-
Subsidy from oil fuel fund	10,920	-	-	-	-	-	-	-	-	10,920
Cost of sales of goods	(490,182)	(23,850)	(77,700)	(9,516)	(17,999)	(1,676)	-	(6,997)	177,910	(450,010)
Gross Profit	7,348	1,889	2,829	2,309	1,726	5	4	353	304	16,767
Dividend income	6,442	-	-	-	-	8	-	4	(6,185)	269
Gain (loss) from financial instruments	298	-	122	-	(23)	-	-	(36)	-	361
Gain (loss) on exchange	25	-	32	1	(5)	-	(1)	1	-	53
Gain on repurchase of debentures	-	-	-	-	-	-	-	1,134	-	1,134
Other income	4,117	206	305	99	86	7	5	18	(3,103)	1,740
Selling and distribution expenses	(190)	(110)	(384)	-	(677)	(17)	-	-	237	(1,141)
Administrative expenses	(3,219)	(76)	(118)	(39)	(451)	(112)	(10)	(74)	1,364	(2,735)
Share of profit (loss) from investments in joint ventures and associates	-	-	-	-	-	-	(374)	-	242	(132)
Profit (loss) before finance costs and income tax expense	14,821	1,909	2,786	2,370	656	(109)	(376)	1,400	(7,141)	16,316
Finance cost	(3,999)	(50)	(163)	(442)	(154)	(32)	-	-	788	(4,052)
Profit (loss) before income tax expense	10,822	1,859	2,623	1,928	502	(141)	(376)	1,400	(6,353)	12,264
Income tax income (expenses)	(936)	(372)	(530)	(280)	(123)	15	-	(57)	-	(2,283)
Profit (loss) for the year	9,886	1,487	2,093	1,648	379	(126)	(376)	1,343	(6,353)	9,981

(Unit: Million Baht)

	Consolidated financial statements for the year ended 31 December 2024									
	Oil refinery	Lube base oil refinery	Aromatics and LAB	Power generation	Solvent	Ethanol	Olefins	Others	Adjustments	Total
Profit (loss) for the year attributable to:										
- Equity holder of the Company	9,886	1,487	2,012	1,648	386	(74)	(376)	1,343	(6,353)	9,959
- Non-controlling interests of the subsidiaries	-	-	81	-	(7)	(52)	-	-	-	22
Profit (loss) for the year	9,886	1,487	2,093	1,648	379	(126)	(376)	1,343	(6,353)	9,981
Timing of revenue recognition										
- At a point in time	486,610	25,739	80,529	10,401	19,725	1,681	4	7,350	(177,033)	455,006
- Over time	-	-	-	1,424	-	-	-	-	(573)	851
Total Revenue	486,610	25,739	80,529	11,825	19,725	1,681	4	7,350	(177,606)	455,857

(Unit: Million Baht)

	Consolidated financial statements for the year ended 31 December 2023									
	Oil refinery	Lube base oil refinery	Aromatics and LAB	Power generation	Solvent	Ethanol	Olefins	Others	Adjustments	Total
Revenue from sales										
- External customers	391,432	18,208	24,372	5,230	19,225	935	-	-	-	459,402
- Inter - segment	100,623	7,107	54,602	7,558	156	944	5	7,068	(178,063)	-
Subsidy from oil fuel fund	9,842	-	-	-	-	-	-	-	-	9,842
Cost of sales of goods	(477,488)	(22,768)	(77,387)	(10,402)	(17,817)	(1,831)	-	(6,781)	178,310	(436,164)
Gross Profit	24,409	2,547	1,587	2,386	1,564	48	5	287	247	33,080
Dividend income	6,906	-	-	-	-	20	-	4	(6,729)	201
Gain (loss) from financial instruments	(2,874)	-	168	(108)	15	-	-	(51)	-	(2,850)
Gain (loss) on exchange	254	(1)	(66)	11	14	-	1	-	-	213
Other income	3,477	147	272	54	76	14	-	14	(2,916)	1,138
Selling and distribution expenses	(109)	(104)	(376)	-	(583)	(21)	-	-	243	(950)
Administrative expenses	(3,097)	(72)	(102)	(40)	(399)	(115)	(10)	(72)	1,336	(2,571)
Share of profit (loss) from investments in joint ventures and associates	-	-	-	-	-	-	(195)	279	-	84
Profit (loss) before finance costs and income tax expense	28,966	2,517	1,483	2,303	687	(54)	(199)	461	(7,819)	28,345
Finance cost	(3,755)	(50)	(181)	(489)	(157)	(23)	-	-	567	(4,088)
Profit (loss) before income tax expense	25,211	2,467	1,302	1,814	530	(77)	(199)	461	(7,252)	24,257
Income tax expenses	(3,698)	(483)	(271)	(76)	(104)	(16)	-	(24)	-	(4,672)
Profit (loss) for the year	21,513	1,984	1,031	1,738	426	(93)	(199)	437	(7,252)	19,585

(Unit: Million Baht)

	Consolidated financial statements for the year ended 31 December 2023									
	Oil refinery	Lube base oil refinery	Aromatics and LAB	Power generation	Solvent	Ethanol	Olefins	Others	Adjustments	Total
Profit (loss) for the year attributable to:										
- Equity holder of the Company	21,513	1,984	873	1,738	402	(53)	(199)	437	(7,252)	19,443
- Non-controlling interests of the subsidiaries	-	-	158	-	24	(40)	-	-	-	142
Profit (loss) for the year	21,513	1,984	1,031	1,738	426	(93)	(199)	437	(7,252)	19,585
Timing of revenue recognition										
- At a point in time	492,055	25,315	78,974	11,439	19,381	1,879	5	7,068	(177,578)	458,538
- Over time	-	-	-	1,349	-	-	-	-	(485)	864
Total Revenue	492,055	25,315	78,974	12,788	19,381	1,879	5	7,068	(178,063)	459,402

(Unit: Million Baht)

	Consolidated financial statements for the year ended 31 December 2024									
	Oil refinery	Lube base oil refinery	Aromatics and LAB	Power generation	Solvent	Ethanol	Olefins	Others	Adjustments	Total
Segment assets	391,372	9,940	25,270	16,041	9,929	2,080	371	107,893	(185,313)	377,583
Investments in associated companies	-	-	-	-	-	-	29,577	982	868	31,427
Total segment assets	391,372	9,940	25,270	16,041	9,929	2,080	29,948	108,875	(184,445)	409,010
Total segment liabilities	248,991	3,597	9,620	11,779	5,050	610	124	105,462	(142,407)	242,826

(Unit: Million Baht)

	Consolidated financial statements for the year ended 31 December 2023									
	Oil refinery	Lube base oil refinery	Aromatics and LAB	Power generation	Solvent	Ethanol	Olefins	Others	Adjustments	Total
Segment assets	397,830	9,142	27,282	17,303	11,168	2,309	220	111,414	(188,714)	387,954
Investments in associated companies	-	-	-	-	-	-	30,323	982	734	32,039
Total segment assets	397,830	9,142	27,282	17,303	11,168	2,309	30,543	112,396	(187,980)	419,993
Total segment liabilities	253,726	3,143	11,781	12,446	6,000	661	122	110,097	(146,295)	251,681

Major customer

Revenue from two customers represents Baht 277,460 million (2023: revenue from two customers represented Baht 273,222 million) of the Group's revenue from sales.

Geographical segments

In presenting geographical information by segments, segment revenue is based on the geographical location of customers and segment assets are based on the geographical location of the assets.

Geographical information

(Unit: Million Baht)

	For the year ended 31 December		As at 31 December	
	Revenue		Non-current assets	
	2024	2023	2024	2023
Thailand	437,164	429,057	265,325	262,375
Indonesia	4,070	3,430	29,614	30,371
Other countries	25,543	36,757	1,850	1,875
Total	466,777	469,244	296,789	294,621

32. Dividends

Dividends	Approved by	Total dividends	Dividend per share
		(Million Baht)	(Baht)
Final dividends for 2022	Annual General Meeting of the shareholders on 10 April 2023	3,798	1.70
The Interim dividends for 2023	Board of Directors' meeting on 25 August 2023	1,451	0.65
Total for 2023		5,249	2.35
Final dividends for 2023	Annual General Meeting of the shareholders on 11 April 2024	6,142	2.75
The Interim dividends for 2024	Board of Directors' meeting on 30 August 2024	2,681	1.20
Total for 2024		8,823	3.95

33. Commitments and contingent liabilities

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Capital commitments				
Project construction agreements	11,376	13,629	10,912	13,170
Total	11,376	13,629	10,912	13,170
Other commitments				
Letters of guarantee issued by financial institutions	1,850	1,830	1,230	1,224
Crude oil and raw material purchase agreements	58,156	73,383	58,156	73,383
Total	60,006	75,213	59,386	74,607

Interest Rate Swap Contracts

The Company has entered into interest rate swap contracts with various financial institutions to manage exposure and fluctuations in interest rate on partial long-term loans in Thai Baht. On March 2024, interest rate swap contracts amounting to Baht 7,000 has completely due according to the contract. As at 31 December 2024, the Company had contracts with a notional amount of Baht 7,500 million to exchange the fixed interest rate to floating interest rate based on THOR plus certain fixed margin per annum. (2023: Baht 14,500 million, exchange the fixed interest rate to floating interest rate based on THOR plus certain fixed margin per annum) The swap contracts are effective from July 2021 to March 2027.

Cross Currency Swap Contracts

The Company has entered into cross currency swap contracts with local financial institutions for hedging foreign exchange and interest rate exposure of long-term debts in US dollar currency. As at 31 December 2024, the Company had notional amount totalling US dollar 623 million (2023: US dollar 623 million). A counterparty agrees to pay the interest and the notional amount according to the terms and conditions in the contracts. The swap contracts are effective from March 2020 to October 2035. The contract that hedges against foreign exchange and interest rate risks, which is linked to sustainability operations, will have its interest payments reduced upon meeting the conditions specified in the contract, if the sustainability performance targets (Sustainability Performance Targets) are achieved.

Forward Foreign Exchange Contracts

The Company has entered into a Forward Foreign Exchange Contract with several financial institutions in the country to hedge against the risk of exchange rate fluctuations on long-term financial liabilities denominated in US dollars, which had an outstanding balance of US dollars 200 million as of 31 December 2024. The contracting parties have agreed to settle payments between each other according to the conditions and terms specified in the contract. The contract period is from September 2024 to November 2028. Some parts of the Forward Foreign Exchange Contract that are linked to sustainability operations will have their exchange rates reduced when the conditions specified in the contract are met, if the sustainability performance targets (Sustainability Performance Targets) are achieved.

Oil Price Crack Spread Swap Contracts

The Group and the Company have oil price crack spread swap and time spread swap contracts with foreign companies and related parties (counterparties). The Company has or the counterparties have commitments to make payments for the differences between the fixed price and floating price of each period.

As at 31 December 2024, the Group had oil volume under the contracts totalling 1.58 million barrels and the Company had oil volume totalling 1.58 million barrels (2023: The Group had oil volume under the contracts totalling 9.80 million barrels and 0.13 million metric tons and the Company had oil volume totalling 9.81 million barrels and 0.27 million metric tons).

34. Financial risk management

34.1 Financial risk factors

The Group is exposed to a variety of financial risks, which are market risk (including foreign exchange risk and interest rate risk and price risk), credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance. The Group uses derivative financial instruments to hedge certain exposures.

Risk management is integral to the whole business of the Group. The Group has a control system in place to create an acceptable balance between the cost of risks and the cost to manage the risks. The management continually monitors the Group's risk management process to ensure that an appropriate balance between risk and control is achieved.

Where all relevant criteria are met, hedge accounting is applied to remove the accounting mismatch between the hedging instrument and the hedged item. This will effectively result in recognising interest expense at a fixed interest rate for the hedged floating rate loans and financial liabilities at the fixed foreign currency rate for the hedged liabilities.

Hedging reserve

The Group and the Company's hedging reserves comprise of the followings:

(Unit: Million Baht)

	Consolidated financial statements			
	Cash flow hedge reserve			
	Cross currency swaps	Cost of hedging reserve	Hedge on foreign currency proceeds	Total hedge reserves
Opening balance 1 January 2024	(1,332)	(660)	(2,472)	(4,464)
Add: Change in fair value of hedging instrument recognised in OCI	(551)	-	715	164
Costs of hedging deferred and recognised in OCI	-	(833)	-	(833)
Less: Deferred tax	110	167	(83)	194
Closing balance 31 December 2024	(1,773)	(1,326)	(1,840)	(4,939)

(Unit: Million Baht)

	Consolidated financial statements					
	Cash flow hedge reserve					
	Cross currency swaps	Cost of hedging reserve	Forward foreign exchange contracts	Interest rate swaps	Hedge on foreign currency proceeds	Total hedge reserves
Opening balance 1 January 2023	(2,051)	(671)	(16)	(47)	(3,172)	(5,957)
Add: Change in fair value of hedging instrument recognised in OCI	899	-	20	59	819	1,797
Costs of hedging deferred and recognised in OCI	-	14	-	-	-	14
Less: Deferred tax	(180)	(3)	(4)	(12)	(119)	(318)
Closing balance 31 December 2023	(1,332)	(660)	-	-	(2,472)	(4,464)

(Unit: Million Baht)

	Separate financial statements			
	Cash flow hedge reserve			
	Cross currency swaps	Cost of hedging reserve	Hedge on foreign currency proceeds	Total hedge reserves
Opening balance 1 January 2024	(1,332)	(660)	(2,472)	(4,464)
Add: Change in fair value of hedging instrument recognised in OCI	(551)	-	715	164
Costs of hedging deferred and recognised in OCI	-	(833)	-	(833)
Less: Deferred tax	110	167	(83)	194
Closing balance 31 December 2024	(1,773)	(1,326)	(1,840)	(4,939)

(Unit: Million Baht)

	Separate financial statements				
	Cash flow hedge reserve				
	Cross currency swaps	Cost of hedging reserve	Forward foreign exchange contracts	Hedge on foreign currency proceeds	Total hedge reserves
Opening balance 1 January 2023	(2,051)	(671)	(16)	(3,172)	(5,910)
Add: Change in fair value of hedging instrument recognised in OCI	899	-	20	819	1,738
Costs of hedging deferred and recognised in OCI	-	14	-	-	14
Less: Deferred tax	(180)	(3)	(4)	(119)	(306)
Closing balance 31 December 2023	(1,332)	(660)	-	(2,472)	(4,464)

34.1.1 Market risk

a) Foreign exchange risk

The Group is exposed to foreign exchange risk from future commercial transactions, net monetary assets and liabilities that are denominated in a currency that is not the entity's functional currency.

The Group uses forward foreign exchange contracts, cross currency swaps in a consistent manner and hedge on foreign currency proceeds to hedge and anticipated foreign exchange commitments and manage their foreign exchange risk arising from future commercial transactions. The Group are required to manage their foreign exchange risk against their functional currency. Foreign currency borrowings are swapped into the entity's functional currency using cross-currency swaps except where the foreign currency borrowings are repaid with cash flows generated in the same foreign currency. The purpose of these hedges is to mitigate the impact of movements in foreign exchange rates on assets and liabilities and the profit and loss account of the Group.

The Group hedges the foreign currency proceeds by hedging the fluctuations arisen from the foreign exchange rate occurring from the certain revenue in US dollar with the long-term loans which has the same currency as revenue occurred. Under the Group's policy, the critical terms of the forwards and options must align with the hedged items.

The Group uses a combination of forward foreign exchange contracts and cross currency swaps to hedge its exposure to foreign currency risk. Under the Group's policy, the critical terms of the forwards and options must align with the hedged items.

The Group only designates the spot component of forward foreign exchange contracts in hedge relationships. The spot component is determined with reference to relevant spot market exchange rates. The differential between the contracted forward rate and the spot market exchange rate is defined as the forward points and include currency basis spread fees. It is discounted based on time period of the contract where material.

The changes in the forward element of the forward foreign exchange contracts and foreign currency basis spreads that relate to hedged items are deferred in the costs of hedging reserve.

As at 31 December 2024 and 2023, the Group and the Company were exposed to foreign currency risk in respect of financial assets and liabilities denominated in the following currencies:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
US dollar				
Cash and cash equivalents	10,710	8,327	9,295	6,238
Short-term investments in financial assets	10,695	5,944	10,527	5,775
Trade receivables	3,226	4,630	893	3,185
Other receivables	873	1,027	881	1,058
Derivative assets	55	188	55	188
Trade payables	(318)	(326)	(146)	(194)
Other payables	(178)	(548)	(748)	(1,063)
Loans and debentures	(99,522)	(104,151)	(101,152)	(104,463)
Derivative liabilities	3	-	(3)	(19)
	(74,456)	(84,909)	(80,398)	(89,295)
Other currencies				
Cash and cash equivalents	804	1,223	668	1,087
Trade receivables	1,328	1,112	-	-
Other receivables	42	21	-	-
Trade payables	(187)	(136)	-	-
Other payables	(41)	(92)	(9)	(60)
Loans	(280)	(309)	-	-
	1,666	1,819	659	1,027
Gross exposure in the statement of financial position	(72,790)	(83,090)	(79,739)	(88,268)
Cross currency swaps	25,102	25,279	25,102	25,279
Hedge on foreign currency proceed with the loans denominated in foreign currency	58,586	58,846	58,586	58,586
Net exposure	10,898	1,035	3,949	(4,143)

Effects of hedge accounting on the financial position and performance

The effects of the foreign currency-related hedging instruments on the Group and the Company's financial position and performance are as follows:

(Unit: Million Baht)

	Consolidated and Separate financial statements	
	2024	2023
Cross currency swaps contracts		
Carrying amount (liability) (Million Baht)	(2,408)	(960)
Notional amount (Million US dollar)	623	623
Maturity date	October 2030 to October 2039	October 2030 to October 2035
Hedge ratio	1 : 1	1 : 1
Weighted average hedged rate for outstanding hedging instruments (including forward points)	31.77	31.77

In term of the hedge on foreign currency proceed with the loans denominated in foreign currency, as at 31 December 2024, the Company's fully drawdown loans amounted to Baht 58,586 million were used in the hedging activities. The loans notional amount was US dollar 1,716 million with maturity from November 2028 to November 2048. The Company's exchange rate for hedge instrument was Baht 32.193 per one US dollar.

Sensitivity

As shown in the table above, the Group is primarily exposed to changes in Baht and US dollar exchange rates. The sensitivity of profit or loss to changes in the exchange rates arises mainly from financial assets and financial liabilities denominated in US dollar and the impact on other components of equity arises from foreign forward exchange contracts and cross currency swap designated as cash flow hedges.

(Unit: Million Baht)

	Consolidated financial statements			
	Impact to net profit		Impact to other components of equity	
	2024	2023	2024	2023
Baht to US dollar exchange rate - increase 10% *	1,027	(156)	(3,859)	(3,918)
Baht to US dollar exchange rate - decrease 10% *	(1,027)	156	3,859	3,918

* Holding all other variables constant

(Unit: Million Baht)

	Separate financial statements			
	Impact to net profit		Impact to other components of equity	
	2024	2023	2024	2023
Baht to US dollar exchange rate - increase 10% *	812	(386)	(6,388)	(6,465)
Baht to US dollar exchange rate - decrease 10% *	(812)	386	6,388	6,465

* Holding all other variables constant

b) Cash flow and fair value interest rate risk

The Group's main interest rate risk arises from long-term borrowings with variable rates, which expose the Group to cash flow interest rate risk. Generally, the Group enters into long-term borrowings at floating rates and swaps them into fixed rates that are lower than those available if the Group borrowed at fixed rates directly. During 2023 and 2024, the Group's borrowings at variable rate were mainly denominated in Baht and US dollar.

The borrowings are carried at amortised cost. The borrowings rate is based on market interest rates which detailed in Note 23 Therefore, the Group is exposed to the risk of future changes in market interest rates.

The exposure of long-term loans interest rate changes at the end of the reporting period are as follows:

	Consolidated financial statements			
	2024		2023	
	Million Baht	% of total loans	Million Baht	% of total loans
Variable rate borrowings	23,182	20	19,287	12

As at 31 December 2024, the percentage of total loans shows the proportion of long-term loans that are currently at variable rates in relation to the total amount of long-term loans 152,073 million (2023: Baht 159,920 million). An analysis by maturities is provided in note 34.1.3.

The Company has low interest rate risk since the Company's borrowings are at a fixed interests rate. The sensitivity impact to the increase or decrease in interest expenses from borrowings, as a result of changes in interest rates is immaterial on separate financial statements.

Sensitivity

Profit or loss is sensitive to higher or lower interest expenses from borrowings as a result of changes in interest rates. Other components of equity changes as a result of an increase or decrease in the fair value of the cash flow hedges of borrowings.

(Unit: Million Baht)

	Consolidated financial statements			
	Impact to net profit		Impact to other components of equity	
	2024	2023	2024	2023
Interest rate - increase 1% *	(305)	(342)	(2)	(4)
Interest rate - decrease 1% *	305	342	2	4

* Holding all other variables constant

c) Price risk of petroleum products

The Group's and the Company's exposure to price risk arises from time to time by volatility and cyclical movement in the market prices for crude oil, petroleum, and petrochemical products. The Group manages this risk by using derivative financial instruments, for example, oil price crack spread swap and time spread swap as appropriated.

Sensitivity

The table below summarises the impact of increases or decreases of the index on net profit for the year.

(Unit: Million Baht)

	Impact to net profit			
	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Price increases by 1 % *	(5)	(12)	(5)	(12)
Price decreases by 1 % *	5	12	5	12

* Holding all other variables constant

34.1.2 Credit risk

The Group's credit risk arises from cash and cash equivalents, contractual cash flows of debt investments carried at FVPL, derivative financial instruments as well as credit exposures to customers, including outstanding receivables.

a) Risk management

The Group manages its credit risk by categorising into level of risks. For banks and financial institutions, the Group only transacts with those that are rated at least within investment grade accredited by a reliable independence credit rating agency.

For transaction with other customers, the Group will consider the credit rating accredited by a reliable independence credit rating agency. If the credit rating is not available, the Group assesses the creditability of the customer by considering its financial position, past experience and other factors. Individual credit limits are set based on these assessments and in accordance with credit limits set by the Board of Director. The compliance with credit limits by customers is regularly monitored by line management.

The Group has no significant credit risk with any single counterparty or group of counterparties since the Group maintains business with large customers in petroleum and power industries and requires first class collateral for the rest.

The Group's investments in debt instruments are considered to be low risk investments. The Group regularly monitors the credit ratings of the investments for credit deterioration.

b) Security

For some trade receivables the Group may obtain security in the form of guarantees or letters of credit which can be called upon if the counterparty is in default under the terms of the agreement.

c) Impairment of financial assets

The Group considers that impairment of financial assets does not have significant financial impact.

Other financial assets measured at amortised cost

Other financial assets measured at amortised cost include short-term investment which the Group considered that short-term investment's credit risk is low.

Debt investments

Debt investments are measured at amortised cost include other receivables and loans to related parties.

All of the debt investments at amortised cost and FVOCI are considered to have low credit risk, and the loss allowance recognised during the year was therefore limited to 12 months expected losses. Management consider 'low credit risk' for listed bonds to be an investment grade credit rating with at least one major rating agency. Other instruments are considered to have low credit risk when they have a low risk of default and the issuer has a strong capacity to meet its contractual cash flow obligations in the near term.

Financial asset measured at fair value through profit or loss (FVPL)

The Group is also exposed to credit risk in relation to debt investments that are measured at FVPL. The maximum exposure at the end of the reporting period is the carrying amount of these investments of Baht 686 million (2023: Baht 722 million).

34.1.3 Liquidity risk

Prudent liquidity risk management is to maintaining sufficient cash and the availability of funding through an adequate amount of committed credit facilities to meet obligations when due and to close out market positions. At the end of the reporting period the Group held deposits at call of Baht 29,042 million (2023: Baht 28,432 million) that are expected to readily generate cash inflows for managing liquidity risk.

Due to the dynamic nature of the underlying businesses, the Group Treasury maintains flexibility in funding by maintaining availability under committed credit lines.

Management regularly monitors i) rolling forecasts of the Group's liquidity reserve (comprising the undrawn borrowing facilities); and ii) cash and cash equivalents. In addition, the Group's liquidity management policy involves projecting cash flows in major currencies and considering the level of liquid assets and monitoring balance sheet liquidity ratios and maintaining appropriate financing plans.

a) Financing arrangements

The Group has undrawn credit facilities as at 31 December as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2024	2023	2024	2023
Floating rate				
Expiring within one year				
- Short-term committed credit facilities	8,841	7,200	6,700	6,700
- Short-term uncommitted credit facilities	12,413	11,420	5,790	6,198
Expiring beyond one year				
- Long-term loans credit facilities	110	7,099	-	7,000
	21,364	25,719	12,490	19,898

b) Maturity of financial liabilities

The tables below analyse the Group's financial liabilities into relevant maturity based on their contractual maturities for:

(a) all non-derivative financial liabilities; and

(b) net and gross settled derivative financial instruments for which the contractual maturities are essential for an understanding of the timing of the cash flows.

The tables below present the maturity of financial liabilities classified by their contractual maturities. The amounts disclosed are the contractual undiscounted cash flows. Balances due within 12 months equals their carrying balances as the impact of discounting is not significant. For interest rate swaps and cross currency swap, the cash flows have been estimated using forward interest rates applicable at the end of the reporting period.

(Unit: Million Baht)

	Consolidate financial statements				
Maturity of financial liabilities as at 31 December 2024	Within 1 year	1 - 5 years	Over 5 years	Total	Carrying amount of (Assets/ Liabilities)
Non-derivatives					
Short-term loan from financial institutions	2,725	-	-	2,725	2,725
Trade and other payables	52,867	-	-	52,867	52,867
Accrued interest	7,449	22,524	62,090	92,063	1,030
Lease liabilities	2,189	7,958	18,356	28,503	19,557
Long-term loans from financial institutions	3,803	16,225	3,040	23,068	23,003
Long-term loans from related and other parties	-	-	179	179	179
Debentures	1,400	26,495	101,726	129,621	128,891
Other financial liabilities	340	3,269	35	3,644	3,644
Total non-derivatives	70,773	76,471	185,426	332,670	231,896
Derivatives					
Forward foreign exchange contracts					
- trading (assets)	(3)	-	-	(3)	(3)
Oil price crack spread swap and time spread swap					
- trading (assets)	(55)	-	-	(55)	(55)
Oil price crack spread swap and time spread swap					
- trading (liabilities)	3	-	-	3	3
Forward foreign exchange contracts					
(Cash inflows)	-	(6,829)	-	(6,829)	50
Cash outflows	-	6,346	-	6,346	-
Interest rate swaps					
(Cash inflows)	(379)	(472)	-	(851)	188
Cash outflows	504	628	-	1,132	-
Cross currency swaps - cash flow hedge					
(Cash inflows)	(844)	(3,379)	(23,561)	(27,784)	2,408
Cash outflows	727	2,910	21,753	25,390	-
Hedging foreign currency income - cash flow hedge					
(Cash inflows)	(2,904)	(33,419)	(67,272)	(103,595)	-
Cash outflows	2,737	23,035	71,897	97,669	-
Total derivatives	(214)	(11,180)	2,817	(8,577)	2,591
Total	70,559	65,291	188,243	324,093	234,487

(Unit: Million Baht)

	Consolidate financial statements				
Maturity of financial liabilities as at 31 December 2023	Within 1 year	1 - 5 years	Over 5 years	Total	Carrying amount of (Assets/ Liabilities)
Non-derivatives					
Short-term loan from financial institutions	3,198	-	-	3,198	3,198
Trade and other payables	51,901	-	-	51,901	51,901
Accrued interest	7,764	24,367	70,249	102,380	1,187
Lease liabilities	1,723	8,381	20,337	30,441	21,091
Long-term loans from financial institutions	3,090	19,941	16,160	39,191	19,095
Long-term loans from related and other parties	-	-	191	191	191
Debentures	7,000	25,989	108,434	141,423	140,632
Other financial liabilities	320	3,268	31	3,619	3,619
Total non-derivatives	74,996	81,946	215,402	372,344	240,914
Derivatives					
Forward foreign exchange contracts					
- trading (assets)	(46)	-	-	(46)	(46)
Forward foreign exchange contracts					
- trading (liabilities)	1	-	-	1	1
Oil price crack spread swap and time spread swap					
- trading (assets)	(173)	-	-	(173)	(173)
Interest rate swaps					
(Cash inflows)	(468)	(851)	-	(1,319)	177
Cash outflows	619	1,120	-	1,739	-
Cross currency swaps - cash flow hedge					
(Cash inflows)	(852)	(3,402)	(24,578)	(28,832)	960
Cash outflows	747	2,984	22,640	26,371	-
Hedging foreign currency income - cash flow hedge					
(Cash inflows)	(2,925)	(25,316)	(79,011)	(107,252)	-
Cash outflows	2,738	23,700	73,969	100,407	-
Total derivatives	(359)	(1,765)	(6,980)	(9,104)	919
Total	74,637	80,181	208,422	363,240	241,833

(Unit: Million Baht)

	Separate financial statements				
Maturity of financial liabilities as at 31 December 2024	Within 1 year	1 - 5 years	Over 5 years	Total	Carrying amount of (Assets/ Liabilities)
Non-derivatives					
Short-term loan from financial institutions	7,648	-	-	7,648	7,648
Trade and other payables	56,214	-	-	56,214	56,214
Accrued interest	7,973	24,348	69,028	101,349	1,107
Lease liabilities	2,176	7,968	18,766	28,910	19,748
Long-term loans from financial institution	3,125	14,813	2,962	20,900	20,840
Long-term loans from related party	-	13,525	81,740	95,265	94,983
Debentures	1,400	12,900	21,087	35,387	35,257
Other financial liabilities	151	3,129	28	3,308	3,308
Total non-derivatives	78,687	76,683	193,611	348,981	239,105
Derivatives					
Oil price crack spread swap and time spread swap - trading (assets)	(55)	-	-	(55)	(55)
Oil price crack spread swap and time spread swap - trading (liabilities)	3	-	-	3	3
Forward foreign exchange contracts					
(Cash inflows)	-	(6,829)	-	(6,829)	50
Cash outflows	-	6,346	-	6,346	-
Interest rate swaps					
(Cash inflows)	(379)	(472)	-	(851)	188
Cash outflows	504	628	-	1,132	-
Cross currency swaps - cash flow hedge					
(Cash inflows)	(844)	(3,379)	(23,561)	(27,784)	2,408
Cash outflows	727	2,910	21,753	25,390	-
Hedging foreign currency income - cash flow hedge					
(Cash inflows)	(2,904)	(33,419)	(67,272)	(103,595)	-
Cash outflows	2,738	23,035	71,897	97,670	-
Total derivatives	(210)	(11,180)	2,817	(8,573)	2,594
Total	78,477	65,503	196,428	340,408	241,699

(Unit: Million Baht)

	Separate financial statements				
Maturity of financial liabilities as at 31 December 2023	Within 1 year	1 - 5 years	Over 5 years	Total	Carrying amount of (Assets/ Liabilities)
Non-derivatives					
Short-term loan from financial institutions	5,186	-	-	5,186	5,186
Trade and other payables	55,900	-	-	55,900	55,900
Accrued interest	8,231	26,130	77,042	111,403	1,260
Lease liabilities	1,682	8,362	20,749	30,793	21,222
Long-term loans from financial institution	2,400	12,218	1,682	16,300	16,212
Long-term loans from related party	-	13,621	85,338	98,959	98,652
Debentures	7,000	12,300	23,129	42,429	42,292
Other financial liabilities	116	3,130	28	3,274	3,274
Total non-derivatives	80,515	75,761	207,968	364,244	243,998
Derivatives					
Forward foreign exchange contracts - trading	(15)	-	-	(15)	(15)
Oil price crack spread swap and time spread swap - trading (assets)	(173)	-	-	(173)	(173)
Oil price crack spread swap and time spread swap - trading (liabilities)	19	-	-	19	19
Interest rate swaps					
(Cash inflows)	(468)	(851)	-	(1,319)	177
Cash outflows	619	1,120	-	1,739	-
Cross currency swaps - cash flow hedge					
(Cash inflows)	(852)	(3,403)	(24,578)	(28,833)	960
Cash outflows	747	2,984	22,640	26,371	-
Hedging foreign currency income - cash flow hedge					
(Cash inflows)	(2,925)	(25,316)	(79,012)	(107,253)	-
Cash outflows	2,738	23,700	73,969	100,407	-
Total derivatives	(310)	(1,766)	(6,981)	(9,057)	968
Total	80,205	73,995	200,987	355,187	244,966

34.2 Capital management

Risk management

The objectives when managing capital are to:

- safeguard the ability to continue as a going concern, to provide returns for shareholders and benefits for other stakeholders, and
- maintain an optimal capital structure to reduce the cost of capital.

Consistent with others in the industry, the Group monitors capital based on gearing ratio which is determined by dividing net debt with equity.

During the year 2024, the Group's strategy, which remains unchanged, was to maintain a gearing ratio within 1.0 time and a Baa3 credit rating for Moody's, BBB credit rating for S&P Global Rating and A+(Tha) for Fitch Ratings (Thailand). In order to increase the strength of capital structure and to maintain an investment grade credit rating. As at 31 December 2024 and 2023, the gearing ratios of the Group are as follows:

(Unit: Million Baht)

	Consolidated financial statements	
	2024	2023
Net debt (including lease liabilities)	134,617	149,832
Equity (including non-controlling interests)	166,185	168,312
Net debt to equity ratio	0.8 times	0.9 times

Loan covenants

Under the terms of the major borrowing facilities, the Group and the Company are required to comply with certain criteria and condition; for example, maintaining shareholders' portion, maintaining debt to equity ratio at the level as specified in the contract and providing financial supports based on ownership percentage. As at 31 December 2024, the Group and the Company has complied with certain criteria and condition as specified in the contract.

35. Fair Value

The following table presents fair value of financial assets and liabilities recognised or disclosed by their fair value hierarchy excluding those with the carrying amount approximates fair values.

(Unit: Million Baht)

	Consolidated financial statements as at 31 December 2024				
	Carrying amount	Level 1	Level 2	Level 3	Total
Assets					
Financial assets at fair value through profit or loss					
Debt investments	686	274	-	412	686
Financial assets at fair value through other comprehensive income					
Equity investments of listed company	11,106	11,106	-	-	11,106
Equity investments of non-listed company	207	-	-	207	207
Derivatives					
Current					
Oil price crack spread swap and time spread swap	55	-	55	-	55
Forward foreign exchange contracts	3	-	3	-	3
Liabilities					
Derivatives					
Current					
Oil price crack spread swap and time spread swap	3	-	3	-	3
Non-current					
Forward foreign exchange contracts	50	-	50	-	50
Interest rate swap	188	-	188	-	188
Derivatives used for hedge accounting					
Cross currency swap	2,408	-	2,408	-	2,408
Financial liabilities not measured at fair value					
Debentures	128,891	-	108,398	-	108,398

(Unit: Million Baht)

	Consolidated financial statements as at 31 December 2023				
	Carrying amount	Level 1	Level 2	Level 3	Total
Assets					
Financial assets at fair value through profit or loss					
Debt investments	722	314	-	408	722
Financial assets at fair value through other comprehensive income					
Equity investments of listed company	14,059	14,059	-	-	14,059
Equity investments of non-listed company	194	-	-	194	194
Derivatives					
Current					
Oil price crack spread swap and time spread swap	173	-	173	-	173
Forward foreign exchange contracts	46	-	46	-	46
Liabilities					
Derivatives					
Current					
Interest rate swap	28	-	28	-	28
Forward foreign exchange contracts	1	-	1	-	1
Non-current					
Interest rate swap	149	-	149	-	149
Derivatives used for hedge accounting					
Cross currency swap	960	-	960	-	960
Financial liabilities not measured at fair value					
Debentures	140,632	-	123,170	-	123,170

(Unit: Million Baht)

	Separate financial statements as at 31 December 2024				
	Carrying amount	Level 1	Level 2	Level 3	Total
Assets					
Financial assets at fair value through profit or loss					
Debt investments	274	274	-	-	274
Financial assets at fair value through other comprehensive income					
Equity investments of listed company	10,785	10,785	-	-	10,785
Equity investments of non-listed company	2	-	-	2	2
Derivatives					
Current					
Oil price crack spread swap and time spread swap	55	-	55	-	55
Liabilities					
Derivatives					
Current					
Oil price crack spread swap and time spread swap	3	-	3	-	3
Non-current					
Forward foreign exchange contracts	50	-	50	-	50
Interest rate swap	188	-	188	-	188
Derivatives used for hedge accounting					
Cross currency swap	2,408	-	2,408	-	2,408
Financial liabilities not measured at fair value					
Long-term loans from related party	94,983	-	73,272	-	73,272
Debentures	35,256	-	36,067	-	36,067

(Unit: Million Baht)

	Separate financial statements as at 31 December 2023				
	Carrying amount	Level 1	Level 2	Level 3	Total
Assets					
Financial assets at fair value through profit or loss					
Debt investments	314	314	-	-	314
Financial assets at fair value through other comprehensive income					
Equity investments of listed company	13,676	13,676	-	-	13,676
Equity investments of non-listed company	2	-	-	2	2
Derivatives					
Current					
Oil price crack spread swap and time spread swap	173	-	173	-	173
Forward foreign exchange contracts	15	-	15	-	15
Liabilities					
Derivatives					
Current					
Oil price crack spread swap and time spread swap	19	-	19	-	19
Interest rate swap	28	-	28	-	28
Non-current					
Interest rate swap	149	-	149	-	149
Derivatives used for hedge accounting					
Cross currency swap	960	-	960	-	960
Financial liabilities not measured at fair value					
Long-term loans from related party	98,652	-	81,416	-	81,416
Debentures	42,292	-	42,040	-	42,040

During the current year, there were no changes in the methods and the assumptions used to estimate the fair value of financial instruments and there were no transfers between the levels of the fair value hierarchy.

Fair value measurement of financial assets and liabilities is in accordance with accounting policy disclosed in Note 4.

Valuation techniques used in measuring level 2 fair values

Type	Valuation technique
Interest rate swap	Future cash flow projection discounted by the market yield which based on Bloomberg at the reporting date.
Forward foreign exchange contracts	Future cash flow projection discounted by the market yield which based on commercial bank report for short-term transactions and future cash flow projection discounted by the market yield which based on Bloomberg at the reporting date for long-term transactions.
Cross currency swap	Future cash flow projection discounted by the market yield which based on Bloomberg at the reporting date.
Oil price crack spread swap and time spread swap	Market comparison technique: The fair values are based on broker quotes. Similar contracts that are traded in an active market and the quotes reflect the actual transactions in similar financial instruments.
Debt investment measure at fair value through profit or loss	Thai Bond Market Association Government Bond Yield Curve as of the reporting date.
Debentures and Long-term loans	Market comparison technique: The valuation model is based on ask prices or latest price of comparable market securities.

Valuation techniques used in measuring level 3 fair values

Changes in level 3 financial instruments for the period ended 31 December 2024 is as follows:

(Unit: Million Baht)

	Consolidated financial statements		
	Debt investment	Equity investment	Total
Beginning balance as at 1 January 2024	408	194	602
Additions	43	22	65
Loss recognised in profit or loss	(36)	(7)	(43)
Exchange differences	(3)	(2)	(5)
Ending balance as at 31 December 2024	412	207	619

The Group considers the significant unobservable inputs used in level 3 fair value measurements and concludes that fair value approximates carrying amount. For the fair value measurement of contingent consideration from the investment acquisitions, the Group considers by using future cash flow projection discounted with cost of debt and the assumptions of relating probabilities of conditions in the share purchase agreements.

The Group did not have any transfers between levels during the year.

The following table shows financial assets and liabilities measured at amortised cost with the carrying amount approximates fair value. The carrying amount of long-term loans from financial institutions, long-term loans from a third party, and long-term loans from a related party approximates their fair value, since their interest rates are close to market rate.

Consolidated financial statements	Separate financial statements
Financial assets	**Financial assets**
- Cash and cash equivalents	- Cash and cash equivalents
- Deposits at a financial institution used as collaterals	- Short-term investments
- Short-term investments	- Trade receivables
- Trade receivables	- Other receivables
- Other receivables	- Finance lease receivables
- Finance lease receivables	- Short-term loan to related parties
- Other non-current assets	- Current portion of long-term loans to related parties
	- Other non-current assets
Financial liabilities	**Financial liabilities**
- Short-term loans from financial institutions	- Short-term loans from related parties
- Trade payables	- Trade payables
- Other payables	- Other payables
- Long-term loans from financial institutions	- Long-term loans from financial institutions
- Long-term loans from a third party	- Long-term loans from related parties
- Long-term loans from a related party	- Lease liabilities
- Lease liabilities	- Other non-current liabilities
- Other non-current liabilities	

36. Oil spill incident

On 3 September 2023, incident resulting in an oil spill during the oil discharge occurred at the Single Buoy Mooring of the Company's refinery. The Company has paid for the compensation to the impacted parties, environmental rehabilitation and related expenses occurring from the case. The Company recognised the related expenses in the statement of income for the year 2024, approximately Baht 75 million, as part of the administrative expenses.

In 2024, the Company received compensation from the insurer totalling Baht 85 million under its insurance policy coverage and recognized such compensation as other income in the statement of income for the year 2024. In January and February 2025, the Company received additional compensation from the insurer totalling Baht 59 million.

37. Investment in Clean Fuel Project

The Company entered into the Engineering, Procurement and Construction Contract (the "EPC Contract") with the main contractor for the construction of the Clean Fuel Project (CFP), which was approved at the Extraordinary General Meeting of Shareholders on 27 August 2018. The total investment value of the project is approximately US dollar 4,825 million, or equivalent to approximately Baht 160,279 million, including interest during construction of approximately US dollar 151 million, or equivalent to approximately Baht 5,016 million. The project cost also includes the investment in the Energy Recovery Unit (ERU), an electrical power plant with a designed generating capacity of 250 megawatts, which will supply electricity and steam to the production process of the CFP.

Due to the COVID-19 pandemic, which affected the CFP Project from the commencement of the engineering design stage, the procurement of equipment and materials and on-site construction, requiring compliance with COVID-19 prevention measures, operational plans had to be adjusted to reflect the prevailing circumstances and address problems to ensure the continued progress of the CFP Project. These factors led to an increase in the CFP Project costs and an extension of the construction timeline beyond the original schedule. Accordingly, the Board of Directors Meeting No. 9/2021 resolved to approve an increase in interest during construction of the CFP Project from US dollar 151 million, or equivalent to approximately Baht 5,016 million, by an additional US dollar 422 million, or equivalent to approximately Baht 14,278 million. Subsequently, the Board of Directors Meeting No. 4/2022 approved an additional budget for the development of the CFP Project and the execution of an amendment agreement to the EPC Contract with the Main Contractor. This approval increased the budget of the CFP Project by approximately US dollar 550 million, or equivalent to approximately Baht 18,165 million, and extended the project completion timeline by 24 months under the EPC Contract to ensure the best interests of the Company and the successful completion of the CFP Project.

During 2024, the Main Contractor's failure to pay overdue payments to its subcontractors working on the CFP Project resulted in work stoppages or workforce reductions. As a result, the Company had to explore various options to ensure the completion of the CFP Project. In this regard, the Company engaged a technical advisor to review and analyse the remaining construction work of the CFP Project and considered recommendations and opinions provided by the Company's technical advisor, legal advisor and independent financial advisor. At the Board of Directors Special Meeting No. 6/2024 of the Company, held on 19 December 2024, the Board of Directors approved an increase of the investment cost of the CFP Project and approved the convening of the Extraordinary General Meeting of Shareholders No. 1/2025 of the Company, scheduled for 21 February 2025, to propose an increase in the investment cost in the CFP Project by approximately US dollar 1,776 million , or equivalent to approximately Baht 63,028 million and an increase in interest during construction of approximately US dollar 505 million, or equivalent to approximately Baht 17,922 million. The additional investment will be used for the construction of the CFP Project, procurement of remaining equipment and materials and payment of other expenses related to the development of the CFP Project, including advisory fees, to support the completion of the CFP Project.

The Enforcement of security in respect of the Clean Fuel Project (CFP)

The Company has enforced security provided under the EPC contract between the Company and the Consortium of PSS Netherlands B.V. (Offshore Contractor) and an unincorporated joint venture of Samsung E&A (Thailand) Co., Ltd., Petrofac South East Asia Pte. Ltd., and Saipem Singapore Pte. Ltd. (Onshore Contractor), in accordance with the contract and in the interest of the Company and its shareholders, in an amount of approximately Baht 12,339 million, approximately equivalent to US dollar 358 million. The Company received such enforcement proceeds in January 2025 and will record the transaction in the first quarter of 2025, deducting the cost of construction in progress of the CFP Project amounting to approximately Baht 12,241 million, and recording other income amounting to approximately Baht 98 million.

38. Events after the reporting period

The Company's dividend announcement

At the Board of Directors' meeting of the Company held on 14 February 2025, the Company's Board of Directors passed a resolution to propose to the Annual General Meeting of Shareholders to consider and approve the dividend payment for the year 2024 at the rate of Baht 1.90 per share, totaling Baht 4,244 million. Such a dividend included the interim dividends of Baht 1.20 per share, which the Company has already paid to the shareholders of the Company in September 2024. Therefore, the additional dividend of Baht 0.70 per share, totaling Baht 1,564 million. The dividends were scheduled to be paid on 28 April 2025. The dividend payment is subject to the approval of the Company's Annual General Meeting of Shareholders which is to be held on 9 April 2025.

39. Approval of financial statements

These financial statements were authorised for issue by the Company's Board of Director on 14 February 2025.

Independent Auditor's Report

To the Shareholders of Thai Oil Public Company Limited

Opinion

I have audited the accompanying consolidated financial statements of Thai Oil Public Company Limited and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2023, and the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies, and have also audited the separate financial statements of Thai Oil Public Company Limited for the same period.

In my opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Thai Oil Public Company Limited and its subsidiaries and of Thai Oil Public Company Limited as at 31 December 2023, their financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards.

Basis for Opinion

I conducted my audit in accordance with Thai Standards on Auditing. My responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of my report. I am independent of the Group in accordance with the *Code of Ethics for Professional Accountants including Independence Standards* issued by the Federation of Accounting Professions (Code of Ethics for Professional Accountants) that are relevant to my audit of the financial statements, and I have fulfilled my other ethical responsibilities in accordance with the Code of Ethics for Professional Accountants. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Key Audit Matters

Key audit matters are those matters that, in my professional judgement, were of most significance in my audit of the financial statements of the current period. These matters were addressed in the context of my audit of the financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on these matters.

I have fulfilled the responsibilities described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of my report, including in relation to these matters. Accordingly, my audit included the performance of procedures designed to respond to my assessment of the risks of material misstatement of the financial statements. The results of my audit procedures, including the procedures performed to address the matters below, provide the basis for my audit opinion on the accompanying financial statements as a whole.

Key audit matters and how audit procedures respond to each matter are described below.

The measurement of inventories valuation

The balance of the Group's inventories is significant to the financial statements while the Group's raw materials and finished goods are commodities, which are exposed to price volatility. The inventories are measured at the lower of cost or net realisable value. I focused on the estimation of the net realisable value of inventory, as disclosed in Note 12 to the financial statements, since it is an area requiring significant management judgment and may affect the valuation of inventories at the end of the reporting period.

I have examined the valuation of inventories of the Group as follows.

- Gained an understanding of and assessed the design and implementation of internal controls and tested the effectiveness of the controls related to the inventory valuation.
- Evaluated the appropriateness of the methodology used to calculate the net realisable value of inventories at the end of reporting period, considering the reasonableness of the market price used through comparison with the expected selling price of commodity, and tested the accuracy of the calculation.
- Assessed the adequacy of the disclosures made in the notes to the financial statements in relation to the allowance for diminution in value of inventories.

Other Information

Management is responsible for the other information. The other information comprise the information included in annual report of the Group, but does not include the financial statements and my auditor's report thereon.

My opinion on the financial statements does not cover the other information and I do not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work I have performed, I conclude that there is a material misstatement of this other information, I am required to report that fact. I have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Thai Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Thai Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Thai Standards on Auditing, I exercise professional judgement and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit 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 Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide those charged with governance with a statement that I have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on my independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, I determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. I describe these matters in my auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, I determine that a matter should not be communicated in my report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

I am responsible for the audit resulting in this independent auditor's report.

Kessirin Pinpuvadol
Certified Public Accountant (Thailand) No. 7325

EY Office Limited
Bangkok: 14 February 2024

Thai Oil Public Company Limited and its subsidiaries

Statement of financial position

As at 31 December 2023

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2023	2022	2023	2022
Assets					
Current assets					
Cash and cash equivalents	*7*	28,431,620,650	43,576,141,447	23,736,906,709	34,787,150,811
Deposits at financial institutions used as collateral	*8*	-	342,942,122	-	-
Short-term investments in financial assets	*9*	5,944,539,560	51,708	5,774,645,000	-
Trade receivables	*10*	31,154,418,362	28,758,763,491	31,899,944,117	29,780,895,851
Other receivables	*11*	2,353,195,206	4,360,674,670	2,398,157,893	4,335,163,616
Current portion of finance lease receivables		-	-	307,103,777	269,294,153
Receivables from oil fuel fund		624,548,279	15,883,619,978	624,548,280	15,883,619,978
Short-term loans to related parties	*6*	-	-	934,382,650	2,079,284,357
Inventories	*12*	52,655,827,049	55,343,143,495	47,174,183,274	49,854,208,859
Derivative assets	*37*	218,987,454	1,408,421,983	188,127,115	1,396,838,782
Prepaid corporate income tax		2,197,393,961	2,197,303,296	1,769,103,579	1,857,158,368
Value added tax receivables		1,790,795,407	1,957,127,320	1,285,504,086	1,132,472,675
Total current assets		125,371,325,928	153,828,189,510	116,092,606,480	141,376,087,450
Non-current assets					
Financial assets measured at fair value through profit or loss	*37*	721,837,723	798,372,415	314,353,497	381,180,557
Financial assets measured at fair value through other comprehensive income	*37*	14,252,714,196	21,394,024,959	13,677,187,445	20,585,524,401
Investments in subsidiaries	*13*	-	-	41,280,364,907	41,280,364,907
Investments in joint ventures and associates	*14*	32,039,270,297	32,603,023,727	981,869,921	981,869,921
Long-term loans to related party	*6*	-	-	9,985,938,541	2,000,000,000
Finance lease receivables, net of current portion		-	-	837,111,270	832,504,343
Investment properties	*15*	102,520,270	102,520,270	1,185,363,847	1,123,781,182
Property, plant and equipment	*16*	218,617,821,097	206,475,779,500	189,321,383,343	175,669,529,025
Right-of-use assets	*17*	22,223,561,873	24,037,927,615	21,508,999,826	23,266,294,300
Goodwill	*18*	826,150,184	849,398,538	-	-
Intangible assets	*19*	2,403,654,692	2,498,591,531	860,863,095	894,478,714
Deferred tax assets	*20*	2,502,706,442	1,125,358,279	1,906,800,870	375,009,310
Other non-current assets		931,138,350	867,671,726	860,800,046	781,310,712
Total non-current assets		294,621,375,124	290,752,668,560	282,721,036,608	268,171,847,372
Total assets		419,992,701,052	444,580,858,070	398,813,643,088	409,547,934,822

The accompanying notes to financial statements are an integral part of the financial statements.

Thai Oil Public Company Limited and its subsidiaries

Statement of financial position (continued)

As at 31 December 2023

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2023	2022	2023	2022
Liabilities and shareholders' equity					
Current liabilities					
Short-term loans from financial institutions	*21*	3,198,430,994	1,891,679,473	-	-
Short-term loans from related parties	*6*	-	-	5,185,565,423	320,937,658
Trade payables	*22*	50,184,442,001	74,154,200,327	54,495,483,064	78,629,741,664
Other payables	*23*	3,910,475,893	4,948,018,121	3,218,319,234	4,222,520,887
Current portion of long-term loans					
from financial institutions	*24*	3,060,928,045	2,884,118,047	2,374,126,219	1,670,083,448
Current portion of long-term loans from related party	*6*	-	-	-	9,850,761,178
Current portion of debentures	*25*	7,000,000,000	17,317,475,318	7,000,000,000	7,515,272,144
Derivative liabilities	*37*	29,222,411	193,137,032	47,259,392	204,262,618
Current portion of lease liabilities	*17*	1,402,283,432	1,401,225,596	1,355,538,212	1,341,462,478
Income tax payables		3,153,972,139	431,326,511	2,729,195,655	-
Excise duty payables		1,463,127,267	451,837,587	1,461,835,339	451,755,137
Short-term provision		98,436,300	-	98,436,300	-
Total current liabilities		73,501,318,482	103,673,018,012	77,965,758,838	104,206,797,212
Non-current liabilities					
Long-term loans from financial institutions,					
net of current portion	*24*	16,034,540,475	19,806,567,400	13,837,711,964	10,236,056,978
Long-term loans from a third party	*24*	191,437,500	216,437,500	-	-
Long-term loans from related party,					
net of current portion	*6*	-	-	98,651,501,113	99,632,079,681
Debentures, net of current portion	*25*	133,631,605,245	131,634,961,395	35,292,022,580	32,355,912,277
Derivative liabilities	*37*	1,109,069,159	1,979,726,503	1,109,069,159	1,920,640,434
Lease liabilities, net of current portion	*17*	19,688,452,996	21,106,960,627	19,866,558,337	21,264,240,778
Deferred tax liabilities	*20*	15,751,580	2,811,025	-	-
Provision for long-term employee benefits	*26*	2,714,494,330	2,752,608,756	2,069,970,365	2,173,378,579
Other non-current liabilities		4,794,340,688	4,750,395,386	4,934,452,286	4,855,245,693
Total non-current liabilities		178,179,691,973	182,250,468,592	175,761,285,804	172,437,554,420
Total liabilities		251,681,010,455	285,923,486,604	253,727,044,642	276,644,351,632

The accompanying notes to financial statements are an integral part of the financial statements.

Thai Oil Public Company Limited and its subsidiaries

Statement of financial position (continued)

As at 31 December 2023

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2023	2022	2023	2022
Shareholders' equity					
Share capital	*27*				
Registered					
2,233,835,566 ordinary shares of Baht 10 each					
(2022: 2,315,147,873 ordinary shares of Baht 10 each)		22,338,355,660	23,151,478,730	22,338,355,660	23,151,478,730
Issued and fully paid up					
2,233,835,566 ordinary shares of Baht 10 each					
(2022: 2,233,835,566 ordinary shares of Baht 10 each)		22,338,355,660	22,338,355,660	22,338,355,660	22,338,355,660
Share premium on ordinary shares		10,698,724,259	10,698,724,259	10,698,724,259	10,698,724,259
Other deficits		(4,342,658,559)	(4,342,658,559)	(9,146,634,394)	(9,243,166,763)
Retained earnings					
Appropriated - statutory reserve	*28*	2,315,147,873	2,315,147,873	2,315,147,873	2,315,147,873
Appropriated - other reserves		244,500,000	244,500,000	244,500,000	244,500,000
Unappropriated		141,288,329,958	127,095,140,237	126,766,514,243	110,599,064,061
Other components of shareholders' equity		(6,974,640,316)	(2,314,908,203)	(8,130,009,195)	(4,049,041,900)
Equity attributable to owners of the Company		165,567,758,875	156,034,301,267	145,086,598,446	132,903,583,190
Non-controlling interests of the subsidiaries		2,743,931,722	2,623,070,199	-	-
Total shareholders' equity		168,311,690,597	158,657,371,466	145,086,598,446	132,903,583,190
Total liabilities and shareholders' equity		419,992,701,052	444,580,858,070	398,813,643,088	409,547,934,822

The accompanying notes to financial statements are an integral part of the financial statements.

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Directors

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Thai Oil Public Company Limited and its subsidiaries

Statement of income

For the year ended 31 December 2023

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2023	2022	2023	2022
Revenue					
Revenue from sales		459,402,194,950	505,703,223,990	492,054,518,624	544,791,694,672
Subsidy from oil fuel fund		9,841,693,460	23,885,643,273	9,841,693,460	23,885,643,273
Total revenue		469,243,888,410	529,588,867,263	501,896,212,084	568,677,337,945
Cost of sales		(436,163,527,244)	(481,137,018,938)	(477,488,207,787)	(526,994,340,498)
Gross profit		33,080,361,166	48,451,848,325	24,408,004,297	41,682,997,447
Dividend income		200,774,430	80,531,829	6,905,946,641	2,778,257,746
Loss from financial instruments		(2,849,952,347)	(16,005,831,795)	(2,873,490,433)	(16,128,333,432)
Gain (loss) on exchange		212,826,718	(64,454,875)	253,985,452	(24,241,664)
Gain on disposal of investments in associates	*14*	-	10,037,820,547	-	10,487,368,511
Gain on reclassification of investments	*14*	-	7,296,617,443	-	7,539,035,364
Other income	*29*	1,138,175,482	781,970,931	3,477,187,708	2,596,232,584
Selling and distribution expenses		(949,961,377)	(1,052,076,412)	(108,638,695)	(68,246,848)
Administrative expenses		(2,570,854,449)	(3,129,684,881)	(3,097,255,409)	(2,819,648,121)
Share of profit (loss) from investments in joint ventures and associates	*14*	83,753,805	(512,610,221)	-	-
Operating profit		28,345,123,428	45,884,130,891	28,965,739,561	46,043,421,587
Finance cost		(4,088,509,884)	(3,860,037,320)	(3,754,545,176)	(3,490,691,352)
Profit before income tax expenses		24,256,613,544	42,024,093,571	25,211,194,385	42,552,730,235
Income tax expenses	*20*	(4,671,722,061)	(8,917,861,561)	(3,698,311,432)	(8,887,386,197)
Profit for the year		19,584,891,483	33,106,232,010	21,512,882,953	33,665,344,038
Profit attributable to:					
Equity holders of the Company		19,443,165,644	32,668,134,594	21,512,882,953	33,665,344,038
Non-controlling interests of the subsidiaries		141,725,839	438,097,416		
		19,584,891,483	33,106,232,010		
Earnings per share	*32*				
Basic earnings per share					
Profit attributable to equity holders of the Company		8.70	15.63	9.63	16.11

The accompanying notes to financial statements are an integral part of the financial statements.

Thai Oil Public Company Limited and its subsidiaries

Statement of comprehensive income

For the year ended 31 December 2023

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2023	2022	2023	2022
Profit for the year		19,584,891,483	33,106,232,010	21,512,882,953	33,665,344,038
Other comprehensive income:					
Other comprehensive income to be reclassified					
to profit or loss in subsequent periods:					
Cash flow hedges, net of income tax	*36*	1,481,858,771	(3,034,720,209)	1,434,589,915	(3,240,728,805)
Cost of hedging, net of income tax	*36*	11,112,355	(531,845,871)	11,112,355	(531,845,871)
Exchange differences on translation of financial					
statements in foreign currency		(405,977,626)	992,203,914	-	-
Share of other comprehensive income from investments					
in associates under equity method, net of income tax	*14*	45,781,296	147,817,577	-	-
Other comprehensive income to be reclassified					
to profit or loss in subsequent periods, net of income tax		1,132,774,796	(2,426,544,589)	1,445,702,270	(3,772,574,676)
Other comprehensive income not to be reclassified					
to profit or loss in subsequent periods					
Actuarial gain (loss), net of income tax	*26*	(2,151,044)	1,568,947,765	-	1,288,808,947
Changes in fair value of financial assets at fair value					
through other comprehensive income, net of income tax		(5,793,057,494)	1,485,531,242	(5,526,669,565)	1,861,021,384
Share of other comprehensive income from investments					
in joint ventures and associates, net of income tax	*14*	-	61,657,501	-	-
Other comprehensive income not to be reclassified					
to profit or loss in subsequent periods, net of income tax		(5,795,208,538)	3,116,136,508	(5,526,669,565)	3,149,830,331
Other comprehensive income for the year		(4,662,433,742)	689,591,919	(4,080,967,295)	(622,744,345)
Total comprehensive income for the year		14,922,457,741	33,795,823,929	17,431,915,658	33,042,599,693
Total comprehensive income attributable to:					
Equity holders of the Company		14,782,358,010	33,354,307,224	17,431,915,658	33,042,599,693
Non-controlling interests of the subsidiaries		140,099,731	441,516,705		
		14,922,457,741	33,795,823,929		

The accompanying notes to financial statements are an integral part of the financial statements.

Thai Oil Public Company Limited and its subsidiaries

Statement of changes in shareholders' equity

For the year ended 31 December 2023

(Unit: Baht)

	Consolidated financial statements																
	Equity attributable to owners of the Company																
									Other components of shareholders' equity								
									Other comprehensive income								
			Other surpluses (deficits)						Changes in value of financial assets designated at fair value through other comprehensive	Exchange differences on translation of financial statements in foreign currency	Cash flow hedges	Cost of hedging	Share of other comprehensive income from an associate	Share of other comprehensive income from held-for-sale	Total equity attributable to owners of the Company	Non-controlling interests of the subsidiaries	Total shareholders' equity
	Issued and fully paid-up share capital	Share premium on ordinary shares	Surplus on business combination under common control	Deficits from the change in the ownership interests in subsidiaries	Surpluses (deficits) from the change in the net assets in an associate	Retained earnings: Appropriated - statutory reserve	Retained earnings: Appropriated - other reserves	Retained earnings: Unappropriated									
Balance as at 1 January 2022	20,400,278,730	2,456,261,491	330,835,954	(4,673,494,513)	(2,322,774,902)	2,040,027,873	244,500,000	103,544,202,130	(60,986,103)	1,045,067,052	(2,251,515,412)	(139,250,650)	255,062,349	12,530,179	120,880,744,178	2,213,335,971	123,094,080,149
Profit for the year	-	-	-	-	-	-	-	32,668,134,594	-	-	-	-	-	-	32,668,134,594	438,097,416	33,106,232,010
Other comprehensive income for the year	-	-	-	-	-	-	-	1,574,798,788	1,485,531,242	991,533,813	(3,034,720,207)	(531,845,871)	202,069,936	(1,194,157)	686,173,544	3,419,289	689,592,833
Total comprehensive income for the year	-	-	-	-	-	-	-	34,242,933,382	1,485,531,242	991,533,813	(3,034,720,207)	(531,845,871)	202,069,936	(1,194,157)	33,354,308,138	441,516,705	33,795,824,843
Increase share capital	1,938,076,930	8,430,634,645	-	-	-	-	-	-	-	-	-	-	-	-	10,368,711,575	-	10,368,711,575
Transaction costs - net of income tax	-	(188,171,877)	-	-	-	-	-	-	-	-	-	-	-	-	(188,171,877)	-	(188,171,877)
Transfer to statutory reserve	-	-	-	-	-	275,120,000	-	(275,120,000)	-	-	-	-	-	-	-	-	-
Dividend paid (Note 34)	-	-	-	-	-	-	-	(8,546,849,418)	-	-	-	-	-	-	(8,546,849,418)	(31,782,477)	(8,578,631,895)
Liquidation a subsidiary	-	-	-	-	-	-	-	-	-	-	-	-	-	(11,336,022)	(11,336,022)	-	(11,336,022)
Disposal of investment in an associate	-	-	-	-	2,320,583,519	-	-	(1,870,025,857)	-	-	-	-	(275,854,352)	-	174,703,310	-	174,703,310
Share gain from the change in the net assets in an associate	-	-	-	-	2,191,383	-	-	-	-	-	-	-	-	-	2,191,383	-	2,191,383
Balance as at 31 December 2022	22,338,355,660	10,698,724,259	330,835,954	(4,673,494,513)	-	2,315,147,873	244,500,000	127,095,140,237	1,424,545,139	2,036,600,865	(5,286,235,619)	(671,096,521)	181,277,933	-	156,034,301,267	2,623,070,199	158,657,371,466
Balance as at 1 January 2023	22,338,355,660	10,698,724,259	330,835,954	(4,673,494,513)	-	2,315,147,873	244,500,000	127,095,140,237	1,424,545,139	2,036,600,865	(5,286,235,619)	(671,096,521)	181,277,933	-	156,034,301,267	2,623,070,199	158,657,371,466
Profit for the year	-	-	-	-	-	-	-	19,443,165,644	-	-	-	-	-	-	19,443,165,644	141,725,839	19,584,891,483
Other comprehensive income for the year	-	-	-	-	-	-	-	(1,075,521)	(5,793,057,494)	(405,427,041)	1,481,858,771	11,112,355	45,781,296	-	(4,660,807,634)	(1,626,108)	(4,662,433,742)
Total comprehensive income for the year	-	-	-	-	-	-	-	19,442,090,123	(5,793,057,494)	(405,427,041)	1,481,858,771	11,112,355	45,781,296	-	14,782,358,010	140,099,731	14,922,457,741
Dividend paid (Note 34)	-	-	-	-	-	-	-	(5,248,900,402)	-	-	-	-	-	-	(5,248,900,402)	(19,238,208)	(5,268,138,610)
Balance as at 31 December 2023	22,338,355,660	10,698,724,259	330,835,954	(4,673,494,513)	-	2,315,147,873	244,500,000	141,288,329,958	(4,368,512,355)	1,631,173,824	(3,804,376,848)	(659,984,166)	227,059,229	-	165,567,758,875	2,743,931,722	168,311,690,597

The accompanying notes to financial statements are an integral part of the financial statements.

Thai Oil Public Company Limited and its subsidiaries

Statement of changes in shareholders' equity (continued)

For the year ended 31 December 2023

(Unit: Baht)

	Separate financial statements									
							Other components of shareholdes' equity			
							Other comprehensive income			
	Issued and fully paid-up share capital	Share premium on ordinary shares	Other deficits Deficits on business combination under common control	Retained earnings Appropriated - statutory reserve	Retained earnings Appropriated - other reserves	Retained earnings Unappropriated	Change in value of financial assets disinaged at fair value through other comprehensive income	Cash flow hedges	Cost of hedging	Total shareholders' equity
Balance as at 1 January 2022	20,400,278,730	2,456,261,491	(17,970,817,850)	2,040,027,873	244,500,000	93,194,531,581	-	(1,998,237,958)	(139,250,650)	98,227,293,217
Profit for the year	-	-	-	-	-	33,665,344,038	-	-	-	33,665,344,038
Other comprehensive income for the year	-	-	-	-	-	1,288,808,947	1,861,021,384	(3,240,728,805)	(531,845,871)	(622,744,345)
Total comprehensive income for the year	-	-	-	-	-	34,954,152,985	1,861,021,384	(3,240,728,805)	(531,845,871)	33,042,599,693
Increase share capital	1,938,076,930	8,430,634,645	-	-	-	-	-	-	-	10,368,711,575
Transaction costs - net of income tax	-	(188,171,877)	-	-	-	-	-	-	-	(188,171,877)
Transfer to statutory reserve	-	-	-	275,120,000	-	(275,120,000)	-	-	-	-
Dividend paid (Note 34)	-	-	-	-	-	(8,546,849,418)	-	-	-	(8,546,849,418)
Disposal of investment in an associate	-	-	8,727,651,087	-	-	(8,727,651,087)	-	-	-	-
Balance as at 31 December 2022	22,338,355,660	10,698,724,259	(9,243,166,763)	2,315,147,873	244,500,000	110,599,064,061	1,861,021,384	(5,238,966,763)	(671,096,521)	132,903,583,190
Balance as at 1 January 2023	22,338,355,660	10,698,724,259	(9,243,166,763)	2,315,147,873	244,500,000	110,599,064,061	1,861,021,384	(5,238,966,763)	(671,096,521)	132,903,583,190
Profit for the year	-	-	-	-	-	21,512,882,953	-	-	-	21,512,882,953
Other comprehensive income for the year	-	-	-	-	-	-	(5,526,669,565)	1,434,589,915	11,112,355	(4,080,967,295)
Total comprehensive income for the year	-	-	-	-	-	21,512,882,953	(5,526,669,565)	1,434,589,915	11,112,355	17,431,915,658
Dividend paid (Note 34)	-	-	-	-	-	(5,248,900,402)	-	-	-	(5,248,900,402)
Disposal of assets acquired from business combination under common control	-	-	96,532,369	-	-	(96,532,369)	-	-	-	-
Balance as at 31 December 2023	22,338,355,660	10,698,724,259	(9,146,634,394)	2,315,147,873	244,500,000	126,766,514,243	(3,665,648,181)	(3,804,376,848)	(659,984,166)	145,086,598,446

The accompanying notes to financial statements are an integral part of the financial statements.

Thai Oil Public Company Limited and its subsidiaries

Statement of cash flows

For the year ended 31 December 2023

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2023	2022	2023	2022
Cash flows from operating activities					
Profit before income tax expenses		24,256,613,544	42,024,093,571	25,211,194,385	42,552,730,235
Adjustments to reconcile profit before tax to					
net cash provided by (paid from) operating activities:					
Depreciation and amortisation	*30*	7,799,461,684	7,744,330,761	5,175,044,946	5,281,655,023
Expected credit loss		2,990,407	3,155,351	-	-
Loss (reversal) of reduction of inventory to net realisable value	*12*	(55,459,025)	557,542,659	221,343,137	332,074,942
Finance cost		4,088,509,884	3,860,037,320	3,754,545,176	3,490,691,352
Unrealised loss on exchange		778,724,483	1,033,832,176	730,525,498	906,789,204
Share of loss (profit) from investments in joint ventures					
and associates	*14*	(83,753,805)	512,610,221	-	-
Dividends income		(200,774,430)	(80,531,829)	(6,905,946,641)	(2,778,257,746)
Difference on lease termination		-	(78,110,615)	-	(76,091,730)
Impairment loss on investment in an associate		-	-	-	11,400,000
Impairment loss on property, plant and equipment		-	686,953,439	-	-
Loss (gain) on disposal of property, plant and equipment		34,151	(41,989)	(61,859,575)	2,866
Loss on write-off of property, plant and equipment		8,922,645	7,477	8,899,721	-
Short-term provision		98,436,300	-	98,436,300	-
Loss on hedging of forecasted revenue transaction		224,946,715	271,145,454	224,946,715	271,145,454
Loss (gain) from changes in fair value of financial assets		117,814,302	(18,302,106)	66,827,060	(8,679,064)
Unrealised loss from changes in fair value of derivatives		130,507,872	182,777,373	156,696,406	139,780,182
Gain on disposal of assets and liabilities held-for-sale		-	(11,881,212)	-	(31,235,890)
Gain on disposal of investments in an associate	*14*	-	(10,037,820,166)	-	(10,487,368,511)
Gain on reclassification of investment	*14*	-	(7,296,617,443)	-	(7,539,035,364)
Amortisation of advance receipts for land lease and others		(23,680,612)	(16,527,146)	(673,343,161)	(517,112,158)
Profit from operating activities before					
changes in operating assets and liabilities		37,143,294,115	39,336,653,296	28,007,309,967	31,548,488,795
Operating assets (increase) decrease					
Trade receivables		(2,531,565,450)	(5,430,112,419)	(2,198,325,874)	(4,741,327,573)
Other receivables		2,041,682,804	(3,316,102,587)	1,921,268,029	(3,470,349,380)
Receivables from oil fuel fund		15,259,071,699	(12,315,955,343)	15,259,071,699	(12,315,955,343)
Inventories		2,742,775,472	(16,324,649,499)	2,458,682,448	(16,563,531,369)
Value added tax receivables		166,331,913	542,913,112	(153,031,411)	701,302,340
Other non-current assets		43,238,973	(5,919,922)	10,967,051	32,364
Operating liabilities increase (decrease)					
Trade payables		(23,967,425,095)	51,162,328,929	(24,132,659,907)	53,295,754,544
Other payables		(1,586,943,196)	(330,059,477)	(621,552,848)	(176,678,137)
Excise duty payables		1,011,289,680	(1,345,805,566)	1,010,080,202	(1,344,871,424)
Other non-current liabilities		(51,053,506)	745,829,229	(40,616,901)	518,845,590
Cash from operating activities		30,270,697,409	52,719,119,753	21,521,192,455	47,451,710,407
Corporate income tax paid		(2,182,928,753)	(9,468,363,069)	(1,336,374,046)	(8,206,074,908)
Net cash flows from operating activities		28,087,768,656	43,250,756,684	20,184,818,409	39,245,635,499

The accompanying notes to financial statements are an integral part of the financial statements.

Thai Oil Public Company Limited and its subsidiaries

Statement of cash flows (continued)

For the year ended 31 December 2023

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2023	2022	2023	2022
Cash flows from investing activities					
Dividends received		594,809,552	841,280,179	6,905,946,641	2,778,257,746
Decrease (increase) in deposits at a financial institution used as collateral		342,942,122	(14,973,841)	-	-
Repayment of short-term investments in financial assets		(5,766,216,853)	(152)	(5,589,161,000)	-
Cash payment for purchase of financial assets measured at					
fair value through other comprehensive income		(99,662,001)	(70,133,368)	-	-
Cash payment for purchase of financial assets measured at					
fair value through profit or loss		(45,276,631)	(84,666,924)	-	-
Cash receipt from short-term loans to related parties	*6*	-	-	1,135,281,727	781,882,950
Cash payment for short-term loans to related parties		-	-	-	(2,079,284,357)
Cash receipt from long-term loans to related party	*6*	-	-	2,000,000,000	-
Cash payment for long-term loans to related party	*6*	-	-	(9,985,000,000)	(2,000,000,000)
Proceeds from long-term loans to savings co-operative of employees		187,259	43,657,453	-	43,393,365
Cash payment for long-term loans to savings co-operative of employees		(118,225,368)	(13,046,642)	(116,975,368)	(6,586,000)
Proceeds from disposal of property, plant and equipment		133,899	136,128	72,837,832	91,268
Cash payment for acquisition of property, plant and equipment		(14,503,557,443)	(31,929,205,073)	(12,912,018,397)	(28,731,959,237)
Cash payment for acquisition of intangible assets		(96,266,773)	(159,603,521)	(90,542,213)	(148,176,801)
Cash payment for right-of-use assets		(814,139)	(19,344,619)	(814,139)	(19,344,619)
Cash payment for capital increase in a subsidiary		-	-	-	(266,810,000)
Proceeds from disposal of investments in an associate	*14*	-	22,047,150,675	-	22,047,150,675
Proceeds from liquidation of a subsidiary		-	308,417,890	-	308,417,890
Proceeds from liquidation of joint ventures		4,769	-	-	-
Proceeds from decrease in capital of joint ventures		-	1,186,096	-	-
Net cash flows used in investing activities		(19,691,941,607)	(9,049,145,719)	(18,580,444,917)	(7,292,967,120)

The accompanying notes to financial statements are an integral part of the financial statements.

Thai Oil Public Company Limited and its subsidiaries

Statement of cash flows (continued)

For the year ended 31 December 2023

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2023	2022	2023	2022
Cash flows from financing activities					
Finance costs paid		(7,653,521,747)	(7,397,031,980)	(8,323,443,642)	(7,694,992,039)
Dividends paid to the shareholders of the Company	*34*	(5,248,900,402)	(8,546,849,418)	(5,248,900,402)	(8,546,849,418)
Dividends paid to non-controlling interests		(19,238,208)	(31,782,477)	-	-
Proceeds from short-term loans from financial institutions	*21*	11,480,657,635	17,325,104,966	-	-
Repayment of short-term loans from financial institutions	*21*	(10,150,168,786)	(16,358,412,216)	-	-
Proceeds from (repayment of) short-term loans from related parties	*6*	-	-	4,864,627,766	(1,814,542,454)
Proceeds from long-term loans from financial institutions	*24*	6,012,208,056	8,779,136,908	6,000,000,000	8,500,000,000
Repayment of long-term loans from financial institutions	*24*	(9,651,308,085)	(17,862,863,012)	(1,700,000,000)	(16,209,000,000)
Repayment of long-term loans from a third party	*24*	(25,000,000)	(63,000,000)	-	-
Repayment of long-term loans from related parties	*6*	-	(14,000,000,000)	(9,365,156,104)	(14,000,000,000)
Cash payment for loans financing fee		(28,178,562)	(7,530,274)	(28,133,562)	(7,510,274)
Proceeds from issuance of debentures	*25*	10,000,000,000	12,000,000,000	10,000,000,000	12,000,000,000
Redemption of debentures	*25*	(16,381,352,255)	(3,000,000,000)	(7,109,024,651)	(3,000,000,000)
Cash payment for debenture financing fee		(3,944,712)	(12,136,946)	(3,944,712)	(12,136,946)
Payment of principal portion of lease liabilities		(1,403,133,971)	(1,211,000,040)	(1,346,015,721)	(1,140,588,486)
Proceeds from increase in share capital		-	10,368,711,576	-	10,368,711,576
Transaction costs on issue of shares		-	(235,214,847)	-	(235,214,847)
Net cash flows used in financing activities		(23,071,881,037)	(20,252,867,760)	(12,259,991,028)	(21,792,122,888)
Net increase (decrease) in cash and cash equivalents		(14,676,053,988)	13,948,743,205	(10,655,617,536)	10,160,545,491
Cash and cash equivalents at beginning of the year		43,576,141,447	29,695,935,321	34,787,150,811	24,599,931,465
Effect of exchange rate changes		(468,466,809)	(68,537,079)	(394,626,566)	26,673,855
Cash and cash equivalents at end of the year	*7*	28,431,620,650	43,576,141,447	23,736,906,709	34,787,150,811
Supplemental disclosure of cash flows information					
Payables on acquisition of property, plant and equipment		350,341,399	741,475,168	176,741,783	692,115,512
Payables on acquisition of intangible assets		134,122,039	214,209,574	15,309,165	-
Increase in right-of-use assets and lease liabilities		131,946,159	9,458,104,838	122,155,829	9,540,274,158

The accompanying notes to financial statements are an integral part of the financial statements.

1. General information

Thai Oil Public Company Limited (the Company) is a public limited company which is incorporated and domiciled in Thailand and is listed on the Stock Exchange of Thailand. The parent company is PTT Public Company Limited (45.03% of shareholding as at 31 December 2023).

The principal business operations of the Group is oil refinery and distributions, petrochemicals, lube base oil and other businesses in domestic and overseas. The address of the Company's registered offices and refinery plant as follows:

Head office: 555/1 Energy Complex Building A, 11th Floor, Vibhavadi Rangsit Road, Kwang Chatuchak, Khet Chatuchak, Bangkok 10900

Sriracha office and refinery plant: 42/1 Moo 1, Sukhumvit Road Km. 124, Tambol Tungsukla, Amphur Sriracha, Chonburi 20230

2. Basis of preparation

2.1 The financial statements have been prepared in accordance with Thai Financial Reporting Standards enunciated under the Accounting Professions Act B.E. 2547 and their presentation has been made in compliance with the stipulations of the Notification of the Department of Business Development, issued under the Accounting Act B.E. 2543, including guidelines promulgated by the Federation of Accounting Professions (TFAC), and the financial reporting requirements of the Securities and Exchange Commission under the Securities and Exchange Act, B.E. 2535.

The financial statements have been prepared on a historical cost basis except where otherwise disclosed in the accounting policies. The financial statements in Thai language are the official statutory financial statements of the Company. The financial statements in English language have been translated from the Thai language financial statements.

2.2 Basis of consolidation

a) The consolidated financial statements include the financial statements of Thai Oil Public Company Limited ("the Company") and the following subsidiary companies ("the subsidiaries") (collectively as "the Group"):

Company's name	Nature of business	Country of incorporation	Percentage of shareholding	
			2023	2022
Direct subsidiaries				
Thai Paraxylene Co., Ltd.	Paraxylene manufacturing and distribution	Thailand	99.99	99.99
Thai Lube Base Public Company Limited	Lube base oil refining and distribution	Thailand	99.99	99.99
Thaioil Energy Services Co., Ltd.	Providing human Resource management	Thailand	99.99	99.99
Thaioil Solvent Co., Ltd.	Investment in solvent and chemical business	Thailand	99.99	99.99
Thaioil Ethanol Co., Ltd.	Investment in ethanol businesses and alternative energy products	Thailand	99.99	99.99
TOP SPP Co., Ltd.	Power and stream generation and distribution	Thailand	99.99	99.99
Thaioil Treasury Center Co., Ltd.	Treasury centre services for the Group's business	Thailand	99.99	99.99
PT TOP Investment Indonesia	Investment in Olefins petrochemical business	Republic of Indonesia	100.00	100.00
Indirect subsidiaries				
TOPNEXT International Co., Ltd.	Distribution of solvent and chemical products	Thailand	99.99	99.99
Sak Chaisidhi Co., Ltd.	Solvent and chemical products manufacturing	Thailand	80.52	80.52
TOP Solvent (Vietnam) LLC	Distribution of solvent and chemical products	Socialist Republic of Vietnam	100.00	100.00
PT Tirta Surya Raya	Distribution of solvent and chemical products	Republic of Indonesia	77.71	77.71
JSKEM Private Limited	Distribution of solvent and chemical products	Republic of Singapore	60.00	60.00
TOPNEXT India Private Limited (Formerly known as "TSCHEM India Private Limited")	Distribution of solvent and chemical products	Republic of India	60.00	60.00
Sapthip Co., Ltd.	Ethanol products manufacturing and distribution	Thailand	50.00	50.00
Sapthip Green Energy Co., Ltd.	Biogas power generation and distribution	Thailand	50.00	50.00

Company's name	Nature of business	Country of incorporation	Percentage of shareholding	
			2023	2022
LABIX Co., Ltd.	Linear Alkyl Benzene manufacturing and distribution	Thailand	75.00	75.00
TOP Ventures Company Limited	Investment in venture capital and/or start-up business	Thailand	99.99	99.99
TOP Ventures Hong Kong Limited	Investment in venture capital and/or start-up business	Hong Kong Special Administrative Region	100.00	100.00
TOP Ventures America LLC	Investment in venture capital and/or start-up business	United States of America	100.00	100.00

b) The financial statements of the subsidiaries are prepared using the same significant accounting policies as the Company.

3. New financial reporting standards

3.1 Financial reporting standards that became effective in the current year

During the year, the Group has adopted the revised financial reporting standards which are effective for fiscal years beginning on or after 1 January 2023. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and providing accounting guidance for users of the standards.

The adoption of these financial reporting standards does not have any significant impact on the Group's financial statements.

3.2 Financial reporting standards that will become effective for fiscal years beginning on or after 1 January 2024

The Federation of Accounting Professions issued a number of revised financial reporting standards, which are effective for fiscal years beginning on or after 1 January 2024. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and providing accounting guidance for users of the standards.

The management of the Group believes that adoption of these amendments will not have any significant impact on the Group's financial statements except for the following standard, which involves changes to key principles, as summarised below.

TAS 12, Income Taxes - International Tax Reform - Pillar Two Model Rules

The amendment requires that entities shall neither recognise nor disclose information about deferred taxes related to Pillar Two model rules published by the Organisation for Economic Co-operation and Development (OECD). This mandatory temporary exemption applies immediately.

The amendment also includes disclosure requirements for affected entities to help users of financial statements better understand an entity's exposure to Pillar Two income taxes arising from that legislation, particularly before its effective date. These disclosure requirements apply for annual reporting periods beginning on or after 1 January 2024, but not for any interim periods ending on or before 31 December 2024.

The management of the Group is currently in the process of assessing the potential exposure to Pillar Two income taxes on the financial statements.

4. Significant accounting policies

4.1 Principles of consolidation

a) Subsidiaries

Subsidiaries are all entities over which the Group has control. The Group controls an entity when the Group is exposed to, 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. Subsidiaries are consolidated from the date on which control is transferred to the Group until the date that control ceases.

In the separate financial statements, investments in subsidiaries are accounted for using cost method.

b) Associates

Associates are all entities over which the Group has significant influence but does not have control or joint control. Investments in associates are accounted for using the equity method of accounting, in consolidated financial statements.

In the separate financial statements, investments in associates are accounted for using cost method.

c) Equity method

The investment is initially recognised at cost which is consideration paid and directly attributable costs.

The Group's subsequently recognises shares of its associates and joint ventures' profits or losses and other comprehensive income in the profit or loss and other comprehensive income. The subsequent cumulative movements are adjusted against the carrying amount of the investment.

When the Group's share of losses in associates and joint ventures equals or exceeds its interest in the associates and joint ventures, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associates and joint ventures.

d) Changes in ownership interests

The Group treats transactions with non-controlling interests that do not result in a loss of control as transactions with equity owners of the Group. A difference between the amount of the adjustment to non-controlling interests to reflect their relative interest in the subsidiary and any consideration paid or received is recognised within equity.

If the ownership interest in associates and joint ventures is reduced but significant influence and joint control is retained, only a proportionate share of the amounts previously recognised in other comprehensive income is reclassified to profit or loss where appropriate. Profit or loss from reduce of the ownership interest in associates and joint ventures is recognise in profit or loss.

When the Group losses control, joint control or significant influence over investments, any retained interest in the investment is remeasured to its fair value, with the change in carrying amount recognised in profit or loss. The fair value becomes the initial carrying amount of the retained interest which is reclassified to investment in an associate, or a joint venture or a financial asset accordingly.

Upon the disposal of investments, the difference between the net disposal proceeds and the carrying amount of the investments is recorded in profit or loss.

e) Intercompany transactions on consolidation

Intra-group transactions, balances and unrealised gains on transactions are eliminated. Unrealised gains on transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interest in the associates and joint ventures. Unrealised losses are also eliminated in the same manner unless the transaction provides evidence of an impairment of the asset transferred.

4.2 Business combination

The Group applies the acquisition method to account for business combinations with an exception on business combination under common control.

Identifiable assets and liabilities acquired and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. On an acquisition-by-acquisition basis, the Group initially recognises any non-controlling interest in the acquiree either at fair value or at the non-controlling interest's proportionate share of the acquiree's net assets.

The excess of the consideration transferred, the amount of any non-controlling interest recognised and the acquisition-date fair value of any previous equity interest in the acquiree (for business combination achieved in stages) over the fair value of the identifiable net assets acquired is recorded as goodwill. In the case of a bargain purchase, the difference is recognised directly in profit or loss.

Acquisition-related cost

Acquisition-related cost are recognised as expenses in profit and loss in consolidated financial statements.

Step-up acquisition

If the business combination is achieved in stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is re-measured to fair value at the acquisition date; any gains or losses arising from such re-measured are recognised in profit or loss.

Changes in fair value of contingent consideration paid/received

Subsequent changes to the fair value of the contingent consideration that is an asset and/or liability is recognised in profit or loss. Contingent consideration that is classified as equity is not re-measured.

Business combination under common control

The Group accounts for business combination under common control by measuring acquired assets and liabilities of the acquiree at their carrying values presented in the highest level of the consolidation. The Group retrospectively adjusted the business combination under common control transactions as if the combination had occurred on the later of the beginning of the preceding comparative period and the date the acquiree has become under common control.

Consideration of business combination under common control are the aggregated amount of fair value of assets transferred, liabilities incurred and equity instruments issued by the acquirer at the date of which the exchange in control occurs.

The difference between consideration of business combination under common control and the acquirer's interests in the carrying value of the acquiree is presented as "surplus arising from business combination under common control" in equity.

The group recognised expenses related to business combination under common control as expenses during the period of which the business combination occurs.

4.3 Foreign currency translation

a) Functional and presentation currency

The financial statements are presented in Thai Baht, which is the Group's and the Company's functional and presentation currency.

b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions.

Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the profit or loss.

When the group recognises gains and losses on a non-monetary item that recognised in other comprehensive income, all of gains and losses on foreign exchange components will also be recognised in other comprehensive income. On the other hand, if gains and losses on a non-monetary item is recognised in profit and loss, all gains and losses on foreign exchange components will be recognised in profit and loss.

c) Group companies

The operational results and financial position of the Group's entities (none of which has the currency of a hyper-inflationary economy) that have a different functional currency from the Group's presentation currency are translated into the presentation currency as follows.

- Assets and liabilities are translated at the closing rate at the date of respective statement of financial position
- Income and expenses in statement of profit or loss and statement of comprehensive income are translated at average exchange rates and
- All resulting exchange differences are recognised in other comprehensive income.

4.4 Cash and cash equivalents

Cash and cash equivalents consist of cash in hand and at banks, and all highly liquid investments with an original maturity of three months or less and not subject to withdrawal restrictions.

Bank overdrafts are included in current liabilities in the statements of financial position.

4.5 Trade receivables

Trade receivables are amounts due from customers for goods sold and/or services performed in the ordinary course of business.

Trade receivables are recognised initially at the amount of consideration that is unconditional unless they contain significant financing components, they are recognised at fair value. The Group holds the trade receivables with the objective to collect the contractual cash flows and therefore measures them subsequently at amortised cost.

The impairment of trade receivables is disclosed in Note 4.7 (f).

4.6 Inventories

Inventories are stated at the lower of cost and net realisable value.

Cost of inventories is determined by the weighted average method. Cost of raw materials comprise all purchase cost and costs directly attributable to the acquisition of the inventory less all attributable discounts. The cost of finished goods and work in progress comprises raw materials, direct labour, other direct costs, overhead costs and directly attributable costs to bring the inventories to their present location and condition.

4.7 Financial instruments

Financial asset

a) Classification

The Group classifies its debt instrument financial assets in the following measurement categories depending on i) business model for managing the asset and ii) the cash flow characteristics of the asset whether they represent solely payments of principal and interest (SPPI).

- those to be measured subsequently at fair value (either through other comprehensive income or through profit or loss); and
- those to be measured at amortised cost.

The Group reclassifies debt investments when its business model for managing those assets changes.

For investments in equity instruments, the Group has an irrevocable election at the time of the initial recognition to account for the equity investment at fair value through profit or loss (FVPL) or at fair value through other comprehensive income (FVOCI) except those that are held for trading, they are measured at FVPL.

b) Recognition and derecognition

Regular way purchases, acquires or sales of financial assets are recognised on trade-date, the date on which the Group commits to purchase or sell the asset. Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the Group has transferred substantially all the risks and rewards of ownership.

c) Measurement

At initial recognition, the Group measures a financial asset at its fair value plus transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at FVPL are expensed in profit or loss.

Financial assets with embedded derivatives are considered in their entirety when determining whether the cash flows are principal and interest (SPPI).

d) Debt instruments

Subsequent measurement of debt instruments depends on the Group's business model for managing the asset and the cash flow characteristics of the financial assets. There are three measurement categories into which the Group classifies its debt instruments:

- Amortised cost: Financial assets that are held for collection of contractual cash flows where those cash flows represent SPPI are measured at amortised cost. Interest income from these financial assets is included in other income using the effective interest rate method. Any gain or loss arising on derecognition is recognised directly in profit or loss and presented in net gain (loss) from financial instruments. Foreign exchange gains and losses are presented in net foreign exchange gain (loss). Impairment losses are presented as a separate line item in the statement of profit or loss.

- FVOCI: Financial assets that are held for i) collection of contractual cash flows where the assets' cash flows represent solely payments of principal and interest are measured at FVOCI and ii) for selling the financial assets. Movements in the carrying amount are taken through other comprehensive income (OCI), except 1) for the recognition of impairment gains or losses, 2) interest income using the effective interest method, and 3) foreign exchange gains and losses which are recognised in profit or loss. When the financial assets is derecognised, the cumulative gain or loss previously recognised in OCI is reclassified from equity to profit or loss and recognised in net gain (loss) from financial instruments. Interest income is included in other income. Impairment expenses are presented separately in the statement of income.
- FVPL: Financial assets that do not meet the criteria for amortised cost or FVOCI are measured at FVPL. A gain or loss on a debt investment that is subsequently measured at FVPL is recognised in profit or loss and presented net within net gain (loss) from financial instruments in the period in which it arises.

e) Equity instruments

The Group measures all equity investments at fair value. Where the Group has elected to present fair value gains or losses on equity instruments in OCI, there is no subsequent reclassification of fair value gains or losses to profit or loss following the derecognition of the investment. Dividends from such investments continue to be recognised in profit or loss as dividend income when the right to receive payments is established.

Changes in the fair value of financial assets at FVPL are recognised in net gain (loss) from financial instruments in the statement of profit or loss.

Impairment losses or reversal of impairment losses on equity investments are reported together with changes in fair value.

f) Impairment

The Group applies the TFRS 9 using simplified approach in measuring the impairment of trade receivables, contract assets and lease receivables, which applies lifetime expected credit loss, from initial recognition, for all trade receivables, contract assets and lease receivables.

To measure the expected credit losses, trade receivables and contract assets have been grouped based on shared credit risk characteristics and the days past due. The contract assets relate to unbilled work in progress and have substantially the same risk characteristics as the trade receivables for the same types of contracts. The Group has therefore concluded that the expected loss rates for trade receivables are a reasonable approximation of the loss rates for the contract assets. The expected credit loss rates are based on payment profiles, historical credit losses as well as forward-looking information and factors that may affect the ability of the customers to settle the outstanding balances.

For other financial assets carried at amortised cost and FVOCI, the Group applies TFRS 9 using general approach in measuring the impairment of those financial assets. Under the general approach, the 12-month or the lifetime expected credit loss is applied depending on whether there has been a significant increase in credit risk and recognise loss from impairment since the initial recognition of those financial assets.

The credit risk assessment is performed at the end of each reporting period whether there is any significant increase in credit risk profile from the initial recognition by comparing i) expected risk of default as of the reporting date and ii) estimated risk of default on the date of initial recognition.

The Group assesses expected credit loss by considering the forward-looking information and past experiences. The expected credit loss is a probability-weighted estimate of credit losses (probability-weighted present value of estimated cash shortfall). The cash shortfall is the difference between all contractual cash flows that are due to the Group and all cash flows expected to receive, discounted at the original effective interest rate.

When measuring expected credit losses, the Group reflects the following:

- probability-weighted estimated uncollectible amounts
- time value of money
- supportable and reasonable information as of the reporting date about past experience, current conditions and forecasts of future situations.

Impairment and reversal of impairment losses are recognised in profit or loss as a separate line item and included in administrative expenses.

4.8 Investment property

Investment property, which is land, is held for long-term rental yields or for capital appreciation and is not occupied by the Group.

Investment properties are measured initially at cost, including transaction costs. Subsequently to initial recognition, investment properties are stated at cost less allowance for loss on impairment (if any). Land is not depreciated.

On disposal of investment properties, the difference between the net disposal proceeds and the carrying amount of the asset is recognised in profit or loss in the period when the asset is derecognised.

4.9 Property, plant and equipment

Land is stated at cost. Buildings and equipment are stated at cost less accumulated depreciation and allowance for loss on impairment of assets (if any). The costs comprise any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating. These include decommissioning costs, delivery and restoration costs, and any obligation associated with either its acquisition or a consequence of having used the items.

Subsequent costs are included carrying value of replace items, only when it is probable that future economic benefit associated with the items will flow to the group. In the case of replacement, the Group writes off carrying value of replaced items. Repair and maintenance costs are recognized in profit or loss during the financial period in which they are incurred.

Depreciation of plant and equipment is calculated by reference to their costs on the straight-line basis over the following estimated useful lives:

	Years
Buildings	10 - 30
Leasehold improvements	5 - 20
Refinery plant and equipment	20 - 35
Lube base oil refinery plants and equipment	16 - 30
Petrochemical plants	10 - 30
Power plants	20 - 25
Machinery, equipment and plant equipment	3 - 20
Oil and liquid chemical tankers and crew boats	10 - 25
Furniture, fixtures, office equipment and others	3 - 10
Vehicles	5

Depreciation is included in determining income.

No depreciation is provided on land and assets under construction.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on disposal of an asset is included in profit or loss when the asset is derecognised.

4.10 Goodwill

Goodwill is initially recorded at cost, which equals to the excess of cost of business combination over the fair value of the net assets acquired. If the fair value of the net assets acquired exceeds the cost of business combination, the excess is immediately recognised as gain in profit or loss.

Goodwill is carried at cost less any accumulated impairment losses. Goodwill is tested for impairment annually and when circumstances indicate that the carrying value may be impaired.

For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the Company's cash-generating units (or group of cash-generating units) that are expected to benefit from the synergies of the combination. The Company estimates the recoverable amount of each cash-generating unit (or group of cash-generating units) to which the goodwill relates. Where the recoverable amount of the cash-generating unit is less than the carrying amount, an impairment loss is recognised in profit or loss. Impairment losses relating to goodwill cannot be reversed in future periods.

4.11 Intangible assets

Intangible assets acquired through business combination are initially recognised at their fair value on the date of business acquisition while intangible assets acquired in other cases are recognised at cost. Following the initial recognition, the intangible assets are carried at cost less any accumulated amortisation and any accumulated impairment losses (if any).

Intangible assets with finite lives are amortised on the straight-line basis over the economic useful life and tested for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method of such intangible assets are reviewed at least at each financial year end. The amortisation expense is charged to profit or loss.

A summary of the intangible assets with finite useful lives is as follows:

	Years
License fee	10 - 25
Computer software	5 - 10
Patent	10

4.12 Impairment of non-financial assets

At the end of each reporting period, the Group performs impairment reviews in respect of the property, plant and equipment, right-of-use assets, investment properties and other intangible assets whenever events or changes in circumstances indicate that an asset may be impaired. The Group also carries out annual impairment reviews in respect of goodwill. An impairment loss is recognised when the recoverable amount of an asset, which is the higher of the asset's fair value less costs to sell and its value in use, is less than the carrying amount.

An impairment loss is recognised in profit or loss.

In the assessment of asset impairment (except for goodwill), if there is any indication that previously recognised impairment losses may no longer exist or may have decreased, the Group estimates the asset's recoverable amount. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised. The increased carrying amount of the asset attributable to a reversal of an impairment loss shall not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in profit or loss.

4.13 Leases

Leases - where the Group is the lessee

Leases are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group. Each lease payment is allocated between the liability and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis or utilisation rate.

Depreciation of right-of-use assets are calculated by reference to their costs, on the straight-line basis over the shorter of their estimated useful lives and the lease term.

Land	33	years
Buildings	3	years
Equipment	5	years
Oil tanker	10	years
Motor vehicles	5	years

If ownership of the leased asset is transferred to the Group at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

For contracts which contain both lease and non-lease components, the Group allocates the considerations in the contract to the lease and non-lease components based on their relative stand-alone prices. However, for leases of real estate for which the group is a lessee, it has elected not to separate lease and non-lease components and instead accounts for these as a single lease component.

Assets and liabilities arising from a lease are initially measured at present value. Lease liabilities include the net present value of the following lease payments:

- fixed payments (including in-substance fixed payments), less any lease incentives receivable,
- variable lease payment that are based on an index or a rate,
- amounts expected to be payable by the lessee under residual value guarantees,
- the exercise price of a purchase option if the lessee is reasonably certain to exercise that option, and
- payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option.

Lease payments under the extension options period are also included in the measurement of the liability, if the Company is reasonably certain in exercise its extension options.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be determined, the lessee's incremental borrowing rate is used, being the rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of similar value in a similar economic environment with similar terms and conditions, is used.

For contracts which have variable lease payments that depend on an index or rate, those payments are not included in the lease liability until they take effect. When adjustments to lease payments based on an index or rate take effect, the lease liability is reassessed and adjusted against the right-of-use asset.

Right-of-use assets are measured at cost. It comprises the following:

- the amount of the initial measurement of lease liability,
- any lease payments made at or before the commencement date less any lease incentives received,
- any initial direct costs, and
- restoration costs.

Short-term leases and leases of low-value assets

A lease that has a lease term less than or equal to 12 months from commencement date or a lease of low-value assets is recognised as expenses on a straight-line basis over the lease term. Low-value assets comprise of IT-equipment and small items of office furniture.

Leases - where the Group is the lessor

Finance lease

When assets are leased out under a finance lease, the present value of the lease payments is recognised as a receivable. The difference between the gross receivable and the present value of the receivable is recognised as unearned finance income. Lease income is recognised over the term of the lease which reflects a constant periodic rate of return. Initial direct costs are included in initial measurement of the finance lease receivable and reduce the amount of income recognised over the lease term.

Operating lease

Rental income under operating leases (net of any incentives given to lessees) is recognised on a straight-line basis over the lease term. Initial direct costs incurred in obtaining an operating lease are added to the carrying amount of the underlying asset and recognised as expense over the lease term on the same basis as lease income. The respective leased assets are included in the statement of financial position based on their nature.

The investment properties of the Group are leased to tenants under operating leases with rentals payable monthly. There are no variable lease payments that depend on an index or rate.

4.14 Financial liabilities

a) Classification

Financial instruments issued by the Group are classified as either financial liabilities or equity securities by considering contractual obligations as follow:

- Where the Group has an unconditional contractual obligation to deliver cash or another financial asset to another entity, it is considered a financial liability unless there is a predetermined or a possibility that settlement for a fixed amount of cash in exchange of a fixed number of the Group's own equity instruments.
- Where the Group has no contractual obligation or has an unconditional right to avoid delivering cash or another financial asset in settlement of the obligation, it is considered an equity instrument.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the reporting date.

b) Measurement

Financial liabilities are initially recognised at fair value and are subsequently measured at amortised cost.

c) Derecognition and modification

Financial liabilities are derecognised when the obligation specified in the contract is discharged, cancelled, or expired.

Where the terms of a financial liability are renegotiated or modified, the Group assesses whether the renegotiation or modification will result in the derecognition of that financial liability. Where the modification results in an extinguishment, the new financial liability is recognised based on fair value of its obligation. The remaining carrying amount of financial liability is derecognised. The difference is recognised as other gains (losses) in profit or loss.

Where the modification does not result in the derecognition of the financial liability, the carrying amount of the financial liability is recalculated as the present value of the renegotiated or modified contractual cash flows discounted at its original effective interest rate. The difference is recognised in other gains (losses) in profit or loss.

4.15 Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of the respective assets. All other borrowing costs are expensed in the period they are incurred. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

4.16 Income tax

Income tax expense represents the sum of corporate income tax currently payable and deferred tax.

Current tax

Current income tax is provided in the accounts at the amount expected to be paid to the taxation authorities, based on taxable profits determined in accordance with tax legislation.

Deferred tax

Deferred income tax is provided on temporary differences between the tax bases of assets and liabilities and their carrying amounts at the end of each reporting period, using the tax rates enacted at the end of the reporting period.

The Group recognises deferred tax liabilities for all taxable temporary differences while it recognises deferred tax assets for all deductible temporary differences and tax losses carried forward to the extent that it is probable that future taxable profit will be available against which such deductible temporary differences and tax losses carried forward can be utilised.

At each reporting date, the Group reviews and reduces the carrying amount of deferred tax assets to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised.

The Group records deferred tax directly to shareholders' equity if the tax relates to items that are recorded directly to shareholders' equity.

4.17 Employee benefits

a) Short-term employee benefits

Salaries, wages, bonuses and contributions to the social security fund are recognised as expenses when incurred.

b) Post-employment benefits and other long-term employee benefits

Defined contribution plans

The Company and its employees have jointly established a provident fund. The fund is monthly contributed by employees and by the Company. The fund's assets are held in a separate trust fund and the Company's contributions are recognised as expenses when incurred.

Defined benefit plans and other long-term employee benefits

The Group has obligations in respect of the severance payments it must make to employees upon retirement under labor law and other employee benefit plans. The Group treats these severance payment obligations as a defined benefit plan. In addition, the Group provides other long-term employee benefit plan, namely long service awards.

The obligation under the defined benefit plan and other long-term employee benefit plans is determined by a professionally qualified independent actuary based on actuarial techniques, using the projected unit credit method.

Actuarial gains and losses arising from defined benefit plans are recognised immediately in other comprehensive income.

Actuarial gains and losses arising from other long-term benefits are recognised immediately in profit and loss.

Past service costs are recognised in profit or loss on the earlier of the date of the plan amendment or curtailment and the date that the Group recognises restructuring-related costs.

4.18 Provisions

Provisions are recognised when the Group has a present obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation. The increase in the provision due to passage of time is recognised as finance costs.

4.19 Government grants

Grants from the government are recognised at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with attached conditions.

Government grants relating to income are deferred and recognised in profit or loss as subsidy over the period necessary to match them with the costs they are intended to compensate.

Subsidy from oil fuel fund is calculated based on the conditions and rates announced by the Energy Policy and Planning committees.

The Group separately presents government grants from revenue from sales in profit or loss.

4.20 Revenue recognition

Revenue includes all revenues from ordinary business activities. All ancillary income in connection with rendering of services in the course of the Group's ordinary activities are also presented as revenue.

Revenue are recorded net of value added tax. They are recognised in accordance with the provision of goods or services, provided that collectability of the consideration is probable.

Multiple element arrangements involving delivery or provision of multiple products or services are separated into individual distinct performance obligations. Total transaction price of the bundled contract is allocated to each performance obligation based on their relative standalone selling prices or estimated standalone selling prices. Each performance obligation is recognised as revenue on fulfilment of the obligation to the customer.

Sales of goods

Revenue from contracts with customers that is derived in connection with oil refinery, lube base oil refinery, aromatics and LAB, solvent and ethanol business is recognised when the Group satisfies a performance obligation by transferring the petroleum products, petrochemical products and other products to customers via vessel, truck, or pipeline. A transfer of goods generally occurs at the same time when legal ownerships are transferred to customers and customers have physical goods in their possession. In that case, the Group satisfies a performance obligation at a point in time.

Electricity and steam sales are recognised on delivery of electricity and steam and customers' acceptance, and measured based on actual electricity and steam delivered and the price as set out in the electricity and steam purchase agreements.

4.21 Derivatives and hedging activities

a) Embedded derivative and derivatives that do not qualify for hedge accounting

Embedded derivative that is separately accounted for and derivatives that do not qualify for hedge accounting is initially recognised at fair value. Changes in the fair value are included in net gain (loss) from financial instruments.

Fair value of derivatives is classified as a current or non-current following its remaining maturity.

b) Hedge accounting

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently remeasured to their fair value at the end of each reporting period. The Group designates certain derivatives as either:

- hedges of the fair value of i) recognised assets or liabilities or ii) unrecognised firm commitments (fair value hedges)
- hedges of a particular risk associated with the cash flows of i) recognised assets and liabilities and ii) highly probable forecast transactions (cash flow hedges); or
- hedges of a net investment in a foreign operation (net investment hedges).

At inception of the hedge relationship, the Group documents i) the economic relationship between hedging instruments and hedged items including whether changes in the cash flows of the hedging instruments are expected to offset changes in the cash flows of hedged items and ii) its risk management objective and strategy for undertaking its hedge transactions.

The full fair value of a hedging derivative is classified as a current or non-current asset or liability following the maturity of related hedged item.

The fair values of derivative financial instruments designated in hedge relationships are disclosed in Note 37. Movements in the hedging reserve in shareholders' equity are shown in Note 36.

Hedge effectiveness

Hedge effectiveness is determined at the inception of the hedge relationship, and through periodic prospective effectiveness assessments, to ensure that an economic relationship exists between the hedged item and hedging instrument.

For hedges of foreign currency purchases, the Group enters into hedge relationships where the critical terms of the hedging instrument match exactly with the terms of the hedged item. The Group therefore performs a qualitative assessment of effectiveness. If changes in circumstances affect the terms of the hedged item such that the critical terms no longer match exactly with the critical terms of the hedging instrument, the Group uses the hypothetical derivative method to assess effectiveness.

In hedges of foreign currency purchases, ineffectiveness may arise if the timing of the forecast transaction changes from what was originally estimated, or if there are changes in the credit risk of the derivative counterparty.

The Group enters into interest rate swaps that have significant similar critical terms as the hedged item, such as reference rate, reset dates, payment dates, maturities and notional amount. The Group does not hedge all of its loans, therefore the hedged item is identified as a proportion of the outstanding loans up to the notional amount of the swaps. Due to the critical terms match of the hedge items and the hedged instrument throughout the year, such hedged transactions are concluded to have economic relationship.

Hedge ineffectiveness for interest rate swaps is assessed using the same principles as for hedges of foreign currency purchases. It may occur due to:

- the credit value/debit value adjustment on the interest rate swaps which is not matched by the loan, and
- differences in critical terms between the interest rate swaps and loans.

Cash flow hedges that qualify for hedge accounting

The effective portion of changes in the fair value of derivatives that are designated and qualified as cash flow hedges is recognised in the cash flow hedge reserve within equity. The gain or loss relating to the ineffective portion is recognised immediately in profit or loss within net gain (loss) from financial instruments.

When cross currency swap contracts are used to hedge forecast transactions, the Group does not designate the cross currency basis spread as the hedging instrument. The changes in fair value of hedging instrument relating to the effective portion are recognised in the cash flow hedge reserve in other comprehensive income within equity. The Group will recognise the change in the fair value of cross currency basis spread that is not related to the hedging instrument in the cost of hedging reserve in other comprehensive income within equity.

The Group uses forward contracts to hedge future transactions by designating only the change in fair value of the forward contracts related to the spot component of forward contracts as the hedging instrument gains or losses relating to the effective portion of the change in the spot component of the forward contracts are recognised within other comprehensive income in the cash flow hedges reserve within equity. The change in the forward element of the contract that relates to the hedged item ('aligned forward element') is recognised within other comprehensive income in the costs of hedging reserve within equity.

Amounts accumulated in equity are reclassified in the periods when the hedged item affects profit or loss, as follows:

- where the hedged item subsequently results in the recognition of a non-financial asset (such as inventory), both the deferred hedging gains and losses and the deferred forward points are included within the initial cost of the asset. The deferred amounts are ultimately recognised in profit or loss when the hedged item affects profit or loss (for example through cost of sales when products are sold)
- the gain or loss relating to the effective portion of the interest rate swaps hedging variable rates borrowings is recognised in profit or loss within finance costs at the same time as the interest expense on the hedged borrowings.

When a hedging instrument expires, is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, any cumulative deferred gain or loss and deferred costs of hedging in equity at that time remains in equity until the forecast transaction occurs. When the forecast transaction is no longer expected to occur, the cumulative gain or loss and deferred costs of hedging that were reported in equity are immediately reclassified to profit or loss.

The Group recognises changes in the fair value of any derivative instrument that does not qualify for hedge accounting immediately in profit or loss, which includes in net gain (loss) from financial instruments.

The Group designates only the spot element of forward contracts and the financial instrument excluding the foreign currency basis spread as a hedging instrument. The change in fair value of the forward element of forward contracts and the foreign currency basis spread of financial instrument that relates to the hedged item is separately accounted for as a cost of hedging which is recognised in other comprehensive income and accumulated in a separate component of equity under cost of hedging reserve.

If the hedged item is transaction-related, the cost of hedging reserve accumulated in other comprehensive income is reclassified to profit or loss when the hedged item affects profit or loss. If the hedged item is time-period related, then the reserve accumulated in other comprehensive income is reclassified to profit or loss on systematic and rational basis. The reclassified amounts are recognised in profit or loss in the same line as the hedged item. If the hedged item is a non-financial item, then the reserve is removed directly from equity and included in the initial carrying amount of the recognised non-financial item. Furthermore, if the Group expects that some or all of the loss accumulated in cost of hedging reserve will not be recovered in the future, that amount is immediately reclassified to profit or loss.

4.22 Financial guarantee contracts

Financial guarantee contracts are recognised as a financial liability at the time the guarantee is issued. The liability is initially measured at fair value and subsequently at the higher of:

- the amount determined in accordance with the expected credit loss model under TFRS 9; and
- the amount initially recognised less the cumulative amount of income recognised in accordance with the principles of TFRS 15.

The fair value of financial guarantees is determined based on the present value of the difference in cash flows between a) the contractual payments required under the debt instrument; and b) the payments that would be required without the guarantee, or the estimated amount that would be payable to a third party for assuming the obligations.

Where guarantees in relation to loans or other payables of associates are provided for no compensation, the fair values are accounted for as contributions and recognised as part of the cost of the investment.

4.23 Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between buyer and seller (market participants) at the measurement date. The Group applies a quoted market price in an active market to measure their assets and liabilities that are required to be measured at fair value by relevant financial reporting standards. Except in case of no active market of an identical asset or liability or when a quoted market price is not available, the Group measures fair value using valuation technique that are appropriate in the circumstances and maximises the use of relevant observable inputs related to assets and liabilities that are required to be measured at fair value.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy into three levels based on categorise of input to be used in fair value measurement as follows:

Level 1 - Use of quoted market prices in an active market for such assets or liabilities

Level 2 - Use of other observable inputs for such assets or liabilities, whether directly or indirectly

Level 3 - Use of unobservable inputs such as estimates of future cash flows

At the end of each reporting period, the Group determines whether transfers have occurred between levels within the fair value hierarchy for assets and liabilities held at the end of the reporting period that are measured at fair value on a recurring basis.

5. Significant accounting judgements and estimates

The preparation of financial statements in conformity with financial reporting standards at times requires management to make subjective judgements and estimates regarding matters that are inherently uncertain. These judgements and estimates affect reported amounts and disclosures; and actual results could differ from these estimates. Significant judgements and estimates are as follows:

Allowance for diminution in value of inventories

Net realisable value is the estimate of the selling price in the ordinary course of business, less applicable variable selling expenses. Allowance is made, where necessary, for obsolete, slow-moving and defective inventories.

Goodwill

The initial recognition and measurement of goodwill, and subsequent impairment testing, require management to make estimates of cash flows to be generated by the asset or the cash-generating units and to choose a suitable discount rate in order to calculate the present value of those cash flows.

Investment in associate

The management of the Company determined that the Group has significant influence on PT Chandra Asri Petrochemical Tbk (CAP) and classified investment as an investment in associate, even though the Group only holds less than 20% of shares and voting rights. This is becuase the Company hold 15% of the shares in CAP through its subsidiary, PT TOP Investment Indonesia. The Company has delegated representatives to serve as the directors of CAP's Board of Commissioners and executives to serve as the members of CAP's Board of Directors. In addition, the Company also entered into the Feedstock Sale and Purchase Agreement with CAP.

Lease

Determining the lease term with extension and termination options - The Group as a lessee

In determining the lease term, the management is required to exercise judgement in assessing whether the Group is reasonably certain to exercise the option to extend or terminate the lease considering all relevant facts and circumstances that create an economic incentive for the Group to exercise either the extension or termination option.

Estimating the incremental borrowing rate - The Group as a lessee

The Group cannot readily determine the interest rate implicit in the lease, therefore, the management is required to exercise judgement in estimating its incremental borrowing rate to discount lease liabilities. The incremental borrowing rate is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment.

Post-employment benefits under defined benefit plans and other long-term employee benefits

The obligation under the defined benefit plan and other long-term employee benefit plans is determined based on actuarial techniques. Such determination is made based on various assumptions, including discount rate, future salary increase rate, mortality rate and staff turnover rate.

6. Related party transactions

During the years, the Group had significant business transactions with related parties. Such transactions, which are summarised below, arose in the ordinary course of business.

Relationships with key management and other related parties were as follows:

Name of entities	Country of incorporation	Nature of relationships
PTT Public Company Limited	Thailand	Parent company
Thai Paraxylene Co., Ltd.	Thailand	Subsidiary and/or common directors and/or the Company's management as a director
LABIX Co., Ltd.	Thailand	Indirect subsidiary and/or common directors and/or the Company's management as a director
Thai Lube Base Public Company Limited	Thailand	Subsidiary and/or common directors and/or the Company's management as a director
Thaioil Marine International Pte. Ltd.(1)	Republic of Singapore	Subsidiary and/or the Company's management as a director
PT TOP Investment Indonesia	Republic of Indonesia	Subsidiary and/or the Company's management as a director
PT Chandra Asri Petrochemical Tbk.	Republic of Indonesia	Indirect associate and/or common directors
Thaioil Energy Services Co., Ltd.	Thailand	Subsidiary and/or common directors and/or the Company's management as a director
Thaioil Solvent Co., Ltd.	Thailand	Subsidiary and/or the Company's management as a director
TOPNEXT International Co., Ltd.(2)	Thailand	Indirect subsidiary and/or common directors/ or the Company's management as a director
Sak Chaisidhi Co., Ltd.	Thailand	Indirect subsidiary and/or the Company's management as a director
TOP Solvent (Vietnam) LLC.	Socialist Republic of Vietnam	Indirect subsidiary and/or the Company's management as a director
PT Tirta Surya Raya	Republic of Indonesia	Indirect subsidiary
JSKEM Private Limited	Republic of Singapore	Indirect subsidiary and/or the Company's management as a director

Name of entities	Country of incorporation	Nature of relationships
TOPNEXT India Private Limited[3] (Formerly known as "TSCHEM India Private Limited")	Republic of India	Subsidiary of indirect subsidiary
TOP SPP Co., Ltd.	Thailand	Subsidiary and/or the Company's management as a director
Thaioil Ethanol Co., Ltd.	Thailand	Subsidiary and/or the Company's management as a director
Sapthip Co., Ltd.	Thailand	Indirect subsidiary and/or common directors and/ or the Company's management as a director
Sapthip Green Energy Co., Ltd.	Thailand	Subsidiary of indirect subsidiary and/or the Company's management as a director
Ubon Bio Ethanol Public Co., Ltd.	Thailand	Other related and/or the Company's management as a director
Chaibadan Community Power Plant 1 Co., Ltd.[4]	Thailand	Joint venture of indirect subsidiary
Chaibadan Community Power Plant 2 Co., Ltd.[4]	Thailand	Joint venture of indirect subsidiary
Thaioil Treasury Center Co., Ltd.	Thailand	Subsidiary and/or the Company's management as a director
TOP Ventures Company Limited	Thailand	Indirect subsidiary and/or the Company's management as a director
TOP Ventures Hong Kong Limited	Hong Kong Special Administrative Region	Indirect subsidiary and/or the Company's management as a director
TOP Ventures America LLC	United States of America	Indirect subsidiary and/or the Company's management as a director
PTT Digital Solutions Co., Ltd.	Thailand	Associate and/or common directors and/or the Company's management as a director
PTT Energy Solutions Co., Ltd.[5]	Thailand	Associate and/or the Company's management as a director
Thai Petroleum Pipeline Co., Ltd.	Thailand	Associate and/or the Company's management as a director
Global Power Synergy Public Co., Ltd. [6]	Thailand	Other related and/or common directors

Name of entities	Country of incorporation	Nature of relationships
Sarn Palung Social Enterprise Company Limited	Thailand	Other related and/or the Company's management as director
PTT Oil and Retail Business Public Company Limited	Thailand	Subsidiary of the parent company and/or common directors
Business Services Alliance Co., Ltd.	Thailand	Subsidiary of the parent company and/or common directors
PTT Exploration and Production Public Company Limited	Thailand	Subsidiary of the parent company
PTT International Trading Pte. Ltd.	Republic of Singapore	Subsidiary of the parent company
PTT Treasury Center Co., Ltd.	Thailand	Subsidiary of the parent company
Energy Complex Co., Ltd.	Thailand	Subsidiary of the parent company
IRPC Public Company Limited	Thailand	Subsidiary of the parent company
PTT Tank Terminal Co., Ltd.	Thailand	Subsidiary of the parent company
PTT Global Chemical Public Company Limited	Thailand	Subsidiary of the parent company
PTT International Trading London Ltd.	England	Subsidiary of the parent company
PTT International Trading USA Inc.	United States of America	Subsidiary of the parent company
PTT MEA Ltd.	United Arab Emirates	Indirect subsidiary of the parent company
Siam Management Holding Co., Ltd.	Thailand	Indirect subsidiary of the parent company
PTTEP International Limited	Thailand	Indirect subsidiary of the parent company
MEKHA V Co., Ltd.	Thailand	Indirect subsidiary of the parent company
Energy Recovery Unit Co., Ltd.	Thailand	Indirect subsidiary of the parent company
Combined Heat and Power Producing Co., Ltd.	Thailand	Indirect subsidiary of the parent company
Nuplex Resins (Vietnam) Pty Ltd.	Socialist Republic of Vietnam	Indirect subsidiary of the parent company
GC Maintenance & Engineering Co., Ltd.	Thailand	Indirect subsidiary of the parent company
NPC Safety and Environmental	Thailand	Indirect subsidiary of the parent company
Global Green Chemicals Public Company Limited	Thailand	Indirect subsidiary of the parent company
PTT Phenol Co., Ltd.	Thailand	Indirect subsidiary of the parent company
Vencorex (Thailand) Co., Ltd.	Thailand	Indirect subsidiary of the parent company
GC Polyols Co., Ltd.	Thailand	Indirect subsidiary of the parent company

Name of entities	Country of incorporation	Nature of relationships
GC Glycol Co., Ltd.	Thailand	Indirect subsidiary of the parent company
GC-M PTA Company Limited	Thailand	Indirect subsidiary of the parent company
PTT MCC Biochem Co., Ltd.	Thailand	Joint venture of subsidiary of the parent company
Thai Tank Terminal Ltd.	Thailand	Joint venture of subsidiary of the parent company
IRPC Polyol Co., Ltd.	Thailand	Joint venture of subsidiary of the parent company
Brighter PTT Oil and Retail Business Company Limited	Myanmar	Joint venture of subsidiary of the parent company

(1) Thaioil Marine International Pte. Ltd., has already been liquidated and closed on 28 December 2022.

(2) On 3 October 2022, TOP Solvent Company Limited changed its name to “TOPNEXT International Company Limited”.

(3) On 26 May 2023, TSCHEM India Private Limited changed its name to “TOPNEXT India Private Limited.”

(4) Chaibadan 1 Community Power Plant Company Limited and Chaibadan 2 Community Power Plant Company Limited, have already been liquidated and closed on 27 March 2023.

(5) On 29 August 2022, the Extraordinary General Meeting of Shareholders of PTT Energy Solutions Company Limited (“PTTES”) passed a resolution approving the dissolution of PTTES. The liquidation process is expected to be completed within 2 years from the date of approval.

(6) During the year 2022, the Company classified investments in associates to financial asset measured at fair value through other comprehensive income (Note 14).

The pricing policies for particular types of transactions are explained further below:

Transactions	Pricing policies
Revenue from sale and services, lease income, purchase of goods and assets	Market prices or, where no market price exists, at contractually agreed prices
Interest income and expense	Agreed rates as stipulated in the agreements
Dividend income	Right to receive dividends
Other income and expenses	Contractually agreed prices
Directors’ remuneration	Amounts approved by the Group’s shareholders

Summarised significant business transactions with related parties are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Parent company				
Revenue from sale	2	-	-	-
Purchase of crude oil and feedstock	339,577	375,428	329,904	365,605
Disposal of investment in associated company	-	10,701	-	10,701
Other income	25	50	25	50
Other expenses	122	98	122	98
Purchase of assets	121	1	-	1
Subsidiaries				
(eliminated from the consolidated financial statements)				
Revenue from sale	-	-	100,623	116,581
Purchase of crude oil and feedstock	-	-	64,762	72,481
Interest income	-	-	373	99
Dividend income	-	-	6,487	2,004
Land lease income	-	-	112	67
Other income	-	-	1,956	1,679
Interest expense	-	-	795	1,159
Interest expense capitalised as cost of assets	-	-	3,931	3,989
Other expenses	-	-	1,763	1,488
Purchase of assets	-	-	230	187
Associates				
Revenue from sale	317	7,564	-	7,552
Purchase of crude oil and feedstock	1,131	922	-	-
Dividend income	-	-	242	710
Other income	-	6	-	6
Other expenses	346	378	345	378
Purchase of assets	43	32	43	30

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Subsidiaries of the parent company				
Revenue from sale	227,341	255,334	212,049	238,237
Purchase of crude oil and feedstock	7,169	16,736	4,314	12,988
Disposal of investment in associated company	-	11,346	-	11,346
Other income	15	14	15	14
Interest expense	1	111	1	111
Interest expense capitalised as cost of assets	-	47	-	47
Other expenses	60	109	15	52
Purchase of assets	41	22	41	22
Other related parties				
Revenue from sale	2,487	8,641	2,482	8,638
Purchase of crude oil and feedstock	-	3	-	-
Dividend income	189	68	169	56
Other income	25	10	25	10
Other expenses	14	22	-	-

As at 31 December 2023 and 2022, the balances of the accounts between the Group and those related companies are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Trade receivables - related parties (Note 10)				
Subsidiaries	-	-	9,076	8,188
An associate	146	-	-	-
Subsidiaries of the parent company	15,127	13,651	13,872	12,578
Other related parties	-	3,070	-	3,070
Total	15,273	16,721	22,948	23,836
Other receivables - related parties				
Parent company	586	1,605	582	1,599
Subsidiaries	-	-	309	204
An associate	68	35	68	35
Subsidiaries of the parent company	670	704	666	696
Other related party	5	3	5	3
Total	1,329	2,347	1,630	2,537

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Finance lease receivables- related parties				
Subsidiaries	-	-	1,144	1,102
Total	-	-	1,144	1,102
Other non-current assets - related parties				
Subsidiaries	-	-	88	60
A subsidiary of the parent company	15	15	15	15
Total	15	15	103	75
Trade payables - related parties				
Parent company	48,344	71,121	46,699	70,332
Subsidiaries	-	-	6,443	5,845
An associate	103	83	-	-
Subsidiaries of the parent company	339	1,772	188	1,550
Total	48,786	72,976	53,330	77,727
Other payables - related parties				
Parent company	94	61	-	-
Subsidiaries	-	-	890	1,035
Associates	134	95	134	95
Subsidiaries of the parent company	17	8	11	5
Other related parties	1	2	-	-
Total	246	166	1,035	1,135
Finance lease payables - related parties				
Parent company	3	4	3	4
Subsidiaries	-	-	508	538
Associates	5	8	5	8
A subsidiary of the parent company	20	42	20	42
Total	28	54	536	592
Derivative liability - related parties				
Subsidiaries	-	-	19	11
Total	-	-	19	11

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Other non-current liabilities - related parties				
Subsidiaries	-	-	671	611
A subsidiary of the parent company	3,092	3,091	3,092	3,091
Other related party	3	5	3	5
Total	3,095	3,096	3,766	3,707

Short-term loans to related parties

Movements of short-term loans to related parties during year ended 31 December 2023 are as follows:

(Unit: Million Baht)

	Separate financial statements				
	Balance as at 1 January 2023	Increase	Decrease	Effect of exchange rate	Balance as at 31 December 2023
Subsidiaries	2,079	-	(1,135)	(10)	934
Total	2,079	-	(1,135)	(10)	934

Interest rates for the year ended 31 December 2023 is charged based on BIBOR 3M plus certain fixed margin per annum and SOFR 3M plus certain fixed margin per annum. (31 December 2022 was charged based on BIBOR 3M plus certain fixed margin per annum and LIBOR 3M plus certain fixed margin per annum).

Long-term loans to related party

Movements of long-term loans to related party during the year ended 31 December 2023 are as follows:

(Unit: Million Baht)

	Separate financial statements			
	Balance as at 1 January 2023	Increase	Decrease	Balance as at 31 December 2023
A subsidiary	2,000	9,986	(2,000)	9,986
Total	2,000	9,986	(2,000)	9,986

On 30 September 2021, the Company entered into a loan agreement with a subsidiary in an amount not exceeding of Baht 2,500 million, with a fixed interest rate of not exceeding 2.5 percent per annum throughout the contract period. The agreement is effective for a period of 3.5 years from the first utilisation date, with the first exercise of rights on 17 January 2022. The loan was used for the construction of the power plant under the Expansion Project of the subsidiary within the Group. During the current year, the subsidiary already repaid the outstanding loan.

On 3 May 2023, the Company entered into a loan agreement with a subsidiary in an amount not exceeding of Baht 10,000 million, with an average interest rate of not exceeding 4.05 percent per annum throughout the contract period. The agreement is effective for 5 - 15 years. The loan serves the purposes of repaying loans to various financial institutions and financing the operations of an electricity and steam generating expansion project for the subsidiary within the Group.

Short-term loans from related parties

Movements of short-term loans from related parties during the year ended 31 December 2023 are as follows:

(Unit: Million Baht)

	Separate financial statements			
	Balance as at 1 January 2023	Increase	Decrease	Balance as at 31 December 2023
Subsidiaries	321	4,865	-	5,186
Total	321	4,865	-	5,186

Interest rates for year ended 31 December 2023 and 2022 are charged based on BIBOR 1M plus certain fixed margin per annum.

Long-term loans from related party

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Current portion of long-term loans from related party				
A subsidiary	-	-	-	9,851
	-	-	-	9,851
Long-term loans from related party, net of current portion				
A subsidiary	-	-	98,652	99,632
	-	-	98,652	99,632
Total	-	-	98,652	109,483

Movements of long-term loans from related party during the year ended 31 December 2023 are as follows:

(Unit: Million Baht)

	Separate financial statements					
	Balance as at 1 January 2023	Increase	Decrease	Amortise of deferred financing fee	Effect of exchange rate	Balance as at 31 December 2023
A subsidiary	109,483	-	(9,365)	15	(1,481)	98,652
Total	109,483	-	(9,365)	15	(1,481)	98,652

The Company entered into multiple loan agreements with a subsidiary, with repayment due ranging from 2023 to 2050. As at 31 December 2023, the outstanding balance of loans were US dollar 2,877.75 million. The loans bear fixed interest rates of 3.025% to 5.96% per annum.

Directors and management's benefits

During the years ended 31 December 2023 and 2022, the Group had employee benefit expenses payable to their directors and management as below.

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Short-term employee benefits	77	69	71	62
Total	77	69	71	62

Significant agreements with related parties

During the year ended 31 December 2023, the Group had the following significant agreements with related parties.

Asset Sale and Purchase Agreement for the Energy Recovery Unit (ERU)

The Company has entered into the Asset Sale and Purchase Agreement for the ERU with a related company to support energy and utilities for Clean Fuel Project (CFP) whereby the purchase price is specified in the agreement. The Company will transfer ownership in the ERU to the purchaser upon satisfaction of all the conditions precedent set out in the agreement (Closing Date). Such conditions precedent include the Company's countersigning of the Provisional Acceptance Certificate (PAC) to the contractor which is expected to occur in 2025 and purchaser and seller receive all necessary certification from relevant authorities.

Fuel and Utilities Supply Agreement

The Company has entered into the Fuel and Utilities Supply Agreement with a related company to supply pitch, other fuels and utilities used in the operation of the ERU. The term of the agreement is 25 years from the Closing Date and the parties may agree to extend the term for another 5 years.

Power Purchase Agreement

The Company has entered into the Power Purchase Agreement with a related company to purchase electricity, steam and other by-products generated by the ERU. The term of the agreement is 25 years from the Closing Date and the parties may agree to extend the term for another 5 years.

Operation and Maintenance Services Agreement

The Company has entered into the Operation and Maintenance Services Agreement with a related company to provide the services of operation and maintenance of the ERU. The term of the agreement is 25 years from the Closing Date and the parties may agree to extend the term for another 5 years.

Master Agreement for Business Collaboration

The Company has entered into Master Agreement for Business Collaboration with a parent company in order to assign rules, conditions and guidelines for credit term extension of crude and condensate from 30 days to not exceeding 90 days. Term of the contract is 1 years which will be expired in 31 December 2023. The Company renewed the Service agreement with a subsidiary for another one year which will be expired on 31 December 2024.

Feedstock Supply Agreement

The Company has entered into Feedstock Supply Agreement with a parent company. A parent company will supply crude and condensate for the Company's refinery production including hire a vessels to deliver crude. Term of the contracts is 3 years which will be expired on 31 December 2024.

P1 Collaboration Agreement

The Company and subsidiaries have entered into P1 Collaboration Agreement to assign a collaboration guideline between PTT group, the Company and one of the Company's subsidiaries for supplying crude and condensate, petroleum product and petrochemical product, hire vessel, and derivatives related to an export and import of crude and condensate petroleum products and petrochemical products, including managing time charter vessel of the Company. These services will be managed by a related party in order to get a maximum benefit among PTT Group. The term of the contracts is 3 years which will be expired on 31 December 2024.

7. Cash and cash equivalents

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Cash on hand	1	-	-	-
Deposits held at bank				
- savings and current accounts	26,461	33,589	21,767	24,800
- fixed deposit accounts less than 3 months	1,970	9,987	1,970	9,987
Total	28,432	43,576	23,737	34,787

As at 31 December 2023, the interest rates on deposits in saving accounts are 0.01% - 5.30% per annum (2022: 0.01% - 2.23% per annum).

As at 31 December 2023, the interest rates on deposits in fixed accounts less than 3 months are 0.30% - 6.01% per annum (2022: 0.13% to 4.44% per annum).

As at 31 December 2023, the Group's had no deposit at financial institutions were used to pledge as collateral for credit facilities (2022: Baht 2,761 million) due to the Group's completely repaid for the loan in full.

8. Deposits at a financial institution used as collateral

As at 31 December 2023, There was no deposits at a financial institution used as short-term collateral represented deposits of a subsidiary (2022: Baht 343 million) due to the repayment of loan completely in full.

9. Short-term investments in financial assets

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Fixed deposit accounts held at bank	5,945	-	5,775	-
Total	5,945	-	5,775	-

As at 31 December 2023, fixed deposit accounts held at bank was denominated in US Dollar amounting to US Dollar 175 million and bore interest at rates of 5.85% to 6.00% per annum.

10. Trade receivables

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Trade receivables - related parties				
Age of outstanding debts by due date				
Not yet due	15,273	16,721	22,948	23,836
Trade receivables - non related parties				
Age of outstanding debts by due date				
Not yet due	15,708	11,918	8,952	5,945
Past due				
Up to 3 months	170	122	-	-
3 - 6 months	7	1	-	-
Over 1 year	2	-	-	-
Total trade receivables - non related parties	15,887	12,041	8,952	5,945
Less: Allowance for expected credit losses	(6)	(3)	-	-
Total trade receivables - non related parties, net	15,881	12,038	8,952	5,945
Total	31,154	28,759	31,900	29,781

The normal credit term granted by the Group ranges from 7 days to 120 days.

11. Other receivables

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Other accounts receivables	1,835	3,928	2,114	4,095
Prepaid expenses	497	420	264	227
Current portion of long-term loans to savings co-operative of employees	21	13	20	13
Total	2,353	4,361	2,398	4,335

12. Inventories

(Unit: Million Baht)

	Consolidated financial statements					
	Cost		Reduce cost to net realisable value		Inventories - net	
	2023	2022	2023	2022	2023	2022
Crude oil and feedstock	17,979	16,713	-	-	17,979	16,713
Materials, spare parts and supplies	1,863	1,741	(13)	(13)	1,850	1,728
Finished and semi-finished oil products	13,124	13,557	(744)	(801)	12,380	12,756
Goods in transit						
Crude oil	20,298	23,988	-	-	20,298	23,988
Materials, spare parts and supplies	34	23	-	-	34	23
Finished and semi-finished oil products	115	135	-	-	115	135
Total	53,413	56,157	(757)	(814)	52,656	55,343

(Unit: Million Baht)

	Separated financial statements					
	Cost		Reduce cost to net realisable value		Inventories - net	
	2023	2022	2023	2022	2023	2022
Crude oil and feedstock	16,592	15,583	-	-	16,592	15,583
Materials, spare parts and supplies	1,317	1,236	-	-	1,317	1,236
Finished and semi-finished oil products	9,579	9,468	(644)	(422)	8,935	9,046
Goods in transit						
Crude oil	20,298	23,988	-	-	20,298	23,988
Materials, spare parts and supplies	32	1	-	-	32	1
Total	47,818	50,276	(644)	(422)	47,174	49,854

As at 31 December 2023, the inventories as stated above included a legal reserve amounting to Baht 12,664 million (2022: Baht 12,661 million).

As at 31 December 2023, a subsidiary has pledged inventories of approximately Baht 230 million (2022: Baht 287 million) to secure short-term loans from financial institutions.

Inventories recognised as expenses in cost of sale of goods for the year ended 31 December 2023 and 2022 are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Cost of sale of goods	359,534	407,781	402,594	455,340
Reduction of inventory to net realisable value	(55)	570	221	332
Net	359,479	408,351	402,815	455,672

13. Investments in subsidiaries

13.1 Movements of investments in subsidiaries are as follows:

(Unit: Million Baht)

	Separate financial statements	
	2023	2022
At 1 January	41,280	41,014
Increase in investment	-	266
At 31 December	41,280	41,280

Significant transactions during the year ended 31 December 2023

Indirect subsidiaries

TOP Ventures Hong Kong Limited (TVHK)

During the year 2023, Thaioil Treasury Centre Co., Ltd. ("TTC"), a subsidiary of the Group, has paid for additional shares to TOP Ventures Hong Kong Limited ("TVHK"), an indirect subsidiary of the Group, amounting to US Dollar 5.08 million or equivalent to Baht 176 million and TTC has fully paid for the shares.

TOP Ventures America LLC (TVUS)

In September 2023, TOP Ventures Hong Kong Limited ("TVHK"), an indirect subsidiary of the Group, has paid for additional shares to TOP Ventures America LLC ("TVUS"), amounting to US Dollar 2.58 million or equivalent to Baht 91 million and TVHK has fully paid for the shares in September 2023.

TOP Ventures Company Limited (TVTH)

In December 2023, Thaioil Treasury Centre Co., Ltd. ("TTC"), a subsidiary of the Group, has paid for additional shares to TOP Ventures Company Limited ("TVTH"), an indirect subsidiary of the Group, amounting to Baht 10 million.

Significant transactions during the year ended 31 December 2022

Direct subsidiaries

Thaioil Treasury Center Co., Ltd

On 27 April 2022, Thaioil Treasury Center Co., Ltd ("TTC"), a subsidiary company, has called up for additional shares totalling Baht 266 million. The Company has fully paid for the shares in April 2022.

Indirect subsidiaries

TOP Ventures Hong Kong Limited (TVHK)

In September 2022, Thaioil Treasury Center Co., Ltd ("TTC"), a direct shareholder holding 99.99 percent of the total registered capital of TVHK, has called up for additional shares in the amount of US Dollar 0.25 million. TTC has fully paid for the shares in September 2022.

13.2 The details of subsidiaries are as follows:

(Unit: Million Baht)

	Country of incorporation	Nature of the business	Separate financial statements							
			Percentage of direct shareholding		Paid-up capital		Cost method		Dividend received during the year	
			2023	2022	2023	2022	2023	2022	2023	2022
			(percent)	(percent)						
Thai Paraxylene Co., Ltd. and its subsidiary	Thailand	Paraxylene manufacturing and distribution	99.99	99.99	2,572	2,572	2,161	2,161	-	386
- Subsidiary										
LABIX Co., Ltd.	Thailand	Linear Alkyl Benzene manufacturing and distribution	75.00	75.00	4,655	4,655	-	-	-	-
Thai Lube Base Public Company Limited	Thailand	Lube base oil refining and distribution	99.99	99.99	1,758	1,758	1,979	1,979	2,792	1,230
Thaioil Energy Services Co., Ltd.	Thailand	Providing human resource management	99.99	99.99	40	40	40	40	3	18
Thaioil Solvent Co., Ltd. and its subsidiaries	Thailand	Investment in solvent and chemical business	99.99	99.99	1,250	1,250	1,250	1,250	180	180
- Subsidiaries										
TOPNEXT International Company Limited and its subsidiaries	Thailand	Distribution of solvent and chemical products	99.99	99.99	1,200	1,200	-	-	-	-
Sak Chaisidhi Co., Ltd.	Thailand	Solvent and chemical products manufacturing	80.52	80.52	190	190	-	-	-	-

(Unit: Million Baht)

	Country of incorporation	Nature of the business	Separate financial statements							
			Percentage of direct shareholding		Paid-up capital		Cost method		Dividend received during the year	
			2023	2022	2023	2022	2023	2022	2023	2022
			(percent)	(percent)						
TOP Solvent (Vietnam) LLC.	Socialist Republic of Vietnam	Distribution of solvent and chemical products	100.00	100.00	634	634	-	-	-	-
PT Tirta Surya Raya	Republic of Indonesia	Distribution of solvent and chemical products	77.71	77.71	50	50	-	-	-	-
JSKEM Private Limited and its subsidiary	Republic of Singapore	Distribution of solvent and chemical products	60.00	60.00	22	22	-	-	-	-
TOPNEXT India Private Limited (Formerly known as “TSCHEM India Private Limited”)	Republic of India	Distribution of solvent and chemical products	99.99	99.99	-(1)	-(1)	-	-	-	-
Thaioil Ethanol Co., Ltd. and its subsidiaries	Thailand	Investment in ethanol businesses and alternative energy products	99.99	99.99	1,450	1,450	1,450	1,450	5	26
- Subsidiaries										
Sapthip Co., Ltd. and its subsidiaries	Thailand	Ethanol products manufacturing and distribution	50.00	50.00	800	800	-	-	-	-
Sapthip Green Energy Co., Ltd.	Thailand	Biogas power generation and distribution	99.99	99.99	25	25	-	-	-	-
TOP SPP Co., Ltd.	Thailand	Power and stream generation and distribution	99.99	99.99	3,500	3,500	3,500	3,500	3,360	-

(Unit: Million Baht)

			Separate financial statements							
			Percentage of direct shareholding		Paid-up capital		Cost method		Dividend received during the year	
	Country of incorporation	Nature of the business	2023	2022	2023	2022	2023	2022	2023	2022
			(percent)	(percent)						
Thaioil Treasury Center Co., Ltd. and its subsidiaries	Thailand	Treasury centre services for the Group's business	99.99	99.99	956	956	956	956	147	164
- Subsidiaries										
TOP Ventures Company Limited	Thailand	Investment in venture capital and/or start-up business	99.99	99.99	29	19	-	-	-	-
TOP Ventures Hong Kong Limited and its subsidiaries	Hong Kong Special Administrative Region	Investment in venture capital and/or start-up business	100.00	100.00	733	557	-	-	-	-
TOP Ventures America LLC.	United States of America	Investment in venture capital and/or start-up business	100.00	100.00	484	393	-	-	-	-
PT TOP Investment Indonesia	Republic of Indonesia	Investment in Olefins petrochemical business	100.00	100.00	29,944	29,944	29,944	29,944	-	-
Total investments in subsidiaries							41,280	41,280	6,487	2,004

(1) The balance is below Baht 1 million.

13.3 Summarised financial information on subsidiaries with material non-controlling interests

Set out below are the summarised financial information for each subsidiary that has non-controlling interests and are material to the Group. The amounts disclosed for each subsidiary are before inter-company eliminations.

Summarised statement of financial position

(Unit: Million Baht)

	LABIX Co., Ltd.		Other individually immaterial subsidiaries		Total	
	2023	2022	2023	2022	2023	2022
As at 31 December						
Non-controlling interest percentage	25	25				
Current assets	5,647	4,489				
Non-current assets	9,280	9,888				
Current liabilities	(4,189)	(3,415)				
Non-current liabilities	(3,051)	(3,905)				
Net assets	7,687	7,057				
Carrying amount of non-controlling interests	1,922	1,764	822	859	2,744	2,623

Summarised statement of comprehensive income

(Unit: Million Baht)

	LABIX Co., Ltd.		Other individually immaterial subsidiaries		Total	
	2023	2022	2023	2022	2023	2022
For the year ended 31 December						
Revenue from sales	26,615	30,912				
Profit	630	1,638				
Other comprehensive income	-	-				
Total comprehensive income	630	1,638				
Profit allocated to non-controlling interests	158	409	(16)	29	142	438
Total comprehensive income allocated to non-controlling interests	158	409	(17)	32	141	441

Summarised statement of cash flows

(Unit: Million Baht)

	LABIX Co., Ltd.	
	2023	2022
For the year ended 31 December		
Cash flows from operating activities	1,479	1,227
Cash flows used in investing activities	(27)	(45)
Cash flows used in financing activities	(1,014)	(1,479)
Net increase (decrease) in cash and cash equivalents	438	(297)
Cash and cash equivalents at the beginning of the year	369	652
Exchange gains on cash and cash equivalents	5	14
Cash and cash equivalents at the end of the year	812	369

14. Investments in joint ventures and associates

14.1 Movements of investments in joint ventures and associates are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Net book value at beginning of year	32,603	55,412	982	23,272
Increase in investment	3	3	-	-
Decrease in investment	-	(1)	-	-
Disposal of investment in associates	-	(11,835)	-	(11,560)
Share of profit (loss) of joint ventures and associates	84	(512)	-	-
Dividend income	(398)	(765)	-	-
Exchange differences on translation	(299)	1,051	-	-
Share of other comprehensive expense of associates, net of tax	46	209	-	-
Share gain from the change in the net assets in an associate	-	2	-	-
Loss on impairment	-	-	-	(11)
Investment reclassification	-	(10,961)	-	(10,719)
Net book value at ending of year	32,039	32,603	982	982

Significant transactions during the year ended 31 December 2023

Indirect joint ventures

Chaibadan Community Power Plant 1 Co., Ltd. and Chaibadan Community Power Plant 2 Co., Ltd.

The extraordinary meeting of Chaibadan Community Power Plant 1 Co., Ltd. ("CCPP1") and Chaibadan Community Power Plant 2 Co., Ltd. ("CCPP2") have approved the dissolution of the companies. CCPP1 and CCPP2 were liquidated and closed on 27 March 2023.

Significant transactions during the year ended 31 December 2022

Disposal of investment and decrease in shareholding of Global Power Synergy Public Company Limited ("GPSC")

On 7 April 2022, the Company's Annual General Meeting of Shareholders passed a resolution to approve the sale of ordinary shares of Global Power Synergy Public Company Limited ("GPSC") with a par value of Baht 10 per share to PTT Public Company Limited ("PTT"), the Company's major shareholder and/or Siam Management Holding Co., Ltd. ("SMH"), PTT's related party, in the aggregate amount of 304 million shares, representing 10.78 percent of the total issued and paid-up shares of GPSC, subject to the terms and conditions of the Share Sale Transaction as specified in the share purchase agreement.

On 6 June 2022 and 7 June 2022, the Company disposed of parts of its investment in GPSC, with 5.55 percent of all issued and paid-up shares of GPSC sold to SMH and 5.23 percent to PTT, or a total of 10.78 percent of the total issued and paid-up shares of GPSC, totalling Baht 22,047 million. The Group and the Company recognised gain from disposal of investment in an associate in the consolidated and separate statements of income of Baht 10,038 million and Baht 10,487 million, respectively.

After the disposal of this investment in GPSC, the Company's remaining shareholding was 10 percent of the total issued and paid-up shares of GPSC and the Company reclassified this investment from investments in associates to financial assets measured at fair value through other comprehensive income. The Group and Company recognised gain from reclassification of investment in the consolidated and separate statements of income amounting to Baht 7,297 million and Baht 7,539 million, respectively.

The objective of the disposal of investment was to use the proceeds generated primarily to make repayment of loans from PTT under the credit facility agreement with PTT and the loans from commercial banks provided as financial assistance in the form of bridging loans and to finance the Company's investment in PT Chandra Asri Petrochemical Tbk.

Dissolution of PTT Energy Solutions Company Limited ("PTTES")

On 29 August 2022, Extraordinary General Meeting of Shareholders of PTT Energy Solutions Company Limited ("PTTES") passed a resolution to approve the dissolution of PTTES, which is an associate company with 20 percent owned by the Company.

On 29 December 2022, PTTES completed the registration of dissolution with the Ministry of Commerce and is in the process of liquidation. The dissolution of PTTES is aligned with PTT Group's business restructuring policy and does not have any material effect to the operation of the Company.

Indirect associates

PT Chandra Asri Petrochemical Tbk

In September 2021, PT TOP Investment Indonesia ("TII"), a subsidiary of the Group, entered into the share acquisition of PT Chandra Asri Petrochemical Tbk ("CAP"), a registered company in the Republic of Indonesia. The Group has 15% of shareholding interest in CAP.

Furthermore, the Group will acquire an additional 0.38% of shareholding interest in CAP with the contingent considerations not exceeding of US Dollar 3.9 million or not exceeding US Dollar 270 million which will depend on the condition of the approval for the final investment decision on the petrochemical plant construction project by PT Chandra Asri Perkasa (CAP2), a subsidiary of CAP within 5 years from the date of investment acquisition.

On 5 August 2022, the Extraordinary General Meeting of Shareholders of CAP passed a resolution to approve the stock split at a ratio of 1:4, resulting in an increase in the Company's shares from 3,244 million shares to 12,976 million shares.

14.2 Investments in associates

The details of associates are as follows:

(Unit: Million Baht)

			Consolidated financial statements							
			Ownership interest held by the Group		Cost method		Equity method		Dividend received during the year	
	Country of incorporation	Nature of business	2023	2022	2023	2022	2023	2022	2023	2022
			(percent)	(percent)						
PTT Digital Solutions Co., Ltd.	Thailand	Provide information technology and computer service activities	20.00	20.00	30	30	767	675	30	25
PTT Energy Solutions Co., Ltd.	Thailand	Provide technical and operational services	20.00	20.00	19	19	20	21	-	4
Global Power Synergy Public Company Limited	Thailand	Power, steam and water generation and distribution for industries	-	-(1)	-	-(1)	-	-(1)	-	586
Thai Petroleum Pipeline Co., Ltd.	Thailand	Oil transportation through the pipeline	9.19	9.19	933	933	929	983	212	95
PT Chandra Asri Petrochemical Tbk(2)	Republic of Indonesia	Chemical products manufacturing and distribution	15.00	15.00	29,920	29,920	30,323	30,924	156	58
Total investments in associates					30,902	30,902	32,039	32,603	398	768

(1) During 2022, the Group classified this investment in an associate as financial asset measured at fair value through other comprehensive income.

(2) On 29 December 2023, the Extraordinary General Meeting of Shareholders of PT Chandra Asri Petrochemical Tbk approved the change its company name to “PT Chandra Asri Pacific Tbk”. The change has been received approval on 3 January 2024.

(Unit: Million Baht)

			Separate financial statements					
			Ownership interest held by the Group		Cost method		Dividend received during the year	
	Country of incorporation	Nature of business	2023	2022	2023	2022	2023	2022
			(percent)	(percent)				
PTT Digital Solutions Co., Ltd.	Thailand	Provide information technology and computer service activities	20.00	20.00	30	30	30	25
PTT Energy Solutions Co., Ltd.	Thailand	Provide technical and operational services	20.00	20.00	19	19	-	4
Global Power Synergy Public Company Limited	Thailand	Power, steam and water generation and distribution for industries	-	-(1)	-	-(1)	-	586
Thai Petroleum Pipeline Co., Ltd.	Thailand	Oil transportation through the pipeline	9.19	9.19	933	933	212	95
Total investments in associates					982	982	242	710

(1) During the year 2022, the Group classified investment in associate as financial assets measured at fair value through other comprehensive income.

As at 31 December 2023, the fair value of the Group and the Company's interest in PT Chandra Asri Petrochemical Tbk listed in the Stock Exchange of the Republic of Indonesia was Indonesian Rupiah 68,128 billion or equivalent to Baht 151,700 million (2022: Indonesian Rupiah 33,350 billion or equivalent to Baht 73,847 million).

Other associates are private companies and do not have a quoted market price available for their shares. There are no contingent liabilities relating to the Group's interest in these associates.

14.3 Summarised financial information for associates

Set out below are the summarised financial information for the associates that are material to the Group. The information disclosed reflects the amounting presented in the financial statements of the relevant associates (not only the Group's shares of those amounts). They have been amended to reflect adjustments made using the equity method, including fair value adjustments and modifications for differences in accounting policy.

Summarised statement of financial position

(Unit: Million Baht)

	PT Chandra Arsi Petrochemical Tbk	
	2023	2022
Current assets	107,557	98,677
Non-current assets	80,473	70,584
Current liabilities	(23,524)	(20,937)
Non-current liabilities	(61,824)	(51,102)
Net assets	102,682	97,222
Shareholding percentage (%)	15.00	15.00
Share of net assets	15,402	14,583
Adjustment and elimination entries	14,921	16,341
Carrying amounts of associates based on equity method	30,323	30,924

Summarised statement of comprehensive income

(Unit: Million Baht)

	PT Chandra Arsi Petrochemical Tbk	
	2023	2022
Revenue	75,379	83,678
Loss	(1,089)	(5,116)
Other comprehensive income	(56)	1,298
Total comprehensive income	(1,145)	(3,818)

Reconciliation of summarised financial information

Reconciliation of the summarised financial information presented to the carrying amount of its interest in associates.

(Unit: Million Baht)

	Global Power Synergy Public Company Limited		PT Chandra Arsi Petrochemical Tbk	
	2023	2022	2023	2022
Group's interest in net assets of associates at 1 January	-	23,314	30,924	30,536
Addition of investment	-	-	3	3
Share of gain (loss) from investments in associates	-	58	(195)	(805)
Share of other comprehensive income from associates, net of income tax	-	8	46	195
Currency translation differences	-	-	(299)	1,051
Dividends received	-	(586)	(156)	(56)
Gain from the change in the net assets of an associate	-	2	-	-
Disposal of investment in an associate	-	(11,835)	-	-
Reclassification of investment	-	(10,961)	-	-
Carrying amount of interest in associates at 31 December	-	-	30,323	30,924

14.4 Individually immaterial associates

In addition to the interests in associates disclosed above, the Group also has interests in a number of individually immaterial associates that are accounted for using the equity method.

(Unit: Million Baht)

	Individually immaterial associates	
	2023	2022
Aggregate carrying amount of individually immaterial associates	1,716	1,679
The total amount of the group's share in associates		
Profit	280	235
Other comprehensive income	-	7
Total comprehensive income	280	242

15. Investment properties

Investment properties of the Group is land and land improvement.

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
As at 1 January				
Cost	103	103	1,124	1,124
Less Provision for impairment	-	-	-	-
Book value	103	103	1,124	1,124
For the year ended 31 December				
Beginning book value	103	103	1,124	1,124
Transfer to property, plant and equipment (Note 16)	-	-	61	-
Ending book value	103	103	1,185	1,124
As at 31 December				
Cost	103	103	1,185	1,124
Less Provision for impairment	-	-	-	-
Book value	103	103	1,185	1,124
Fair value	458	458	2,759	2,626

Fair value Measurement

The fair value of investment property was determined by external, independent property valuers, having appropriate recognised professional qualifications and experiences in valuing the property. The independent valuers provide the fair value of the Group's investment property portfolio on a regular basis.

The fair value measurement for all investment property has been categorised as a level 3 fair value based on the inputs to the valuation technique used.

The following table shows the valuation technique used in measuring the fair value of investment property, as well as the significant unobservable inputs used.

Valuation technique	Significant unobservable inputs	Inter-relationship between key unobservable inputs and fair value measurement
- Discounted cash flows: The valuation model considers the present value of net cash flows to be generated from the property, taking into account expected rental growth rate. The expected net cash flows are discounted using risk-adjusted discount rates. Among other factors, the discount rate estimation considers the quality of its location (prime vs secondary), tenant credit quality and lease terms.	• Contractually agreed lease income over the remaining period. • The risk-adjusted discount rates (6%-7%)	The estimated fair value increase (decrease) if: • Expected market rental growth was higher (lower) • The risk-adjusted discount rate was lower (higher).
- Market approach	The adjusted quoted price and the actual selling price of comparable investment properties	The estimated fair value increase (decrease) if land price was higher (lower).

Amounts recognised in profit and loss that related to investment property are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
For the year ended 31 December				
Rental income	22	12	92	58

16. Property, plant and equipment

Movements of property, plant and equipment for the years ended 31 December 2023 and 2022 are summarised below.

(Unit: Million Baht)

	Consolidated financial statements										
	Land	Buildings	Leasehold improvements	Refinery plant and equipment	Petro-chemical plants	Power plants	Machinery, equipment and plant equipment	Furniture, fixtures, office equipment and others	Vehicles	Construction in progress	Total
Cost											
At 1 January 2022	7,347	5,079	212	116,429	36,122	17,702	7,386	1,068	14	108,568	299,927
Additions	11	6	-	260	3	-	297	15	2	33,839	34,433
Disposals and write-off	-	-	-	(1)	-	-	(7)	(5)	-	-	(13)
Transfers in (out)	-	24	-	1,346	10	50	131	24	-	(1,618)	(33)
Exchange differences	-	-	-	-	-	-	(6)	-	-	-	(6)
At 31 December 2022	7,358	5,109	212	118,034	36,135	17,752	7,801	1,102	16	140,789	334,308
Additions	-	1	-	258	-	27	15	10	-	17,466	17,777
Disposals and write-off	-	-	-	(1)	-	(462)	(5)	(2)	-	-	(470)
Transfers in (out)	-	36	-	1,998	24	3,612	102	54	-	(5,829)	(3)
Exchange differences	-	(4)	-	-	-	-	(30)	-	-	(1)	(35)
At 31 December 2023	7,358	5,142	212	120,289	36,159	20,929	7,883	1,164	16	152,425	351,577

(Unit: Million Baht)

	Consolidated financial statements										
	Land	Buildings	Leasehold improvements	Refinery plant and equipment	Petro-chemical plants	Power plants	Machinery, equipment and plant equipment	Furniture, fixtures, office equipment and others	Vehicles	Construction in progress	Total
Accumulated depreciation											
At 1 January 2022	-	1,863	47	84,594	21,420	8,025	4,688	878	13	-	121,528
Depreciation charged during the year	-	233	8	2,944	1,309	767	330	51	1	-	5,643
Depreciation on disposals and write-off	-	-	-	(1)	-	-	(8)	(4)	(1)	-	(14)
Transfers in	-	2	-	-	-	-	-	-	-	-	2
Exchange differences	-	-	-	-	-	-	(1)	-	-	-	(1)
At 31 December 2022	-	2,098	55	87,537	22,729	8,792	5,009	925	13	-	127,158
Depreciation charged during the year	-	233	8	3,071	1,173	701	342	59	1	-	5,588
Depreciation on disposals and write-off	-	-	-	(34)	-	(410)	(5)	(2)	-	-	(451)
Transfers in	-	2	-	-	-	-	-	-	-	-	2
Exchange differences	-	(1)	-	-	-	-	(11)	-	-	-	(12)
At 31 December 2023	-	2,332	63	90,574	23,902	9,083	5,335	982	14	-	132,285
Impairment allowance											
At 31 December 2022	-	-	-	-	674	-	-	-	-	-	674
At 31 December 2023	-	-	-	-	674	-	-	-	-	-	674
Net book value											
At 31 December 2022	7,358	3,011	157	30,497	12,732	8,960	2,792	177	3	140,789	206,476
At 31 December 2023	7,358	2,810	149	29,715	11,583	11,846	2,548	182	2	152,425	218,618

Depreciation for the year

2022 (Baht 5,508 million included in manufacturing cost, and the balance in selling and administrative expenses)	5,643
2023 (Baht 5,398 million included in manufacturing cost, and the balance in selling and administrative expenses)	5,588

(Unit: Million Baht)

	Separate financial statements								
	Land	Buildings	Refinery plant and equipment	Power plants	Machinery, equipment and plant equipment	Furniture, fixtures, office equipment and others	Vehicles	Construction in progress	Total
Cost									
At 1 January 2022	4,941	3,740	108,034	5,784	1,575	681	1	107,206	231,962
Additions	-	-	236	-	13	7	-	32,196	32,452
Disposals and write-off	-	-	(1)	-	-	-	-	-	(1)
Transfers in (out)	-	7	977	-	-	23	-	(1,038)	(31)
At 31 December 2022	4,941	3,747	109,246	5,784	1,588	711	1	138,364	264,382
Additions	-	-	259	-	5	6	-	16,707	16,977
Disposals and write-off	-	-	(1)	(462)	(2)	-	-	-	(465)
Transfers in (out)	(61)	-	1,696	-	-	49	-	(1,748)	(64)
At 31 December 2023	4,880	3,747	111,200	5,322	1,591	766	1	153,323	280,830
Accumulated depreciation									
At 1 January 2022	-	1,038	77,088	5,316	1,324	562	1	-	85,329
Depreciation charged during the year	-	176	2,843	264	60	41	-	-	3,384
Depreciation on disposals and write-off	-	-	(1)	-	-	-	-	-	(1)
At 31 December 2022	-	1,214	79,930	5,580	1,384	603	1	-	88,712
Depreciation charged during the year	-	173	2,918	52	46	52	-	-	3,241
Depreciation on disposals and write-off	-	-	(34)	(408)	(2)	-	-	-	(444)
At 31 December 2023	-	1,387	82,814	5,224	1,428	655	1	-	91,509
Impairment allowance									
At 31 December 2022	-	-	-	-	-	-	-	-	-
At 31 December 2023	-	-	-	-	-	-	-	-	-

(Unit: Million Baht)

	Separate financial statements								
	Land	Buildings	Refinery plant and equipment	Power plants	Machinery, equipment and plant equipment	Furniture, fixtures, office equipment and others	Vehicles	Construction in progress	Total
Net book value									
At 31 December 2022	4,941	2,533	29,316	204	204	108	-	138,364	175,670
At 31 December 2023	4,880	2,360	28,386	98	163	111	-	153,323	189,321
Depreciation for the year									
2022 (Baht 3,278 million included in manufacturing cost, and the balance in selling and administrative expenses)									3,384
2023 (Baht 3,080 million included in manufacturing cost, and the balance in selling and administrative expenses)									3,241

As at 31 December 2023, the Group had assets under construction for The Clean Fuel Project. The construction has been financed with loans. Borrowing costs amounting to Baht 4,141 million were capitalised during the year ended 31 December 2023 (the Company only: Baht 4,507 million). The weighted average rate of 2.62% to 5.39% per annum (The Company only: 3.73% to 5.99% per annum) has been used to determine the amount of borrowing costs eligible for capitalisation. The borrowing costs were included in 'Additions' during the year.

The gross amounts of the Group's and the Company's fully depreciated plant and equipment that were still in use as at 31 December 2023, were Baht 69,890 million (2022: Baht 68,861 million) and Baht 55,109 million (2022: Baht 54,106 million), respectively.

As at 31 December 2023, certain subsidiaries mortgaged their land, building, petrochemical plant and machines as collateral for credit facilities. The book value of land, building, petrochemical plant, and machines amounted to Baht 7,051 million (2022: Baht 15,935 million).

17. Leases

The Group as a lessee

The Group has lease contracts for assets used in its operations.

a) Right-of-use assets

Movements of right-of-use assets for the years ended 31 December 2023 and 2022 are summarised below:

(Unit: Million Baht)

	Consolidated financial statements					
	Land	Buildings	Equipment	Oil tankers	Motor vehicles	Total
1 January 2022	12,307	44	78	4,627	75	17,131
Additions	68	171	68	9,107	43	9,457
Lease modification	-	-	-	(841)	(1)	(842)
Exchange differences	-	-	(1)	-	-	(1)
Depreciation for the year	(429)	(66)	(48)	(1,120)	(44)	(1,707)
31 December 2022	11,946	149	97	11,773	73	24,038
Additions	7	2	94	-	30	133
Lease modification	-	-	-	(14)	-	(14)
Exchange differences	(2)	-	-	-	-	(2)
Depreciation for the year	(429)	(62)	(66)	(1,332)	(42)	(1,931)
31 December 2023	11,522	89	125	10,427	61	22,224

(Unit: Million Baht)

	Separate financial statements					
	Land	Buildings	Equipment	Oil tankers	Motor vehicles	Total
1 January 2022	11,315	6	52	4,627	66	16,066
Additions	289	73	50	9,107	40	9,559
Lease modification	103	-	-	(841)	(1)	(739)
Depreciation for the year	(404)	(29)	(28)	(1,120)	(39)	(1,620)
31 December 2022	11,303	50	74	11,773	66	23,266
Additions	7	-	94	-	22	123
Lease modification	(14)	-	-	(14)	-	(28)
Depreciation for the year	(411)	(27)	(46)	(1,332)	(36)	(1,852)
31 December 2023	10,885	23	122	10,427	52	21,509

The movements of right-of-use assets exclude the right-of-use assets which are classified as investment property which is presented in Note 15.

b) Lease liabilities

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Lease payments	30,440	32,619	30,793	32,924
Less: Deferred interest expenses	(9,350)	(10,111)	(9,571)	(10,318)
Total	21,090	22,508	21,222	22,606
Less: Portion due within one year	(1,402)	(1,401)	(1,355)	(1,342)
Lease liabilities - net of current portion	19,688	21,107	19,867	21,264

Movements of the lease liability account during the years ended 31 December 2023 and 2022 are summarised below:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Balance at beginning of year	22,508	15,382	22,606	15,223
Additions	132	9,458	122	9,540
Interest expenses	753	658	757	653
Repayments	(2,156)	(1,869)	(2,103)	(1,793)
Lease modification	(14)	(917)	(28)	(815)
Unrealised gain on exchange	(132)	(204)	(132)	(202)
Exchange differences	1	-	-	-
Balance at end of year	21,090	22,508	21,222	22,606

A maturity analysis of lease payments is disclosed in Note 36.1.3 under the liquidity risk.

c) Expenses relating to leases that are recognised in profit or loss

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Depreciation expenses of right-of-use assets	1,931	1,707	1,852	1,620
Interest expenses on lease liabilities	753	658	757	653
Expenses relating to short-term leases	4	11	-	-
Expenses relating to leases of low-value assets	4	5	4	5

d) Group as a lessor

The Group has entered into operating leases for its investment property portfolio consisting of (see Note 15). During the year 2023, the Group has sublease income amounting to Baht 22 million (2022: Baht 12 million) (The Company only: Baht 92 million, 2022: Baht 58 million).

18. Goodwill

(Unit: Million Baht)

	Consolidated financial statements	
	2023	2022
At 1 January		
Cost	849	850
Book value	849	850
For the year ended 31 December		
Book value at the beginning of year	849	850
Exchange differences	(23)	(1)
Book value at end of year	826	849
At 31 December		
Cost	826	849
Book value	826	849

Goodwill is allocated to the Group's cash-generating units (CGUs) identified according to business segment which is solvent segment.

Impairment testing for goodwill

The Group tests goodwill impairment on an annual basis. The recoverable amount was based on its value-in-use, determined by discounting future cash flows to be generated in the future from the continuing use of CGU which based on the management approved five-year financial budget. Those cash flows are determined by annual earnings before interest, taxes, depreciation, and amortisation (EBITDA) estimated by management, adjusted by corporate income tax, change in working capital and relevant capital expenditures. The estimate also included a long-term growth rate with reference to gross domestic product (GDP) growth rates for the countries in which the CGUs operates and experiences by management.

The key assumptions used for value-in-use calculations are as follows:

	Goodwill - Thailand	Goodwill - Vietnam
	%	%
Gross margin	9.34 - 9.84	6.48 - 6.69
Long-term growth rate	3.00	6.20
Discount rate from weighted average cost of capital (WACC)	6.97	11.61

The recoverable amount of CGU in which goodwill is allocated is estimated to exceed the carrying amount of the CGU. Management has considered the above and believes that there is no occurrence of impairment of goodwill.

19. Intangible assets

The net book value of intangible assets as at 31 December 2023 and 2022 are presented below.

(Unit: Million Baht)

	Consolidated financial statements				
	License fee	Computer software	Patent	Intangible assets under processing	Total
As at 31 December 2023					
Cost	3,577	1,485	2	293	5,357
Less: Accumulated amortisation	(1,969)	(983)	(1)	-	(2,953)
Net book value	1,608	502	1	293	2,404
As at 31 December 2022					
Cost	3,528	1,271	2	406	5,207
Less: Accumulated amortisation	(1,859)	(848)	(1)	-	(2,708)
Net book value	1,669	423	1	406	2,499

(Unit: Million Baht)

	Separate financial statements				
	License fee	Computer software	Patent	Intangible assets under processing	Total
As at 31 December 2023					
Cost	966	1,237	2	292	2,497
Less: Accumulated amortisation	(869)	(766)	(1)	-	(1,636)
Net book value	97	471	1	292	861
As at 31 December 2022					
Cost	953	1,035	2	397	2,387
Less: Accumulated amortisation	(853)	(639)	(1)	-	(1,493)
Net book value	100	396	1	397	894

20. Income tax

Income tax expenses for the years ended 31 December 2023 and 2022 are summarised as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Current income tax:				
Income tax for the year	4,788	7,844	4,035	7,020
Deferred tax:				
Relating to origination and reversal of temporary differences	(116)	1,074	(337)	1,867
Income tax expense reported in profit or loss	4,672	8,918	3,698	8,887

The amounts of income tax relating to each component of other comprehensive income for the years ended 31 December 2023 and 2022 are presented in the movement in deferred tax assets and liabilities.

The amounts of current tax and deferred tax that recognised directly in equity for the years ended 31 December 2023 and 2022 are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Current income tax:				
Current income tax on transaction costs for issued share capital	-	48	-	48

The reconciliation between accounting profit and income tax expense are shown below.

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Accounting profit before tax	24,257	42,024	25,211	42,553
Applicable tax rate	20%	20%	20%	20%
Accounting profit before tax multiplied by income tax rate	4,851	8,405	5,042	8,511
Decrease in deferred tax in current year	91	49	-	-
Adjustment from prior period	(59)	9	(48)	-
Effects of:				
Promotional privileges and dividends	(350)	(330)	(1,381)	(556)
Non-deductible expenses	210	895	150	1,007
Additional expense deductions allowed	(71)	(110)	(65)	(75)
Total	(211)	455	(1,296)	376
Income tax expense reported in profit or loss	4,672	8,918	3,698	8,887

Revenue, profit before finance costs and income tax expenses and income tax expenses from overseas operations of the Group for the year ended 31 December 2023 are as follows:

(Unit: Million Baht)

	Revenue [1]	Profit (loss) before finance costs and income tax expenses	Income tax expense
Thailand	460,064	28,438	4,649
Vietnam	3,779	86	6
Indonesia	3,130	(141)	16
Singapore	1,018	9	1
Hong Kong [2]	(8)	(10)	-
United States of America [2]	(37)	(37)	-
Total	467,946	28,345	4,672

Note:

[1] Taxable income consists of: Sales, Subsidy from oil fuel fund, Dividend Income, Gain (loss) from hedging derivatives, Foreign exchange gain (loss) and Other income etc.

[2] No income tax expenses due to income tax loss.

The analysis of deferred tax assets and deferred tax liabilities is as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Deferred tax assets, net	2,503	1,125	1,907	375
Deferred tax liabilities, net	(16)	(3)	-	-
Deferred tax, net	2,487	1,122	1,907	375

The movements in deferred tax assets and liabilities during the year are as follows:

(Unit: Million Baht)

	Consolidated financial statements									
	Employee benefit obligation	Impairment losses on assets	Unused tax losses	Lease liabilities	Cash flow hedges	Borrowing cost	Loss from exchange rate in construction in progress	Unrealised loss on changes in fair value of investment FVOCI	Others	Total
Deferred tax assets										
At 1 January 2022	960	-	76	248	-	206	1,916	-	36	3,442
Charged (credited) to profit or loss	(8)	140	550	55	-	21	582	-	55	1,395
Charged (credited) to other comprehensive income	(392)	-	-	-	-	-	-	-	78	(314)
Reclassification	-	-	-	-	157	-	-	-	(92)	65
Exchange differences	-	-	(2)	-	-	-	-	-	-	(2)
At 31 December 2022	560	140	624	303	157	227	2,498	-	77	4,586
At 1 January 2023	560	140	624	303	157	227	2,498	-	77	4,586
Charged (credited) to profit or loss	(10)	(23)	(182)	17	235	19	-	-	55	111
Charged (credited) to other comprehensive income	1	-	-	-	(197)	-	-	-	-	(196)
Reclassification	-	-	-	-	-	-	-	1,073	-	1,073
Exchange differences	1	-	-	-	-	-	-	-	-	1
At 31 December 2023	551	117	442	320	195	246	2,498	1,073	132	5,575

(Unit: Million Baht)

	Consolidated financial statements						
	Accumulated depreciation	Deferred cost of debentures	Gain on reclassification of investments	Cash flow hedges	Unrealised gain on changes in fair value of investment FVOCI	Others	Total
Deferred tax liabilities							
At 1 January 2022	(344)	(70)	-	(246)	-	(367)	(1,027)
(Charged) credited to profit or loss	(52)	22	(1,916)	(165)	-	(361)	(2,472)
(Charged) credited to other comprehensive income	-	-	-	568	(465)	-	103
Reclassification	-	(4)	(136)	-	92	136	88
Exchange differences	-	1	-	(157)	-	-	(156)
At 31 December 2022	(396)	(51)	(2,052)	-	(373)	(592)	(3,464)
At 1 January 2023	(396)	(51)	(2,052)	-	(373)	(592)	(3,464)
(Charged) credited to profit or loss	(81)	2	-	-	-	83	4
Credited to other comprehensive income	-	-	-	-	1,446	-	1,446
Reclassification	-	-	-	-	(1,073)	-	(1,073)
Exchange differences	-	(1)	-	-	-	-	(1)
At 31 December 2023	(477)	(50)	(2,052)	-	-	(509)	(3,088)

(Unit: Million Baht)

	Separate financial statements									
	Employee benefit obligation	Impairment losses on assets	Unused tax losses	Lease liabilities	Cash flow Hedges	Borrowing cost	Loss from exchange rate in construction in progress	Unrealised loss on changes in fair value of investment FVOCI	Others	Total
Deferred tax assets										
At 1 January 2022	940	-	48	199	-	206	1,916	-	11	3,320
Charged (credited) to profit or loss	(76)	2	(48)	48	-	21	582	-	52	581
Credited in other comprehensive income	(322)	-	-	-	-	-	-	-	-	(322)
Reclassification	-	-	-	-	146	-	-	-	-	146
At 31 December 2022	542	2	-	247	146	227	2,498	-	63	3,725
At 1 January 2023	542	2	-	247	146	227	2,498	-	63	3,725
Charged (credited) to profit or loss	(8)	-	-	12	235	19	-	-	54	312
Credited in other comprehensive income	-	-	-	-	(186)	-	-	-	-	(186)
Reclassification	-	-	-	-	-	-	-	917	-	917
At 31 December 2023	534	2	-	259	195	246	2,498	917	117	4,768

(Unit: Million Baht)

	Separate financial statements						
	Accumulated depreciation	Deferred cost of debentures	Gain on reclassification of investments	Cash flow hedges	Unrealised gain on changes in fair value of investment FVOCI	Others	Total
Deferred tax liabilities							
At 1 January 2022	(259)	(80)	-	(309)	-	(262)	(910)
(Charged) credited to profit or loss	(29)	23	(1,916)	(165)	-	(362)	(2,449)
(Charged) credited to other comprehensive income	-	-	-	620	(465)	-	155
Reclassification	-	-	(31)	(146)	-	31	(146)
At 31 December 2022	(288)	(57)	(1,947)	-	(465)	(593)	(3,350)
At 1 January 2023	(288)	(57)	(1,947)	-	(465)	(593)	(3,350)
(Charged) credited to profit or loss	(59)	2	-	-	-	81	24
Credited to other comprehensive income	-	-	-	-	1,382	-	1,382
Reclassification	-	-	-	-	(917)	-	(917)
At 31 December 2023	(347)	(55)	(1,947)	-	-	(512)	(2,861)

Deferred income tax assets are recognised for tax loss carried forwards only to the extent that realisation of the related tax benefit through the future taxable profits is probable. As at 31 December 2023, the Group did not recognise deferred income tax assets of Baht 31 million (2022: Baht 218 million) in respect of losses that can be carried forward against future taxable income amounting to Baht 154 million which will expire during 2024 to 2028 (2022: Baht 1,087 million will expire during 2023 to 2027).

21. Short-term loans from financial institutions

Short-term loans from financial institutions for the Group are as follows:

(Unit: Million Baht)

	Consolidated financial statements	
	2023	2022
Short-term loans from financial institutions		
- Secured	515	508
- Unsecured	2,683	1,384
Total short-term loans from financial institutions	3,198	1,892

Movements of short-term loans from financial institutions for the Group are as follows:

(Unit: Million Baht)

	Consolidated financial statements	
	2023	2022
Opening balance	1,892	929
Cash flows:		
Proceeds from short-term loans	11,480	17,325
Repayments of short-term loans	(10,150)	(16,358)
Other non-cash movements:		
Exchange differences	(24)	(4)
Closing balance	3,198	1,892

As at 31 December 2023, short-term loans from financial institutions represented promissory notes of the subsidiaries which denominated in Thai Baht amounting to Baht 2,515 million, Vietnamese Dong 357,700 million (equivalent to Baht 503 million) and Indonesian Rupiah currency amounting to 81,224 million Indonesian Rupiahs (equivalent to Baht 181 million), and bore interest at rates of 2.00% to 10.00% per annum (2022: subsidiaries' short-term loans denominated in Thai Baht amounting to Baht 1,308 million, Vietnamese Dong 259,500 million (equivalent to Baht 378 million) and Indonesian Rupiah currency amounting to 92,083 million Indonesian Rupiahs (equivalent to Baht 204 million) with bore interest rates of 2.66% to 10.00% per annum. These short-term loans of a subsidiary are secured by the pledge of inventories and jointed collateral with the short-term loans under the terms and condition in the Credit Facilities Agreement.

22. Trade payables

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Related parties (Note 6)	48,786	72,976	53,330	77,727
Other parties	1,398	1,178	1,165	903
Total	50,184	74,154	54,495	78,630

23. Other payables

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Other payables	1,717	2,550	1,405	2,020
Accrued interest	1,187	1,365	1,260	1,445
Accrued operating expenses	320	235	116	85
Oil Fuel Fund payable	156	340	156	340
Others	530	458	281	333
Total	3,910	4,948	3,218	4,223

24. Long-term loans from financial institutions and a third party

Long-term loans from financial institutions and a third party are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Current portion of long-term loans from financial institutions, net				
- Secured	611	1,007	-	-
- Unsecured	2,450	1,877	2,374	1,670
Long-term loans from financial institutions, net of current portion				
- Secured	1,886	9,133	-	-
- Unsecured	14,148	10,674	13,838	10,236
Long-term loans from a third party				
- Unsecured	192	216	-	-
Total long-term loans	19,287	22,907	16,212	11,906

Movements of long-term loans from financial institutions and a third party are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Opening balance	22,907	31,968	11,906	19,536
Cash flows:				
Proceeds from long-term loans	6,012	8,779	6,000	8,500
Repayments of long-term loans	(9,676)	(17,926)	(1,700)	(16,209)
Financing fee	(28)	(8)	(28)	(8)
Other non-cash movements:				
Amortisation of deferred financing fee	90	98	34	87
Exchange differences	(18)	(4)	-	-
Closing balance	19,287	22,907	16,212	11,906

The weighted average effective interest rate of the long-term loans of the Group were 4.21% per annum (2022: 3.40% per annum), the Company was 4.37% per annum (2022: 3.54% per annum).

The detail of long-term loans of the Group are as follows:

			As at 31 December						
			2023		2022				
No.	Loans by	Currency in agreement	Original currency (Million)	Equivalent to Million Baht	Original currency (Million)	Equivalent to Million Baht	Interest rate per annum (%)	Principal repayment term	Interest payment period
1	Subsidiaries	Baht	-	-	160	160	FDR (6M) plus a certain margin	Semi-Annual	Semi-Annual
2	Subsidiaries	Baht	-	-	15	15	MLR minus a certain margin	Semi-Annual	Semi-Annual
3	Subsidiaries	Baht	-	-	6,883	6,883	THBFIX (3M) plus a certain margin	Semi-Annual	Quarterly
4	Subsidiaries	Baht	31	31	42	42	THOR plus a certain margin	Semi-Annual	Semi-Annual
5	Subsidiaries	Baht	6	6	-	-	THOR plus a certain margin	Semi-Annual	Semi-Annual
6	Subsidiaries	Baht	12	12	23	23	MLR minus a certain margin	Semi-Annual	Semi-Annual
7	Subsidiaries	Baht	1	1	10	10	MLR minus a certain margin	Semi-Annual	Semi-Annual
8	Subsidiaries	Baht	2	2	-	-	THOR plus a certain margin	Semi-Annual	Monthly
9	Subsidiaries	Baht	2,460	2,460	3,200	3,200	THOR plus a certain margin	Semi-Annual	Monthly
10	Subsidiaries	Baht	191	191	216	216	THOR plus a certain margin	A specified in the agreement	A specified in the agreement
11	Subsidiaries	Vietnamese Dong	264,438	371	309,098	452	COF plus a certain margin	Semi-Annual	Semi-Annual
12	The Company	Baht	6,247	6,247	6,922	6,922	MLR minus a certain margin	Quarterly	Quarterly
13	The Company	Baht	3,989	3,989	4,984	4,984	6MBIBOR plus a certain margin	Semi-Annual	Quarterly
14	The Company	Baht	497	497	-	-	3MBIBOR plus a certain margin	End of the contract	Quarterly
15	The Company	Baht	499	499	-	-	THOR plus a certain margin	End of the contract	Quarterly
16	The Company	Baht	994	994	-	-	THOR plus a certain margin	Quarterly	Quarterly
17	The Company	Baht	2,994	2,994	-	-	THOR plus a certain margin	Semi-Annual	Quarterly
18	The Company	Baht	993	993	-	-	MLR minus a certain margin	Quarterly	Quarterly
Total				19,287		22,907			

In December 2022, the Company entered into long-term loan facility agreements with various financial institutions in Thailand totalling of Baht 6,000 million, with the drawdown on 31 March 2023 with interest rates and repayment schedule for 5 - 8 years as stipulated in such agreements to be used in normal business operations. Under the terms, the Company agrees to maintain certain financial ratios and comply with conditions stipulated in the agreements.

The Group's long-term loans are secured by collateral of land, building, petrochemical plants, and machinery (Note 16) in accordance with the Credit Facilities Agreement.

The Group is required to comply with certain criteria and conditions; for example, maintaining shareholders' portion, maintaining debt to equity ratio at the level as specified in the contract and providing financial supports based on ownership percentage.

25. Debentures

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Debentures	141,423	149,781	42,429	40,004
Less: Discount on/ Issuance of debentures	(791)	(829)	(137)	(133)
Total	140,632	148,952	42,292	39,871
Less: Current portion of debentures, net	(7,000)	(17,317)	(7,000)	(7,515)
Debentures, net	133,632	131,635	35,292	32,356

Movements of debentures of the Group and the Company are as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Beginning balance	148,952	135,868	39,871	30,430
Cash flows:				
Additions	10,000	12,000	10,000	12,000
Repayments	(16,381)	(3,000)	(7,109)	(3,000)
Financing fee	(4)	(12)	(4)	(12)
Other non-cash movements:				
Interest of discount on debenture/ Amortisation of deferred financing fee	36	49	-	10
Exchange differences	(1,971)	4,047	(466)	443
Ending balance	140,632	148,952	42,292	39,871

Debentures issued by the Group are owned by the Company and a subsidiary, which are unsecured and unsubordinated. The debentures issued by a subsidiary are fully guaranteed by the Company. Detail are as follows:

Consolidated financial statements							
Issuance date	Maturity date	Years	Currency	2023 (Million)	2022 (Million)	Interest rate (% p.a.)	Interest payment term
23 March 2012	23 March 2027	15	Baht	7,500	7,500	5.05	Semi-annual basis
23 January 2013	23 January 2023	10	US Dollars	-	216.4	3.625	Semi-annual basis
23 January 2013	23 January 2043	30	US Dollars	172.4	172.4	4.875	Semi-annual basis
12 March 2014	12 March 2024	10	Baht	7,000	7,000	4.84	Semi-annual basis
10 April 2018	23 January 2023	10	US Dollars	-	283.6	3.625	Semi-annual basis
10 April 2018	23 January 2043	30	US Dollars	327.6	327.6	4.875	Semi-annual basis
20 November 2018	20 November 2028	10	US Dollars	400	400	4.625	Semi-annual basis
20 November 2018	20 November 2048	30	US Dollars	600	600	5.375	Semi-annual basis
17 October 2019	17 October 2049	30	US Dollars	565	565	3.50	Semi-annual basis
18 June 2020	18 June 2030	10	US Dollars	400	400	2.50	Semi-annual basis
18 June 2020	18 June 2050	30	US Dollars	600	600	3.75	Semi-annual basis
11 November 2022	11 November 2025	3	Baht	1,400	1,400	2.99	Semi-annual basis
11 November 2022	11 November 2027	5	Baht	600	600	3.64	Semi-annual basis
11 November 2022	11 November 2029	7	Baht	2,000	2,000	4.13	Semi-annual basis
11 November 2022	11 November 2032	10	Baht	1,700	1,700	4.49	Semi-annual basis
11 November 2022	11 November 2034	12	Baht	3,100	3,100	4.79	Semi-annual basis
11 November 2022	11 November 2037	15	Baht	3,200	3,200	5.09	Semi-annual basis
3 May 2023	3 May 2028	5	Baht	2,800	-	3.32	Semi-annual basis
3 May 2023	3 May 2033	10	Baht	2,300	-	3.84	Semi-annual basis
3 May 2023	3 May 2038	15	Baht	4,900	-	4.24	Semi-annual basis

Separate financial statements							
Issuance date	Maturity date	Years	Currency	2023 (Million)	2022 (Million)	Interest rate (% p.a.)	Interest payment term
23 March 2012	23 March 2027	15	Baht	7,500	7,500	5.05	Semi-annual basis
23 January 2013	23 January 2023	10	US Dollars	-	216.4	3.625	Semi-annual basis
23 January 2013	23 January 2043	30	US Dollars	172.4	172.4	4.875	Semi-annual basis
12 March 2014	12 March 2024	10	Baht	7,000	7,000	4.84	Semi-annual basis
11 November 2022	11 November 2025	3	Baht	1,400	1,400	2.99	Semi-annual basis
11 November 2022	11 November 2027	5	Baht	600	600	3.64	Semi-annual basis
11 November 2022	11 November 2029	7	Baht	2,000	2,000	4.13	Semi-annual basis
11 November 2022	11 November 2032	10	Baht	1,700	1,700	4.49	Semi-annual basis
11 November 2022	11 November 2034	12	Baht	3,100	3,100	4.79	Semi-annual basis
11 November 2022	11 November 2037	15	Baht	3,200	3,200	5.09	Semi-annual basis
3 May 2023	3 May 2028	5	Baht	2,800	-	3.32	Semi-annual basis
3 May 2023	3 May 2033	10	Baht	2,300	-	3.84	Semi-annual basis
3 May 2023	3 May 2038	15	Baht	4,900	-	4.24	Semi-annual basis

The Company and a subsidiary are required to comply with certain criteria and conditions; for example, maintaining shareholders' portion at the level as specified in the contract.

26. Provision for long-term employee benefits

The movement in the provision for long-term employee benefits during the year is as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
At 1 January	2,753	4,799	2,173	3,874
Current service cost	155	314	88	166
Interest cost	75	67	57	54
Actuarial loss (gain)	3	(2,086)	-	(1,638)
Benefits paid during the year	(272)	(340)	(248)	(283)
Exchange differences	-	(1)	-	-
At 31 December	2,714	2,753	2,070	2,173

Actuarial (gains) losses recognised in other comprehensive income arising from:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Experience	(1)	(458)	-	(563)
Demographic assumptions	8	18	-	7
Financial assumptions	(4)	(1,521)	-	(1,055)
Total	3	(1,961)	-	(1,611)

Actuarial (gains) losses recognised in profit and loss arising from:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Experience	-	(2)	-	9
Demographic assumptions	-	12	-	3
Financial assumptions	-	(135)	-	(39)
Total	-	(125)	-	(27)

The principal actuarial assumptions used were as follows:

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Discount rate	2.5% - 3.9%	2.5% - 3.9%	2.5% - 2.8%	2.5% - 2.8%
Salary increases rate	5.0% - 6.0%	5.0% - 6.0%	5.0%	5.0%
Employee turnover	0.2% - 5.7%	0.2% - 5.7%	0.2% - 2.3%	0.2% - 2.3%

Assumptions regarding future mortality have been based on published statistics and mortality tables.

The result of sensitivity analysis for significant assumptions that affect the present value of the provision for long-term employee benefit as at 31 December 2023 and 2022 are summarised below:

(Unit: Million Baht)

	Consolidated financial statements					
	Change in assumption		Increase in assumption		Decrease in assumption	
	2023	2022	2023	2022	2023	2022
Discount rate	1%	1%	(350)	(363)	405	399
Salary growth rate	1%	1%	340	312	(299)	(275)

(Unit: Million Baht)

	Separate financial statements					
	Change in assumption		Increase in assumption		Decrease in assumption	
	2023	2022	2023	2022	2023	2022
Discount rate	1%	1%	(271)	(272)	308	312
Salary growth rate	1%	1%	272	254	(243)	(227)

The above sensitivity analysis is based on a change in an assumption while all other assumptions remain constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions the same method which is the present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting period has been applied when calculating the pension liability recognised within the consolidated statement of financial position. The methods and types of assumptions used in preparing the sensitivity analysis did not change when compared to the previous period.

The weighted average reserve long-term employee benefit of the Group is 10 years (2022: 10 years).

Expected maturity analysis of undiscounted retirement benefits are as follows:

(Unit: Million Baht)

	Consolidated financial statements				
	Less than 1 year	Between 1 - 2 years	Between 2 - 5 years	Over 5 years	Total
At 31 December 2023					
Retirement benefits	234	376	309	3,040	3,959
At 31 December 2022					
Retirement benefits	183	443	310	3,180	4,116

(Unit: Million Baht)

	Separate financial statements				
	Less than 1 year	Between 1 - 2 years	Between 2 - 5 years	Over 5 years	Total
At 31 December 2023					
Retirement benefits	229	360	279	2,267	3,135
At 31 December 2022					
Retirement benefits	149	428	296	2,411	3,284

27. Share Capital

Movements of the share capital for the year ended 31 December 2023 are summaries below:

	Consolidated/ Separate financial statements				
		Number of share		Share capital	
	Par value per share	Registered share capital	Paid-up share capital	Registered share capital	Paid-up share capital
	(Baht)	(Million share)		(Million Baht)	
As at 1 January 2023	10	2,315	2,234	23,151	22,338
Decrease in registered share capital	10	(81)	-	(813)	-
As at 31 December 2023	10	2,234	2,234	22,338	22,338

On 10 April 2023, the Company's Annual General Meeting of Shareholders passed a resolution to approve the decrease in the Company's registered share capital of Baht 813 million by cancelling of 81.3 million unissued shares with a par value of Baht 10 per share from the existing registered capital of Baht 23,151 million to be Baht 22,338 million.

28. Statutory reserve

Pursuant to Section 116 of the Public Limited Companies Act B.E. 2535, the Company is required to set aside a statutory reserve at least 5 percent of its net profit after deducting accumulated deficit brought forward (if any), until the reserve reaches 10 percent of the registered capital. The statutory reserve is not available for dividend distribution. At present, the statutory reserve has fully been set aside.

29. Other income

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Interest income	786	368	1,087	440
Service income and others	352	414	2,390	2,156
Total	1,138	782	3,477	2,596

30. Expenses by nature

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Changes in finished goods and work in progress	(91)	(2,860)	110	(2,827)
Purchase and raw materials used	356,343	416,777	406,039	471,703
Natural gas used	12,847	17,152	3,166	7,288
Employee benefit expenses	4,366	4,185	2,074	2,132
Depreciation and amortisation	7,799	7,744	5,175	5,282
Excise tax	36,935	33,362	36,901	33,332
Oil fuel fund contribution/ Energy conservation fund contribution	16,502	4,031	16,502	4,031

31. Promotional privileges

Certain local subsidiaries have been granted privileges by the Board of Investment relating to power and steam generation, petrochemical product production and chemical product production. The summary of privileges granted are as follows:

a) an exemption from payment of import duty and tax on machinery and equipment as approved by the Board of Investment.

b) an exemption from payment of corporate income tax for promoted operations for periods of 7 to 8 years from the dates on which the income is first derived from such operations or 8 years from the date on which the income is received subsequent to when the privileges were granted.

c) a 50% reduction in the normal corporate income tax rate on the net profit derived from certain promotional operations for a period of 5 years, commencing from the expiry date in (b) above.

As promoted companies, the subsidiaries must comply with certain conditions and restrictions provided for in the promotional certificates.

Revenues from promoted businesses were as follows:

(Unit: Million Baht)

	Consolidated financial statements	
	2023	2022
Revenues from promoted businesses	15,803	47,088

32. Earnings per share

Basic earnings per share is calculated by dividing profit for the year attributable to equity holders of the Company (excluding other comprehensive income) by the weighted average number of ordinary shares that issue during the year.

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Profit for the year attributable to equity holders of the Company (Million Baht)	19,443	32,668	21,513	33,665
Weighted average number of ordinary shares (Million shares)	2,234	2,090	2,234	2,090
Basic earnings per share (Baht/share)	**8.70**	**15.63**	**9.63**	**16.11**

33. Segment information

Segment information is presented in respect of the Group's business segments. The primary format, business segments, is based on the Group's management and the internal reporting structure provided to the chief operating decision maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as President and Chief Executive Officer who make strategic decisions.

Segment results, assets and liabilities include items directly attributable to a segment as well as those that can be allocated on a reasonable basis.

Reportable segments

The Group is organised into business units based on their products and services. During the current period, the Group has not changed the organisation of their reportable segments from the last annual financial statements.

Segment 1: Oil refinery
Segment 2: Lube base oil refinery
Segment 3: Aromatics and LAB
Segment 4: Power generation
Segment 5: Solvent
Segment 6: Ethanol
Segment 7: Olefins
Segment 8: Others

The following tables present assets, revenue, and operating results information regarding the Group's operating segments for the years ended 31 December 2023 and 2022:

(Unit: Million Baht)

	Consolidated financial statements for the year ended 31 December 2023									
	Oil refinery	Lube base oil refinery	Aromatics and LAB	Power generation	Solvent	Ethanol	Olefins	Others	Adjustments	Total
Revenue from sales										
- External customers	391,432	18,208	24,372	5,230	19,225	935	-	-	-	459,402
- Inter - segment	100,623	7,107	54,602	7,558	156	944	5	7,068	(178,063)	-
Subsidy from oil fuel fund	9,842	-	-	-	-	-	-	-	-	9,842
Cost of sales of goods	(477,488)	(22,768)	(77,387)	(10,402)	(17,817)	(1,831)	-	(6,781)	178,310	(436,164)
Gross Profit	24,409	2,547	1,587	2,386	1,564	48	5	287	247	33,080
Dividend income	6,906	-	-	-	-	20	-	4	(6,729)	201
Gain (loss) from financial instruments	(2,874)	-	168	(108)	15	-	-	(51)	-	(2,850)
Gain (loss) on exchange	254	(1)	(66)	11	14	-	1	-	-	213
Other income	3,477	147	272	54	76	14	-	14	(2,916)	1,138
Selling and distribution expenses	(109)	(104)	(376)	-	(583)	(21)	-	-	243	(950)
Administrative expenses	(3,097)	(72)	(102)	(40)	(399)	(115)	(10)	(72)	1,336	(2,571)
Share of profit (loss) from investments in joint ventures and associates	-	-	-	-	-	-	(195)	279	-	84
Profit (loss) before finance costs and income tax expense	28,966	2,517	1,483	2,303	687	(54)	(199)	461	(7,819)	28,345
Finance cost	(3,755)	(50)	(181)	(489)	(157)	(23)	-	-	567	(4,088)
Profit (loss) before income tax expense	25,211	2,467	1,302	1,814	530	(77)	(199)	461	(7,252)	24,257
Income tax income (expenses)	(3,698)	(483)	(271)	(76)	(104)	(16)	-	(24)	-	(4,672)
Profit (loss) for the year	21,513	1,984	1,031	1,738	426	(93)	(199)	437	(7,252)	19,585

(Unit: Million Baht)

	Consolidated financial statements for the year ended 31 December 2023									
	Oil refinery	Lube base oil refinery	Aromatics and LAB	Power generation	Solvent	Ethanol	Olefins	Others	Adjustments	Total
Profit (loss) for the year attributable to:										
- Equity holder of the Company	21,513	1,984	873	1,738	402	(53)	(199)	437	(7,252)	19,443
- Non-controlling interests of the subsidiaries	-	-	158	-	24	(40)	-	-	-	142
Profit (loss) for the year	21,513	1,984	1,031	1,738	426	(93)	(199)	437	(7,252)	19,585
Timing of revenue recognition										
- At a point in time	492,055	25,315	78,974	11,439	19,381	1,879	5	7,068	(177,578)	458,538
- Over time	-	-	-	1,349	-	-	-	-	(485)	864
Total Revenue	492,055	25,315	78,974	12,788	19,381	1,879	5	7,068	(178,063)	459,402

(Unit: Million Baht)

	Consolidated financial statements for the year ended 31 December 2022									
	Oil refinery	Lube base oil refinery	Aromatics and LAB	Power generation	Solvent	Ethanol	Olefins	Others	Adjustments	Total
Revenue from sales										
- External customers	428,210	20,078	27,752	6,211	22,397	1,055	-	-	-	505,703
- Inter - segment	116,582	7,695	61,185	5,504	190	741	2	6,647	(198,546)	-
Subsidy from oil fuel fund	23,886	-	-	-	-	-	-	-	-	23,886
Cost of sales of goods	(526,995)	(24,376)	(89,489)	(10,065)	(20,802)	(1,624)	-	(6,702)	198,916	(481,137)
Gross Profit (loss)	41,683	3,397	(552)	1,650	1,785	172	2	(55)	370	48,452
Dividend income	2,778	-	-	-	-	12	-	5	(2,715)	80
Gain (loss) from financial instruments	(16,128)	-	100	-	13	-	-	10	-	(16,005)
Gain (loss) on exchange	(24)	30	(10)	6	(58)	-	(1)	(7)	-	(64)
Gain on disposal of investment in associate	10,487	-	-	-	-	-	-	-	(449)	10,038
Gain on reclassification of investment	7,539	-	-	-	-	-	-	-	(242)	7,297
Other income	2,596	114	314	18	40	5	-	3	(2,308)	782
Selling and distribution expenses	(68)	(98)	(346)	-	(703)	(21)	-	-	184	(1,052)
Administrative expenses	(2,820)	(69)	(806)	(39)	(322)	(98)	(9)	(67)	1,099	(3,131)
Share of profit (loss) from investments in joint ventures and associates	-	-	-	-	-	-	(806)	293	-	(513)
Profit (loss) before finance costs and income tax expense	46,043	3,374	(1,300)	1,635	755	70	(814)	182	(4,061)	45,884
Finance cost	(3,491)	(58)	(162)	(293)	(121)	(19)	-	-	284	(3,860)
Profit (loss) before income tax expense	42,552	3,316	(1,462)	1,342	634	51	(814)	182	(3,777)	42,024
Income tax income (expenses)	(8,887)	(665)	688	(1)	(107)	(4)	-	58	-	(8,918)
Profit (loss) for the year	33,665	2,651	(774)	1,341	527	47	(814)	240	(3,777)	33,106

(Unit: Million Baht)

	Consolidated financial statements for the year ended 31 December 2022									
	Oil refinery	Lube base oil refinery	Aromatics and LAB	Power generation	Solvent	Ethanol	Olefins	Others	Adjustments	Total
Profit (loss) for the year attributable to:										
- Equity holder of the Company	33,665	2,651	(1,183)	1,341	527	18	(814)	240	(3,777)	32,668
- Non-controlling interests of the subsidiaries	-	-	409	-	-	29	-	-	-	438
Profit (loss) for the year	33,665	2,651	(774)	1,341	527	47	(814)	240	(3,777)	33,106
Timing of revenue recognition										
- At a point in time	544,792	27,773	88,937	10,656	22,587	1,796	2	6,647	(198,350)	504,840
- Over time	-	-	-	1,059	-	-	-	-	(196)	863
Total Revenue	544,792	27,773	88,937	11,715	22,587	1,796	2	6,647	(198,546)	505,703

(Unit: Million Baht)

	Consolidated financial statements for the year ended 31 December 2023									
	Oil refinery	Lube base oil refinery	Aromatics and LAB	Power generation	Solvent	Ethanol	Olefins	Others	Adjustments	Total
Segment assets	397,830	9,142	27,282	17,303	11,168	2,309	220	111,414	(188,714)	387,954
Investments in associated companies	-	-	-	-	-	-	30,323	982	734	32,039
Total segment assets	397,830	9,142	27,282	17,303	11,168	2,309	30,543	112,396	(187,980)	419,993
Total segment liabilities	253,726	3,143	11,781	12,446	6,000	661	122	110,097	(146,295)	251,681

(Unit: Million Baht)

	Consolidated financial statements for the year ended 31 December 2022										
	Oil refinery	Lube base oil refinery	Aromatics and LAB	Power generation	Marine transportation service	Solvent	Ethanol	Olefins	Others	Adjustments	Total
Segment assets	408,566	10,142	26,746	16,590	4	10,407	2,720	71	114,247	(177,515)	411,978
Investments in associated companies	-	-	-	-	-	-	-	30,924	982	697	32,603
Total segment assets	408,566	10,142	26,746	16,590	4	10,407	2,720	30,995	115,229	(176,818)	444,581
Total segment liabilities	276,643	3,336	12,275	10,159	-	5,411	707	119	112,915	(135,642)	285,923

Major customer

Revenue from two customers represents Baht 273,222 million (2022: revenue from two customers represented Baht 289,804 million) of the Group's revenue from sales.

Geographical segments

In presenting geographical information by segments, segment revenue is based on the geographical location of customers and segment assets are based on the geographical location of the assets.

Geographical information

(Unit: Million Baht)

	For the year ended 31 December		As at 31 December	
	Revenue		Non-current assets	
	2023	2022	2023	2022
Thailand	429,057	479,996	262,375	257,851
Indonesia	3,430	2,743	30,371	30,996
Other countries	36,757	46,850	1,875	1,906
Total	469,244	529,589	294,621	290,753

34. Dividends

Dividends	Approved by	Total dividends	Dividend per share
		(Million Baht)	(Baht)
Final dividends for 2021	Annual General Meeting of the shareholders on 7 April 2022	4,080	2.00
The Interim dividends for 2022	Board of Directors' meeting on 28 October 2022	4,467	2.00
Total for 2022		8,547	4.00
Final dividends for 2022	Annual General Meeting of the shareholders on 10 April 2023	3,798	1.70
The Interim dividends for 2023	Board of Directors' meeting on 25 August 2023	1,451	0.65
Total for 2023		5,249	2.35

35. Commitments and contingent liabilities

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Capital commitments				
Project construction agreements	13,629	16,088	13,170	15,411
Total	13,629	16,088	13,170	15,411
Other commitments				
Letters of guarantee issued by financial institutions	1,830	2,142	1,224	1,519
Crude oil and raw material purchase agreements	73,383	78,188	73,383	78,188
Total	75,213	80,330	74,607	79,707

Investment in Clean Fuel Project

The Company has engaged contractors for construction of Clean Fuel Project (CFP) which has been approved in the Extraordinary General Meeting of Shareholders held on 27 August 2018, with the investment project value of not exceeding US Dollar 4,825 million or equivalent to Baht 160,279 million. The project cost includes the investment of Energy Recovery Unit (ERU). The ERU is an electrical power plant, with the designed generating capacity of 250 megawatts and steam, to supply the production process of the CFP.

Interest Rate Swap Contracts

The Company has entered into interest rate swap contracts with various financial institutions to manage exposure and fluctuations in interest rate on long-term loans in Thai Baht. As at 31 December 2023, the Company had contracts with a notional amount of Baht 14,500 million to exchange the fixed interest rate to floating interest rate based on THOR plus certain fixed margin per annum. (2022: Baht 14,500 million, exchange the fixed interest rate to floating interest rate based on THOR plus certain fixed margin per annum) The swap contracts are effective from July 2021 to March 2027.

A subsidiary has entered into interest rate swap contracts with various financial institutions to manage exposure and fluctuations in interest rate on long-term loans in Thai Baht. In April 2023, A subsidiary cancelled the interest rate swap contracts with all financial institutions due to the repayment of the hedge loan in full (31 December 2022: Baht 5,373 million).

Cross Currency Swap Contracts

The Company has entered into cross currency swap contracts with local financial institutions for hedging foreign exchange and interest rate exposure of long-term debts in US Dollar currency. As at 31 December 2023, the Company had notional amount totalling US Dollar 623 million (2022: US Dollar 623 million). A counterparty agrees to pay the interest and the notional amount according to the terms and conditions in the contracts. The swap contracts are effective from March 2020 to October 2035.

Forward Foreign Exchange Contracts

The Company has entered into forward foreign exchange contracts with local financial institutions for hedging foreign exchange exposure of long-term debts in US Dollar currency. In January 2023, the Company had completely made payment according to the terms and conditions in the contracts (31 December 2022: Outstanding US Dollar 196 million).

Oil Price Crack Spread Swap Contracts

The Group and the Company have oil price crack spread swap and time spread swap contracts with foreign companies and related parties (counterparties). The Company has or the counterparties have commitments to make payments for the differences between the fixed price and floating price of each period.

As at 31 December 2023, the Group had oil volume under the contracts totalling 9.80 million barrels and 0.13 million metric tons and the Company had oil volume totalling 9.81 million barrels and 0.27 million metric tons (2022: The Group had oil volume under the contracts totalling 21.78 million barrels and 0.001 million metric tons and the Company had oil volume totalling 21.78 million barrels and 0.01 million metric tons).

36. Financial risk management

36.1 Financial risk factors

The Group is exposed to a variety of financial risks, which are market risk (including foreign exchange risk and interest rate risk and price risk), credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance. The Group uses derivative financial instruments to hedge certain exposures.

Risk management is integral to the whole business of the Group. The Group has a control system in place to create an acceptable balance between the cost of risks and the cost to manage the risks. The management continually monitors the Group's risk management process to ensure that an appropriate balance between risk and control is achieved.

Where all relevant criteria are met, hedge accounting is applied to remove the accounting mismatch between the hedging instrument and the hedged item. This will effectively result in recognising interest expense at a fixed interest rate for the hedged floating rate loans and financial liabilities at the fixed foreign currency rate for the hedged liabilities.

Hedging reserve

The Group and the Company's hedging reserves comprise of the followings:

(Unit: Million Baht)

	Consolidated financial statements					
	Cash flow hedge reserve					
	Cross currency swaps	Cost of hedging reserve	Forward foreign exchange contracts	Interest rate swaps	Hedge on foreign currency proceeds	Total hedge reserves
Opening balance 1 January 2023	(2,051)	(671)	(16)	(47)	(3,172)	(5,957)
Add: Change in fair value of hedging instrument recognised in OCI	899	-	20	59	819	1,797
Costs of hedging deferred and recognised in OCI	-	14	-	-	-	14
Less: Deferred tax	(180)	(3)	(4)	(12)	(119)	(318)
Closing balance 31 December 2023	(1,332)	(660)	-	-	(2,472)	(4,464)
Opening balance 1 January 2022	(101)	(139)	(20)	(253)	(1,878)	(2,391)
Add: Change in fair value of hedging instrument recognised in OCI	(2,437)	-	5	258	(1,686)	(3,860)
Costs of hedging deferred and recognised in OCI	-	(665)	-	-	-	(665)
Less: Deferred tax	487	133	(1)	(52)	392	959
Closing balance 31 December 2022	(2,051)	(671)	(16)	(47)	(3,172)	(5,957)

(Unit: Million Baht)

	Separate financial statements				
	Cash flow hedge reserve				
	Cross currency swaps	Cost of hedging reserve	Forward foreign exchange contracts	Hedge on foreign currency proceeds	Total hedge reserves
Opening balance 1 January 2023	(2,051)	(671)	(16)	(3,172)	(5,910)
Add: Change in fair value of hedging instrument recognised in OCI	899	-	20	819	1,738
Costs of hedging deferred and recognised in OCI	-	14	-	-	14
Less: Deferred tax	(180)	(3)	(4)	(119)	(306)
Closing balance 31 December 2023	(1,332)	(660)	-	(2,472)	(4,464)
Opening balance 1 January 2022	(101)	(139)	(20)	(1,878)	(2,138)
Add: Change in fair value of hedging instrument recognised in OCI	(2,437)	-	5	(1,686)	(4,118)
Costs of hedging deferred and recognised in OCI	-	(665)	-	-	(665)
Less: Deferred tax	487	133	(1)	392	1,011
Closing balance 31 December 2022	(2,051)	(671)	(16)	(3,172)	(5,910)

36.1.1 Market risk

a) Foreign exchange risk

The Group is exposed to foreign exchange risk from future commercial transactions, net monetary assets and liabilities that are denominated in a currency that is not the entity's functional currency.

The Group uses forward foreign exchange contracts, cross currency swaps in a consistent manner and hedge on foreign currency proceeds to hedge and anticipated foreign exchange commitments and manage their foreign exchange risk arising from future commercial transactions. The Group are required to manage their foreign exchange risk against their functional currency. Foreign currency borrowings are swapped into the entity's functional currency using cross-currency swaps except where the foreign currency borrowings are repaid with cash flows generated in the same foreign currency. The purpose of these hedges is to mitigate the impact of movements in foreign exchange rates on assets and liabilities and the profit and loss account of the Group.

The Group hedges the foreign currency proceeds by hedging the fluctuations arisen from the foreign exchange rate occurring from the certain revenue in US Dollar with the long-term loans which has the same currency as revenue occurred. Under the Group's policy, the critical terms of the forwards and options must align with the hedged items.

The Group uses a combination of forward foreign exchange contracts and cross currency swaps to hedge its exposure to foreign currency risk. Under the Group's policy, the critical terms of the forwards and options must align with the hedged items.

The Group only designates the spot component of forward foreign exchange contracts in hedge relationships. The spot component is determined with reference to relevant spot market exchange rates. The differential between the contracted forward rate and the spot market exchange rate is defined as the forward points and include currency basis spread fees. It is discounted based on time period of the contract where material.

The changes in the forward element of the forward foreign exchange contracts and foreign currency basis spreads that relate to hedged items are deferred in the costs of hedging reserve.

As at 31 December 2023 and 2022, the Group and the Company were exposed to foreign currency risk in respect of financial assets and liabilities denominated in the following currencies:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
US Dollars				
Cash and cash equivalents	8,327	16,900	6,238	15,360
Short-term investments in financial assets	5,944	-	5,775	-
Trade receivables	4,630	2,190	3,185	430
Other receivables	1,027	2,074	1,058	2,099
Derivative assets	188	739	188	739
Trade payables	(326)	(2,533)	(194)	(1,539)
Other payables	(548)	(1,000)	(1,063)	(1,590)
Loans and debentures	(104,151)	(122,464)	(104,463)	(122,866)
Derivative liabilities	-	(193)	(19)	(204)
	(84,909)	(104,287)	(89,295)	(107,571)

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Other currencies				
Cash and cash equivalents	1,223	435	1,087	319
Trade receivables	1,112	1,064	-	-
Other receivables	21	17	-	-
Trade payables	(136)	(110)	-	-
Other payables	(92)	(69)	(60)	(44)
Loans	(309)	(452)	-	-
	1,819	885	1,027	275
Gross exposure in the statement of financial position	(83,090)	(103,402)	(88,268)	(107,296)
Forward foreign exchange contracts	-	6,111	-	6,111
Cross currency swaps	19,782	19,797	19,782	19,797
Net exposure	(63,308)	(77,494)	(68,486)	(81,388)

Effects of hedge accounting on the financial position and performance

The effects of the foreign currency-related hedging instruments on the Group and the Company's financial position and performance are as follows:

(Unit: Million Baht)

	Consolidated and Separate financial statements	
	2023	2022
Forward foreign exchange contracts		
Carrying amount (liability) (Million Baht)	-	658
Notional amount (Million US Dollars)	-	196
Maturity date	-	January 2023
Hedge ratio	-	1 : 1
Weighted average hedged rate for outstanding hedging instruments (including forward points)	-	31.18

(Unit: Million Baht)

	Consolidated and Separate financial statements	
	2023	2022
Cross currency swaps contracts		
Carrying amount (liability) (Million Baht)	(960)	(1,536)
Notional amount (Million US Dollars)	623	623
Maturity date	October 2030 to October 2035	March 2030 to October 2035
Hedge ratio	1 : 1	1 : 1
Weighted average hedged rate for outstanding hedging instruments (including forward points)	31.77	31.79

In term of the hedge on foreign currency proceed with the loans denominated in foreign currency, as at 31 December 2023, the Company's fully drawdown loans amounted to Baht 58,846 million were used in the hedging activities. The loans notional amount was US Dollar 1,716 million with maturity from November 2028 to November 2048. The Company's exchange rate for hedge instrument was Baht 32.193 per one US Dollar.

Sensitivity

As shown in the table above, the Group is primarily exposed to changes in Baht and US Dollar exchange rates. The sensitivity of profit or loss to changes in the exchange rates arises mainly from financial assets and financial liabilities denominated in US Dollar and the impact on other components of equity arises from foreign forward exchange contracts and cross currency swap designated as cash flow hedges.

(Unit: Million Baht)

	Consolidated financial statements			
	Impact to net profit		Impact to other components of equity	
	2023	2022	2023	2022
Baht to US Dollar exchange rate - increase 10% *	(370)	(718)	(3,918)	(4,321)
Baht to US Dollar exchange rate - decrease 10% *	370	718	3,918	4,313

* Holding all other variables constant

(Unit: Million Baht)

	Separate financial statements			
	Impact to net profit		Impact to other components of equity	
	2023	2022	2023	2022
Baht to US Dollar exchange rate - increase 10% *	(573)	(769)	(6,465)	(7,025)
Baht to US Dollar exchange rate - decrease 10% *	573	769	6,465	7,017

* Holding all other variables constant

b) Cash flow and fair value interest rate risk

The Group's main interest rate risk arises from long-term borrowings with variable rates, which expose the Group to cash flow interest rate risk. Generally, the Group enters into long-term borrowings at floating rates and swaps them into fixed rates that are lower than those available if the Group borrowed at fixed rates directly. During 2022 and 2023, the Group's borrowings at variable rate were mainly denominated in Baht and US dollars.

The borrowings are carried at amortised cost. The borrowings rate is based on market interest rates which detailed in Note 24 Therefore, the Group is exposed to the risk of future changes in market interest rates.

The exposure of long-term loans interest rate changes at the end of the reporting period are as follows:

	Consolidated financial statements			
	2023		2022	
	Million Baht	% of total loans	Million Baht	% of total loans
Variable rate borrowings	19,287	12	22,907	13

As at 31 December 2023, the percentage of total loans shows the proportion of long-term loans that are currently at variable rates in relation to the total amount of long-term loans 163,117 million (2022: Baht 173,751 million). An analysis by maturities is provided in note 36.1.3.

The Company has low interest rate risk since the Company's borrowings are at a fixed interests rate. The sensitivity impact to the increase or decrease in interest expenses from borrowings, as a result of changes in interest rates is immaterial on separate financial statements.

Instruments used by the Group

During the year 2023, The Group cancelled the interest rate swap contracts with all financial institutions due to the repayment of the hedge loan in full. (2022: The Group entered into interest rate swaps covering approximately 23% of the variable loan principal outstanding. The fixed interest rates of the swaps range between 4.21% and 4.42%, and the variable rates of the loans are 2.81% at the end of the reporting period.

The swap contracts require settlement of net interest receivable or payable every 90 days. The settlement dates coincide with the dates on which interest is payable on the underlying debt.

The Group applies hedge accounting for certain interest rate swaps.

Effect of hedge accounting on the financial position and performance

The effects of the interest rate-related hedging instruments on the Group's financial position and performance are as follows:

(Unit: Million Baht)

	Consolidated financial statements	
	2023	2022
Interest rate swaps contracts		
Carrying amount (liabilities)	-	(59)
Notional amount	-	5,373
Maturity date	-	March 2028
Hedge ratio	-	1 : 1
Weighted average strike rate for outstanding hedging instruments for the year	-	4.34%

Sensitivity

Profit or loss is sensitive to higher or lower interest expenses from borrowings as a result of changes in interest rates. Other components of equity changes as a result of an increase or decrease in the fair value of the cash flow hedges of borrowings.

(Unit: Million Baht)

	Consolidated financial statements			
	Impact to net profit		Impact to other components of equity	
	2023	2022	2023	2022
Interest rate - increase 1% *	(155)	(143)	(4)	(173)
Interest rate - decrease 1% *	155	143	4	173

* Holding all other variables constant

c) Price risk of petroleum products

The Group's and the Company's exposure to price risk arises from time to time by volatility and cyclical movement in the market prices for crude oil, petroleum, and petrochemical products. The Group manages this risk by using derivative financial instruments, for example, oil price crack spread swap and time spread swap as appropriated.

Sensitivity

The table below summarises the impact of increases or decreases of the index on net profit for the year.

(Unit: Million Baht)

	Impact to net profit			
	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Price increases by 1 % *	(12)	(49)	(12)	(49)
Price decreases by 1 % *	12	49	12	49

* Holding all other variables constant

36.1.2 Credit risk

The Group's credit risk arises from cash and cash equivalents, contractual cash flows of debt investments carried at FVPL, derivative financial instruments as well as credit exposures to customers, including outstanding receivables.

a) Risk management

The Group manages its credit risk by categorising into level of risks. For banks and financial institutions, the Group only transacts with those that are rated at least within investment grade accredited by a reliable independence credit rating agency.

For transaction with other customers, the Group will consider the credit rating accredited by a reliable independence credit rating agency. If the credit rating is not available, the Group assesses the creditability of the customer by considering its financial position, past experience and other factors. Individual credit limits are set based on these assessments and in accordance with credit limits set by the Board of Director. The compliance with credit limits by customers is regularly monitored by line management.

The Group has no significant credit risk with any single counterparty or group of counterparties since the Group maintains business with large customers in petroleum and power industries and requires first class collateral for the rest.

The Group's investments in debt instruments are considered to be low risk investments. The Group regularly monitors the credit ratings of the investments for credit deterioration.

b) Security

For some trade receivables the Group may obtain security in the form of guarantees or letters of credit which can be called upon if the counterparty is in default under the terms of the agreement.

c) Impairment of financial assets

The Group considers that impairment of financial assets does not have significant financial impact.

Other financial assets measured at amortised cost

Other financial assets measured at amortised cost include short-term investment which the Group considered that short-term investment's credit risk is low.

Debt investments

Debt investments are measured at amortised cost include other receivables and loans to related parties.

All of the debt investments at amortised cost and FVOCI are considered to have low credit risk, and the loss allowance recognised during the year was therefore limited to 12 months expected losses. Management consider 'low credit risk' for listed bonds to be an investment grade credit rating with at least one major rating agency. Other instruments are considered to have low credit risk when they have a low risk of default and the issuer has a strong capacity to meet its contractual cash flow obligations in the near term.

Financial asset measured at fair value through profit or loss (FVPL)

The Group is also exposed to credit risk in relation to debt investments that are measured at FVPL. The maximum exposure at the end of the reporting period is the carrying amount of these investments of Baht 722 million (2022: Baht 798 million).

36.1.3 Liquidity risk

Prudent liquidity risk management is to maintaining sufficient cash and the availability of funding through an adequate amount of committed credit facilities to meet obligations when due and to close out market positions. At the end of the reporting period the Group held deposits at call of Baht 28,432 million (2022: Baht 43,576 million) that are expected to readily generate cash inflows for managing liquidity risk.

Due to the dynamic nature of the underlying businesses, the Group Treasury maintains flexibility in funding by maintaining availability under committed credit lines.

Management regularly monitors i) rolling forecasts of the Group's liquidity reserve (comprising the undrawn borrowing facilities); and ii) cash and cash equivalents. In addition, the Group's liquidity management policy involves projecting cash flows in major currencies and considering the level of liquid assets and monitoring balance sheet liquidity ratios and maintaining appropriate financing plans.

a) Financing arrangements

The Group has undrawn credit facilities as at 31 December as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2023	2022	2023	2022
Floating rate				
Expiring within one year				
- Short-term committed credit facilities	7,200	7,955	6,700	6,700
- Short-term uncommitted credit facilities	10,070	8,575	6,198	4,730
Expiring beyond one year				
- Long-term loans credit facilities	7,099	6,074	7,000	6,000
	24,369	22,604	19,898	17,430

b) Maturity of financial liabilities

The tables below analyse the Group's financial liabilities into relevant maturity based on their contractual maturities for:

(a) all non-derivative financial liabilities; and

(b) net and gross settled derivative financial instruments for which the contractual maturities are essential for an understanding of the timing of the cash flows.

The tables below present the maturity of financial liabilities classified by their contractual maturities.

The amounts disclosed are the contractual undiscounted cash flows. Balances due within 12 months equals their carrying balances as the impact of discounting is not significant. For interest rate swaps and cross currency swap, the cash flows have been estimated using forward interest rates applicable at the end of the reporting period.

(Unit: Million Baht)

	Consolidate financial statements				
Maturity of financial liabilities as at 31 December 2023	Within 1 year	1 - 5 years	Over 5 years	Total	Carrying amount of (Assets/ Liabilities)
Non-derivatives					
Short-term loan from financial institutions	3,198	-	-	3,198	3,198
Trade and other payables	51,901	-	-	51,901	51,901
Accrued interest	7,764	24,367	70,249	102,380	1,187
Lease liabilities	1,402	5,558	14,130	21,090	21,090
Long-term loans from financial institutions	3,090	19,941	16,160	39,191	19,095
Long-term loans from related and other parties	-	-	191	191	191
Debentures	7,000	25,989	108,434	141,423	140,632
Other financial liabilities	320	3,268	31	3,619	3,619
Total non-derivatives	74,675	79,123	209,195	362,993	240,913
Derivatives					
Forward foreign exchange contracts - trading (assets)	(46)	-	-	(46)	(46)
Forward foreign exchange contracts - trading (liabilities)	1	-	-	1	1
Oil price crack spread swap and time spread swap - trading (assets)	(173)	-	-	(173)	(173)
Interest rate swaps					
(Cash inflows)	(468)	(851)	-	(1,319)	177
Cash outflows	619	1,120	-	1,739	-
Cross currency swaps - cash flow hedge					
(Cash inflows)	(852)	(3,402)	(24,578)	(28,832)	960
Cash outflows	747	2,984	22,640	26,371	-
Hedging foreign currency income - cash flow hedge					
(Cash inflows)	(2,925)	(25,316)	(79,011)	(107,252)	-
Cash outflows	2,738	23,700	73,969	100,407	-
Total derivatives	(359)	(1,765)	(6,980)	(9,104)	919
Total	74,316	77,358	202,215	353,889	241,832

(Unit: Million Baht)

	Consolidate financial statements				
Maturity of financial liabilities as at 31 December 2022	Within 1 year	1 - 5 years	Over 5 years	Total	Carrying amount of (Assets/ Liabilities)
Non-derivatives					
Short-term loan from financial institutions	1,892	-	-	1,892	1,892
Trade and other payables	76,704	-	-	76,704	76,704
Accrued interest	7,837	23,718	73,850	105,405	1,365
Lease liabilities	1,401	5,449	15,658	22,508	22,508
Long-term loans from financial institutions	2,924	14,696	5,228	22,848	22,691
Long-term loans from related and other parties	-	-	216	216	216
Debentures	17,318	16,500	115,963	149,781	148,952
Other financial liabilities	235	3,243	63	3,541	3,541
Total non-derivatives	108,311	63,606	210,978	382,895	277,869
Derivatives					
Forward foreign exchange contracts - trading	(12)	-	-	(12)	(12)
Oil price crack spread swap and time spread swap - trading (assets)	(739)	-	-	(739)	(739)
Oil price crack spread swap and time spread swap - trading (liabilities)	193	-	-	193	193
Forward foreign exchange contracts - cash flow hedge					
(Cash inflows)	(6,808)	-	-	(6,808)	(658)
Cash outflows	6,111	-	-	6,111	-
Interest rate swaps					
(Cash inflows)	(732)	(1,319)	-	(2,051)	385
Cash outflows	648	1,167	-	1,815	-
- Cash flow hedge					
(Cash inflows)	(164)	(562)	(29)	(755)	59
Cash outflows	224	764	40	1,028	-
Cross currency swaps - cash flow hedge					
(Cash inflows)	(859)	(3,437)	(27,770)	(32,066)	1,536
Cash outflows	753	3,010	25,853	29,616	-
Hedging foreign currency income - cash flow hedge					
(Cash inflows)	(2,925)	(17,452)	(89,811)	(110,188)	-
Cash outflows	2,738	10,952	89,455	103,145	-
Total derivatives	(1,572)	(6,877)	(2,262)	(10,711)	764
Total	106,739	56,729	208,716	372,184	278,633

(Unit: Million Baht)

	Separate financial statements				
Maturity of financial liabilities as at 31 December 2023	Within 1 year	1 - 5 years	Over 5 years	Total	Carrying amount of (Assets/ Liabilities)
Non-derivatives					
Trade and other payables	55,900	-	-	55,900	55,900
Accrued interest	8,231	26,130	77,042	111,403	1,260
Lease liabilities	1,356	5,502	14,364	21,222	21,222
Long-term loans from financial institution	2,400	11,088	1,313	14,801	16,212
Long-term loans from related party	-	13,621	85,338	98,959	98,652
Debentures	7,000	12,300	23,129	42,429	42,292
Other financial liabilities	116	3,130	28	3,274	3,274
Total non-derivatives	75,003	71,771	201,214	347,988	238,812
Derivatives					
Forward foreign exchange contracts - trading	(15)	-	-	(15)	(15)
Oil price crack spread swap and time spread swap - trading (assets)	(173)	-	-	(173)	(173)
Oil price crack spread swap and time spread swap - trading (liabilities)	19	-	-	19	19
Interest rate swaps					
(Cash inflows)	(468)	(851)	-	(1,319)	177
Cash outflows	619	1,120	-	1,739	-
Cross currency swaps - cash flow hedge					
(Cash inflows)	(852)	(3,403)	(24,578)	(28,833)	960
Cash outflows	747	2,984	22,640	26,371	-
Hedging foreign currency income - cash flow hedge					
(Cash inflows)	(2,925)	(25,316)	(79,012)	(107,253)	-
Cash outflows	2,738	23,700	73,969	100,407	-
Total derivatives	(310)	(1,766)	(6,981)	(9,057)	968
Total	74,693	70,005	194,233	338,931	239,780

(Unit: Million Baht)

	Separate financial statements				
Maturity of financial liabilities as at 31 December 2022	Within 1 year	1 - 5 years	Over 5 years	Total	Carrying amount of (Assets/ Liabilities)
Non-derivatives					
Trade and other payables	80,650	-	-	80,650	80,650
Accrued interest	8,126	24,561	80,381	113,068	1,445
Lease liabilities	1,341	5,416	15,849	22,606	22,606
Long-term loans from financial institution	1,700	10,300	-	12,000	11,906
Long-term loans from related party	9,851	-	99,954	109,805	109,483
Debentures	7,516	16,500	15,989	40,005	39,871
Other financial liabilities	85	3,119	39	3,243	3,243
Total non-derivatives	109,269	59,896	212,212	381,377	269,204
Derivatives					
Oil price crack spread swap and time spread swap - trading (assets)	(739)	-	-	(739)	(739)
Oil price crack spread swap and time spread swap - trading (liabilities)	204	-	-	204	204
Forward foreign exchange contracts - cash flow hedge					
(Cash inflows)	(6,808)	-	-	(6,808)	(658)
Cash outflows	6,111	-	-	6,111	-
Interest rate swaps					
(Cash inflows)	(732)	(1,319)	-	(2,051)	385
Cash outflows	648	1,167	-	1,815	-
Cross currency swaps - cash flow hedge					
(Cash inflows)	(859)	(3,437)	(27,770)	(32,066)	1,536
Cash outflows	753	3,010	25,853	29,616	-
Hedging foreign currency income - cash flow hedge					
(Cash inflows)	(2,925)	(17,452)	(89,811)	(110,188)	-
Cash outflows	2,738	10,952	89,455	103,145	-
Total derivatives	(1,609)	(7,079)	(2,273)	(10,961)	728
Total	107,660	52,817	209,939	370,416	269,932

36.2 Capital management

Risk management

The objectives when managing capital are to:

- safeguard the ability to continue as a going concern, to provide returns for shareholders and benefits for other stakeholders, and
- maintain an optimal capital structure to reduce the cost of capital.

Consistent with others in the industry, the Group monitors capital based on gearing ratio which is determined by dividing net debt with equity.

During the year 2023, the Group's strategy, which remains unchanged, was to maintain a gearing ratio within 1.0 time and a Baa3 credit rating for Moody's and BBB credit rating for S&P's. In order to increase the strength of capital structure and to maintain an investment grade credit rating. As at 31 December 2023 and 2022, the gearing ratios of the Group are as follows:

(Unit: Million Baht)

	Consolidated financial statements	
	2023	2022
Net debt (including lease liabilities)	149,832	152,340
Equity (including non-controlling interests)	168,312	158,657
Net debt to equity ratio	0.9 times	1.0 times

Loan covenants

Under the terms of the major borrowing facilities, the Group and the Company are required to comply with certain criteria and condition; for example, maintaining shareholders' portion, maintaining debt to equity ratio at the level as specified in the contract and providing financial supports based on ownership percentage. As at 31 December 2023, the Group and the Company has complied with certain criteria and condition as specified in the contract.

37. Fair Value

The following table presents fair value of financial assets and liabilities recognised or disclosed by their fair value hierarchy excluding those with the carrying amount approximates fair values.

(Unit: Million Baht)

	Consolidated financial statements as at 31 December 2023				
	Carrying amount	Level 1	Level 2	Level 3	Total
Assets					
Financial assets at fair value through profit or loss					
Debt investments	722	314	-	408	722
Financial assets at fair value through other comprehensive income					
Equity investments of listed company	14,059	14,059	-	-	14,059
Equity investments of non-listed company	194	-	-	194	194
Derivatives					
Current					
Oil price crack spread swap and time spread swap	173	-	173	-	173
Forward foreign exchange contracts	46	-	46	-	46
Liabilities					
Derivatives					
Current					
Interest rate swap	28	-	28	-	28
Forward foreign exchange contracts	1	-	1	-	1
Non-current					
Interest rate swap	149	-	149	-	149
Derivatives used for hedge accounting					
Cross currency swap	960	-	960	-	960
Financial liabilities not measured at fair value					
Debentures	140,632	-	123,170	-	123,170

(Unit: Million Baht)

	Consolidated financial statements as at 31 December 2022				
	Carrying amount	Level 1	Level 2	Level 3	Total
Assets					
Financial assets at fair value through profit or loss					
Debt investments	798	381	-	417	798
Financial assets at fair value through other comprehensive income					
Equity investments of listed company	21,287	21,287	-	-	21,287
Equity investments of non-listed company	107	-	-	107	107
Derivatives					
Current					
Oil price crack spread swap and time spread swap	739	-	739	-	739
Forward foreign exchange contracts	11	-	11	-	11
Derivatives used for hedge accounting					
Forward foreign exchange contracts	658	-	658	-	658
Liabilities					
Derivatives					
Current					
Oil price crack spread swap and time spread swap	193	-	193	-	193
Non-current					
Interest rate swap	385	-	385	-	385
Derivatives used for hedge accounting					
Interest rate swap	59	-	59	-	59
Cross currency swap	1,536	-	1,536	-	1,536
Financial liabilities not measured at fair value					
Debentures	148,952	-	123,029	-	123,029

(Unit: Million Baht)

	Separate financial statements as at 31 December 2023				
	Carrying amount	Level 1	Level 2	Level 3	Total
Assets					
Financial assets at fair value through profit or loss					
Debt investments	314	314	-	-	314
Financial assets at fair value through other comprehensive income					
Equity investments of listed company	13,676	13,676	-	-	13,676
Equity investments of non-listed company	2	-	-	2	2
Derivatives					
Current					
Oil price crack spread swap and time spread swap	173	-	173	-	173
Forward foreign exchange contracts	15	-	15	-	15
Liabilities					
Derivatives					
Current					
Oil price crack spread swap and time spread swap	19	-	19	-	19
Interest rate swap	28	-	28	-	28
Non-current					
Interest rate swap	149	-	149	-	149
Derivatives used for hedge accounting					
Cross currency swap	960	-	960	-	960
Financial liabilities not measured at fair value					
Debentures	42,292	-	42,040	-	42,040

(Unit: Million Baht)

	Separate financial statements as at 31 December 2022				
	Carrying amount	Level 1	Level 2	Level 3	Total
Assets					
Financial assets at fair value through profit or loss					
Debt investments	381	381	-	-	381
Financial assets at fair value through other comprehensive income					
Equity investments of listed company	20,584	20,584	-	-	20,584
Equity investments of non-listed company	2	-	-	2	2
Derivatives					
Current					
Oil price crack spread swap and time spread swap	739	-	739	-	739
Derivatives used for hedge accounting					
Forward foreign exchange contracts	658	-	658	-	658
Liabilities					
Derivatives					
Current					
Oil price crack spread swap and time spread swap	204	-	204	-	204
Non-current					
Interest rate swap	385	-	385	-	385
Derivatives used for hedge accounting					
Cross currency swap	1,536	-	1,536	-	1,536
Financial liabilities not measured at fair value					
Debentures	39,871	-	39,345	-	39,345

During the current year, there were no changes in the methods and the assumptions used to estimate the fair value of financial instruments and there were no transfers between the levels of the fair value hierarchy.

Fair value measurement of financial assets and liabilities is in accordance with accounting policy disclosed in Note 4.

Valuation techniques used in measuring level 2 fair values

Type	Valuation technique
Interest rate swap	Future cash flow projection discounted by the market yield which based on Bloomberg at the reporting date.
Forward foreign exchange contracts	Future cash flow projection discounted by the market yield which based on commercial bank report for short-term transactions and future cash flow projection discounted by the market yield which based on Bloomberg at the reporting date for long-term transactions.
Cross currency swap	Future cash flow projection discounted by the market yield which based on Bloomberg at the reporting date.
Oil price crack spread swap and time spread swap	Market comparison technique: The fair values are based on broker quotes. Similar contracts that are traded in an active market and the quotes reflect the actual transactions in similar financial instruments.
Debt investment measure at fair value through profit or loss	Thai Bond Market Association Government Bond Yield Curve as of the reporting date.
Debentures and Long-term loans	Market comparison technique: The valuation model is based on ask prices or latest price of comparable market securities.

Valuation techniques used in measuring level 3 fair values

Changes in level 3 financial instruments for the period ended 31 December 2023 is as follows:

(Unit: Million Baht)

	Consolidated financial statements		
	Debt investment	Equity investment	Total
Beginning balance as at 1 January 2023	417	107	524
Additions	45	99	144
Loss recognised in profit or loss	(51)	(10)	(61)
Exchange differences	(3)	(2)	(5)
Ending balance as at 31 December 2023	408	194	602

The Group considers the significant unobservable inputs used in level 3 fair value measurements and concludes that fair value approximates carrying amount. For the fair value measurement of contingent consideration from the investment acquisitions, the Group considers by using future cash flow projection discounted with cost of debt and the assumptions of relating probabilities of conditions in the share purchase agreements.

The Group did not have any transfers between levels during the year.

The following table shows financial assets and liabilities measured at amortised cost with the carrying amount approximates fair value. The carrying amount of long-term loans from financial institutions, long-term loans from a third party, and long-term loans from a related party approximates their fair value, since their interest rates are close to market rate.

Consolidated financial statements	Separate financial statements
Financial assets	**Financial assets**
- Cash and cash equivalents	- Cash and cash equivalents
- Deposits at a financial institution used as collaterals	- Short-term investments
- Short-term investments	- Trade receivables
- Trade receivables	- Other receivables
- Other receivables	- Finance lease receivables
- Finance lease receivables	- Short-term loan to related parties
- Other non-current assets	- Current portion of long-term loans to related parties
	- Other non-current assets
Financial liabilities	**Financial liabilities**
- Short-term loans from financial institutions	- Short-term loans from related parties
- Trade payables	- Trade payables
- Other payables	- Other payables
- Long-term loans from financial institutions	- Long-term loans from financial institutions
- Long-term loans from a third party	- Long-term loans from related parties
- Long-term loans from a related party	- Lease liabilities
- Lease liabilities	- Other non-current liabilities
- Other non-current liabilities	

38. Oil spill incident

On 3 September 2023, the incident resulting in an oil spill during the oil discharge occurred at the Single Buoy Mooring of the Company's refinery in Chonburi. The Company, with cooperation and support from both government agencies and private sectors, promptly initiated oil spill cleanup efforts to prevent the oil from reaching the shoreline. At the present, the Company has completed the clean-up of the spilled oil. The assessment of long-term impacts and any required rehabilitation actions in the affected areas is ongoing process, which will require cooperative assessment involving government authorities, external experts and communities. At present, the Company's refinery operations are proceeding normally.

The Company has established a recovery plan to provide assistance to those who have been affected by this situation. Simultaneously, the Company is engaged in negotiations with the insurance company to determine the claim value under the insurance policies.

The Company has recognised related expenses in the statement of income for the year ended 31 December 2023, approximately Baht 224 million, as part of the administrative expenses. Such expenses and provisions mainly consist of costs incurred in resolving and mitigating the consequences of oil spill, as well as offering compensation and the financial relief extended to affected parties.

As of 31 December 2023, the related expenses included the provision for the oil spill incident and the Company anticipates the potential for incurring additional expenditures in the future.

39. Events after the reporting period

The Company's dividend announcement

At the Board of Directors' meeting of the Company held on 14 February 2024, the Company's Board of Directors passed a resolution to propose to the Annual General Meeting of Shareholders to consider and approve the dividend payment for the year 2023 at the rate of Baht 3.40 per share, totaling Baht 7,595 million. Such a dividend included the interim dividends of Baht 0.65 per share, which the Company has already paid to the shareholders of the Company in September 2023. Therefore, the additional dividend of Baht 2.75 per share, totaling Baht 6,143 million. The dividends were scheduled to be paid on 30 April 2024. The dividend payment is subject to the approval of the Company's Annual General Meeting of Shareholders which is to be held on 11 April 2024.

40. Approval of financial statements

These financial statements were authorised for issue by the Company's Board of Director on 14 February 2024.

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