IMPORTANT NOTICE

THIS DOCUMENT IS AVAILABLE ONLY TO INVESTORS WHO ARE EITHER (1) QIBs (AS DEFINED BELOW) UNDER RULE 144A OF THE SECURITIES ACT (AS DEFINED BELOW) OR (2) NON-U.S. PERSONS WITH ADDRESSES OUTSIDE OF THE UNITED STATES.

IMPORTANT: *You must read the following before continuing. If you are not the intended recipient of this message, please do not distribute or copy the information contained in this e-mail, but instead, delete and destroy all copies of this e-mail including all attachments*. The following applies to the offering circular following this page, and you are therefore advised to read this carefully before reading, accessing or making any other use of the offering circular. In accessing the offering circular, you agree to be bound by the following terms and conditions, including any modifications to them any time you receive any information from us as a result of such access.

NOTHING IN THIS ELECTRONIC TRANSMISSION CONSTITUTES AN OFFER OF SECURITIES FOR SALE IN ANY JURISDICTION WHERE IT IS UNLAWFUL TO DO SO. THE SECURITIES HAVE NOT BEEN, AND WILL NOT BE, REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR THE SECURITIES LAWS OF ANY STATE OF THE U.S. OR OTHER JURISDICTION AND THE SECURITIES MAY NOT BE OFFERED OR SOLD WITHIN THE U.S. OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS (AS DEFINED IN REGULATION S UNDER THE SECURITIES ACT), EXCEPT PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND APPLICABLE STATE OR LOCAL SECURITIES LAWS.

THE FOLLOWING OFFERING CIRCULAR MAY NOT BE FORWARDED OR DISTRIBUTED TO ANY OTHER PERSON AND MAY NOT BE REPRODUCED IN ANY MANNER WHATSOEVER. ANY FORWARDING, DISTRIBUTION OR REPRODUCTION OF THIS DOCUMENT 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 ANY OF THE SECURITIES DESCRIBED THEREIN.

THE SECURITIES HAVE NOT BEEN AND WILL NOT BE REGISTERED WITH THE FINANCIAL SERVICES COMMISSION OF THE REPUBLIC OF KOREA ("KOREA") UNDER THE FINANCIAL INVESTMENT SERVICES AND CAPITAL MARKETS ACT OF KOREA, AS AMENDED. ACCORDINGLY, THE SECURITIES MAY NOT BE OFFERED, SOLD, DELIVERED OR TRANSFERRED, DIRECTLY OR INDIRECTLY, IN KOREA OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, ANY KOREAN RESIDENT (AS SUCH TERM IS DEFINED IN THE FOREIGN EXCHANGE TRANSACTIONS ACT OF KOREA AND THE ENFORCEMENT DECREE THEREOF) FOR A PERIOD OF ONE YEAR FROM THE DATE OF ISSUANCE OF THE SECURITIES, EXCEPT (I) THE SECURITIES MAY BE OFFERED, SOLD, DELIVERED OR TRANSFERRED ONLY TO, BETWEEN OR AMONG KOREAN QUALIFIED INSTITUTIONAL INVESTORS AS SPECIFIED IN ARTICLE 2-2, PARAGRAPH 2, ITEM 4 OF THE REGULATION ON THE ISSUANCE OF SECURITIES AND PUBLIC DISCLOSURE, ETC. OF KOREA, PROVIDED THAT AT LEAST 80% OF THE AGGREGATE ISSUANCE AMOUNT OF THE SECURITIES SHALL BE ALLOCATED TO NON-RESIDENTS OF KOREA (AS SUCH TERM IS DEFINED IN THE FOREIGN EXCHANGE TRANSACTIONS ACT OF KOREA AND THE ENFORCEMENT DECREE THEREOF) (WHICH APPLIES ONLY TO THE SECURITIES ACQUIRED FROM THE COMPANY OR ANY INITIAL PURCHASER AT THE TIME OF ISSUANCE OF THE SECURITIES), AND THE OTHER REQUIREMENTS AS SET FORTH IN ARTICLE 2-2-2, PARAGRAPH 2, ITEM 3 ABOVE ARE SATISFIED, OR (II) AS OTHERWISE PERMITTED BY APPLICABLE KOREAN LAWS AND REGULATIONS.

Confirmation of your Representation: In order to be eligible to view the following offering circular or make an investment decision with respect to the securities, investors must be either (I) a Qualified Institutional Buyer ("QIB") (within the meaning of Rule 144A under the Securities Act) or (II) a non-U.S. person (within the meaning of Regulation S under the Securities Act). By accepting the e-mail and accessing the following offering circular, you shall be deemed to have represented to us that (1) you and any customers you represent are either (a) a QIB or (b) a non-U.S. person and that the electronic mail address that you gave us and to which this e-mail has been delivered is not located in the United States, its territories or possessions and (2) you consent to the delivery of such offering circular by electronic transmission.

You are reminded that the following offering circular has been delivered to you on the basis that you are a person into whose possession the following offering circular may be lawfully delivered in accordance with the laws of jurisdiction in which you are located and you may not, nor are you authorized to, deliver or disclose the contents of the following offering circular to any other person. If this is not the case, you must return this offering circular to us immediately.

The materials relating to the offering do not constitute, and may not be used in connection with, an offer or solicitation in any place where offers or solicitations are not permitted by law. If a jurisdiction requires that the offering be made by a licensed broker or dealer and the initial purchasers or any affiliate of the initial purchasers is a licensed broker or dealer in that jurisdiction, the offering shall be deemed to be made by the initial purchasers or such affiliate on behalf of GS Caltex Corporation in such jurisdiction. The following offering circular 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 BNP PARIBAS, Citigroup Global Markets Inc., Mizuho Securities Asia Limited and Morgan Stanley & Co. International plc (collectively, the "Joint Bookrunners") nor any person who controls any of them nor any director, officer, employee nor agent of any of them or affiliate of any such person accepts any liability or responsibility whatsoever in respect of any difference between the offering circular distributed to you in electronic format and the hard copy version available to you on request from the Joint Bookrunners.

The Joint Bookrunners are acting exclusively for GS Caltex Corporation and no one else in connection with the offer. They will not regard any other person (whether or not a recipient of this document) as its client in relation to the offer and will not be responsible to anyone other than GS Caltex Corporation for providing the protections afforded to its clients nor for giving advice in relation to the offer or any transaction or arrangement referred to herein.

You should not reply by e-mail to this transmission, and you may not purchase any securities by doing so. Any reply e-mail communications, including those you generate by using the "Reply" function on your e-mail software, will be ignored or rejected. 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 CIRCULAR

US$300,000,000
GS Caltex Corporation

(incorporated in the Republic of Korea with limited liability)

4.250% Notes due 2030

GS Caltex Corporation (the "Company") is offering US$300,000,000 aggregate principal amount of its 4.250% Notes due 2030 (the "Notes"). Interest on the Notes will be payable semi-annually in arrears on April 28 and October 28 of each year, commencing April 28, 2026 until redemption or maturity. The Company may not redeem the Notes, in whole or in part, prior to maturity except upon the occurrence of certain events related to Korean tax law as described herein. The Notes will be issued only in registered form in denominations of US$200,000 and integral multiples of US$1,000 in excess thereof.

The Notes will constitute unsecured and unsubordinated obligations of the Company and will rank equally with all other unsecured and unsubordinated obligations of the Company from time to time outstanding.

Approval in-principle has been received from the Singapore Exchange Securities Trading Limited (the "SGX-ST") for the listing and quotation of the Notes on the SGX-ST. The SGX-ST assumes no responsibility for the correctness of any of the statements made, opinions expressed or reports contained in this Offering Circular. Approval in-principle from, admission to the Official List of, and the listing and quotation of the Notes on, the SGX-ST are not to be taken as an indication of the merits of the Company or the Notes.

The Notes are expected to be rated Baa1 by Moody's Investors Service ("Moody's") and BBB+ by Standard & Poor's Rating Services, a division of the McGraw-Hill Companies, Inc. ("S&P"). Such ratings do not constitute a recommendation to buy, sell or hold the Notes and may be subject to revision, suspension or withdrawal at any time by the assigning rating organizations.

Investing in the Notes involves risks. See "Risk Factors" beginning on page 8 of this Offering Circular.

The Notes have not been and will not be registered under the U.S. Securities Act of 1933, as amended (the "Securities Act"), or the securities laws of any other jurisdiction, and may not be offered or sold within the United States or to U.S. persons except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act. Accordingly, the Notes are being initially offered and sold in the United States only to qualified institutional buyers (as defined in Rule 144A under the Securities Act) and outside the United States to non-U.S. persons in reliance on Regulation S under the Securities Act, in each case, in compliance with applicable laws, regulations and directives. For further details about eligible offerees and resale restrictions, see "Plan of Distribution" and "Transfer Restrictions."

Issue Price: 99.657%
(plus accrued interest, if any, from October 28, 2025)

Delivery of the Notes in book-entry form will be made on or about October 28, 2025.

Joint Bookrunners and Joint Lead Managers

BNP PARIBAS	**Citigroup**
Mizuho	**Morgan Stanley**

The date of this Offering Circular is October 21, 2025.

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You should rely only on the information contained in this Offering Circular. The Company has not and the Initial Purchasers have not authorized anyone to provide you with information that is different. This document may only be used where it is legal to offer and sell these Notes. The information in this document may only be accurate as of the date of this Offering Circular.

IN CONNECTION WITH THIS OFFERING, TO THE EXTENT PERMITTED BY, AND IN ACCORDANCE WITH, APPLICABLE LAWS AND REGULATIONS, ANY OF THE INITIAL PURCHASERS APPOINTED AS A STABILIZATION MANAGER (THE "STABILIZATION MANAGER") (OR PERSONS ACTING ON BEHALF OF THE STABILIZATION MANAGER) MAY OVER-ALLOT OR EFFECT TRANSACTIONS WITH A VIEW TO SUPPORTING THE MARKET PRICE OF THE NOTES AT A LEVEL HIGHER THAN THAT WHICH MIGHT OTHERWISE PREVAIL. HOWEVER, THERE IS NO ASSURANCE THAT THE STABILIZATION MANAGER (OR PERSONS ACTING ON BEHALF OF THE STABILIZATION MANAGER) WILL UNDERTAKE SUCH STABILIZATION. ANY STABILIZATION MAY BEGIN ON OR AFTER THE DATE ON WHICH ADEQUATE PUBLIC DISCLOSURE OF THE TERMS OF THE OFFER OF THE NOTES IS MADE AND, IF BEGUN, MAY BE ENDED AT ANY TIME, BUT IT MUST END NO LATER THAN THE EARLIER OF 30 DAYS AFTER THE ISSUE DATE OF THE NOTES AND 60 DAYS AFTER THE DATE OF THE ALLOTMENT OF THE NOTES.

THE NOTES HAVE NOT BEEN REGISTERED UNDER THE FINANCIAL INVESTMENT SERVICES AND CAPITAL MARKETS ACT OF KOREA (THE "FSCMA"). ACCORDINGLY, THE NOTES MAY NOT BE OFFERED, SOLD OR DELIVERED, DIRECTLY OR INDIRECTLY, IN KOREA OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, ANY RESIDENT OF KOREA (AS SUCH TERM IS DEFINED UNDER THE FOREIGN EXCHANGE TRANSACTIONS ACT OF KOREA AND ITS ENFORCEMENT DECREE) OR TO OTHERS FOR RE-OFFERING OR RESALE, EXCEPT AS OTHERWISE PERMITTED UNDER APPLICABLE KOREAN LAWS AND REGULATIONS. IN ADDITION, DURING THE FIRST YEAR AFTER THE ISSUANCE OF THE NOTES, THE NOTES MAY NOT BE TRANSFERRED TO ANY RESIDENT OF KOREA OTHER THAN A "QUALIFIED INSTITUTIONAL INVESTOR" (A "KOREAN QIB," AS DEFINED IN THE REGULATION ON THE ISSUANCE OF SECURITIES AND PUBLIC DISCLOSURE, ETC. OF KOREA) WHO IS REGISTERED WITH THE KOREA FINANCIAL INVESTMENT ASSOCIATION (THE "KOFIA") AS A KOREAN QIB, PROVIDED THAT THE AMOUNT OF THE NOTES ACQUIRED BY SUCH KOREAN QIBS IN THE PRIMARY MARKET IS LIMITED TO NO MORE THAN 20% OF THE AGGREGATE ISSUE AMOUNT OF THE NOTES.

No person has been authorized in connection with any offering of the Notes to give any information or make any representation other than as contained in this Offering Circular and, if given or made, that information or representation must not be relied upon as having been authorized by the Company or by the Initial Purchasers (as defined in "Plan of Distribution"). This Offering Circular does not constitute an offer to sell or a solicitation of an offer to buy any Notes by any person except in compliance with all applicable laws and regulations. No representation or warranty, express or implied, is made by the Initial Purchasers or any of their affiliates or advisers as to the accuracy or completeness of the information contained in this Offering Circular or any other information provided by the Company in connection with the offering of the Notes or the Notes or their distribution or for any other statement made or purported to be made by any Initial Purchaser or on its behalf in connection with the Company or the offering of the Notes. Nothing contained in this Offering Circular is, or shall be relied upon as, a promise or representation by the Initial Purchasers or their affiliates or advisers. Each Initial Purchaser accordingly disclaims any and all responsibility or liability whether arising in tort or contract or otherwise which it might otherwise have in respect of the information contained in this Offering Circular, any other information provided by the Company in connection with the offering of the Notes or any other such statement. Neither the delivery of this Offering Circular nor any sale made in connection with this Offering Circular shall under any circumstances imply that the information in this Offering Circular is correct as of any date subsequent to the date of this Offering Circular or constitute a representation that there has been no change or development reasonably likely to involve a material adverse change in the Company's affairs since the date of this Offering Circular.

The Company, having made all reasonable inquiries, confirms that this Offering Circular contains all information with respect to the Company and the Notes which is material in the context of the issue and offering of the Notes, that the information contained in this Offering Circular is true and accurate in all material respects and is not misleading in any material respect, that the opinions and intentions expressed in this Offering Circular are honestly held and have been reached after considering all relevant circumstances and are based on reasonable assumptions, and that there are no other facts, the omission of which would, in the context of the issue and offering of the Notes, make this Offering Circular as a whole or any information or the expression of any opinions or intentions expressed in this Offering Circular misleading in any material respect. The Company accepts responsibility accordingly. Information provided in this Offering Circular with respect to Korea and its political status and economy, has been derived from information published by the Korean government and other public sources, and the Company accepts responsibility only for the accurate extraction of information from such sources.

The Notes have not been registered with or approved or disapproved by the U.S. Securities and Exchange Commission, any state securities commission or other regulatory authority, nor have any of the foregoing authorities passed upon or endorsed the merits of this offering or the accuracy or adequacy of this Offering Circular. Any representation to the contrary is a criminal offense.

This Offering Circular does not constitute, and may not be used for purposes of, an offer, invitation or solicitation by anyone in any jurisdiction or in any circumstances in which such offer, invitation or solicitation is not authorized or to any person to whom it is unlawful to make such offer, invitation or solicitation. The distribution of this Offering Circular and the offering of the Notes in certain jurisdictions may be restricted by law. Persons into whose possession this Offering Circular may come are required by the Company and the Initial Purchasers to inform themselves about and to observe the relevant restrictions. For a description of certain restrictions on offers and sales of the Notes and distribution of this Offering Circular, see "Plan of Distribution" and "Transfer Restrictions." No action is being taken in any jurisdiction to permit an offering to the general public of Notes or the distribution of this Offering Circular in any jurisdiction where action would be required for those purposes.

In making an investment decision, prospective investors must rely on their own examination of the Company and the terms of the offering of the Notes, including the merits and risks involved. The Company is not making any representation to any purchaser of the Notes regarding the legality of an investment in the Notes by such purchaser under any legal investment or similar laws or regulations. The contents of this Offering Circular should not be construed as providing legal, business, accounting or tax advice.

Notice to investors in Singapore—By accepting this Offering Circular, if you are an investor in Singapore, you: (I) represent and warrant that you are either (1) 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 (2) 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, and (II) agree to be bound by the limitations and restrictions described herein.

Notice to Prospective Investors in the United Kingdom—This Offering Circular is only being distributed to and is only directed at (i) persons who are outside the UK; (ii) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the "Order"); or (iii) high net worth entities, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). The Notes will only be available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such Notes will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely on this Offering Circular or any of its contents.

MiFID II product governance/Professional investors and ECPs target market—Solely for the purposes of the 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. Any person subsequently offering, selling or recommending the Notes (a "distributor") should take into consideration each manufacturer'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 each manufacturer's target market assessment) and determining the appropriate distribution channels.

UK MiFIR product governance/Professional investors and ECPs only target market—Solely for the purposes of the 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, as defined in the FCA Handbook Conduct of Business Sourcebook, and professional clients, as defined in Regulation (EU) No 600/2014 as it forms part of UK domestic law by virtue of the European Union (Withdrawal) Act 2018, as amended ("UK MiFIR") only; and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Notes (a "distributor") should take into consideration the manufacturer's target market assessment; however a distributor subject to the FCA Handbook Product Intervention and Product Governance Sourcebook, as may be applicable, is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the manufacturer's target market assessment) and determining the appropriate distribution channels.

Notice to Capital Market Intermediaries and Prospective Investors Pursuant to Paragraph 21 of the Hong Kong SFC Code of Conduct—Important Notice to Prospective Investors: Prospective investors should be aware that certain intermediaries in the context of this offering of the Notes, including all Initial Purchasers, are "capital market intermediaries" (together, the "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" (together, the "OCs") for this offering and are subject to additional requirements under the SFC Code. Prospective investors who are directors, employees or major shareholders of the Company, a CMI or its group companies would be considered under the SFC Code as having an association (an "Association") with the Company, the CMI or the relevant group company (as the case may be). Prospective investors associated with the Company or any CMI (including its group companies) should specifically disclose this when placing an order for the Notes and should disclose, at the same time, if such orders may negatively impact the price discovery process in relation to this 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 this offering, such order is hereby deemed not to negatively impact the price discovery process in relation to this 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). If a prospective investor is an asset management arm affiliated with any Initial Purchaser, such prospective investor should so indicate when placing an order if it is for a fund or portfolio where the relevant Initial Purchaser 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 this 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 Initial Purchaser, such that its order may be considered to be a "proprietary order" (pursuant to the SFC Code), such prospective investor should so indicate to the relevant Initial Purchaser 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 this offering, such "proprietary order" is hereby deemed not to negatively impact the price discovery process in relation to this 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 Initial Purchasers and/or any other third parties as may be required by the SFC Code, including to the Company, 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 this offering. Failure to provide such information may result in that order being rejected.

PRESENTATION OF FINANCIAL INFORMATION

The financial information of the Company as of and for the years ended December 31, 2022, 2023 and 2024 contained in this Offering Circular is derived from the Company's audited consolidated financial statements included in this Offering Circular. Such financial statements have been prepared in accordance with Korean International Financial Reporting Standards ("K-IFRS"). The financial information of the Company presented as of June 30, 2025 and for the six months ended June 30, 2024 and 2025 is derived from the Company's unaudited consolidated interim financial statements included in this Offering Circular. Such financial statements have been prepared in accordance with K-IFRS No. 1034 "Interim Financial Reporting."

All financial information, descriptions and other information regarding the Company are, unless indicated otherwise, given on a consolidated basis. Discrepancies pertaining to certain tables in this Offering Circular are due to rounding.

CERTAIN DEFINED TERMS AND CONVENTIONS

References to "Korea" or the "Republic" are references to The Republic of Korea. References to the "Government" are references to the government of the Republic of Korea. The Company publishes its financial statements in Won. References to "Won" or "₩" are to Korean Won, which is the legal tender currency of Korea. References to "US$," "U.S. dollars" or "cents" are to the currency of the United States of America. References to "S$" are to the currency of the Republic of Singapore. For a discussion of historical information regarding the rate of exchange between Won and the U.S. dollar, see "Exchange Rates." Unless otherwise specified, all conversions of Won into U.S. dollars and vice versa appearing in this Offering Circular were made at the base rate under the market average exchange rate system, announced by Seoul Money Brokerage Services, Ltd. between U.S. dollars and Won, rounded down to the nearest tenth of a Won (the "Market Average Exchange Rate"), in effect on June 30, 2025, which was Won 1,356.4 to US$1.00. No representation is made that the Won or U.S. dollar amounts referred to in this Offering Circular could have been or could be converted into U.S. dollars or Won, as the case may be, at any particular rate or at all.

FORWARD-LOOKING STATEMENTS

This Offering Circular includes "forward-looking statements," as defined in Section 27A of the Securities Act and Section 21E of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act"). Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as "believes," "expects," "anticipates," "estimates," "projects," "plans," "intends," "targets," "seeks," "aims," "contemplates," "goal," "should," "can," "may," "will" and similar expressions or the negatives thereof. Those statements include, among other things, the discussions of the Company's business strategy and expectations concerning its market position, future operations, cash flows, margins, profitability, liquidity and capital resources. Reliance on any forward-looking statement involves risks and uncertainties, and although the Company believes that the assumptions on which the forward-looking statements are based are reasonable, any of those assumptions could prove to be inaccurate, and, as a result, the forward-looking statements based on those assumptions could be incorrect. The uncertainties in this regard include, but are not limited to, those identified in the risk factors discussed elsewhere in this Offering Circular. See "Risk Factors." In light of these and other uncertainties, you should not conclude that the Company will necessarily achieve any plans and objectives or projected financial results referred to in any of the forward-looking statements. The Company does not undertake to release the results of any revisions of these forward-looking statements to reflect future events or circumstances, except as required by law.

AVAILABLE INFORMATION

To permit compliance with Rule 144A under the Securities Act in connection with sales of the Notes, the Company will be required under the Fiscal Agency Agreement (as defined herein) to furnish, upon request, to a holder of a Note and a prospective investor designated by such holder the information required to be delivered under Rule 144A(d)(4) under the Securities Act if, at the time of the request, the Company is neither a reporting company under Section 13 or Section 15(d) of the Exchange Act nor exempt from reporting pursuant to Rule 12g3-2(b) thereunder. In accordance with the Fiscal Agency Agreement, the Fiscal Agent (as defined herein) also will make available for inspection by holders of the Notes, or, in certain cases, arrange for the mailing to such holders certain reports or communications received from the Company.

ENFORCEMENT OF CIVIL LIABILITIES

The Company is a corporation with limited liability organized under the laws of Korea. Many of the directors and officers of the Company named herein reside in Korea, and a significant portion of the assets of the directors and officers and a substantial majority of the assets of the Company are located in Korea. As a result, it may not be possible for investors to effect service of process within the United States upon such persons or to enforce against them or against the Company in United States courts judgments predicated upon the civil liability provisions of the federal securities laws of the United States. There is also doubt as to the enforceability in Korea, either in original actions or in actions for enforcement of judgments of United States courts, of civil liabilities predicated on the United States federal securities laws.

SUMMARY

The Company is one of the largest petroleum refining companies in Korea, as well as a leading producer of certain petrochemical products. The Company is currently ranked second among Korean petroleum refining companies in terms of refining capacity.

The Company's principal business activities consist of the production and marketing of refined petroleum products, petrochemicals (consisting of various aromatics products, polypropylene products and polyethylene products) and lubricants (including base oil). Such activities (with the exception of lubricants production, which takes place at the Company's facilities located in Incheon) are carried out at the Company's Yeosu production complex located in southern Korea, which includes the world's fifth-largest single-site oil refinery with a refining capacity of 800,000 barrels per stream day ("BPSD").

The Company also operates an extensive storage, transportation and sales network in Korea for the Company's refined petroleum products. The Company seeks to maintain secure demand for its refined petroleum products through its domestic retail sales and distribution network. As of June 30, 2025, the Company's sales network for refined petroleum products included 2,327 service stations (including 332 liquefied petroleum gas ("LPG") filling stations), representing approximately 18.5% of the service stations in Korea. Of these, the Company owned or controlled 334 service stations. According to Korea National Oil Corporation, the Company's domestic market share for its light oil refined petroleum products was approximately 21.8% in 2024 and 22.8% in the first half of 2025 in terms of sales volume.

The Company has invested significant capital in refinery-related initiatives to improve its crude oil processing efficiency, expand refining capacity, increase production of higher value refined products and meet evolving environmental standards. The Company's heavy oil upgrading plants convert low value-added and low quality heavy oil products, such as bunker-C, into higher margin and more environmentally friendly low-sulfur light oil products, such as gasoline, diesel and kerosene. The Company has a heavy oil upgrading ratio (which is the ratio of heavy oil reprocessing capacity to total crude oil refining capacity) of approximately 34.3% as of June 30, 2025, the second-highest among Korean refiners based on the data relating to the other Korean refiners as published by the Ministry of Trade, Industry and Energy (the "MOTIE"). In addition, in July 2021, the Company commenced commercial operations of a new mixed feed cracker facility in Yeosu, which currently has a production capacity of up to 900,000 metric tons per annum ("MTA") of ethylene and 500,000 MTA of polyethylene, in order to further diversify the Company's product portfolio and expand its petrochemical business. The Company intends to continue to strategically invest in its production facilities and in developing leading technology to produce higher margin, higher value-added products and enhance the overall quality of its products. The Company also expects that continued modernization and rationalization of its facilities will improve production efficiency, increase opportunities for vertical integration and result in cost savings.

The Company is owned 50% by Chevron Corporation ("Chevron") through two of its subsidiaries and 50% by GS Energy Corporation ("GS Energy"). The Company was established in 1967 in Korea as a petroleum refining joint venture between Lucky Chemical Industrial Corp., the founding company of the LG Group, and Caltex, a U.S. corporation engaged in international petroleum refining and marketing. In May 1996, the Company changed its name from "Honam Oil Refinery Co., Ltd." to "LG-Caltex Oil Corporation." Following a series of restructurings, the shares that Caltex held in the Company are now held by Chevron (Overseas) Holdings Ltd. and Chevron Global Energy Inc. The LG Group also underwent a series of restructurings in an effort to improve corporate governance and operational efficiency. In July 2004, LG Corporation (which had previously owned 50% of the Company's shares) split itself into two separate holding companies, LG Corporation and GS Holdings Corporation ("GS Holdings"). As a result, the Company became a subsidiary of GS Holdings. In March 2005, the Company changed its name from "LG-Caltex Oil Corporation" to "GS Caltex Corporation." The Company benefits from vertical integration provided through its affiliation with GS Holdings and Chevron. See "Business—Raw Materials" and "Business—Sales and Distribution."

In January 2012, GS Holdings established a new wholly-owned subsidiary, GS Energy, to serve as an intermediate holding company for the Company and transferred all of its shares in the Company to GS Energy. From June 2012 to June 2013, the Company also transferred certain of its non-core operations to GS Energy, including its natural gas distribution, LNG-fired heat and power generation, renewable energy development and oil and natural gas exploration and development businesses. Such divestments were made in furtherance of the Company's renewed focus on its core businesses of petroleum refining, petrochemicals production and lubricants production. The Company intends to continue to strategically grow its core businesses and maintain a high level of business alignment with Chevron, which remains an important strategic business partner as well as a shareholder of the Company.

The Company's sales were Won 58,532 billion in 2022, Won 48,608 billion in 2023 and Won 47,614 billion in 2024, and Won 24,499 billion in the first half of 2024 and Won 21,838 billion in the first half of 2025. The Company reported net profit of Won 2,789 billion in 2022, Won 1,153 billion in 2023 and Won 109 billion in 2024, and net profit of Won 317 billion in the first half of 2024 and net loss of Won 45 billion in the first half of 2025. The Company had total assets of Won 23,174 billion and total equity of Won 13,099 billion as of December 31, 2024, and total assets of Won 21,885 billion and total equity of Won 12,981 billion as of June 30, 2025.

THE OFFERING

The following is only a summary of certain terms of the Notes, which are more fully described in "Description of the Notes." Terms used and not otherwise defined in this summary have the meanings given to them in "Description of the Notes."

Issuer	GS Caltex Corporation
Notes	US$300,000,000 4.250% Notes due 2030
Interest Rate	4.250%
Interest Payment Dates	April 28 and October 28, commencing April 28, 2026
Maturity	October 28, 2030
Ranking	The Notes will be unsecured and will be the direct, unconditional, unsubordinated and unsecured general obligations of the Company and will rank *pari passu* among themselves and at least equally with all other outstanding and future unsecured and unsubordinated general obligations of the Company (subject to certain statutory exceptions under the laws of Korea).
Form and Denomination	The Notes will be deliverable only in registered form and only in denominations in principal amounts of US$200,000 and integral multiples of US$1,000 in excess thereof. The Notes initially offered and sold within the United States to qualified institutional buyers ("QIBs") pursuant to Rule 144A under the Securities Act ("Rule 144A") and outside the United States to non-U.S. persons pursuant to Regulation S under the Securities Act ("Regulation S") will be evidenced by separate Global Notes, in registered form without coupons, and deposited with a custodian for and registered in the name of a nominee of The Depository Trust Company in New York, New York ("DTC"), as depositary. The Notes may not be sold or otherwise transferred except in accordance with the restrictions described under "Transfer Restrictions."
Certain Covenants	The Notes contain certain limitations on the creation, incurrence, issuance or assumption or the guarantee by the Company or any of its subsidiaries of certain debt secured by any mortgage, charge, pledge or other security interest on any property or asset of the Company or any such subsidiary. The Notes also contain certain limitations on sale and leaseback transactions by the Company or any of its subsidiaries. "Terms and Conditions of the Notes—Covenants of the Company."
Optional Tax Redemption	The Company may, at its option, redeem the Notes, in whole but not in part, at 100% of their principal amount plus accrued interest to the date fixed for redemption, if the Company has or would become obligated to pay Additional Amounts in respect of certain Korean taxes imposed in respect of payments of principal of or interest on the Notes. See "Terms and Conditions of the Notes—Optional Redemption Due to Changes in Tax Treatment."
Additional Amounts	If withholding or deduction of present or future taxes or other governmental charges is required by Korea, subject to certain exceptions, the Company will pay Additional Amounts (as such term is defined in "Terms and Conditions of the Notes—Taxation") as are necessary in order to ensure that the net amounts received by Holders of Notes after such withholding or deduction is the same as the amount of principal and interest which the Holders would have received in the absence of that withholding or deduction. See "Terms and Conditions of the Notes—Taxation."

Listing	Approval in-principle has been received from the SGX-ST for the listing and quotation of the Notes on the SGX-ST. For so long as the Notes are listed on the SGX-ST and the rules of the SGX-ST so require, the Notes, if traded on the SGX-ST, will be traded in a minimum board lot size of S$200,000 (or its equivalent in foreign currencies). Accordingly, the Notes, if traded on the SGX-ST, will be traded in a minimum board lot size of US$200,000. For so long as the Notes are listed on the SGX-ST and the rules of the SGX-ST so require, in the event that a Global Note is exchanged for definitive Notes in certificated form, the Company will appoint and maintain a paying agent in Singapore, where the Notes may be presented or surrendered for payment or redemption. In addition, in the event that a Global Note is exchanged for definitive Notes in certificated form, an announcement of such exchange will be made by or on behalf of the Company through the SGX-ST and such announcement will include all material information with respect to the delivery of the definitive Notes in certificated form, including details of the paying agent in Singapore.
Rating of the Notes	The Notes are expected to be rated Baa1 by Moody's and BBB+ by S&P. Such ratings of the Notes do not constitute a recommendation to buy, sell or hold the Notes and may be subject to revision or withdrawal at any time by the rating organizations. Each such rating should be evaluated independently of any other rating of the Notes or of the Company's other securities.
Use of Proceeds	The Company intends to use the net proceeds from the offering principally for general corporate purposes.
Governing Law	New York
Fiscal Agent	Citicorp International Limited
Paying Agent, Transfer Agent and Registrar	Citibank, N.A., London Branch
Delivery of the Notes	Delivery of the Notes, against payment in same-day funds, is expected on or about October 28, 2025.
Risk Factors	Investing in the Notes involves risks. See "Risk Factors" for a description of certain risks that investors should consider before making an investment in the Notes.
Security Codes	Rule 144A ISIN: US36294BAM63 Regulation S ISIN: USY29011DM51 Rule 144A CUSIP: 36294B AM6 Regulation S CUSIP: Y29011 DM5

SUMMARY CONSOLIDATED FINANCIAL AND OTHER INFORMATION

The following tables present summary financial and other information of the Company. The summary financial information as of and for the years ended December 31, 2022, 2023 and 2024 are derived from the audited consolidated financial statements of the Company included elsewhere in this Offering Circular, which have been prepared in accordance with K-IFRS. The summary financial information presented as of June 30, 2025 and for the six months ended June 30, 2024 and 2025 are derived from the unaudited consolidated interim financial statements of the Company included elsewhere in this Offering Circular, which have been prepared in accordance with K-IFRS No. 1034 "Interim Financial Reporting."

The Company's results of operations for the six months ended June 30, 2025 may not be indicative of its result of operations for any future interim period or for the full year 2025.

STATEMENT OF INCOME (LOSS) INFORMATION

	For the year ended December 31,			For the six months ended June 30,	
	2022	2023	2024	2024	2025
	(in billions of Won)				
Sales	₩ 58,532	₩ 48,608	₩ 47,614	₩ 24,499	₩ 21,838
Cost of sales	(53,298)	(45,758)	(45,953)	(23,309)	(21,421)
Selling, general and administrative expenses	(1,255)	(1,166)	(1,113)	(566)	(559)
Operating profit (loss)	3,980	1,684	548	625	(141)
Share of profit of equity method accounted investees	18	15	14	12	8
Finance income	3,468	4,027	2,454	1,139	1,833
Finance costs	(3,737)	(4,235)	(2,922)	(1,387)	(1,758)
Other income	470	297	255	112	182
Other expenses	(418)	(264)	(227)	(94)	(166)
Profit (loss) before income tax	3,780	1,524	122	406	(43)
Income tax expense	(991)	(371)	(13)	(89)	(1)
Profit (loss) for the period	₩ 2,789	₩ 1,153	₩ 109	₩ 317	₩ (45)
Profit (loss) attributable to:					
Owners of the parent company	₩ 2,789	₩ 1,153	₩ 109	₩ 317	₩ (45)
Non-controlling interests	–	–	–	–	–

STATEMENT OF COMPREHENSIVE INCOME (LOSS) INFORMATION

Profit (loss) for the period	₩ 2,789	₩ 1,153	₩ 109	₩ 317	₩ (45)
Total other comprehensive income (loss) for the period, net of tax	18	(58)	28	33	(29)
Total comprehensive income (loss) for the period	₩ 2,808	₩ 1,094	₩ 137	₩ 349	₩ (74)
Total comprehensive income (loss) attributable to:					
Owners of the parent company	₩ 2,808	₩ 1,094	₩ 137	₩ 349	₩ (74)
Non-controlling interests	–	–	–	–	–

STATEMENT OF FINANCIAL POSITION INFORMATION

	As of December 31,			As of June 30,
	2022	2023	2024	2025
	(in billions of Won)			
Assets				
Cash and cash equivalents	₩ 1,561	₩ 1,265	₩ 1,276	₩ 1,093
Accounts and notes receivable	3,964	3,913	3,681	3,446
Short-term financial assets	1,805	298	309	337
Inventories	5,566	5,759	5,095	4,497
Prepaid income taxes	1	1	50	2
Other current assets	317	1,008	1,036	944
Assets held for sale	–	–	15	28
Total current assets	13,213	12,244	11,462	10,346
Long-term financial assets	315	285	344	257
Investments in associates	283	315	338	347
Property, plant and equipment	11,980	11,275	10,835	10,723
Investment properties	37	41	58	58
Intangible assets	70	70	77	73
Defined benefit assets, net	113	65	29	52
Deferred income tax assets	3	3	6	6
Other non-current assets	25	25	25	23
Total non-current assets	12,826	12,078	11,711	11,539
Total assets	₩26,039	₩24,322	₩23,174	₩21,885
Liabilities				
Accounts payable – trade	₩ 2,662	₩ 2,832	₩ 2,999	₩ 2,053
Short-term financial liabilities	4,354	2,932	2,711	3,097
Income taxes payable	997	295	11	9
Other current liabilities	77	985	1,074	1,273
Total current liabilities	8,089	7,043	6,794	6,432
Long-term financial liabilities	4,260	3,558	3,123	2,318
Defined benefit liabilities, net	–	2	3	4
Deferred income tax liabilities	110	149	80	77
Other non-current liabilities	60	72	75	73
Total non-current liabilities	4,429	3,780	3,281	2,472
Total liabilities	12,519	10,823	10,075	8,904
Equity				
Common stock	260	260	260	260
Capital surplus	68	68	68	68
Capital adjustments	(61)	(61)	(61)	(61)
Accumulated other comprehensive income	29	8	71	41
Retained earnings	13,224	13,224	12,760	12,673
Equity attributable to owners of the parent company	13,520	13,499	13,099	12,981
Non-controlling interests	–	–	–	–
Total equity	13,520	13,499	13,099	12,981
Total liabilities and equity	₩26,039	₩24,322	₩23,174	₩21,885

OTHER FINANCIAL INFORMATION

	As of or for the year ended December 31,			As of or for the six months ended June 30,
	2022	2023	2024	2025
	(in billions of Won)			
Capital expenditures[(1)]	₩ 527	₩ 534	₩ 585	₩ 410
Depreciation and amortization	1,061	1,060	988	492
Net cash provided by operating activities	1,459	2,050	1,918	429
Net cash used in investing activities	(476)	(331)	(499)	(356)
Net cash used in financing activities	(507)	(2,019)	(1,438)	(241)
Ratio of total debt to equity[(2)]	0.42	0.37	0.34	0.32

(1) Represents acquisitions of property, plant and equipment as presented in the Company's statements of cash flows.

(2) Calculated by dividing (i) the sum of (a) short-term borrowings, (b) current portion of long-term borrowings and bonds and (c) long-term borrowings and bonds by (ii) total equity.

RISK FACTORS

An investment in the Notes is subject to various risks, including those listed below. Investors should carefully consider the following risks as well as the other information contained in this Offering Circular before purchasing the Notes. These risks could materially affect the Company's ability to meet its obligations under the Notes. In such case, investors may lose all or part of their original investment in, and the expected return on, the Notes.

Risks Relating to the Company

The Company operates in highly competitive markets, and the Company's failure to successfully compete would adversely affect its market position and business.

The Company competes in highly competitive petroleum refining, petrochemical and lubricant markets characterized by advantages from economies of scale and brand recognition, evolving regulatory and industry standards and continual improvements in performance characteristics and product features. The Company competes in various product lines based on the following factors:

- product performance, quality and reliability;
- ability to accurately identify and respond to emerging regulatory and industry trends and consumer demand for product features and performance characteristics;
- successful and timely expansion of production capacity;
- development of new and innovative products and manufacturing processes;
- effectiveness of sales and marketing efforts; and
- brand recognition and financial strength.

Petroleum Refining Segment. The Company's single largest market for its refined petroleum products is Korea (as represented by sales denominated in Won), which accounted for 30.1%, 29.4%, 28.5% and 29.7% of its sales of such products in 2022, 2023, 2024 and the first half of 2025, respectively. According to Korea National Oil Corporation, the Company ranked third among Korean refiners with a market share in the domestic light oil refined petroleum market of 21.8% in 2024 and 22.8% in the first half of 2025 based on sales volume. In Korea, the Company competes principally with three other major domestic petroleum refiners, SK Energy, HD Hyundai Oilbank and S-Oil Corporation. Furthermore, following the deregulation of the Korean petroleum refining market in January 1997, there have been new entrants into the market that import refined products and market them primarily to non-affiliated service stations. In addition, the Government has been promoting reductions in the retail prices of refined light oil products such as gasoline and diesel by promoting discount service stations nationwide since 2011, which in turn has contributed to a decrease in the Company's margins from its petroleum refining business. In its export markets, the Company competes with a variety of competitors ranging from the "supermajor" oil companies to large local state-owned and private refiners.

The Company's results of operations may be impacted by developments in the global economy that affect demand for its refined petroleum products, which has experienced significant volatility in recent years. Following a period of recovery in demand in 2021 and the first half of 2022 (which was preceded by a significant slowdown due to the debilitating effects of the COVID-19 pandemic on the global economy in 2020), the global demand for refined petroleum products has generally weakened in light of increased weakness and uncertainty in the global economy and financial markets, among others, due to increasing inflationary pressures and significant fluctuations in policy interest rates globally. Such weakness and uncertainty have been exacerbated in the first half of 2025 in part due to the imposition of universal "reciprocal" tariffs by the United States on its trading partners and the resulting tension and deterioration of economic and trade relations between the United States and many of these countries (including China), as well as the ongoing hostilities in the Middle East following the Israel-Hamas war and the Iran-Israel conflict.

The Company's results of operations may also be impacted by its competitors' expansion projects and refinery improvements that result in an increase in the overall regional or local production volume of refined petroleum products. Following delays in the expansion projects of the Company's overseas competitors largely due to the aforementioned negative impact of COVID-19, such projects have since generally resumed or been completed, and the overall refining capacity of the industry has increased in recent years. Furthermore, prices in the Korean and global market for refined petroleum products have been affected by, among other things, the disruptions in the supply of crude oil in part due to the ongoing war between Russia and Ukraine since February 2022 and the ensuing sanctions imposed against Russia by the United States and other countries, which contributed to a significant increase in the market price of crude oil in the first half of 2022, as well as the decisions by the member countries of OPEC+ to reduce their crude oil supply volume from October 2022. Such reductions were extended into the first half of 2025 until those countries decided to begin increasing their crude oil supply volume commencing in April 2025. As a result of such volatility, the Company's refining margins have fluctuated significantly in recent years. While refining margins were temporarily strengthened by short-term supply disruptions and logistical risks at times, they have generally decreased in recent years as the commencement of operations of new large-scale refining facilities and the resulting increase in production from producers in Asia as well as concerns over slowing demand placed downward pressure on the market.

The global refined petroleum industry is facing continued threat of a long-term reduction in demand for gasoline and diesel for motor vehicle use as the market share of electric vehicles in the global automotive industry continues to increase. While the Company is actively pursuing strategies to diversify its product portfolio to reduce the degree of its reliance on sales of refined petroleum products, no assurance can be given that the Company will not be adversely affected by future declines in demand for refined petroleum products for motor vehicle use.

The foregoing developments in turn have led to increased uncertainty regarding future prospects for the industry, as well as difficulty in accurately forecasting future results of operations and cash flows on the part of industry participants, including the Company. Overall, despite periods of temporary rebounds, the global refined petroleum market has remained unstable and relatively weak in recent years, which conditions may be further exacerbated by continued uncertainty in the global economy as well as future changes in major crude oil-producing countries' production policies and increases in geopolitical tensions. Such volatility may result in further fluctuations in prices and sales volumes, which may have a material adverse effect on the Company's operating margins and results of operations.

Petrochemicals Segment. In the petrochemical industry, the Company faces competition mainly from global producers (including other major Korean petrochemical companies), both in domestic and export markets, primarily on the basis of price and quality. The petrochemical industry is highly cyclical and demand for petrochemical products has fluctuated depending on general economic conditions in Korea, as well as in various Asian economies, in particular China and Southeast Asia. An imbalance between supply and demand, as well as the emergence of low cost producers in the Middle East which are located near fuel sources, have resulted in pricing pressures as well as uncertainty regarding future prospects for the global petrochemical industry.

The petrochemical industry has suffered in the past from, and continues to face the prospects of, an oversupply of petrochemical products as a result of continued expansion of petrochemical production capacity in Asia and the Middle East. Following a period of recovery in global economic activities in 2021 and the first half of 2022, in line with which the global petrochemical industry also showed signs of recovery, the global petrochemical industry has faced renewed weakness and uncertainty, as recovery in global demand has since slowed in light of weaker global economic conditions and the impact of the temporary rebound in demand from China following the resumption of its economic activities in the second half of 2022 was not as strong as initially anticipated. Such weakness and uncertainty were exacerbated in the first half of 2025 by due to concerns over export disruptions stemming from an increase in trade tensions between the United States and China following the imposition of significantly higher tariffs against each other, which applied further downward pressure on prices and margins of petrochemical products until those countries adopted measures to suspend such increased tariffs.

Furthermore, in August 2025, the Government urged major participants of the Korean petrochemical industry to propose restructuring plans to reduce the domestic industry capacity of naphtha cracker facilities (which produce polypropylene, polyethylene and olefin products) in order to enhance their economic viability by the end of 2025. In September 2025, a creditors' committee formed by various domestic financial institutions with credit exposure to Korean petrochemical companies announced that such financial institutions would provide liquidity support to those companies that submit satisfactory restructuring plans. While the Company believes that its mixed feed cracker facility, which uses naphtha as its primary feedstock, uniquely benefits from having access to a stable internal supply of naphtha, and currently has no plans to scale down the operation of such facility, the Company cannot predict the outcome of any plans that may be developed by its domestic competitors. No assurance can be given that any such plans that are adopted by the Company's domestic competitors will not lead to increased consolidation in the Korean petrochemical industry, or that they may not have an adverse effect on the Company's competitive position in the market.

It is uncertain whether prices and margins in the Korean and global market for petrochemical products will improve again in the near future and/or be sustained in the longer term. In particular, periods of rapid increase in the price of crude oil and, in turn, naphtha (which is the primary feedstock for the Company's aromatics products) have in the past negatively impacted, and may in the future negatively impact, the Company's margins in the petrochemicals segment. Although the Company seeks to enhance operational efficiency in order to maintain its margins and strengthen its market position, no assurance can be given that the Company will not be adversely affected by such factors, as well as by the volatility of prices of petrochemical products in the Korean and international markets.

Lubricants Segment. In the lubricant oil market, the Company faces competition from a wide variety of existing and new competitors ranging from supermajor oil companies and large state-owned refining companies to specialized producers that focus on a limited number of product lines. The Company's primary competitors in the base oil market consist of large regional petroleum refining companies and state-owned refineries. In the domestic lubricant market, the Company competes principally with domestic petroleum refining companies and their affiliates, such as SK Enmove (which is a sister company of SK Energy and is in the process of being merged with its affiliate SK On, a leading manufacturer of rechargeable batteries) and S-Oil Total, while in the overseas lubricant market, the Company's main competitors consist of supermajor oil companies and state-owned oil companies. The lubricant oil market in recent years has been characterized by intense competition resulting from expansion of production capacity, erosion of average selling prices and frequent changes in performance requirements for lubricant products driven by rapidly changing technologies and evolving industry and regulatory standards in the automotive industry, which has negatively impacted the profitability of Korean lubricant producers, including the Company.

The global market for lubricant and base oil products showed stronger margins in 2023 due to a rebound in demand from China as a result of the general resumption of its economic activities following the COVID-19 pandemic, as well as stronger economic conditions in India and the Middle East. In 2024, margins were further supported by stronger market demand for heavy grade marine lubricants, in part due to growth in international trades involving Asian countries and an increase in cargo volumes resulting from vessel upsizing, as well as a temporary supply shortage of base oil products due in part to a fire at a major Taiwanese refinery complex and pre-scheduled maintenance shutdowns of certain other leading Asian manufacturers' facilities. However, renewed weakness and uncertainty in the global economy and financial markets in the first half of 2025 have adversely affected the margins for lubricant and base oil products. It is uncertain whether prices and margins in the Korean and global markets for lubricant and base oil products will improve again in the near future and/or be sustained in the long term. Although the Company seeks to enhance operational efficiency in order to maintain its margins and strengthen its market position, no assurance can be given that the Company will not be adversely affected by such factors, as well as by the volatility of prices of lubricant oil and base oil products in the Korean and international markets.

Dependence on foreign sources of crude oil may subject the Company to difficulties in meeting its crude oil needs in sufficient quantities and at prices acceptable to the Company.

The Company imports all of its crude oil requirements from overseas sources. In 2024, approximately 23% of the Company's crude oil requirements were supplied through GS Caltex Singapore Pte., Ltd., one of the Company's subsidiaries, and approximately half of the Company's crude oil requirements were supplied directly by or through Chevron U.S.A. Singapore Branch. Pursuant to the terms of the Crude Oil and Products Sale and Purchase Agreement executed in February 2007, Chevron U.S.A. Singapore Branch has agreed to supply to the Company, and the Company has agreed to purchase from or through Chevron U.S.A. Singapore Branch, up to 50% of the Company's annual crude oil requirements. A substantial portion of the Company's crude oil requirements are imported pursuant to supply contracts that typically provide for the supply of a fixed quantity (within a specified range) of crude oil during a period of one or more years, at prices linked to international crude prices. The remainder is imported under contracts of limited duration, which typically provide that prices are variable depending on market prices prevailing at the time of supply, or purchased in the spot market from time to time at the prevailing market price.

Although the Crude Oil and Products Sale and Purchase Agreement with Chevron U.S.A. Singapore Branch enhances the Company's ability to source the most competitive suppliers of crude oil in the crude market, the supply and the market price of crude oil remain subject to a variety of factors that are beyond the Company's control. Any disruption in the supply of crude oil or significant volatility in the market price of crude oil will likely have a material adverse effect on the Company's business, financial condition and results of operations. For example, the ongoing war between Russia and Ukraine since February 2022 and the ensuing sanctions imposed against Russia, as well as the decisions by the member countries of OPEC+ to reduce their crude oil supply volume from October 2022 through March 2025 (when these countries reversed such decisions to begin increasing their supply volume from April 2025) have caused disruptions in the global supply chain from time to time in recent years. While the Company has not experienced significant difficulties to date in obtaining crude oil for its production requirements to date, there can be no assurance that the Company will be able to meet its future crude oil needs in sufficient quantities and at prices and terms acceptable to the Company.

Fluctuations in market prices of crude oil may adversely affect the Company's margins and profits.

The Company's earnings and cash flows from operations depend primarily on the margin at which the Company is able to sell refined petroleum and other products relative to its fixed and variable expenses, including the costs of crude oil and other feedstock. As crude oil constitutes the most important component of the Company's raw material requirements, the Company's financial performance is significantly impacted by the market price of crude oil.

The market price of crude oil has fluctuated significantly in recent years. Although the market price of crude oil significantly increased in the first half of 2022, primarily as a result of the ongoing war between Russia and Ukraine since February 2022 and the ensuing sanctions imposed against Russia, it generally declined from the second half of 2022 through 2024 in light of weakness and uncertainty in the global economy and financial markets, among others, due to rising interest rates globally to combat inflationary pressures, the effect of which was partially offset by the decisions by the member countries of OPEC+ to reduce their crude oil supply volume from October 2022 through March 2025. The market price of crude oil further declined in the first half of 2025 due in part to decisions by the member countries of OPEC+ to begin increasing their crude oil supply volume starting in April 2025, as well as increased uncertainty and weakness in global economic conditions due in part to the imposition of new and/or higher tariffs by the U.S. government and the resulting increase in trade and political tensions between the United States and its key trading partners. The average price of Dubai crude oil on the spot market was US$96.3, US$82.1 and US$79.6 per barrel in 2022, 2023 and 2024, respectively, and US$71.9 per barrel in the first half of 2025. See "—Dependence on foreign sources of crude oil may subject the Company to difficulties in meeting its crude oil needs in sufficient quantities and at prices acceptable to the Company," "—Activities of the Company and its subsidiaries relating to countries targeted by economic sanctions of the United States and other jurisdictions may subject the Company to sanctions under relevant laws and regulations, or may cause the Company to seek alternative sources of crude oil, either of which may adversely affect the Company's business, reputation and results of operations or investors in the Notes," and "—Impositions of anti-dumping duties, safeguard duties, countervailing duties, quotas or tariffs may have an adverse impact on the Company's export sales."

The market price and supply of imported crude oil are subject to a variety of factors that are beyond the control of the Company, including the following:

- activities of OPEC+ and other petroleum producing nations in setting and maintaining production levels and, therefore, market prices;
- political developments, hostilities and instability in petroleum producing regions, in particular the Middle East and Russia;
- changes in international sanctions applicable to petroleum producing nations, such as Russia and Iran, which affect their ability to produce and export crude oil;
- the development, market prices and supply levels of substitute energy sources, such as liquefied natural gas, coal, nuclear energy, solar energy and hydropower;
- the level of commitment and investment by governments and private sector enterprises in new, greenfield exploration projects and shale oil extraction projects and the success of such activities in increasing the global supply of oil for commercial applications;
- a continued increase in popularity of electric vehicles, which would negatively impact demand for refined petroleum products and, in turn, crude oil;
- the occurrence of unexpected events, such as severe health epidemics (including the ongoing global COVID-19 pandemic) and large-scale natural disasters, affecting the global economy;
- Korean as well as foreign government regulations and policies with respect to the oil and energy industries;
- the growth in demand for energy resources in China and other large emerging economies;
- global weather conditions;
- exchange rate and interest rate fluctuations;
- expectations of inflation; and
- overall Korean and global economic and financial conditions (including the negative impact of tariffs and trade barriers imposed by major economies).

Increases in the prices of crude oil, such as the temporary increases that were caused by the war between Russia and Ukraine that started in February 2022 and the ensuing sanctions imposed against Russia, correspondingly increase the short-term financing needs of the Company. Although the Company has not experienced difficulties to date in securing trade financing for crude oil imports and other working capital requirements to date, any such difficulties in securing short-term financing on favorable terms may have a material adverse effect on its business, financial condition and results of operations. In order to mitigate the effect of price volatility in the crude oil market on the Company's operations, the Company attempts to manage its margin exposure through derivative financial instruments. In addition, the Company has historically been able to pass on a substantial portion (but not all) of the increase in costs of crude oil imports to its customers through price increases for its refined petroleum products, which typically lag between one to two weeks. However, there can be no assurance that the Company will continue to be able to pass on such increased costs without negatively impacting customer demand or the Company's long-term relationship with customers. The inability of the Company to pass along increases in the prices of crude oil and other raw materials to its customers on a timely basis would have a material adverse effect on the Company's profit margins and may have a material adverse effect on the Company's business, financial condition and results of operations.

On the other hand, rapid decreases in the prices of crude oil and resulting decreases in the market prices of the Company's products, such as those decreases that were caused in part by COVID-19 and generally weak global economic conditions since the second half of 2022, negatively affect the margins of the Company's products to the extent the Company's inventory of crude oil were purchased or hedged at prices that were higher than currently prevailing market prices, which in turn may have a material adverse effect on the Company's operating profit levels and may have a material adverse effect on the Company's business, financial condition and results of operations. See "—Unexpected events, such as health epidemics (including the global COVID-19 pandemic and any possible recurrence of other types of widespread infectious diseases), accidents and natural disasters, may adversely affect the Company's business, financial condition and results of operations."

Activities of the Company and its subsidiaries relating to countries targeted by economic sanctions of the United States and other jurisdictions may subject the Company to sanctions under relevant laws and regulations, or may cause the Company to seek alternative sources of crude oil, either of which may adversely affect the Company's business, reputation and results of operations or investors in the Notes.

The U.S. government, including the U.S. Department of the Treasury's Office of Foreign Assets Control ("OFAC"), administers and enforces certain laws and regulations, or U.S. direct sanctions, that impose prohibitions or restrictions on dealings with or related to certain designated countries and territories, governments, entities and individuals, and entities majority-owned by such parties, that take place within U.S. jurisdiction. U.S. direct sanctions include territorial sanctions targeting specific countries and jurisdictions; blocking sanctions, which generally prohibit U.S. persons from engaging in transactions or other dealings with or involving blocked persons or the property or interests in property of blocked person; and non-blocking prohibitions and restrictions that target specific kinds of dealings, including, for example, dealings in debt or equity issued by certain designated parties issued after certain dates. For example, as a result of the ongoing conflict involving Ukraine and Russia, the United States, along with the European Union, the United Kingdom, Korea, Singapore and other major jurisdictions, has adopted new, additional and/or enhanced economic and trade sanctions and restrictions on Russia. Although U.S. direct sanctions generally are not applicable to non-U.S. persons (although certain U.S. direct sanctions programs do apply to non-U.S. subsidiaries of U.S. companies), non-U.S. persons can be held liable for violations of U.S. direct sanctions to the extent they participate in prohibited transactions within U.S. jurisdiction (including as a result of, for example, involving U.S. goods, services or technology, U.S. persons, or U.S. dollar payments that are cleared through the U.S. financial system). Violations of U.S. direct sanctions can result in substantial civil or criminal penalties.

In addition to U.S. direct sanctions, the United States maintains numerous secondary sanctions programs that give the U.S. government authority to impose a variety of sanctions on foreign parties that engage in certain dealings relating to Russia, as well as other U.S. sanctions targets/targeted activities regardless of whether such dealings are within U.S. jurisdiction. The imposition of U.S. secondary sanctions is not automatic, and instead requires specific action by the U.S. government. In practice, U.S. secondary sanctions are highly discretionary and may be strongly influenced by political considerations, and accordingly, are difficult to predict. Non-U.S. parties that engage in sanctionable activities are potentially subject to a number of sanctions, including, among other things, the blocking of any property within U.S. jurisdiction (including the possession or control of U.S. persons) in which the sanctioned party has an interest, which would include a prohibition on transactions or dealings within U.S. jurisdiction involving the securities of the sanctioned party, or, in the case of financial institutions, being prohibited or restricted from maintaining correspondent accounts in the United States. The Company's business and reputation could be adversely affected, for example, if the U.S. government were to determine that its activities, or the activities of any of its counterparties, involve sanctionable activity under U.S. secondary sanctions.

In addition, the European Union, the United Kingdom, Korea, Singapore and other major jurisdictions administer and enforce their own sanctions programs that target certain countries and territories, governments, entities and individuals in varying respects that the Company or certain of its dealings may be subject to.

From time to time, the Company has historically engaged in business transactions related to Russia, including purchases of crude oil from Russia through its subsidiary GS Caltex Singapore Pte., Ltd. and its affiliate Chevron USA, Inc. In 2022, the Company's crude oil supply sourced from Russia represented approximately 3% of its total crude oil supply. All of such purchases (the last of which was completed in May 2022) were made pursuant to agreements or orders entered into prior to Russia's invasion of Ukraine in February 2022. Since the date of such invasion, the Company has not entered into any new agreements or orders to purchase crude oil from Russia, and accordingly, the Company has made no purchases of crude oil from Russia since May 2022 and currently has no outstanding orders of crude oil from Russia.

In addition, the Company sells finished lubricant oil products in Russia, Ukraine and Belarus primarily through its sales branch located in Moscow. In 2022, 2023, 2024 and the first six months of 2025, the Company's sale of finished lubricant oil products in Russia, Ukraine and Belarus represented less than 5% of its total sales for each of such periods. Prior to Russia's invasion of Ukraine, the Company also previously engaged in minor trades of airplane fuel under applicable agreements that indirectly involved certain Russian counterparties currently designated as entities listed on the Sectoral Sanctions Identifications List by the OFAC. Such transactions represented less than 0.01% of the Company's total sales in 2022. However, the Company has ceased such transactions of airplane fuel since Russia's invasion of Ukraine purchases, the last of which was completed in March 2022.

The Company confirms that its transactions involving Russia, Ukraine or Belarus have been conducted at all times in full compliance with all sanctions laws. Furthermore, The Company does not have any dealings with the government of the Russian Federation, the Central Bank of the Russian Federation, VTB Bank Public Joint Stock Company, The Corporation Bank for Development and Foreign Economic Affairs Vnesheconombank, Promsvyazbank Public Joint Stock Company, Bank Rossiya, or any person or arrangement that is owned or controlled by any of the aforementioned entities. The Company is continuing to evaluate its business activities in Russia, Ukraine and Belarus in light of recent developments and will only engage in additional transactions with or involving Russian, Ukrainian or Belarusian counterparties that are fully compliant with applicable sanctions. Although the Company believes that it is in compliance with all applicable sanctions under their current terms, and intend to maintain such compliance, there can be no assurance that it will be in compliance in the future, particularly as the scope of certain laws and regulations may be unclear and may be subject to changing interpretations. Any violation or sanctions could result in fines or other penalties and the Company's reputation may be adversely affected.

In addition, although the Company will continue to closely monitor legislative and political developments in the United States, the European Union, the United Kingdom, Korea, Singapore and other major jurisdictions, the Company cannot assure you that current or future regulations or developments regarding Russia will not have a negative impact on the Company's stable procurement of crude oil or otherwise on its business or reputation. While the Company believes that adequate alternative supplies of crude oil are currently available to it, if the Company cannot obtain adequate crude oil volumes of the type and quality it requires, or if it is able to obtain such types and volumes only at unfavorable prices, the Company's business and results of operations could be materially and adversely affected.

Unexpected events, such as health epidemics (including the global COVID-19 pandemic and any possible recurrence of other types of widespread infectious diseases), accidents and natural disasters, may adversely affect the Company's business, financial condition and results of operations.

The occurrence of one or more unexpected events, including fires, tornadoes, tsunamis, hurricanes, earthquakes, floods and other forms of severe weather, as well as severe health epidemics such as the global COVID-19 pandemic in Korea or in other countries where the Company operates or where its suppliers or customers are located could adversely affect the Company's operations and financial performance. In addition, the normal operations of the Company's existing facilities or the construction of its new facilities may be interrupted or delayed by accidents caused by operating hazards, power supply disruptions, equipment failures, natural disasters or other events or by disruptions due to health epidemics. Any interruption (partial or complete) of operations at the Company's facilities as a result of any such accidents or otherwise, could materially and adversely affect its business, financial condition and results of operations. There can be no assurance that such events will not occur in the future or that the Company's production capacity will not be materially and adversely impacted as a result of such events.

In particular, COVID-19, an infectious disease caused by severe acute respiratory syndrome coronavirus 2 and was declared a pandemic by the World Health Organization in March 2020, materially and adversely affected the global economy and financial markets in recent years. While the Company believes that COVID-19 did not cause material disruptions to its business operations, COVID-19 had a material adverse effect on the overall Korean and global economies and the demand for, and the prices and margins of, the Company's products, particularly in 2020. See "—Fluctuations in market prices of crude oil may adversely affect the Company's margins and profits." Risks associated with a prolonged outbreak of COVID-19 or other types of widespread infectious diseases include:

- further volatility and deterioration in the market prices of crude oil, which may adversely affect the price margins of the Company's products;
- disruptions or delays in the supply of crude oil, other raw materials and equipment from the Company's suppliers;
- disruption in the normal operations of the Company's industrial and commercial customers (such as airlines), which in turn may further decrease demand for the Company's products for such uses;
- volatility and deterioration in the economic conditions, and a decline in consumer confidence, in Korea and other countries, which may decrease demand for the Company's products for direct consumer use and the products and services of the Company's industrial and commercial customers, thereby leading to a decrease in demand for the Company's products for such uses;
- an increase in credit risk of the Company's industrial and commercial customers (such as airlines), sales agents and independently owned service stations, which may cause them to default on their outstanding payment obligations;
- disruptions or delays in the delivery and distribution of the Company's products;
- disruptions or delays in the construction of new manufacturing facilities or maintenance and refurbishment of existing manufacturing facilities;
- disruption in the normal operations of the Company's business resulting from contraction of COVID-19 by its employees, which may necessitate the Company's employees to be quarantined and/or manufacturing facilities or offices to be temporarily shut down;
- disruption resulting from the necessity for social distancing, including implementation of temporary adjustment of work arrangements requiring employees to work remotely, which may lead to a reduction in labor productivity;
- depreciation of the Won against major foreign currencies, which in turn may increase the cost of imported raw materials and equipment;
- unstable global and Korean financial markets, which may adversely affect the Company's ability to meet its funding needs on a timely and cost-effective basis; and
- impairments in the fair value of the Company's long-term assets or investments in companies that may be adversely affected by the pandemic.

In the event that COVID-19 or other types of widespread infectious diseases cannot be effectively and timely contained, the Company's business, financial condition and results of operations may further be materially adversely affected.

The Company's capital investments to expand its production capacity are subject to various uncertainties and risks.

The Company operates in the petroleum and petrochemical industries where producers with economies of scale enjoy a competitive advantage. Accordingly, the Company's business requires a significant amount of capital investment for the expansion, upgrading and maintenance of facilities and equipment on a timely and cost-effective basis in order to maintain long-term competitiveness, improve profitability and diversify product portfolios. As part of the Company's overall strategy, the Company historically has sought to improve its heavy oil upgrading ratio through significant investments in its production facilities, and in recent years has focused on enhancing the operational efficiencies of its production facilities and incrementally revamping its existing facilities and equipment. In addition, the Company completed the construction of a mixed feed cracker facility in Yeosu, initially designed to have a production capacity of up to 750,000 MTA of ethylene and 500,000 MTA of polyethylene, and commenced its commercial operations in July 2021 in order to further diversify the Company's product portfolio and expand its petrochemical business. In December 2024, the Company increased the production capacity of such facility to up to 900,000 MTA of ethylene through a productivity enhancement initiative to eliminate inefficiencies in, and optimize the operation of, its production processes. The Company's ability to build, operate and maintain production capacity and increase or diversify its output is subject to significant risks and uncertainties, including delays and cost overruns associated with the build-out of new or upgraded facilities, delays in obtaining necessary government approvals, problems with supplies of raw materials and equipment malfunctions and breakdowns.

In order to finance its facilities expansion, maintenance and upgrading plans in the future, the Company intends to use cash on hand, funds from operations and debt financing. However, no assurance can be given that such sources will provide it with sufficient amounts of capital in a timely manner or that necessary funds can be obtained on terms acceptable to the Company and within the limitations imposed by the terms of its existing or any future financings. Volatile financial market conditions and an increasing interest rate environment may also curtail the Company's ability to obtain adequate funding and/or increase its cost of borrowings, which would have an adverse effect on Company's liquidity and financial position. If the Company cannot meet its funding needs for capital expenditures, it may have to delay implementation of its production capacity expansion and upgrading plans. If the Company is unable to carry out its planned expansions and upgrades, it may not be able to meet customer demand, which could result in lower profitability and a loss in its market share. In addition, the Company's investments typically will be made well in advance of any sales that will be generated from making such expenditures. If unforeseen adverse market conditions lead to a decline in demand for the Company's products, which in turn results in a mismatch between sales volume and anticipated production volume, or if sales prices decline due to market oversupply or the Company encounters production difficulties, the Company may not be able to recover its investments, in part or in full, or the recovery of these investments may take longer than expected, which may materially and adversely affect its business, financial condition and results of operations.

Foreign exchange rate fluctuations between the Won and foreign currencies can adversely affect the Company's financial results.

The Company's consolidated financial statements are prepared from the local currency-denominated financial results, assets and liabilities of the Company and its subsidiaries around the world, which are then translated into Won. Accordingly, the Company's consolidated financial results and assets and liabilities may be materially affected by changes in exchange rates. A substantial portion of the Company's sales are denominated in currencies other than the Won, in particular the U.S. dollar, and the Company's purchases of crude oil and other raw material imports are primarily denominated in U.S. dollars. To the extent that the Company incurs costs in one currency and make sales in another, the Company's profit margins may be affected by changes in the exchange rates between the two currencies. Since the currency in which sales are recorded may not be the same as the currency in which expenses are incurred, exchange rate fluctuations may materially affect the Company's results of operations.

Depreciation of the Won against major foreign currencies causes:

- an increase in Won terms in costs denominated in such foreign currencies, including costs of crude oil and other raw materials that the Company purchases from overseas sources, expenses relating to labor and other costs of the Company's overseas operations and a substantial portion of the Company's freight costs, which are denominated principally in U.S. dollars;

- an increase in the amount of Won required for the Company to make interest and principal payments on its foreign currency-denominated debt; and

- foreign exchange translation losses on foreign currency-denominated liabilities, which lower the Company's earnings for accounting purposes.

Appreciation of the Won against major foreign currencies, on the other hand, causes:

- the Company's export products to be less competitive by raising the prices of its products in foreign currency terms; and

- a decrease in sales and accounts receivable in Won terms from export sales, which are primarily denominated in U.S. dollars.

The Company strives to naturally offset its foreign exchange risk by matching its foreign currency receivables with its foreign currency payables, and the Company's overseas subsidiaries have sought to further mitigate the adverse impact of exchange rate fluctuations by hedging their exposure through conducting business transactions in the local currency of the respective markets in which the transactions are engaged. The Company attempts to manage the remaining net exposure after natural hedges by entering into currency forward contracts. Although the impact of exchange rate fluctuations has in the past been partially mitigated by such strategies, the Company's results of operations have historically been affected by exchange rate fluctuations, which have become more volatile in recent periods as a result of increased levels of uncertainty and signs of deterioration in the global economy and financial markets. There can be no assurance that such strategies will be effective in reducing or eliminating the adverse impact of such fluctuations in the future. Due to the larger positive effects of the depreciation of the Won, the appreciation of the Won against major foreign currencies in the past generally has had a net negative impact on the Company's results of operations. Exchange rate fluctuations can also affect the Won value of the Company's equity investments and monetary assets and liabilities denominated in foreign currencies. Exchange rate fluctuations have had and may in the future have an adverse impact on the Company's business, financial condition and results of operations.

The Company's international operations are exposed to various risks.

Export sales represented approximately 72.6%, 73.1%, 73.6% and 73.2% of the Company's sales in 2022, 2023, 2024 and the first half of 2025, respectively, a significant portion of which was derived from sales to Southeast Asia, China, Australia, the United States and Japan. The Company also engages in production operations abroad, including through subsidiaries in China and the Czech Republic which operate production facilities for compounded polypropylene, and its overseas sales subsidiaries engage in local sales and marketing activities as well as providing regional logistics support. The Company intends to continue to expand its overseas operations by carefully seeking out promising business opportunities outside Korea as well as increasing the portion of its products produced and sold abroad. The demand and market acceptance for its products abroad are subject to a high level of uncertainty and are substantially dependent upon local market conditions. The Company cannot guarantee that its continued international expansion will be profitable or that it can recoup the costs related to its overseas investments.

Expansion of the Company's operations abroad requires management attention and personnel resources. The Company also faces additional risks associated with its operations outside Korea, including:

- fluctuations in exchange rates;

- increased costs associated with understanding overseas markets and monitoring international economic, industry and customer trends, as well as developing and maintaining effective production, marketing and distribution presences in various countries;

- providing efficient customer service and support in markets abroad;
- difficulty and costs relating to compliance with commercial and legal requirements in overseas markets, including those relating to labor and the environment and industry-specific regulations;
- foreign exchange controls and cash repatriation restrictions;
- unanticipated changes in local economic conditions;
- armed conflicts and sanctions imposed in response by the international community (such as the ongoing war between Russia and Ukraine since February 2022 and the ensuing actions that the United States and other countries have taken or may take in the future; see "—Activities of the Company and its subsidiaries relating to countries targeted by economic sanctions of the United States and other jurisdictions may subject the Company to sanctions under relevant laws and regulations, or may cause the Company to seek alternative sources of crude oil, either of which may adversely affect the Company's business, reputation and results of operations or investors in the Notes");
- political instability and civil unrest, cultural and religious conflicts, and acts of terrorism; and
- trade barriers such as local content requirements, tariffs, taxes and other restrictions and expenses.

The Company's overall success as a global business depends, in part, on its ability to manage such risks. The likelihood of the risks being realized and their potential impact on the Company or its business partners vary from country to country and are difficult to predict. The Company may not be able to develop and implement policies and strategies that will be effective in each location where it conducts business, and there can be no assurance that its exposure to such risks, which may become greater as the Company expands its international operations, will not adversely affect its business, financial condition and results of operations.

Impositions of anti-dumping duties, safeguard duties, countervailing duties, quotas or tariffs may have an adverse impact on the Company's export sales.

Exports account for a significant majority of the Company's sales. The Company continues to carefully monitor developments with respect to trade remedy policies, including anti-dumping duties, safeguard duties, countervailing duties, quotas or tariffs, in all major markets in which the Company sells its products and seeks to mitigate the related risks by adjusting supply and export arrangements as necessary. However, there can be no assurance that the trade agreements between Korea and its major trading partners will not be amended or that anti-dumping duties, safeguard duties, countervailing duties, quotas or tariffs will not be imposed on the Company's sales of products outside Korea in the future. The occurrence of any such events, including those described below, may have a material adverse impact on the Company's business, financial condition and results of operations.

In April 2025, the U.S. government imposed a universal "reciprocal" tariff which applies to all imports from all of its trading partners (including those with free trade agreements with the United States), with a base rate of 10%, subject to certain exceptions. In addition, the U.S. government announced higher rates to be imposed on imports from certain enumerated countries (including Korea at 15%) on a country-by-country basis, subject to certain exceptions, which implementation became effective on August 7, 2025. The imposition of any such tariffs may have a material adverse effect on the Company's sales of its products in the United States as well as on the Company's downstream customers that produce finished products using the Company's products in countries subject to such tariffs and export those products to the United States. The increases in costs and prices due to the imposition of any such tariffs may reduce consumer demand for such products in the United States, which may in turn adversely affect the demand for the Company's products.

Historically, tariffs have led to increased trade and political tensions. In response to the recent tariffs imposed by the U.S. government, various countries have implemented, or have announced plans to implement, retaliatory tariffs on goods produced in the United States. Political tensions as a result of trade policies could reduce trade volume, investment, technological exchange and other economic activities between major

international economies, resulting in a material adverse effect on global economic conditions and the stability of global financial markets. If further tariffs are imposed on a broader range of the Company's or its customers' exports, or if further retaliatory trade measures are taken by impacted foreign countries in response to additional tariffs, the Company or its customers may be required to adjust their prices or incur additional expenses, which may have a material adverse impact on the Company's business, financial condition and results of operations.

Concentration of operations at the Yeosu production complex may expose the Company to business interruption and other risks.

The Company's primary production facilities are located at its Yeosu complex in southern Korea. Processing, transporting and storing crude oil, refined petroleum products, petrochemical products and lubricant products involve many significant hazards which could result in fires, explosions, spills, blow-outs and other unexpected or dangerous conditions. In addition, the normal operations of the Company's production facilities may be interrupted by accidents caused by operating hazards, power supply disruptions, equipment failures, natural disasters or other events. See "—Unexpected events, such as health epidemics (including the global COVID-19 pandemic and any possible recurrence of other types of widespread infectious diseases), accidents and natural disasters, may adversely affect the Company's business, financial condition and results of operations." Any interruption (partial or complete) of the Company's operations at the Yeosu complex as a result of any such accidents or otherwise could materially and adversely affect the business, financial condition and results of operations of the Company. There can be no assurance that such events will not occur in the future or that the Company's production capacity will not be materially and adversely impacted as a result of such events.

While the Company believes that it maintains insurance coverage in amounts which conform to industry norms in Korea, if the production facilities at the Yeosu complex are damaged and the Company's operations are interrupted for a sustained period, there can be no assurance that the Company's insurance policies will be adequate to cover any or all of the losses that may be incurred as a result of such interruptions or the costs of repairing or replacing the damaged facilities. See "Business—Insurance."

Potential decrease in demand for refined petroleum and petrochemical products from China may result in downward pressure on prices of such products.

China is one of the largest consumers of refined petroleum and petrochemical products in the world, and one of the Company's largest export markets. Global prices of refined petroleum and petrochemical products are in significant part influenced by China's actual and anticipated levels of consumption of such products, which are in turn dependent on the economic and market conditions and growth rates in China. Any actual or anticipated decrease in Chinese consumption as a result of a slowdown in China's economic growth or otherwise could lead to an imbalance in supply and demand, which would result in downward pressure on prices of refined petroleum and petrochemical products. Any decline in the prices of refined petroleum or petrochemical products would cause the Company's operating margins to decrease, which could have a material adverse effect on the Company's business, financial condition and results of operations.

Disruptions in transportation of crude oil and the Company's products could have a material adverse effect on the Company's business, financial condition and results of operations.

The Company primarily utilizes the services of third parties to transport crude oil and refined petroleum, petrochemical and lubricant products to and from its production facilities. The cost of these services is significant and prevailing rates can be volatile depending on market conditions. In particular, the global COVID-19 pandemic caused significant disruption in the availability of crude oil transportation and a general increase in transportation costs in recent years. Increases in transportation rates could result in increased raw material costs or product distribution costs. The Company may experience an interruption of supply or increase in costs to deliver its products to the market if the ability of pipelines or vessels (including tankers, tank trucks and rail tank cars) to transport crude oil or products is disrupted due to inclement weather, natural disasters, global health epidemics, hostilities, accidents, governmental regulations or unanticipated third-party actions, including terrorist attacks. A prolonged or unanticipated disruption in transportation of crude oil or the Company's products could have a material adverse effect on the Company's business, financial condition and results of operations.

The Company's financial support to sales agents and the service stations in its distribution network is subject to credit risk.

The Company provides certain financial support to its sales agents and the service stations in its distribution network in the form of credit sales and loans. Such credit sales and loans are secured by collateral, consisting primarily of the real estate on which the service stations are located. Although the Company reviews the value of such collateral periodically to determine whether any depreciation in value has occurred, there can be no assurance that the amount of collateral the Company has received will be sufficient to secure the amount of the Company's credit extensions to its sales agents and service stations. Furthermore, any material increase in such financial support may have a material adverse effect on the Company's results of operations.

The Company is subject to contingent liabilities, including those associated with litigation, governmental proceedings or other disputes.

The Company may from time to time become a party to various litigation, arbitration or administrative proceedings arising in the ordinary course of business or otherwise. The Company is currently involved in various legal proceedings and claims that have not yet been fully resolved, which the Company does not believe to be material to its business, results or operations or financial conditions, and additional claims may arise in the future. See "Business—Legal Proceedings." Such proceedings are subject to significant uncertainty and may be expensive, time-consuming and disruptive to the Company's operations. An adverse resolution of litigation, arbitration, administrative or other proceedings or actions to which the Company is a party could have a material adverse effect on its business, financial condition and results of operations, including as a result of injunctive and other non-monetary remedies. Additionally, any amount that the Company may be required to pay to satisfy a judgment, settlement, fine or penalty may not be covered by its liability insurance policies. Legal proceedings, and any adverse resolution thereof, can also result in negative publicity and damage to the Company's reputation, which could adversely impact its business.

Work stoppages and other labor-related issues may adversely affect the Company's operations.

As of June 30, 2025, approximately half of the Company's employees in Korea were members of its labor union. The Company negotiates a collective bargaining agreement every two years with its labor union, which it last entered into in November 2023, and annually negotiates a wage agreement. The Company considers its current relations with its work force to be good and has not experienced any strikes or other material labor disputes since 2004. However, there can be no assurance that the Company's relationship with its employees will not deteriorate in the future. Any labor unrest, work stoppages or strikes could prevent the Company's production facilities from continuing normal operations, which in turn could have a material adverse effect on the business, financial condition and results of operations of the Company.

The Company may be exposed to risks and costs associated with protecting the integrity and security of confidential information.

The Company's business involves the storage and transmission of large amounts of confidential information relating to the Company as well as its customers and suppliers, and any breach in its cybersecurity could expose the Company to a risk of loss, the improper use or disclosure of such information, ensuing legal actions or potential liability, any of which could harm its reputation and adversely affect its business. Although there has been no material instance where an unauthorized party was able to obtain access to the Company's data or its customers' data, there can be no assurance that the Company will not be vulnerable to cyber-attacks in the future.

The Company's cybersecurity measures may also fail due to employee error, malfeasance or otherwise. Instituting appropriate access controls and safeguards across the Company's information technology infrastructure is challenging. Furthermore, outside parties may attempt to fraudulently induce employees to disclose sensitive information in order to gain access to the Company's or its customers' data or accounts or may otherwise obtain access to such data or accounts. Because the techniques used to obtain unauthorized access, disable or degrade service or sabotage systems change frequently and often are not recognized until launched against a target, the Company may be unable to anticipate these techniques or implement adequate preventative measures. If an actual or perceived breach of the Company's cybersecurity occurs or the market perception of the effectiveness of its cybersecurity measures is adversely affected, the Company may incur significant legal and financial exposure, including legal claims and regulatory fines and penalties, damage to its reputation and a loss of confidence of its customers, which could have an adverse effect on the Company's business, financial condition and results of operations.

Failure to protect the Company's intellectual property rights could cause its business to suffer.

The Company believes that developing new or improved refined petroleum, petrochemical or lubricant products or refining or processing technologies that can be differentiated from those of its competitors is an important factor for maintaining the success of its business. The Company takes active measures to protect its intellectual property by obtaining patents and undertaking monitoring activities in its major markets. However, the Company cannot guarantee that the measures it is taking will effectively deter competitors from improper use of the Company's proprietary technologies. The Company's competitors may misappropriate the Company's intellectual property, disputes as to ownership of intellectual property may arise and the Company's intellectual property may otherwise become known or be independently developed by its competitors. Any failure to protect the Company's intellectual property could impair its competitiveness and harm its business and future prospects.

The Company may be exposed to infringement or misappropriation claims by third parties, which, if determined adversely to the Company, could cause material harm to the Company.

The Company's continued success depends on its ability to use and develop its technology and know-how without infringing the intellectual property rights of third parties. The validity and scope of claims relating to patents involve complex scientific, legal and factual questions and analyses and, therefore, may be highly uncertain. Although the Company is currently not aware of any other parties pursuing or intending to pursue infringement claims against the Company, there can be no assurance that the Company will not be subject to such claims in the future. Also, because patent applications in many jurisdictions are kept confidential for an extended period before they are published, the Company may be unaware of pending patent applications by other parties that relate to the Company's technologies, products or processes.

The defense and prosecution of intellectual property suits, patent opposition proceedings and related legal and administrative proceedings can be both costly and time-consuming and may significantly divert the efforts and resources of the Company's technical and management personnel. An adverse determination in any such litigation or proceedings to which the Company may become a party could subject the Company to significant liability to third parties, require the Company to seek licenses from third parties, to pay ongoing royalties or to redesign its products or subject the Company to injunctions prohibiting the manufacture and sale of its products or the use of its technologies. Protracted litigation could also result in customers deferring or limiting their purchase or use of the Company's products until resolution of such litigation. The occurrence of any of the foregoing could have a material adverse effect on the business, financial condition and results of operations of the Company.

The interests of GS Energy and Chevron may conflict with those of the Company.

The Company is a joint venture between GS Energy and Chevron. GS Energy owns 50% of the Company's common stock while Chevron (Overseas) Holdings Ltd. owns 40% of the Company's common stock and Chevron Global Energy Inc. owns the remaining 10%. In addition, GS Energy and Chevron each appoints five members to the Company's board of directors. When exercising their rights as the Company's shareholders, GS Energy and Chevron may take into account not only the Company's interests but also their interests and the interests of their affiliates. While the Company believes that its interests are generally aligned at present with those of its shareholders and continually engages in discussions with its shareholders regarding its and their mutual interests, any potential conflict of interest may result in lost corporate opportunities for the Company, including opportunities to enter into lines of business that may overlap with those pursued by other energy-related businesses of GS Energy and Chevron. In addition, such shareholders may take actions contrary to the Company's policies or objectives, undergo a change of control, experience financial and other difficulties or be unable or unwilling to fulfill their obligations under the joint venture, which may materially and adversely affect the Company's business, financial condition and results of operations.

Risks Relating to Regulation

The Company and its operations are subject to extensive regulation of the petroleum refining industry by the Government.

Due to the importance of petroleum products to the Korean economy, the Government exercises significant control over the domestic petroleum refining industry. The Petroleum and Petroleum Alternative Fuel Business Act, as amended, confers on the Government the authority to exercise a wide range of controls over the Korean petroleum refining industry, including requiring maintenance of a certain storage capacity for, and volume of stockpile of, onshore crude oil and refined petroleum products. See "Government Regulation." The Government also has the ability to influence and control other government-related entities, some of which are the Company's customers.

From time to time, the Government also implements actions in furtherance of public policy considerations and the Government's broader objectives for the petroleum refining industry and the Korean economy, which are not necessarily in the Company's best commercial interest. For example, the Government introduced Government-operated discount service stations nationwide in 2011 in order to promote reduction in the retail prices of refined light oil products such as gasoline and diesel, which in turn has contributed to a decrease in the Company's margins from its petroleum refining business. Government policies and regulations relating to the domestic petroleum refining industry may change, and the Company cannot provide any assurance that future policy decisions or regulatory changes by the Government will not have an adverse effect on the Company's business, results of operations and financial condition.

The Company's operations are subject to anti-competitive regulations.

The Company is subject to regulation under the Monopoly Regulation and Fair Trade Act of Korea, which provides for antitrust regulations and restrictions enforced by the Korea Fair Trade Commission, as well as under similar laws and regulations of other countries. The Company has from time to time been subject to antitrust investigations in connection with alleged unfair anti-competitive practices and related legal proceedings. While the Company is currently not subject to any material antitrust claims, it may become subject to investigations and proceedings relating to antitrust claims in the future. Although the Company will seek to evaluate the merits of any future antitrust claims against it and to vigorously defend its position in connection therewith, it is possible that one or more of such claims may result in an unfavorable outcome. In addition, irrespective of the validity or the successful assertion of any such claims, the Company may incur significant costs with respect to litigating or settling the asserted claims. An adverse final resolution of any such claims or the imposition of any sanctions or penalties against the Company for anti-competitive practices could result in financial liability, damage to the Company's reputation, loss of experienced personnel or other consequences, any of which may have a material adverse effect on the Company's business, financial condition and results of operations.

The Company is subject to strict environmental, health and safety regulations.

Due to the nature of the Company's businesses, its operations generate a variety of chemicals, gases, by-products and other emissions and waste materials, and the Company is subject to various environmental laws and regulations in Korea and other jurisdictions in which it operates relating to the handling, use, storage, discharge, treatment and disposal of petroleum-based products. The Company is also subject to regulation and periodic monitoring by environmental protection authorities in various jurisdictions. See "Business—Environmental Matters." The Company has incurred, and expects to continue to incur, capital and operating costs to comply with such environmental laws and regulations. The Company may be responsible for the investigation and remediation of environmental conditions at its production sites, and the Company may also be subject to associated liabilities, including liabilities for environmental damage, third party property damage or personal injury resulting from lawsuits brought by governmental authorities or private litigants. In the course of the Company's operations, hazardous wastes may be generated at third party-owned or operated sites, and hazardous wastes may be disposed of or treated at third party-owned or operated disposal sites. If those sites become contaminated, the Company could also be held responsible for the cost of investigation and remediation of such sites, for any associated environmental damage, and for civil or criminal fines or penalties.

The Company has installed various types of anti-pollution equipment and implemented processes consistent with industry standards to minimize energy use and reduce the industrial wastes generated at its production facilities. However, any failure on the Company's part to comply with any present or future environmental regulations could result in the assessment of damage or imposition of fines against the Company or suspension of its production. See "Business—Legal Proceedings." In addition, more stringent environmental laws and regulations could require the Company to acquire additional anti-pollution equipment or incur other significant compliance expenses. The Company's non-compliance with the relevant environmental regulations, or the perception that the Company has not appropriately responded to growing consumer concerns for environmental issues, may adversely affect the Company's reputation, business, financial condition and results of operations.

Furthermore, heightened global awareness and international and national commitments to reduce greenhouse gas emissions and counteract climate change (including increased activism by non-governmental and political organizations campaigning against fossil fuel extractions) may lead to increased costs for the Company. For example, the Glasgow Climate Pact which was agreed to at the 2021 United Nations Climate Change Conference ("COP26") in November 2021 includes commitments to phase down the use of unabated coal power and inefficient fossil fuel subsidies. The Government also announced its commitment to reduce greenhouse gas emissions by 40% by 2030 at COP26, and such commitments were reconfirmed at the 2022 United Nations Climate Change Conference ("COP27") in Egypt in November 2022. In addition, COP28 in Dubai in December 2023 resulted in an agreement to transition away from fossil fuels to achieve net-zero emissions by 2050 as well as to triple renewable energy capacity globally by 2030. Carbon tax proposals in various jurisdictions as well as consumer preference changes in response to growing concerns of climate change could stimulate the emergence of alternative technologies and renewable energy availability, which may impact the market demand for refined petroleum products while increasing the Company's corporate expenses. Investor preferences and sentiments are also influenced by environmental, social and corporate governance considerations including climate change and the transition to a lower carbon economy. Changes in such preferences and sentiment, including increased scrutiny from market participants, environmental organizations or the press could have an adverse effect on the Company's debt issuances, could affect the Company's access to the capital markets and its attractiveness to potential investors, potentially resulting in reduced access to financing, increased financing costs, potential volatility in the price(s) of the Company's outstanding debt securities as well as on its business plans and financial performance.

In addition, in January 2021, the National Assembly enacted the Serious Accidents Punishment Act (the "SAPA") to prevent serious accidents and to protect the safety of the public and workers by punishing the responsible management personnel (the "RMP") who caused such serious accidents. The SAPA, which became effective in January 2022, imposes direct obligations on the RMP, who has the authority and responsibility to represent the business and to take certain health and safety measures as further elaborated in a presidential decree thereof. The SAPA also obligates businesses to adopt a health and safety system and take other measures to prevent serious workplace accidents and public disasters. If a serious workplace accident occurs and the Company is found not to be in compliance with its obligations under the SAPA, the Company and its RMP may be subject to criminal sanctions and, in the case of the Company, punitive damages, which may adversely affect the Company's reputation, business, financial condition and results of operations.

Related party transactions with member companies of the GS Group are subject to scrutiny by the Korea Fair Trade Commission.

The Company's business relationships and transactions with its subsidiaries and affiliates are subject to ongoing scrutiny by the Korea Fair Trade Commission as to, among other things, whether such relationships and transactions constitute undue financial support among companies of the same business group. The Company engages in various transactions with its subsidiaries and affiliates on an arm's-length basis. See "Certain Relationships and Related Party Transactions." The Company is also subject to fair trade regulations limiting cross-guarantees of debt and cross-shareholdings among member companies of the GS Group. In addition, the Company's material business transactions with its subsidiaries, affiliates and member companies of the GS Group will be subject to approval by its board of directors pursuant to the Korean Commercial Code and the Monopoly Regulation and Fair Trade Act and are subject to public disclosure requirements under the Monopoly Regulation and Fair Trade Act. Any future determinations by the Korea Fair Trade Commission that the Company has engaged in transactions that violate the fair trade laws and regulations may result in fines or other punitive measures and may have a material adverse effect on the Company's reputation and its business.

Related party transactions are subject to scrutiny by the Korean tax authorities.

Under Korean tax law, there is an inherent risk that the Company's transactions with its subsidiaries, affiliates or any other person or company that is related to the Company may be challenged by the Korean tax authorities if such transactions are viewed as having been made on terms that were not on an arm's-length basis. If the Korean tax authorities determine that any of the Company's transactions with related parties was not on an arm's-length basis, the Company would not be permitted to deduct the amount equivalent to such undue financial support as expenses, which may have adverse tax consequences for the Company.

Risks Relating to Korea

If economic conditions in Korea deteriorate, the Company's current business and future growth could be materially and adversely affected.

The Company is incorporated in Korea and a significant majority of its assets are located in Korea. Furthermore, sales in Korea account for a significant portion of the Company's sales. As a result, the Company is subject to political, economic, legal and regulatory risks specific to Korea, and the Company's performance and successful fulfillment of its operational strategies are dependent in large part on the overall Korean economy. The economic indicators in Korea in recent years have shown mixed signs of growth and uncertainty, and future growth of the Korean economy is subject to many factors beyond the Company's control, including developments in the global economy. Any future deterioration of the Korean or global economy could adversely affect the Company's business, financial condition and results of operations.

Following a period of deterioration due to the debilitating effects of the COVID-19 pandemic on the Korean economy as well as on the economies of Korea's major trading partners in 2020, the overall Korean economy showed signs of recovery in 2021. However, adverse conditions and volatility in the worldwide financial markets, fluctuations in oil and commodity prices, supply chain disruptions and the increasing weakness of the global economy, as well as significant fluctuations in policy interest rates globally (including in Korea), have contributed to the uncertainty of global economic prospects in recent years and have adversely affected, and may continue to adversely affect, the Korean economy. The value of the Won relative to major foreign currencies, in particular the U.S. dollar, has fluctuated significantly and, as a result of uncertain global and Korean economic, social and political conditions, there has been significant volatility in the stock prices of Korean companies recently. Future declines in the Korea Composite Stock Price Index, and large amounts of sales of Korean securities by foreign investors and subsequent repatriation of the proceeds of such sales may adversely affect the value of the Won, the foreign currency reserves held by financial institutions in Korea, and the ability of Korean companies to raise capital. Any future deterioration of the Korean or global economy could adversely affect the Company's business, financial condition and results of operations and the market price of the Notes.

Other developments that could have an adverse impact on Korea's economy include:

- declines in consumer confidence and a slowdown in consumer spending, including as a result of higher levels of market interest rates;
- rising inflationary pressures leading to increases in costs of goods and services and a decrease in purchasing power;
- political uncertainty or increasing strife among or within political parties in Korea following the declaration of martial law by former President Yoon Suk-yeol in December 2024 that led to his impeachment and subsequent removal in April 2025 and the election of Mr. Lee Jae-myung as President in June 2025;
- hostilities or political or social tensions involving Russia (including the Russia-Ukraine war and the ensuing actions against Russia) and any resulting adverse effects on the global supply of oil and other natural resources or the global financial markets;
- adverse conditions or developments in the economies of countries and regions that are important export markets for Korea, such as China, the United States, Europe and Japan, or in emerging market economies in Asia or elsewhere, including as a result of the deterioration of economic and trade relations among such countries (including increases in tariffs) and increased uncertainties in the global financial markets and industry;

- adverse changes or volatility in foreign currency reserve levels, interest rates, inflation rates, commodity prices (including oil prices), exchange rates (including fluctuations of the U.S. dollar, Euro or Japanese Yen exchange rates or revaluation of the Chinese Yuan) or stock markets;

- the occurrence of severe health epidemics in Korea or other parts of the world;

- deterioration in economic or diplomatic relations between Korea and its trading partners or allies, including deterioration resulting from territorial or trade disputes or disagreements in foreign policy;

- the economic impact of any pending or future free trade agreements or of any changes to existing free trade agreements;

- increased sovereign default risks in select countries and the resulting adverse effects on the global financial markets;

- deterioration in the financial condition or performance of small- and medium-sized enterprises and other companies in Korea;

- investigations of large Korean business groups and their senior management for possible misconduct;

- continuing rise in the level of household debt and increasing delinquencies and credit defaults by retail and small- and medium-sized enterprise borrowers in Korea;

- shortages of imported raw materials, natural resources, rare earth minerals or component parts due to disruptions to the global supply chain;

- social and labor unrest;

- substantial changes in the market prices of Korean real estate;

- a substantial decrease in tax revenues and a substantial increase in the Government's expenditures for fiscal stimulus measures, unemployment compensation and other economic and social programs, which would likely lead to a national budget deficit as well as an increase in the Government's debt;

- financial problems or lack of progress in the restructuring of Korean business groups, other large troubled companies, their suppliers or the financial sector;

- loss of investor confidence arising from corporate accounting irregularities or corporate governance issues concerning certain Korean companies;

- increases in social expenditures to support an aging population in Korea or decreases in economic productivity due to the declining population size in Korea;

- a continued decrease in the population and birthrates in Korea;

- geopolitical uncertainty and the risk of further attacks by terrorist groups around the world;

- hostilities or political or social tensions involving countries in the Middle East (including those resulting from the hostilities in the Middle East following the Israel-Hamas war and the Iran-Israel conflict) and Northern Africa and any material disruption in the global supply of oil or sudden increase in the price of oil;

- natural or man-made disasters that have a significant adverse economic or other impact on Korea or its major trading partners; and

- an increase in the level of tensions or an outbreak of hostilities between North Korea and Korea or the United States.

Escalations in tensions with North Korea could have an adverse effect on the Company and the market value of the Notes.

Relations between Korea and North Korea have been tense throughout Korea's modern history. The level of tension between the two Koreas has fluctuated and may increase abruptly as a result of current and future events. In particular, there have been heightened security concerns in recent years stemming from North Korea's nuclear weapon and ballistic missile programs as well as its hostile military actions against Korea. Some of the significant incidents in recent years include the following:

- North Korea renounced its obligations under the Nuclear Non-Proliferation Treaty in January 2003 and has conducted six rounds of nuclear tests since October 2006, including claimed detonations of hydrogen bombs and warheads that can be mounted on ballistic missiles. Over the years, North Korea has continued to conduct a series of missile tests, including missiles launched from submarines and intercontinental ballistic missiles that it claims can reach the United States mainland. North Korea has increased the frequency of such activities since the beginning of 2022, firing numerous ballistic missiles, including intercontinental ballistic missiles, and in November 2023, successfully launched its first spy satellite. In response, the Government has repeatedly condemned the provocations and flagrant violations of relevant United Nations Security Council resolutions. In February 2016, the Government also closed the inter-Korea Gaeseong Industrial Complex in response to North Korea's fourth nuclear test in January 2016. Internationally, the United Nations Security Council has passed a series of resolutions condemning North Korea's actions and significantly expanding the scope of sanctions applicable to North Korea. Over the years, the United States and the European Union have also expanded their sanctions applicable to North Korea.

- In March 2010, a Korean naval vessel was destroyed by an underwater explosion, killing many of the crewmen on board. The Government formally accused North Korea of causing the sinking, while North Korea denied responsibility. Moreover, in November 2010, North Korea fired more than 100 artillery shells that hit Korea's Yeonpyeong Island near the Northern Limit Line, which acts as the de facto maritime boundary between Korea and North Korea on the west coast of the Korean peninsula, causing casualties and significant property damage. The Government condemned North Korea for the attack and vowed stern retaliation should there be further provocation.

North Korea's economy also faces severe challenges, which may further aggravate social and political pressures within North Korea. Although bilateral summit meetings between Korea and North Korea were held in April, May and September 2018 and between North Korea and the United States in June 2018, February 2019 and June 2019, there can be no assurance that the level of tensions affecting the Korean peninsula will not escalate in the future. Any increase in tensions, which may occur, for example, if North Korea experiences a leadership crisis, high-level contacts between Korea and North Korea or between the United States and North Korea break down or military hostilities occur, could have a material adverse effect on the Korean economy and on the Company's business, financial condition and results of operations and the market value of the Notes.

There are special risks involved with investing in securities of Korean companies.

As the Company is a Korean company and operates in a business and cultural environment that is different from that of other countries, there are risks associated with investing in its securities that are not typical for investments in securities of companies in other jurisdictions.

Under the Foreign Exchange Transaction Act of Korea and the Presidential Decree and regulations under that Act and Decree (collectively referred to as the "Foreign Exchange Transaction Laws"), if the Government deems that certain emergency circumstances, including sudden fluctuations in interest rates or exchange rates, extreme difficulty in stabilizing the balance of payments or substantial disturbance in the Korean financial and capital markets, are likely to occur, it may impose any necessary restriction such as requiring Korean or foreign investors to obtain prior approval from the Minister of Economy and Finance for the acquisition of Korean securities or for the repatriation of interest, dividends or sales proceeds arising from Korean securities or other types of capital transactions. Moreover, if the Government deems it necessary on account of war, armed conflict, natural disaster or grave and sudden changes in domestic or foreign economic circumstances or similar events or circumstances, the Minister of Economy and Finance may temporarily suspend performance under any or all foreign exchange transactions, in whole or in part, to which the Foreign Exchange Transaction Laws apply (including suspension of payment and receipt of foreign exchange) or impose an obligation to deposit or sell any means of payment to the Bank of Korea or certain other governmental agencies or financial institutions.

In addition, the Company's audited consolidated financial statements included in this Offering Circular are presented in accordance with K-IFRS and its future financial statements will be prepared in accordance with K-IFRS, which differ in certain respects from accounting principles applicable to companies in certain other countries, including the United States. In making an investment decision, investors must rely upon their own examination of the Company, the terms of the offering and the financial and other information contained in this Offering Circular.

Risks Relating to the Notes

Credit ratings are periodically assigned to the Company and the Notes.

The Company and its debt securities, including the Notes, are subject to periodic review by independent credit rating agencies. Accordingly, increases in the level of the Company's outstanding indebtedness, a deterioration in its operating performance or other events could cause the rating agencies to downgrade the Company's credit ratings generally and the ratings on the Notes, which could adversely impact the trading prices for, or the liquidity of, the Notes. Any such downgrade could also adversely affect the Company's cost of borrowing, limit its access to the capital markets or result in more restrictive covenants in future debt agreements.

The Notes are expected to be rated Baa1 by Moody's and BBB+ by S&P. The credit ratings assigned to the Notes are limited in scope, and may not reflect the potential impact of all risks related to structure and other factors that may affect the value of the Notes. Each agency's rating should be evaluated independently of any other agency's rating. A credit rating is not a recommendation to buy, sell or hold the Notes and may be subject to revision, suspension or withdrawal at any time by the assigning rating agency. There can be no assurance that these ratings will remain in effect for a given period or that these ratings will not be revised by the rating agencies in the future.

The Notes constitute unsecured obligations of the Company and, as a result, their repayment may be compromised under certain circumstances.

Because the Notes are unsecured obligations, their repayment may be compromised if:

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

If any of these events occurs, the Company's assets may not be sufficient to pay amounts due on any of the Notes. In addition, any secured indebtedness incurred by the Company would have priority over its unsecured indebtedness to the extent of the assets securing such indebtedness.

There is no existing trading market for the Notes and, therefore, the Notes offer limited liquidity.

The Notes constitute a new issue of securities for which there is no existing market. Approval in-principle has been received from the SGX-ST for the listing and quotation of the Notes on the SGX-ST. The offer and sale of the Notes is not conditioned on obtaining a listing of the Notes on the SGX-ST or any other exchange. Although the Initial Purchasers have advised the Company that they currently intend to make a market in the Notes, they are not obligated to do so, and any market-making activity with respect to the Notes, if commenced, may be discontinued at any time without notice at their sole discretion. For a further discussion of the Initial Purchasers' planned market-making activities, see "Plan of Distribution."

No assurance can be given as to the liquidity of, or the development and continuation of an active trading market for, the Notes. If an active trading market for the Notes does not develop or is not maintained, the market price and liquidity of the Notes may be adversely affected. If such a market were to develop, the Notes could trade at prices that may be higher or lower than the price at which the Notes are issued depending on many factors, including:

- prevailing interest rates;
- the Company's results of operations and financial condition;
- political and economic developments in and affecting Korea;
- the market conditions for similar securities; and
- the financial condition and operating performance of the Korean petroleum refining and petrochemical sectors.

The Notes are subject to certain transfer restrictions.

The Notes 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 to QIBs in reliance on the exemption provided by Rule 144A, to certain persons in offshore transactions in reliance on Regulation S, or pursuant to another available exemption from, or in another transaction not subject to, the registration requirements of the Securities Act and in accordance with applicable state securities laws. In addition, subject to the conditions set forth in the Fiscal Agency Agreement (as defined in "Terms and Conditions of the Notes"), a Note may be transferred only if the principal amount of Notes transferred is at least US$200,000. For a further discussion of the transfer restrictions applicable to the Notes, see "Terms and Conditions of the Notes" and "Transfer Restrictions."

The Notes have not been and will not be registered under the FSCMA. Accordingly, the Notes may not be offered, sold or delivered, directly or indirectly, in Korea or to, or for the account or benefit of, any resident of Korea (as such term is defined under the Foreign Exchange Transactions Act of Korea and its Enforcement Decree), or to others for re-offering or resale, directly or indirectly, in Korea or to any residents of Korea, except as otherwise permitted under applicable Korean laws and regulations. In addition, during the first year after the issuance of the Notes, the Notes may not be transferred to any resident of Korea other than a Korean QIB who is registered with the KOFIA as a Korean QIB, provided that the amount of the Notes acquired by such Korean QIBs in the primary market is limited to no more than 20% of the aggregate issue amount of the Notes.

Prescription regulations in Korea apply to the Notes.

Failure to exercise a right of action for more than a certain period of time may operate as a bar to exercise of such right. Under Korean laws, claims against the issuer in respect of the payment of principal of notes or bonds are prescribed upon the expiry of five years, and claims for payment of interest in respect of such notes or bonds are also prescribed upon the expiry of five years (three years if the payment for such interest is due within a year), in each case from the relevant due date as adjusted by any acceleration or otherwise, in respect thereof, as set forth in Article 64 of the Commercial Code and Article 163 of the Civil Act of Korea. If a Noteholder fails to exercise his or her right of payment for longer than the period set forth above, the Korean courts may not enforce a claim for payment for principal or interest in respect of the Notes.

Risks Relating to Forward-Looking Statements

This offering circular contains forward looking statements that are management's present expectations of future events and are subject to certain factors and uncertainties that could cause actual results to differ materially from those described in the forward looking statements.

In addition to the risks related to the Company's business discussed above, other factors could cause actual results to differ materially from those described in the various forward-looking statements contained in this Offering Circular, including the statements relating to the Company's use of proceeds from the offering. These factors include, but are not limited to, the following:

- general economic, business and political conditions;
- fluctuations in commodity prices, particularly the price of crude oil;
- adverse developments in the global financial markets;
- regulatory developments in the energy industry;
- declines in consumer confidence;
- the ability of third parties to perform in accordance with contractual terms and specifications;
- changes in interest rates and exchange rates;
- expansion and other development trends in the energy industry;
- success of the Company's business strategy, including expansion and growth of its operations;
- seasonality;
- the Company's leverage and its ability to meet its debt obligations;
- environmental risks and hazards and the costs of compliance with environmental regulations; and
- conditions in the Korean and global financial markets.

By their nature, certain disclosures relating to these and other risks are only estimates and should one or more of these uncertainties or risks materialize, actual results may vary materially from those estimated, anticipated or projected, as well as from historical results. Specifically but without limitation, revenues could decrease, costs (including capital costs) could increase, investments could be delayed and anticipated improvements in performance might not be fully realized.

The Company cautions you not to rely on the forward-looking statements, which speak only as of the date of this Offering Circular. Except as required by law, the Company is not under any obligation, and expressly disclaims any obligation, to update or alter any forward-looking statements, whether as a result of new information, future events or otherwise. All subsequent forward-looking statements attributable to the Company or any person acting on the Company's behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section.

USE OF PROCEEDS

The Company expects to use the net proceeds from the Notes, estimated to be US$297,471,000 (after deduction of Initial Purchasers' discounts but not estimated offering expenses), principally for general corporate purposes.

CAPITALIZATION

The following table sets forth the Company's capitalization (defined as the sum of long-term borrowings and bonds, excluding current portion, and total equity) as of June 30, 2025 as derived from the unaudited consolidated interim financial statements of the Company as of June 30, 2025 and as adjusted to give effect to the issuance of the Notes offered hereby, before deducting the Initial Purchaser's discounts and estimated offering expenses payable by the Company and on the assumption that the proceeds from the issuance of the Notes will not be used for the immediate repayment of outstanding borrowings. For additional information, see "Selected Consolidated Financial and Other Data" and the unaudited consolidated interim financial statements of the Company and the notes thereto included elsewhere in this Offering Circular.

	As of June 30, 2025	
	Actual	**As adjusted**
	(in billions of Won)	
Long-term debt:		
Long-term bonds, excluding current portion	₩ 1,502	₩ 1,502
Long-term borrowings, excluding current portion	234	234
Notes offered hereby[(1)]	–	407
Total long-term debt	1,736	2,143
Equity:		
Common stock of ₩10,000 par value, Authorized: 27,000,000 shares; Issued: 26,000,000 shares	260	260
Capital surplus	68	68
Capital adjustments	(61)	(61)
Accumulated other comprehensive loss	41	41
Retained earnings	12,673	12,673
Total equity	12,981	12,981
Total capitalization	₩14,717	₩15,124

(1) Translated into Won at Won 1,356.4 to US$1.00, the Market Average Exchange Rate in effect on June 30, 2025.

Other than as indicated herein, there has been no material change in the Company's total capitalization since June 30, 2025.

EXCHANGE RATES

The following table sets out, for the periods and dates indicated, information concerning the Market Average Exchange Rate. No representation is made that the Won or U.S. dollar amounts referred to herein could have been or could be converted in U.S. dollars or Won, as the case may be, at any particular rate or at all.

Period	At End of Period	Average Rate[(1)]	High	Low
		(Won per US$1.00)		
2020	1,088.0	1,180.1	1,280.1	1,082.7
2021	1,185.5	1,144.4	1,199.1	1,083.1
2022	1,267.3	1,292.0	1,436.6	1,185.5
2023	1,289.4	1,305.4	1,360.6	1,219.3
2024	1,470.0	1,364.0	1,474.1	1,289.4
2025 (through October 21)	1,420.2	1,413.0	1,482.9	1,352.6
May	1,381.4	1,394.5	1,426.9	1,365.0
June	1,356.4	1,367.0	1,381.9	1,356.4
July	1,382.9	1,375.2	1,391.9	1,352.6
August	1,388.6	1,389.7	1,399.3	1,382.2
September	1,402.2	1,391.8	1,411.6	1,380.0
October (through October 21)	1,420.2	1,417.1	1,428.4	1,401.9

Source: Seoul Money Brokerage Services, Ltd.

(1) The average rate for each period is calculated as the average of the Market Average Exchange Rates on each business day during the relevant period (or portion thereof).

SELECTED CONSOLIDATED FINANCIAL AND OTHER DATA

The following tables present summary financial and other information of the Company. The selected financial information as of and for the years ended December 31, 2022, 2023 and 2024 are derived from the audited consolidated financial statements of the Company included elsewhere in this Offering Circular, which have been prepared in accordance with K-IFRS. The summary financial information presented as of June 30, 2025 and for the six months ended June 30, 2024 and 2025 are derived from the unaudited consolidated interim financial statements of the Company included elsewhere in this Offering Circular, which have been prepared in accordance with K-IFRS No. 1034 "Interim Financial Reporting."

The Company's results of operations for the six months ended June 30, 2025 may not be indicative of its result of operations for any future interim period or for the full year 2025.

STATEMENT OF INCOME (LOSS) INFORMATION

	For the year ended December 31,			For the six months ended June 30,	
	2022	2023	2024	2024	2025
	(in billions of Won)				
Sales	₩ 58,532	₩ 48,608	₩ 47,614	₩ 24,499	₩ 21,838
Cost of sales	(53,298)	(45,758)	(45,953)	(23,309)	(21,421)
Selling, general and administrative expenses	(1,255)	(1,166)	(1,113)	(566)	(559)
Operating profit (loss)	3,980	1,684	548	625	(141)
Share of profit of equity method accounted investees	18	15	14	12	8
Finance income	3,468	4,027	2,454	1,139	1,833
Finance costs	(3,737)	(4,235)	(2,922)	(1,387)	(1,758)
Other income	470	297	255	112	182
Other expenses	(418)	(264)	(227)	(94)	(166)
Profit (loss) before income tax	3,780	1,524	122	406	(43)
Income tax expense	(991)	(371)	(13)	(89)	(1)
Profit (loss) for the period	₩ 2,789	₩ 1,153	₩ 109	₩ 317	₩ (45)
Profit (loss) attributable to:					
Owners of the parent company	₩ 2,789	₩ 1,153	₩ 109	₩ 317	₩ (45)
Non-controlling interests	–	–	–	–	–

STATEMENT OF COMPREHENSIVE INCOME (LOSS) INFORMATION

Profit (loss) for the period	₩ 2,789	₩ 1,153	₩ 109	₩ 317	₩ (45)
Total other comprehensive income (loss) for the period, net of tax	18	(58)	28	33	(29)
Total comprehensive income (loss) for the period	₩ 2,808	₩ 1,094	₩ 137	₩ 349	₩ (74)
Total comprehensive income (loss) attributable to:					
Owners of the parent company	₩ 2,808	₩ 1,094	₩ 137	₩ 349	₩ (74)
Non-controlling interests	–	–	–	–	–

STATEMENT OF FINANCIAL POSITION INFORMATION

	As of December 31,			As of June 30,
	2022	2023	2024	2025
	(in billions of Won)			
Assets				
Cash and cash equivalents	₩ 1,561	₩ 1,265	₩ 1,276	₩ 1,093
Accounts and notes receivable	3,964	3,913	3,681	3,446
Short-term financial assets	1,805	298	309	337
Inventories	5,566	5,759	5,095	4,497
Prepaid income taxes	1	1	50	2
Other current assets	317	1,008	1,036	944
Assets held for sale	–	–	15	28
Total current assets	13,213	12,244	11,462	10,346
Long-term financial assets	315	285	344	257
Investments in associates	283	315	338	347
Property, plant and equipment	11,980	11,275	10,835	10,723
Investment properties	37	41	58	58
Intangible assets	70	70	77	73
Defined benefit assets, net	113	65	29	52
Deferred income tax assets	3	3	6	6
Other non-current assets	25	25	25	23
Total non-current assets	12,826	12,078	11,711	11,539
Total assets	₩26,039	₩24,322	₩23,174	₩21,885
Liabilities				
Accounts payable – trade	₩ 2,662	₩ 2,832	₩ 2,999	₩ 2,053
Short-term financial liabilities	4,354	2,932	2,711	3,097
Income taxes payable	997	295	11	9
Other current liabilities	77	985	1,074	1,273
Total current liabilities	8,089	7,043	6,794	6,432
Long-term financial liabilities	4,260	3,558	3,123	2,318
Defined benefit liabilities, net	–	2	3	4
Deferred income tax liabilities	110	149	80	77
Other non-current liabilities	60	72	75	73
Total non-current liabilities	4,429	3,780	3,281	2,472
Total liabilities	12,519	10,823	10,075	8,904
Equity				
Common stock	260	260	260	260
Capital surplus	68	68	68	68
Capital adjustments	(61)	(61)	(61)	(61)
Accumulated other comprehensive income	29	8	71	41
Retained earnings	13,224	13,224	12,760	12,673
Equity attributable to owners of the parent company	13,520	13,499	13,099	12,981
Non-controlling interests	–	–	–	–
Total equity	13,520	13,499	13,099	12,981
Total liabilities and equity	₩26,039	₩24,322	₩23,174	₩21,885

OTHER FINANCIAL INFORMATION

	As of or for the year ended December 31,			As of or for the six months ended June 30, 2025
	2022	2023	2024	
	(in billions of Won)			
Capital expenditures[(1)]	₩ 527	₩ 534	₩ 585	₩ 410
Depreciation and amortization	1,061	1,060	988	492
Net cash provided by operating activities	1,459	2,050	1,918	429
Net cash used in investing activities	(476)	(331)	(499)	(356)
Net cash used in financing activities	(507)	(2,019)	(1,438)	(241)
Ratio of total debt to equity[(2)]	0.42	0.37	0.34	0.32

(1) Represents acquisitions of property, plant and equipment as presented in the Company's statements of cash flows.

(2) Calculated by dividing (i) the sum of (a) short-term borrowings, (b) current portion of long-term borrowings and bonds and (c) long-term borrowings and bonds by (ii) total equity.

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

The following discussion and analysis of the Company's consolidated financial information as of and for the years ended December 31, 2022, 2023 and 2024 and as of June 30, 2025 and for the six months ended June 30, 2024 and 2025 should be read in conjunction with the Company's audited consolidated annual financial statements and related notes included in this Offering Circular, which have been prepared in accordance with K-IFRS, and the Company's unaudited consolidated interim financial statements and related notes included in this Offering Circular, which have been prepared in accordance with K-IFRS No. 1034 "Interim Financial Reporting."

OVERVIEW

The Company is one of the largest petroleum refining companies in Korea, as well as a leading producer of certain petrochemical products. The Company's business activities are organized into three principal business segments, as follows:

- **Petroleum refining**: The petroleum refining segment produces a broad range of refined petroleum products, including gasoline, kerosene and diesel as well as other types of light oil, middle distillates and heavy oil;

- **Petrochemicals**: The petrochemicals segment produces various aromatics products (including benzene, paraxylene, toluene, mixed xylene and solvents), polypropylene and other polymer products, and ethylene and polyethylene products; and

- **Lubricants**: The lubricants segment produces a variety of lubricant oil and grease products for automobiles, marine vessels and industrial machinery, as well as base oil used as raw materials for lubricant oil.

Factors Affecting Results of Operations and Financial Condition of the Company

The results of operations and financial condition of the Company, including its operating profit and such profit as a percentage of total sales (or operating margin), have been and will continue to be materially affected by a number of factors, some of which are outside of the Company's control, including:

- changes in the price of crude oil;

- fluctuations in exchange rates of major foreign currencies;

- conditions in the Korean and global economies;

- competition in the Korean and global petroleum refining, petrochemical and lubricant industries;

- the level of, and returns on, the Company's capital expenditures and production capacity expansion; and

- changes in the Company's product mix.

Changes in the Price of Crude Oil

The Company's earnings and cash flows from operations depend primarily on the margins at which the Company is able to sell refined petroleum and other products relative to its fixed and variable expenses, including the costs of crude oil and other feedstock. As crude oil constitutes the most important component of the Company's raw material requirements, the Company's financial performance is significantly impacted by the market price of crude oil. The market price of crude oil has fluctuated significantly in recent years, and the average price of Dubai crude oil on the spot market was US$96.3, US$82.1 and US$79.6 per barrel in 2022, 2023 and 2024, respectively, and US$71.9 per barrel in the first half of 2025. The market price and supply of imported crude oil are subject to a variety of factors that are beyond the control of the Company, including the following:

- activities of OPEC+ and other petroleum producing nations in setting and maintaining production levels and, therefore, market prices;
- political developments, hostilities and instability in petroleum producing regions, in particular the Middle East and Russia;
- changes in international sanctions applicable to petroleum producing nations, such as Russia and Iran, which affect their ability to produce and export crude oil;
- the development, market prices and supply levels of substitute energy sources, such as liquefied natural gas, coal, nuclear energy, solar energy and hydropower;
- the level of commitment and investment by governments and private sector enterprises in new, greenfield exploration projects and shale oil extraction projects and the success of such activities in increasing the global supply of oil for commercial applications;
- the continued increase in popularity of electric vehicles, which would negatively impact demand for refined petroleum products and, in turn, crude oil;
- the occurrence of unexpected events, such as severe health epidemics (including the global COVID-19 pandemic) and large-scale natural disasters, affecting the global economy;
- Korean as well as foreign government regulations and policies with respect to the oil and energy industries;
- the growth in demand for energy resources in China and other large emerging economies;
- global weather conditions;
- exchange rate and interest rate fluctuations;
- expectations of inflation; and
- overall Korean and global economic and financial conditions (including the negative impact of tariffs and other economic barriers imposed by major economies).

In particular, the ongoing war between Russia and Ukraine since February 2022 and the ensuing sanctions imposed against Russia, as well as the decisions by the member countries of OPEC+ to reduce their crude oil supply volume from October 2022 (which reductions were extended into the first half of 2025 until those countries decided to begin increasing their crude oil supply volume commencing in April 2025), have caused, and may continue to cause, significant volatility in the supply and price level of crude oil.

In order to mitigate the effect of price volatility in the crude oil market on the Company's operations, the Company attempts to manage its exposure to crude oil price risk primarily through adjusting the purchase volume of crude oil. In addition, from time to time, the Company uses commodity derivatives to further mitigate such risk. While the Company has historically been able to pass on a substantial portion (but not all) of the increase in costs of crude oil imports to its customers through price increases for its refined petroleum products, which typically lag between one to two weeks, there can be no assurance that the Company will continue to be able to pass on such increased costs without negatively impacting customer demand or the Company's long-term relationship with customers. Increases in the prices of crude oil also correspondingly increase the short-term financing needs of the Company. See "Risk Factors—Risks Relating to the Company—Fluctuations in market prices of crude oil may adversely affect the Company's margins and profits."

Fluctuations in Exchange Rates

A substantial portion of the Company's sales are denominated in currencies other than the Won, in particular the U.S. dollar, and the Company's purchases of crude oil and other raw material imports are primarily denominated in U.S. dollars. To the extent that the Company incurs costs in one currency and makes sales in another, the Company's profit margins may be affected by changes in the exchange rates between the two currencies.

Depreciation of the Won against major foreign currencies causes:

- an increase in Won terms in costs denominated in such foreign currencies, including costs of crude oil and other raw materials that the Company purchases from overseas sources, expenses relating to labor and other costs of the Company's overseas operations and a substantial portion of the Company's freight costs, which are denominated principally in U.S. dollars;

- an increase in the amount of Won required for the Company to make interest and principal payments on its foreign currency-denominated debt; and

- foreign exchange translation losses on foreign currency-denominated liabilities, which lower the Company's earnings for accounting purposes.

Appreciation of the Won, on the other hand, causes the Company's export products to be less competitive by raising their prices in U.S. dollar terms and reduces net sales in Won from export sales, which are primarily denominated in U.S. dollars. Due to the larger positive effects of the depreciation of the Won, the appreciation of the Won against major foreign currencies in the past generally has had a net negative impact on the Company's results of operations.

The Company strives to naturally offset its foreign exchange risk by matching its foreign currency receivables with its foreign currency payables, and the Company's overseas subsidiaries have sought to further mitigate the adverse impact of exchange rate fluctuations by hedging their exposure through conducting business transactions in the local currency of the respective markets in which the transactions are engaged. The Company attempts to manage the remaining net exposure after natural hedges by entering into currency swap agreements. From time to time, the Company also enters into currency forward contracts with the objective of managing its foreign exchange risk.

Conditions in the Korean and Global Economies

The Company is incorporated in Korea and a significant portion of its assets are located in Korea. Furthermore, sales in Korea accounted for 27.4%, 26.9%, 26.4% and 26.8% of the Company's sales in 2022, 2023, 2024 and the first half of 2025, respectively. As a result, the Company is subject to political, economic, legal and regulatory risks specific to Korea, and the Company's performance and successful fulfillment of its operational strategies are dependent on the overall Korean economy. The economic indicators in Korea in recent years have shown mixed signs of growth and uncertain recovery, and future growth of the Korean economy is subject to many factors beyond the Company's control, including developments in the global economy. See "Risk Factors—Risks Relating to Korea—If economic conditions in Korea deteriorate, the Company's current business and future growth could be materially and adversely affected."

Furthermore, the Company's business is sensitive to worldwide economic conditions, which have a significant impact on the level of demand for and prices of the Company's products in export markets, as well as the availability and market prices of crude oil and other raw materials and exchange rates. In particular, China is one of the largest consumers of refined petroleum and petrochemical products in the world, and one of the Company's largest export markets. Global prices of refined petroleum and petrochemical products are in significant part influenced by China's actual and anticipated levels of consumption of such products. Such consumption levels are in turn dependent on the economic and market conditions and growth rates in China, which have shown signs of a slowdown in recent years, including due to a prolonged period of severe restrictions on economic activities by the Chinese government during much of the COVID-19 pandemic before the easing of such policies beginning in late 2022 and, more recently, an increase in trade tensions between the United States and China following the imposition of higher tariffs against each other during the first half of 2025.

While economic conditions in Korea and globally showed signs of recovery in parts of 2021 and 2022 after sharply deteriorating in 2020 largely due to the effects of the COVID-19 pandemic, growth has slowed since the second half of 2022 in light of adverse conditions and volatility in the worldwide financial markets, fluctuations in oil and commodity prices, supply chain disruptions and the increasing weakness of the global economy, as well as significant fluctuations in policy interest rates globally (including in Korea) and, more recently, the U.S. government's imposition of universal "reciprocal" tariffs on its trading partners. See "Risk Factors—Risks Relating to the Company—Impositions of anti-dumping duties, safeguard duties, countervailing duties, quotas or tariffs may have an adverse impact on the Company's export sales." Accordingly, the overall prospects for the Korean, Chinese and global economy in the remainder of 2025 and beyond remain highly uncertain.

Competition in the Korean and Global Petroleum Refining, Petrochemical and Lubricant Industries

The Company competes in highly competitive petroleum refining, petrochemical and lubricant markets characterized by advantages from economies of scale and brand recognition, evolving regulatory and industry standards and continual improvements in performance characteristics and product features. The Company competes in various product lines based on the following factors:

- product performance, quality and reliability;
- ability to accurately identify and respond to emerging regulatory and industry trends and consumer demand for product features and performance characteristics;
- successful and timely expansion of production capacity;
- development of new and innovative products and manufacturing processes;
- effectiveness of sales and marketing efforts; and
- brand recognition and financial strength.

The level of competition in the domestic and global petroleum refining, petrochemical and lubricant industries affects the Company's sales and margins, as it impacts the pricing of the Company's products and its product marketing costs, as well as the amount of capital expenditures and other investments necessary to maintain or enhance the Company's market position. See "Risk Factors—Risks Relating to the Company—The Company operates in highly competitive markets, and the Company's failure to successfully compete would adversely affect its market position and business" and "Business—Competition." In particular, due in part to continued intense competition in the petroleum refining and petrochemical industries in Korea and overseas as well as ongoing increases in refining and petrochemical production capacity in Asia and the Middle East, prices and margins in the Korean and global market for refined petroleum and petrochemical products remain vulnerable, which in turn has led to uncertainty regarding future prospects for these industries, as well as difficulty in accurately forecasting future results of operations and cash flows on the part of industry participants, including the Company.

Level of the Company's Capital Expenditures and Production Capacity Expansion

The Company operates in the petroleum and petrochemical industries where producers with economies of scale enjoy a competitive advantage. Accordingly, the Company's business requires a significant amount of capital investment for the expansion, upgrading and maintenance of facilities and equipment on a timely and cost-effective basis in order to maintain long-term competitiveness, improve operating cost efficiency and produce value-added products with higher margins. As part of the Company's overall strategy, the Company has historically sought to improve its heavy oil upgrading ratio through significant investments in its production facilities and has in recent years focused on enhancing the operational efficiencies of its production facilities and incrementally revamping its existing facilities and equipment. In addition, the Company completed the construction of a mixed feed cracker facility in Yeosu, which currently has a production capacity of up to 900,000 MTA of ethylene (following the completion of a productivity enhancement initiative in December 2024) and 500,000 MTA of polyethylene, and commenced its commercial operations in July 2021 in order to further diversify the Company's product portfolio and expand its petrochemical business. The Company's capital expenditures amounted to Won 527 billion in 2022, Won 534 billion in 2023, Won 585 billion in 2024 and Won 410 billion in the first half of 2025. The Company currently expects its capital expenditures, principally for replacing its property, plant and equipment and revamping its facilities, for 2025 and 2026 to be similar to those in 2024. Increased capital expenditures lead to increases in depreciation and amortization expenses as well as financing costs related to such expenditures. The level of capital expenditures made by the Company, as well as the returns the Company is able to achieve on its capital expenditure investments, have affected and will continue to affect the Company's financial condition and results of operations.

Changes in the Company's Product Mix

The Company operates through several business segments in different industries with a variety of product categories. The Company's operating results depend to a significant extent on the Company's ability to anticipate and respond to emerging customer preferences and demand as well as evolving industry and regulatory standards by ensuring the continued and timely development of new, as well as enhancements to existing, products. Accordingly, the Company continually reviews and seeks to implement necessary changes to its production facilities and processes to achieve and maintain an optimal product mix, with a view to sustaining and improving its sales and profitability.

In the petroleum refining segment, the Company has leveraged its significant capital investment in refinery-related initiatives, including the completion of its fourth desulfurization plant in 2009 and its fourth heavy oil upgrading plant in 2013, to focus on producing higher margin, higher value-added light oil and low-sulfur products.

In the petrochemicals segment, the Company has been emphasizing the production of paraxylene and benzene in the aromatics sub-segment, co-polymers and compounded polypropylene in the polypropylene sub-segment and high density polyethylene in the polyethylene sub-segment, for which the Company believes there is strong domestic and overseas demand which can help it achieve higher margins. From 2006 to 2016, the Company acquired or established overseas manufacturing subsidiaries in China, the Czech Republic and Mexico that produce compounded polypropylene products for the relevant markets. In July 2025, the Company divested its entire equity stake in its former subsidiary in Mexico as part of its strategy to rebalance its product portfolio and geographic focus. In addition, the Company completed the construction of a mixed feed cracker facility in Yeosu, designed to have a production capacity of up to 750,000 MTA of ethylene and 500,000 MTA of polyethylene, and commenced its commercial operations in July 2021 in order to further diversify the Company's product portfolio and expand its petrochemical business. In December 2024, the Company completed a productivity enhancement initiative, as a result of which the production capacity of such facility was increased to up to 900,000 MTA of ethylene.

In the lubricants segment, the Company revamped its base oil production facilities in 2011, and its total base oil production capacity is currently 29,381 barrels per day, most of which consist of Group II and Group III base oil. The Company believes that having internal base oil production capacity creates significant synergies, including by enabling vertical integration of its lubricant oil production process. Furthermore, in recent years, the Company has been strategically increasing the proportion of higher-grade lubricant oil products, which command higher prices, in its lubricant oil product mix, while also increasing its focus on geographic markets that offer higher margins.

Critical Accounting Policies

The Company has prepared its consolidated annual financial statements in accordance with K-IFRS and its consolidated interim financial statements in accordance with K-IFRS No. 1034 "Interim Financial Reporting." The preparation of these financial statements requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses as well as the disclosure of contingent assets and liabilities. See Note 4 of the notes to the Company's consolidated annual financial statements as of and for the years ended December 31, 2024 and 2023 included elsewhere in this Offering Circular for summaries of the Company's significant accounting policies that are critical to the portrayal of the Company's financial condition since they require the Company's management to make difficult, complex or subjective judgments, some of which may relate to matters that are inherently uncertain, and because of the possibility that future events affecting these estimates may differ significantly from management's current judgment.

Recent Accounting Changes

Certain new accounting standards, interpretations and amendments to existing accounting standards have been published and are mandatory for the Company for annual periods beginning on or after January 1, 2024. See Note 3 of the notes to the Company's consolidated annual financial statements as of and for the years ended December 31, 2024 and 2023 and Note 2.3 of the notes to the Company's unaudited condensed consolidated interim financial statements as of June 30, 2025 and for the six-month periods ended June 30, 2025 and 2024 included elsewhere in this Offering Circular.

Principal Income Statement Items

Sales

The Company derives its sales principally from the sale of a wide range of refined petroleum products, petrochemical products and lubricant products.

Cost of Sales

The Company's cost of sales, which comprises expenses that are directly related to production, consists primarily of:

- costs related to purchases of raw materials including crude oil and other feedstock and additives used in the Company's production process;
- depreciation and amortization of property, plant, equipment and intangible assets;
- factory overhead, including utilities, maintenance of production equipment and other support expenses associated with the production of the Company's products;
- salaries, retirement benefits and other employee welfare expenses of personnel directly involved in production activities;
- provisions for inventory write-downs due to decline in net realizable value for the Company's inventories; and
- research and development expenses directly attributable to the production of the Company's products.

Selling, General and Administrative Expenses

The Company incurs various operating costs, which include selling, general and administrative expenses that are not directly related to production, in addition to its cost of sales. The Company's selling, general and administrative expenses consist primarily of the following:

- salaries, retirement benefits and other employee welfare expenses for its non-production personnel;
- transportation expenses, including freight costs related to delivery of the Company's products;
- fees, including fees related to professional advisory services and technological assistance and brand royalty payments made to GS Holdings and Chevron;
- depreciation and amortization expenses for property, equipment and intangible assets;
- amounts paid to subcontractors, including for IT services and maintenance and repair services for the Company's facilities; and
- advertising expenses.

Operating Profit

Operating profit is the Company's sales less cost of sales and selling, general and administrative expenses. Operating profit as a percentage of total sales constitutes the Company's operating margin. The Company views operating profit and operating margin as key measures of its performance.

Share of Profit or Loss of Equity Method Accounted Investees

The Company holds equity interests in various associates as indicated in Note 11 of the notes to the consolidated interim financial statements of the Company. Investments in the Company's associates are accounted for using the equity method. Associates are companies in which the Company does not have the ability to directly or indirectly control the financial and operating decisions, but does possess the ability to exercise significant influence. Share of profit or loss of associates is the proportionate net income or loss of such associates that is attributable to the Company based on its percentage of ownership in such entities.

Finance Income and Costs

Finance income includes principally interest income, gains on foreign exchange transactions and translation, and gains on valuation and transaction of derivative instruments. Finance costs include principally interest expense, losses on foreign exchange transactions and translation, and losses on valuation and transaction of derivative instruments.

Other Income and Expenses

The Company's other income includes principally gains on valuation and transactions of commodity derivatives, on disposal of property, plant and equipment and on investment property, rental income, and government grants. Other expenses mainly include losses on valuation and transactions of commodity derivatives and on disposal of property, plant and equipment, and other miscellaneous expenses.

Income Tax Expense

The Company's income tax expense for the period consists of current and deferred tax.

Profit (Loss) for the Period

Profit (loss) for the period is calculated as profit (loss) before income tax less income tax expense.

Results of Operations—First Half of 2024 Compared to First Half of 2025

The following table presents the Company's statement of income information and changes therein for the first half of 2024 and the first half of 2025.

	For the Six Months Ended June 30,		Changes First Half of 2024 versus First Half of 2025
	2024	2025	Amount
	(In billions of Won)		
Sales	₩ 24,499	₩ 21,838	₩(2,661)
Cost of sales	(23,309)	(21,421)	1,888
Selling, general and administrative expenses	(566)	(559)	7
Operating profit (loss)	625	(141)	(766)
Share of profit of equity method accounted investees	12	8	(4)
Finance income	1,139	1,833	694
Finance costs	(1,387)	(1,758)	(371)
Other income	112	182	70
Other expenses	(94)	(166)	(72)
Profit (loss) before income tax	406	(43)	(449)
Income tax expense	(89)	(1)	88
Profit (loss) for the period	₩ 317	₩ (45)	₩ (362)

Sales

The following table presents the Company's sales by segment and changes therein for the first half of 2024 and the first half of 2025.

	For the Six Months Ended June 30,		Changes First Half of 2024 versus First Half of 2025
	2024	2025	Amount
	(In billions of Won)		
Petroleum refining segment:			
Total sales of refining segment	₩ 31,343	₩26,761	₩(4,582)
Inter-segment sales	(11,912)	(9,915)	1,997
Sales to external customers	19,431	16,847	(2,584)
Petrochemicals segment:			
Total sales of petrochemicals segment	4,161	4,215	54
Inter-segment sales	(93)	(105)	(12)
Sales to external customers	4,068	4,110	42
Lubricants segment:			
Total sales of lubricants segment	1,126	989	(137)
Inter-segment sales	(126)	(108)	18
Sales to external customers	1,000	881	(119)
Sales to external customers	₩ 24,499	₩21,838	(2,661)

The Company's sales decreased by 10.9%, or Won 2,661 billion, from Won 24,499 billion in the first half of 2024 to Won 21,838 billion in the first half of 2025 primarily due to a decrease in sales of the petroleum refining segment, which was enhanced by a decrease in sales of the lubricants segment. Such decreases were slightly offset by an increase in sales of the petrochemicals segment. Specifically:

- Sales to external customers for the petroleum refining segment, which accounted for 77.1% of the Company's sales in the first half of 2025, decreased by 13.3%, or Won 2,584 billion, from Won 19,431 billion in the first half of 2024 to Won 16,847 billion in the first half of 2025. Such decrease was mainly due to a 14.4%, or Won 1,302 billion, decrease in sales of the Company's other refined petroleum products (which primarily consist of bunker-C, naphtha, LPG and jet A-1) from Won 9,047 billion in the first half of 2024 to Won 7,745 billion in the first half of 2025, which was enhanced by a 12.4%, or Won 1,283 billion, decrease in sales of its principal refined petroleum products (which consist of gasoline, kerosene and diesel) from Won 10,384 billion in the first half of 2024 to Won 9,101 billion in the first half of 2025.

  - The decrease in sales of the Company's other refined petroleum products principally reflected a decrease in the sales volume of such products, which was mainly due to sluggish global demand for naphtha from downstream petrochemical industries in light of continued and prolonged weakness and uncertainty in global economic conditions. The effect of such decrease was enhanced by a decrease in the average selling price of the Company's other refined petroleum products, primarily reflecting a decrease in the international market price of crude oil, which is the primary feedstock for refined petroleum products generally.

  - The decrease in sales of the Company's principal refined petroleum products primarily reflected a decrease in the average selling price of such products, which was also principally due to a decrease in the international market price of crude oil as described above. The effect of such decrease was enhanced by a decrease in the sales volume of the Company's diesel and gasoline products, primarily reflecting sluggish global demand for such products in light of continued and prolonged weakness and uncertainty in global economic conditions.

- Sales to external customers for the petrochemicals segment, which accounted for 18.8% of the Company's sales in the first half of 2025, slightly increased by 1.0%, or Won 42 billion, from Won 4,068 billion in the first half of 2024 to Won 4,110 billion in the first half of 2025 due to an increase in sales of olefin products, which was partially offset by a decrease in sales of aromatics products.

  - The increase in sales of olefin products (which primarily consist of the Company's excess ethylene production) mainly reflected an increase in the sales volume of such products, which was principally due to the increase in the production capacity of the Company's mixed feed cracker facility following the completion of its productivity enhancement initiative in December 2024. Such increase was enhanced by an increase in the average selling price of such products, which mainly reflected a depreciation of the Won against the U.S. dollar, which increased the price of the Company's exported olefin products in Won terms.

  - The decrease in sales of aromatics products was primarily attributable to decreases in sales of toluene and mixed xylene, which were partially offset by increases in sales of paraxylene and benzene. The decrease in sales of toluene was mainly due to a decrease in the sales volume of such product, which in turn mainly reflected weaker demand for such product as a blending stock from overseas petroleum refineries. The decrease in sales of mixed xylene was mainly due to a decrease in the average selling price of such product, which primarily reflected a decrease in the market price of naphtha, which is the primary feedstock for such products. The increase in sales of paraxylene was mainly due to stronger demand from downstream industries in China. The increase in sales of benzene, which is produced in part as a by-product in the production of paraxylene, mainly reflected the related increase in the sales volume of paraxylene as described above.

- Sales to external customers for the lubricants segment, which accounted for 4.0% of the Company's sales in the first half of 2025, decreased by 11.9%, or Won 119 billion, from Won 1,000 billion in the first half of 2024 to Won 881 billion in the first half of 2025 mainly due to a decrease in sales of base oil, which was enhanced by a slight decrease in sales of lubricants and others.

- The decrease in sales of base oil was principally due to a decrease in the sales volume of base oil, which was primarily due to reduced production resulting from pre-scheduled maintenance of the Company's base oil manufacturing facilities. The effect of such decrease was in small part offset by a slight increase in the average selling price of base oil.

- The decrease in sales of lubricants and others principally reflected a decrease in the sales volume of lubricant oil, which was mainly driven by sluggish global demand for such products in light of increased weakness and uncertainty in global economic conditions. Such decrease was partially offset by an increase in the average selling price of lubricant oil, which was mainly driven by a depreciation of the Won against the U.S. dollar (which increased the price of the Company's exported lubricant oil products in Won terms) and an increase in the proportion of higher-grade lubricant oil products (which command higher prices) in the Company's product mix.

Cost of Sales

The Company's cost of sales decreased by 8.1%, or Won 1,888 billion, from Won 23,309 billion in the first half of 2024 to Won 21,421 billion in the first half of 2025. The decrease in cost of sales was primarily due to a decrease in the volume of crude oil purchases by the Company, mainly reflecting a decrease in the production volume of the Company's refined petroleum products, which was enhanced by a decrease in the international market price of crude oil.

Gross margin (which represents the Company's sales less cost of sales, or gross profit, as a percentage of its sales to external customers) decreased from 4.9% in the first half of 2024 to 1.9% in the first half of 2025 primarily due to a decrease in the gross profit of the refined petroleum segment, principally as a result of a decrease in the spread between the international market prices of crude oil and refined petroleum products in the context of weaker crude oil prices in the first half of 2025.

Selling, General and Administrative Expenses

The following table presents a breakdown of the Company's selling, general and administrative expenses and changes therein for the first half of 2024 and the first half of 2025.

	For the Six Months Ended June 30,		Changes First Half of 2024 versus First Half of 2025
	2024	2025	Amount
	(In billions of Won)		
Salaries	₩ 87	₩ 83	₩(4)
Retirement benefits	10	10	0
Other employee benefits	66	58	(8)
Subcontractors	51	49	(2)
Rent	10	10	0
Transportation	95	89	(6)
Advertising	23	28	5
Depreciation	65	70	5
Fees	78	81	3
Amortization	7	7	0
Travel	7	6	(1)
Taxes and dues	19	19	0
Insurance	2	2	0
Bad debt expense (reversal of allowance for doubtful accounts)	4	1	(3)
Others	42	44	2
Total selling, general and administrative expenses	₩566	₩559	(7)

The Company's selling, general and administrative expenses decreased by 1.2%, or Won 7 billion, from Won 566 billion in the first half of 2024 to Won 559 billion in the first half of 2025 primarily due to decreases in other employee benefits, transportation expense and salaries, which were partially offset by increases in advertising expense and depreciation expense.

- Other employee benefits decreased by 12.1%, or Won 8 billion, from Won 66 billion in the first half of 2024 to Won 58 billion in the first half of 2025, principally as a result of a decrease in the Company's contributions to its employee welfare fund.

- Transportation expense decreased by 6.3%, or Won 6 billion, from Won 95 billion in the first half of 2024 to Won 89 billion in the first half of 2025, principally as a result of a decrease in the sales volume of the Company's refined petroleum products.

- Salaries decreased by 4.6%, or Won 4 billion, from Won 87 billion in the first half of 2024 to Won 83 billion in the first half of 2025, primarily due to a decrease in estimated performance-based bonus payments.

- Advertising expense increased by 21.7%, or Won 5 billion, from Won 23 billion in the first half of 2024 to Won 28 billion in the first half of 2025, principally as a result of the Company's increased marketing efforts to promote its service station brand in Korea.

- Depreciation expense increased by 7.7%, or Won 5 billion, from Won 65 billion in the first half of 2024 to Won 70 billion in the first half of 2025, principally as a result of the commencement of depreciation of newly acquired equipment in connection with the productivity enhancement initiative for the Company's mixed feed cracker facility, which was completed in December 2024.

Operating Profit (Loss)

The following table presents the Company's operating profit (loss) by segment and changes therein for the first half of 2024 and the first half of 2025.

	For the Six Months Ended June 30,		Changes First Half of 2024 versus First Half of 2025
	2024	2025	Amount
	(In billions of Won)		
Petroleum refining segment	₩275	₩(263)	₩(538)
Petrochemicals segment	108	(84)	(192)
Lubricants segment	242	206	(36)
Total operating profit (loss)	₩625	₩(141)	(766)

The Company recognized operating profit of Won 625 billion in the first half of 2024 compared to operating loss of Won 141 billion in the first half of 2025. Such change primarily reflected the Company's recognition of operating profit of the petroleum refining segment of Won 275 billion in the first half of 2024 compared to operating loss of Won 263 billion in the first half of 2025, as well as its recognition of operating profit of the petrochemicals segment of Won 108 billion in the first half of 2024 compared to operating loss of Won 84 billion in the first half of 2025. Such changes were enhanced by a decrease in the operating profit of the lubricants segment from Won 242 billion in the first half of 2024 to Won 206 billion in the first half of 2025. Operating margin (which represents the Company's operating profit (loss) as a percentage of its sales to external customers) changed from 2.6% in the first half of 2024 to (0.6)% in the first half of 2025.

- Operating margin of the petroleum refining segment changed from 1.4% in the first half of 2024 to (1.6)% in the first half of 2025 primarily due to a decrease in the spread between the international market prices of crude oil and refined petroleum products in the context of weaker crude oil prices in the first half of 2025.

- Operating margin of the petrochemicals segment changed from 2.7% in the first half of 2024 to (2.0)% in the first half of 2025, which was mainly driven by a deterioration of margins on sales of aromatics products, primarily reflecting increased weakness and uncertainty in global economic conditions in part due to increased tensions between the United States and China relating to their imposition of higher tariffs against each other.

- Operating margin of the lubricants segment, while remaining relatively strong, decreased slightly from 24.2% in the first half of 2024 to 23.4% in the first half of 2025 principally as a result of lower margins on the Company's exports of lubricant oil products, mainly reflecting increased weakness and uncertainty in the global economy.

Finance Income and Finance Costs

The following table presents a breakdown of the Company's finance income and costs and changes therein for the first half of 2024 and the first half of 2025.

	For the Six Months Ended June 30,		Changes First Half of 2024 versus First Half of 2025
	2024	2025	Amount
	(In billions of Won)		
Finance Income			
Interest income	₩ 22	₩ 22	₩ 0
Dividends income	1	1	0
Gain on valuation of derivative instruments	111	6	(105)
Gain on transaction of derivative instruments	51	67	16
Foreign currency transaction gain	873	1,447	574
Foreign currency translation gain	81	291	210
Total finance income	₩1,139	₩1,833	694
Finance Costs			
Interest expense	₩ 111	₩ 96	₩ (15)
Loss on valuation of derivative instruments	4	111	107
Loss on transaction of derivative instruments	95	33	(62)
Foreign currency transaction loss	918	1,420	502
Foreign currency translation loss	258	98	(160)
Others	2	0	(2)
Total finance costs	₩1,387	₩1,758	371

Finance income increased by 60.9%, or Won 694 billion, from Won 1,139 billion in the first half of 2024 to Won 1,833 billion in the first half of 2025 primarily due to increases in foreign currency transaction gain and foreign currency translation gain. Such increases were partially offset by a decrease in gain on valuation of derivative instruments (which primarily relate to the Company's hedging activities against foreign currency fluctuations on its foreign currency debt).

Finance costs increased by 26.7%, or Won 371 billion, from Won 1,387 billion in the first half of 2024 to Won 1,758 billion in the first half of 2025 principally as a result of increases in foreign currency transaction loss and loss on valuation of derivative instruments, which were partially offset by decreases in foreign currency translation loss and loss on transaction of derivative instruments.

On a net basis, the Company recognized net loss on foreign exchange translations of Won 177 billion in the first half of 2024 compared to net gain of Won 193 billion in the first half of 2025, while the Company recognized net loss on foreign exchange transactions of Won 45 billion in the first half of 2024 compared to net gain of Won 26 billion in the first half of 2025. In terms of the Market Average Exchange Rate, the Won

depreciated from Won 1,289.4 to US$1.00 as of December 31, 2023 to Won 1,389.2 to US$1.00 as of June 30, 2024 and to Won 1,470.0 to US$1.00 as of December 31, 2024 but appreciated to Won 1,356.4 to US$1.00 as of June 30, 2025. However, the average value of the Market Average Exchange Rate depreciated from Won 1,349.5 to US$1.00 in the first half of 2024 to Won 1,427.9 to US$1.00 in the first half of 2025. In the context of such exchange rate fluctuations, the Company recognized net gain on valuation of derivative instruments of Won 107 billion in the first half of 2024 compared to net loss of Won 105 billion in the first half of 2025, while it recognized net loss on transactions of derivative instruments of Won 44 billion in the first half of 2024 compared to net gain of Won 34 billion in the first half of 2025.

Other Income and Expenses

The following table presents a breakdown of the Company's other income and expenses and changes therein for the first half of 2024 and the first half of 2025.

	For the Six Months Ended June 30,		Changes First Half of 2024 versus First Half of 2025
	2024	2025	Amount
	(In billions of Won)		
Other Income			
Gain on valuation and transactions of commodity derivatives	₩ 57	₩100	₩43
Gain on disposal of property, plant and equipment	19	18	(1)
Gain on disposal of assets held for sale	–	9	9
Rental income	2	2	0
Government grants	2	1	(1)
Others	31	52	21
Total other income	₩112	₩182	70
Other Expenses			
Loss on valuation and transactions of commodity derivatives	₩ 56	₩104	₩48
Loss on disposal of property, plant and equipment	1	9	8
Loss on disposal of assets held for sale	–	1	1
Expenses related to investment properties	0	1	1
Others	35	52	17
Total other expenses	₩ 94	₩166	72

Other income increased by 62.5%, or Won 70 billion, from Won 112 billion in the first half of 2024 to Won 182 billion in the first half of 2025 primarily due to a 75.4%, or Won 43 billion, increase in gain on valuation and transactions of commodity derivatives from Won 57 billion in the first half of 2024 to Won 100 billion in the first half of 2025. Such increase was enhanced by a 67.7%, or Won 21 billion, increase in other miscellaneous income from Won 31 billion in the first half of 2024 to Won 52 billion in the first half of 2025, which mainly related to an increase in the volume of the Company's brokerage activities in relation to its aromatics products (the effect of which was substantially offset by an increase in miscellaneous other expenses as described below) and the Company's recognition of gain on disposal of assets held for sale of Won 9 billion in the first half of 2025 compared to no such gain in the first half of 2024, which primarily related to its sale of certain less profitable service stations.

Other expenses increased by 76.6%, or Won 72 billion, from Won 94 billion in the first half of 2024 to Won 166 billion in the first half of 2025 primarily due to an 85.7%, or Won 48 billion, increase in loss on valuation and transactions of commodity derivatives from Won 56 billion in the first half of 2024 to Won 104 billion in the first half of 2025. Such increase was enhanced by a 48.6%, or Won 17 billion, increase in miscellaneous other expenses from Won 35 billion in the first half of 2024 to Won 52 billion in the first half of

2025, mainly relating to an increase in the volume of the Company's brokerage activities in relation to its aromatics products as described above, and a substantial increase in loss on disposal of property, plant and equipment from Won 1 billion in the first half of 2024 to Won 9 billion in the first half of 2025, mainly relating to the Company's disposal of obsolete catalysts.

The Company's commodity derivatives principally relate to its hedging activities against fluctuations in the price of aromatics products. On a net basis, the Company recognized net gain on valuation and transactions of commodity derivatives of Won 0.4 billion in the first half of 2024 compared to net loss of Won 4 billion in the first half of 2025, mainly reflecting fluctuations in the market prices and margins of aromatics products.

Income Tax Expenses

The Company's income tax expense significantly decreased by 98.9%, or Won 88 billion, from Won 89 billion in the first half of 2024 to Won 1 billion in the first half of 2025, as the Company recognized profit before income tax of Won 406 billion in the first half of 2024 compared to loss before income tax of Won 43 billion in the first half of 2025. The Company recognized income tax expense in the first half of 2025 despite reporting a loss before income tax, primarily due to income tax expenses incurred by consolidated subsidiaries that generated profit before tax during the period.

Profit (Loss) for the Period

Due to the factors described above, the Company recognized profit of Won 317 billion in the first half of 2024 compared to loss of Won 45 billion in the first half of 2025. Net margin, which is the Company's profit for the period as a percentage of total sales, changed from 1.3% in the first half of 2024 to (0.2)% in the first half of 2025.

Results of Operations—2023 Compared to 2024

The following table presents the Company's statement of income information and changes therein for 2023 and 2024.

	For the Year Ended December 31,		Changes 2023 versus 2024
	2023	2024	Amount
	(In billions of Won)		
Sales	₩ 48,608	₩ 47,614	₩ (994)
Cost of sales	(45,758)	(45,953)	(195)
Selling, general and administrative expenses	(1,166)	(1,113)	53
Operating profit	1,684	548	(1,136)
Share of profit of equity method accounted investees	15	14	(1)
Finance income	4,027	2,454	(1,573)
Finance costs	(4,235)	(2,922)	1,313
Other income	297	255	(42)
Other expenses	(264)	(227)	37
Profit before income tax	1,524	122	(1,402)
Income tax expense	(371)	(13)	358
Profit for the year	₩ 1,153	₩ 109	₩(1,044)

Sales

The following table presents the Company's sales by segment and changes therein for 2023 and 2024.

	For the Year Ended December 31,		Changes 2023 versus 2024
	2023	2024	Amount
	(In billions of Won)		
Petroleum refining segment:			
Total sales of refining segment	₩ 63,091	₩ 59,716	₩(3,375)
Inter-segment sales	(24,194)	(21,913)	2,281
Sales to external customers	38,897	37,803	(1,094)
Petrochemicals segment:			
Total sales of petrochemicals segment	7,871	8,086	215
Inter-segment sales	(211)	(186)	25
Sales to external customers	7,660	7,900	240
Lubricants segment:			
Total sales of lubricants segment	2,153	2,137	(16)
Inter-segment sales	(103)	(226)	(123)
Sales to external customers	2,051	1,911	(140)
Sales to external customers	₩ 48,608	₩ 47,614	₩ (994)

The Company's sales decreased by 2.0%, or Won 994 billion, from Won 48,608 billion in 2023 to Won 47,614 billion in 2024 due to decreases in sales of the petroleum refining segment and, to a much lesser extent, sales of the lubricants segment, which were partially offset by an increase in sales of the petrochemicals segment. Specifically:

- Sales to external customers for the petroleum refining segment, which accounted for 79.4% of the Company's sales in 2024, decreased by 2.8%, or Won 1,094 billion, from Won 38,897 billion in 2023 to Won 37,803 billion in 2024 mainly due to a 4.3%, or Won 895 billion, decrease in sales of the Company's principal refined petroleum products from Won 20,827 billion in 2023 to Won 19,932 billion in 2024, which was enhanced by a 1.1%, or Won 199 billion, decrease in sales of other refined petroleum products from Won 18,070 billion in 2023 to Won 17,871 billion in 2024.

  - The decrease in sales of the Company's principal refined petroleum products primarily reflected a decrease in the average selling price of such products, mainly as a result of a decrease in the international market price of crude oil, primarily due to sluggish global demand for crude oil as global economic conditions continued to show signs of weakness and deterioration. The effect of such decrease was partially offset by an increase in the sales volume of the Company's principal petroleum products, in particular gasoline. Such increase was mainly due to higher market demand for gasoline in light of more stringent environmental regulations and a continued shift in consumer sentiment to prefer vehicles fueled by gasoline over those fueled by diesel. Due to such reason, the sales volume of the Company's diesel products decreased over the same period.

  - The decrease in sales of the Company's other refined petroleum products principally reflected a decrease in the average selling price of such products, also mainly as a result of the decrease in the international market price of crude oil as described above. The effect of such decrease was partially offset by an increase in the sales volume of such products, which was mainly attributable to stronger market demand for naphtha, primarily reflecting stronger demand from downstream petrochemical industries, particularly in China.

- Sales to external customers for the petrochemicals segment, which accounted for 16.6% of the Company's sales in 2024, increased by 3.1%, or Won 240 billion, from Won 7,660 billion in 2023 to Won 7,900 billion in 2024 mainly due to an increase in sales of aromatics products, which was partially offset by a decrease in sales of polyethylene products.

  - The increase in sales of aromatics products was mainly driven by an increase in the sales volume of such products (especially benzene and other miscellaneous aromatics products (which mainly includes various types of solvents)), principally reflecting stronger demand from downstream petrochemical industries, particularly in China. The effect of such increase was enhanced by an increase in the average selling price of aromatics products, primarily due to stronger market demand for benzene and other miscellaneous aromatics products as described above.

  - The decrease in sales of polyethylene products was primarily attributable to a decrease in the sales volume of such products, which was mainly driven by a temporary suspension of the operation of the Company's mixed feed cracker facility due to pre-scheduled maintenance activities and the implementation of a productivity enhancement initiative, which was completed in December 2024. The average selling price of the Company's polyethylene products remained relatively stable.

- Sales to external customers for the lubricants segment, which accounted for 4.0% of the Company's sales in 2024, decreased by 6.8%, or Won 140 billion, from Won 2,051 billion in 2023 to Won 1,911 billion in 2024 mainly due to a decrease in sales of base oil, which was enhanced by a decrease in sales of lubricants and others.

  - The decrease in sales of base oil was mainly due to a decrease in the average selling price of base oil, which was mainly driven by a decrease in the international market price of crude oil, which is the primary feedstock for base oil, as described above. The effect of such decrease was enhanced in small part by a slight decrease in the sales volume of base oil.

  - The decrease in sales of lubricants and others reflected a decrease in the sales volume of lubricant oil products, which was mainly driven by the Company's strategic decision to streamline its lubricant oil product and customer portfolio to increase its focus on higher-grade products and higher-margin geographic markets. The effect of such decrease was partially offset by a small increase in the average selling price of lubricant oil products, which primarily reflected an increase in the proportion of higher-grade products (which command higher prices) in the Company's lubricant oil product mix, as well as a depreciation of the Won against the U.S. dollar, which increased the price of the Company's exported lubricant oil products in Won terms.

Cost of Sales

The Company's cost of sales increased slightly by 0.4%, or Won 195 billion, from Won 45,758 billion in 2023 to Won 45,953 billion in 2024. The increase in cost of sales was primarily due to an increase in the volume of crude oil purchased by the Company, which in turn mainly reflected the increase in the sales volume of the Company's refined petroleum products, enhanced by depreciation of the Won relative to the U.S. dollar in 2024 compared to 2023, which increased the price of imported crude oil in Won terms. The combined effect of such factors was mostly offset by a decrease in the international market price of crude oil amidst continued signs of weakness and uncertainty in the global economic conditions.

The Company's gross margin decreased from 5.9% in 2023 to 3.5% in 2024 primarily due to a decrease in gross profit of the petroleum refining segment, resulting mainly from a decrease in the spread between the international market prices of crude oil and refined petroleum products in the context of weaker crude oil prices.

Selling, General and Administrative Expenses

The following table presents a breakdown of the Company's selling, general and administrative expenses and changes therein for 2023 and 2024.

	For the Year Ended December 31,		Changes 2023 versus 2024
	2023	2024	Amount
	(In billions of Won)		
Salaries	₩ 270	₩ 190	₩(80)
Retirement benefits	15	18	3
Other employee benefits	84	93	9
Subcontractors	106	120	14
Rent	22	21	(1)
Transportation	183	202	19
Advertising	48	45	(3)
Depreciation	156	138	(18)
Fees	154	159	5
Amortization	14	16	2
Travel	15	14	(1)
Taxes and dues	21	20	(1)
Insurance	4	4	0
Bad debt expense	1	(3)	(4)
Others	73	77	4
Total selling, general and administrative expenses	₩1,166	₩1,113	(53)

The Company's selling, general and administrative expenses decreased by 4.5%, or Won 53 billion, from Won 1,166 billion in 2023 to Won 1,113 billion in 2024 primarily due to decreases in salaries and depreciation expense, which were partially offset by increases in transportation and subcontractor expenses.

- Salaries decreased by 29.6%, or Won 80 billion, from Won 270 billion in 2023 to Won 190 billion in 2024 primarily due to a decrease in performance-based bonus payments.

- Depreciation expense decreased by 11.5%, or Won 18 billion, from Won 156 billion in 2023 to Won 138 billion in 2024, principally as a result of the expiration of the estimated useful lives of certain of the Company's property and equipment.

- Transportation expense increased by 10.4%, or Won 19 billion, from Won 183 billion in 2023 to Won 202 billion in 2024 principally as a result of higher international freight costs in part due to increased geopolitical conflicts in the Middle East.

- Subcontractor expense increased by 13.2%, or Won 14 billion, from Won 106 billion in 2023 to Won 120 billion in 2024, principally as a result of increased demolition costs relating to the Company's shut-down and sale of less profitable service stations.

Operating Profit

The following table presents the Company's operating profit by segment and changes therein for 2023 and 2024.

	For the Year Ended December 31,		Changes 2023 versus 2024
	2023	2024	Amount
	(In billions of Won)		
Petroleum refining segment	₩ 880	₩(19)	₩ (899)
Petrochemicals segment	339	82	(257)
Lubricants segment	465	485	20
Total operating profit	₩1,684	₩548	(1,136)

The Company's operating profit decreased by 67.5%, or Won 1,136 billion, from Won 1,684 billion in 2023 to Won 548 billion in 2024, mainly due to the Company's recognition of operating income in 2023 compared to operating loss in 2024 in the petroleum refining segment and, to a lesser extent, a decrease in operating profit of the petrochemicals segment. Such changes were slightly offset by an increase in the operating profit of the lubricants segment. Operating margin decreased from 3.5% in 2023 to 1.2% in 2024.

- Operating margin of the petroleum refining segment changed from 2.3% in 2023 to (0.1)% in 2024 primarily due to a decrease in the spread between the international market prices of crude oil and refined petroleum products in the context of weaker crude oil prices, mainly reflecting weaker global economic conditions.

- Operating margin of the petrochemicals segment decreased from 4.4% in 2023 to 1.0% in 2024, which was mainly driven by weaker margins on sales of paraxylene, primarily reflecting weaker demand for such product from China as well as an increase in the global supply level of paraxylene following capacity expansion of Chinese manufacturers.

- Operating margin of the lubricants segment increased from 22.7% in 2023 to 25.4% in 2024 principally as a result of stronger margins on sales of lubricant oil products, mainly reflecting the Company's efforts to enhance the quality of its lubricant oil products and increase the proportion of higher-grade products (which command higher prices and margins) in its lubricant oil product mix.

Finance Income and Finance Costs

The following table presents a breakdown of the Company's finance income and costs and changes therein for 2023 and 2024.

	For the Year Ended December 31,		Changes 2023 versus 2024
	2023	2024	Amount
	(In billions of Won)		
Finance Income			
Interest income	₩ 56	₩ 42	₩ (14)
Dividends income	2	1	(1)
Gain on disposal of financial assets at FVTPL	0	0	0
Gain on valuation of derivative instruments	52	179	127
Gain on transaction of derivative instruments	132	109	(23)
Foreign currency transaction gain	3,695	1,945	(1,750)
Foreign currency translation gain	89	179	90
Total finance income	₩4,027	₩2,454	(1,573)

	For the Year Ended December 31,		Changes 2023 versus 2024
	2023	2024	Amount
	(In billions of Won)		
Finance Costs			
Interest expense	₩ 262	₩ 221	(41)
Loss on valuation of derivative instruments	8	33	25
Loss on transaction of derivative instruments	115	168	53
Foreign currency transaction loss	3,743	2,034	(1,709)
Foreign currency translation loss	106	464	358
Others	1	2	1
Total finance costs	₩4,235	₩2,922	(1,313)

Finance income decreased by 39.1%, or Won 1,573 billion, from Won 4,027 billion in 2023 to Won 2,454 billion in 2024 primarily due to a decrease in foreign currency transaction gain, which was slightly offset by increases in gain on valuation of derivative instruments and foreign currency translation gain.

Finance costs decreased by 31.0%, or Won 1,313 billion, from Won 4,235 billion in 2023 to Won 2,922 billion in 2024 principally as a result of a decrease in foreign currency transaction loss, which was partially offset by increases in foreign currency translation loss and loss on transaction of derivative instruments.

On a net basis, the Company's net loss on foreign exchange translations increased from Won 17 billion in 2023 to Won 285 billion in 2024, while the Company's net loss on foreign exchange transactions increased from Won 48 billion in 2023 to Won 89 billion in 2024. In terms of the Market Average Exchange Rate, the Won depreciated from Won 1,267.3 to US$1.00 as of December 31, 2022 to Won 1,289.4 to US$1.00 as of December 31, 2023 and further depreciated to Won 1,470.0 to US$1.00 as of December 31, 2024. In addition, the average value of the Market Average Exchange Rate depreciated from Won 1,305.3 to US$1.00 in 2023 to Won 1,364.0 to US$1.00 in 2024. In the context of such exchange rate fluctuations, the Company's net gain on valuation of derivative instruments increased from Won 44 billion in 2023 to Won 146 billion in 2024, while it recognized net gain on transactions of derivative instruments of Won 18 billion in 2023 compared to net loss of Won 59 billion in 2024.

Other Income and Expenses

The following table presents a breakdown of the Company's other income and expenses and changes therein for 2023 and 2024.

	For the Year Ended December 31,		Changes 2023 versus 2024
	2023	2024	Amount
	(In billions of Won)		
Other Income			
Gain on valuation and transactions of commodity derivatives	₩138	₩120	₩(18)
Gain on disposal of property, plant and equipment	34	57	23
Gain on disposal of investment properties	0	–	0
Rental income	3	3	0
Government grants	4	4	0
Others	118	70	(48)
Total other income	₩297	₩255	(42)

	For the Year Ended December 31,		Changes 2023 versus 2024
	2023	2024	Amount
	(In billions of Won)		
Other Expenses			
Loss on valuation and transactions of commodity derivatives	₩147	₩124	(23)
Loss on disposal of property, plant and equipment	14	12	(2)
Expenses related to investment properties	1	2	1
Others	102	89	(13)
Total other expenses	₩264	₩227	(37)

Other income decreased by 14.1%, or Won 42 billion, from Won 297 billion in 2023 to Won 255 billion in 2024 primarily due to a 40.7%, or Won 48 billion, decrease in other miscellaneous income from Won 118 billion in 2023 to Won 70 billion in 2024 (mainly reflecting the effect of a one-time gain on re-valuation of certain right-of-use assets in 2023), and to a lesser extent, a 13.0%, or Won 18 billion, decrease in gain on valuation and transactions of commodity derivatives from Won 138 billion in 2023 to Won 120 billion in 2024. The effect of such decreases was partially offset by a 67.6%, or Won 23 billion, increase in gain on disposal of property, plant and equipment from Won 34 billion in 2023 to Won 57 billion in 2024, which mainly reflected the Company's disposal of certain less profitable service stations.

Other expenses decreased by 14.0%, or Won 37 billion, from Won 264 billion in 2023 to Won 227 billion in 2024 principally as a result of a 15.6%, or Won 23 billion, decrease in loss on valuation and transactions of commodity derivatives from Won 147 billion in 2023 to Won 124 billion in 2024. Such decrease was enhanced by a 12.7%, or Won 13 billion, decrease in other miscellaneous expenses from Won 102 billion in 2023 to Won 89 billion in 2024, which mainly reflected costs related to the sale of the Company's minority interest in GS Lubricants (Tianjin) Co., Ltd. in the first quarter of 2023.

On a net basis, net loss on valuation and transactions of commodity derivatives decreased by 55.6%, or Won 5 billion, from Won 9 billion in 2023 to Won 4 billion in 2024, mainly reflecting fluctuations in the market prices and margins of aromatics products.

Income Tax Expenses

The Company's income tax expense significantly decreased by 96.5%, or Won 358 billion, from Won 371 billion in 2023 to Won 13 billion in 2024, primarily due to a significant decrease in profit before income tax from Won 1,524 billion in 2023 to Won 122 billion in 2024. The Company's effective tax rate was 24.3% in 2023 and 10.7% in 2024, while the statutory tax rate in Korea applicable to the Company was 26.4% in both 2023 and 2024. The Company's effective tax rate was lower than the statutory tax rate in 2023 and 2024 primarily due to the effects of tax credits received by the Company in each of the two years and other miscellaneous adjustments in the case of 2024. See Note 17 of the notes to the Company's consolidated annual financial statements as of and for the years ended December 31, 2024 and 2023 included elsewhere in this Offering Circular.

Profit for the Year

Due to the factors described above, the Company's profit for the year significantly decreased by 90.5%, or Won 1,044 billion, from Won 1,153 billion in 2023 to Won 109 billion in 2024. Net margin was 2.4% in 2023 and 0.2% in 2024.

Results of Operations—2022 Compared to 2023

The following table presents the Company's statement of income information and changes therein for 2022 and 2023.

	For the Year Ended December 31,		Changes 2022 versus 2023
	2022	2023	Amount
	(In billions of Won)		
Sales	₩ 58,532	₩ 48,608	₩(9,924)
Cost of sales	(53,298)	(45,758)	7,540
Selling, general and administrative expenses	(1,255)	(1,166)	89
Operating profit	3,980	1,684	(2,296)
Share of profit of equity method accounted investees	18	15	(3)
Finance income	3,468	4,027	559
Finance costs	(3,737)	(4,235)	(498)
Other income	470	297	(173)
Other expenses	(418)	(264)	154
Profit before income tax	3,780	1,524	(2,256)
Income tax expense	(991)	(371)	620
Profit for the year	₩ 2,789	₩ 1,153	₩(1,637)

Sales

The following table presents the Company's sales by segment and changes therein for 2022 and 2023.

	For the Year Ended December 31,		Changes 2022 versus 2023
	2022	2023	Amount
	(In billions of Won)		
Petroleum refining segment:			
Total sales of refining segment	₩ 75,175	₩ 63,091	₩(12,084)
Inter-segment sales	(27,418)	(24,194)	3,224
Sales to external customers	47,757	38,897	(8,860)
Petrochemicals segment:			
Total sales of petrochemicals segment	8,855	7,871	(984)
Inter-segment sales	(115)	(211)	(96)
Sales to external customers	8,739	7,660	(1,079)
Lubricants segment:			
Total sales of lubricants segment	2,134	2,153	19
Inter-segment sales	(98)	(103)	(5)
Sales to external customers	2,036	2,051	15
Sales to external customers	₩ 58,532	₩ 48,608	₩ (9,924)

The Company's sales decreased by 17.0%, or Won 9,924 billion, from Won 58,532 billion in 2022 to Won 48,608 billion in 2023 primarily due to a decrease in sales of the petroleum refining segment, which was enhanced by a decrease in sales of the petrochemicals segment. Specifically:

- Sales to external customers for the petroleum refining segment, which accounted for 80.0% of the Company's sales in 2023, decreased by 18.6%, or Won 8,860 billion, from Won 47,757 billion in 2022 to Won 38,897 billion in 2023 mainly due to a 20.4%, or Won 5,333 billion, decrease in sales of the Company's principal refined petroleum products from Won 26,160 billion in 2022 to Won 20,827 billion in 2023, which was enhanced by a 16.3%, or Won 3,526 billion, decrease in sales of other refined petroleum products from Won 21,596 billion in 2022 to Won 18,070 billion in 2023.

  - The decrease in sales of the Company's principal refined petroleum products primarily reflected a decrease in the average selling price of such products, mainly as a result of a decrease in the international market price of crude oil, which is the primary feedstock for such products. The effect of such decrease was enhanced by decreases in the sales volume of the Company's diesel and gasoline products, which primarily reflected weaker global demand for such products as the global economy generally began to show signs of deterioration beginning in the second half of 2022.

  - The decrease in sales of the Company's other refined petroleum products also principally reflected a decrease in the average selling price of such products, mainly as a result of the decrease in the international market price of crude oil as described above. The effect of such decrease was enhanced by a small decrease in the sales volume of such products, which was mainly attributable to weaker global demand for Bunker-C as the global economy generally began to show signs of deterioration beginning in the second half of 2022.

- Sales to external customers for the petrochemicals segment, which accounted for 15.8% of the Company's sales in 2023, decreased by 12.3%, or Won 1,079 billion, from Won 8,739 billion in 2022 to Won 7,660 billion in 2023 mainly due to a decrease in sales of aromatics products, which was enhanced by a decrease in sales of olefin products.

  - The decrease in sales of aromatics products was mainly driven by a decrease in the average selling price of such products, reflecting a decrease in the market price of naphtha, which is the primary feedstock for such products, as well as a decrease in the sales volume of aromatics products, especially benzene and paraxylene, in each case primarily due to decreased demand from China mainly reflecting an increase in the domestic production level in China in part due to general resumption of manufacturing activities following the COVID-19 pandemic.

  - The decrease in sales of olefin products (primarily representing sales of the Company's excess ethylene production) reflected a decrease in the average selling price of such products, principally reflecting a decrease in the market price of naphtha, which is the primary feedstock for ethylene. The effect of such decrease was partially offset by an increase in the sales volume of such products, primarily due to a continued ramp-up of the Company's production of ethylene following the commencement of commercial operation of its mixed feed cracker facility in July 2021.

- Sales to external customers for the lubricants segment, which accounted for 4.2% of the Company's sales in 2023, increased by 0.7%, or Won 15 billion, from Won 2,036 billion in 2022 to Won 2,051 billion in 2023 due to an increase in sales of lubricants and others, which was in large part offset by a decrease in sales of base oil.

  - The increase in sales of lubricants and others reflected an increase in the average selling price of such products, which was mainly driven by an increase in the proportion of higher-grade products (which command higher prices) in the Company's product mix, as well as a depreciation of the Won against the U.S. dollar, which increased the price of the Company's exported lubricant oil products in Won terms. The effect of such increase was partially offset by a decrease in the sales volume of lubricants and others, which primarily reflected the Company's strategic decision to streamline its lubricant oil product and customer portfolio to increase its focus on higher-grade products and higher-margin geographic markets.

- The decrease in sales of base oil was due to a decrease in the average selling price of base oil, which was mainly driven by a decrease in the international market price of crude oil, which is the primary feedstock for base oil. The effect of such decrease was in significant part offset by an increase in the sales volume of base oil, which was primarily due to stronger demand from the Company's overseas customers, including China and India.

Cost of Sales

The Company's cost of sales decreased by 14.1%, or Won 7,540 billion, from Won 53,298 billion in 2022 to Won 45,758 billion in 2023. The decrease in cost of sales was primarily due to a decrease in the international market price of crude oil.

The Company's gross margin decreased from 8.9% in 2022 to 5.9% in 2023 due to a deterioration in gross profit of the petroleum refining segment, resulting mainly from a decrease in the spread between the international market prices of crude oil and refined petroleum products in the context of weaker global economic conditions.

Selling, General and Administrative Expenses

The following table presents a breakdown of the Company's selling, general and administrative expenses and changes therein for 2022 and 2023.

	For the Year Ended December 31,		Changes 2022 versus 2023
	2022	2023	Amount
	(In billions of Won)		
Salaries	₩ 351	₩ 270	₩(81)
Retirement benefits	38	15	(23)
Other employee benefits	75	84	9
Subcontractors	96	106	10
Rent	17	22	5
Transportation	177	183	6
Advertising	47	48	1
Depreciation	153	156	3
Fees	183	154	(29)
Amortization	13	14	1
Travel	14	15	1
Taxes and dues	22	21	(1)
Insurance	4	4	0
Bad debt expense	(6)	1	7
Others	72	73	1
Total selling, general and administrative expenses	₩1,255	₩1,166	(89)

The Company's selling, general and administrative expenses decreased by 7.1%, or Won 89 billion, from Won 1,255 billion in 2022 to Won 1,166 billion in 2023 primarily due to a decrease in salaries, which was enhanced by decreases in fees and retirement benefits. Such decreases were partially offset by increases in subcontractors expense and other employment benefits.

- Salaries decreased by 23.1%, or Won 81 billion, from Won 351 billion in 2022 to Won 270 billion in 2023 primarily due to a decrease in performance-based bonus payments.

- Fees decreased by 15.8%, or Won 29 billion, from Won 183 billion in 2022 to Won 154 billion in 2023, principally as a result of a decrease in brand royalty paid to GS Holdings and Chevron, which is calculated as a percentage of the Company's sales.

- Retirement benefits decreased by 60.5%, or Won 23 billion, from Won 38 billion in 2022 to Won 15 billion in 2023, principally as a result of a decrease in salary levels.

- Subcontractors expense increased by 10.4%, or Won 10 billion, from Won 96 billion in 2022 to Won 106 billion in 2023, principally as a result of increased demolition costs relating to the Company's shut-down and sale of less profitable service stations.

- Other employee benefits increased by 12.0%, or Won 9 billion, from Won 75 billion in 2022 to Won 84 billion in 2023, principally as a result of increases in the Company's contributions to its employee welfare fund and retirement pension plans.

Operating Profit

The following table presents the Company's operating profit by segment and changes therein for 2022 and 2023.

	For the Year Ended December 31,		Changes 2022 versus 2023
	2022	2023	Amount
	(In billions of Won)		
Petroleum refining segment	₩3,435	₩ 880	₩(2,555)
Petrochemicals segment	89	339	250
Lubricants segment	455	465	10
Total operating profit	₩3,980	₩1,684	(2,296)

The Company's operating profit decreased by 57.7%, or Won 2,296 billion, from Won 3,980 billion in 2022 to Won 1,684 billion in 2023, reflecting a decrease in operating profit of the petroleum refining segment, which was partially offset by increases in operating profit of the petrochemicals segment and the lubricants segment. Operating margin also decreased from 6.8% in 2022 to 3.5% in 2023.

- Operating margin of the petroleum refining segment decreased from 7.2% in 2022 to 2.3% in 2023 primarily due to a decrease in the spread between the international market prices of crude oil and refined petroleum products in the context of weaker global economic conditions.

- Operating margin of the petrochemicals segment increased from 1.0% in 2022 to 4.4% in 2023, which was mainly driven by improved margins on sales of aromatics products, primarily reflecting stronger global demand for such products.

- Operating margin of the lubricants segment increased slightly from 22.3% in 2022 to 22.7% in 2023 principally as a result of improved margins on sales of lubricant oil products, in part due to the Company's efforts to enhance the quality of its lubricant oil products and increase the proportion of higher-grade products (which command higher prices and margins) in its lubricant oil product mix.

Finance Income and Finance Costs

The following table presents a breakdown of the Company's finance income and costs and changes therein for 2022 and 2023.

	For the Year Ended December 31,		Changes 2022 versus 2023
	2022	2023	Amount
	(In billions of Won)		
Finance Income			
Interest income	₩ 33	₩ 56	₩ 23
Dividends income	2	2	0
Gain on disposal of financial assets at FVTPL	0	0	0
Gain on valuation of derivative instruments	115	52	(63)
Gain on transaction of derivative instruments	424	132	(292)
Foreign currency transaction gain	2,729	3,695	966
Foreign currency translation gain	165	89	(76)
Total finance income	₩3,468	₩4,027	559
Finance Costs			
Interest expense	₩ 207	₩ 262	55
Loss on valuation of derivative instruments	10	8	(2)
Loss on transaction of derivative instruments	103	115	12
Foreign currency transaction loss	3,132	3,743	611
Foreign currency translation loss	282	106	(176)
Others	2	1	(1)
Total finance costs	₩3,737	₩4,235	498

Finance income increased by 16.1%, or Won 559 billion, from Won 3,468 billion in 2022 to Won 4,027 billion in 2023 primarily due to increases in foreign currency transaction gain, which was partially offset by decreases in gain on transaction and valuation of derivative instruments and foreign currency translation gain.

Finance costs increased by 13.3%, or Won 498 billion, from Won 3,737 billion in 2022 to Won 4,235 billion in 2023 principally as a result of an increase in foreign currency transaction loss, which was partially offset by a decrease in foreign currency translation loss.

On a net basis, the Company's net loss on foreign exchange translations decreased by 85.5%, or Won 100 billion, from Won 117 billion in 2022 to Won 17 billion in 2023, and the Company's net loss on foreign exchange transactions decreased by 88.1%, or Won 355 billion, from Won 403 billion in 2022 to Won 48 billion in 2023. In terms of the Market Average Exchange Rate, the Won depreciated from Won 1,185.5 to US$1.00 as of December 31, 2021 to Won 1,267.3 to US$1.00 as of December 31, 2022 and further depreciated to Won 1,289.4 to US$1.00 as of December 31, 2023. In addition, the average value of the Market Average Exchange Rate depreciated from Won 1,292.0 to US$1.00 in 2022 to Won 1,305.3 to US$1.00 in 2023. In the context of such exchange rate fluctuations, the Company's net gain on valuation of derivative instruments decreased by 58.1%, or Won 61 billion, from Won 105 billion in 2022 to Won 44 billion in 2023, while its net gain on transactions of derivative instruments decreased by 94.4%, or Won 303 billion, from Won 321 billion in 2022 to Won 18 billion in 2023.

Other Income and Expenses

The following table presents a breakdown of the Company's other income and expenses and changes therein for 2022 and 2023.

	For the Year Ended December 31,		Changes 2022 versus 2023
	2022	2023	Amount
	(In billions of Won)		
Other Income			
Gain on valuation and transactions of commodity derivatives	₩171	₩138	₩ (33)
Gain on disposal of property, plant and equipment	135	34	(101)
Gain on disposal of investment properties	–	0	0
Rental income	3	3	0
Government grants	3	4	1
Others	158	118	(40)
Total other income	₩470	₩297	(173)
Other Expenses			
Loss on valuation and transactions of commodity derivatives	₩232	₩147	(85)
Loss on disposal of property, plant and equipment	5	14	9
Expenses related to investment properties	1	1	0
Others	179	₩102	(77)
Total other expenses	₩418	₩264	(154)

Other income decreased by 36.8%, or Won 173 billion, from Won 470 billion in 2022 to Won 297 billion in 2023 primarily due to a 74.8%, or Won 101 billion, decrease in gain on disposal of property, plant and equipment from Won 135 billion in 2022 to Won 34 billion in 2023, which mainly reflected the impact of the Company's disposal of a service station in February 2022. Such decrease was enhanced by a 25.3%, or Won 40 billion, decrease in other miscellaneous income from Won 158 billion in 2022 to Won 118 billion in 2023 (primarily related to a decrease in the volume of the Company's brokerage activities in relation to its aromatics products and substantially offset by a decrease in miscellaneous other expenses as described below), and a 19.3%, or Won 33 billion, decrease in valuation and transactions of commodity derivatives from Won 171 billion in 2022 to Won 138 billion in 2023.

Other expenses decreased by 36.8%, or Won 154 billion, from Won 418 billion in 2022 to Won 264 billion in 2023 principally as a result of a 36.6%, or Won 85 billion, decrease in loss on valuation and transactions of commodity derivatives from Won 232 billion in 2022 to Won 147 billion in 2023. Such decrease was enhanced by a 43.0%, or Won 77 billion, decrease in other miscellaneous expenses from Won 179 billion in 2022 to Won 102 billion in 2023, which mainly related to a decrease in the volume of the Company's brokerage activities in relation to its aromatics products as described above.

On a net basis, net loss on valuation and transactions of commodity derivatives decreased by 85.2%, or Won 52 billion, from Won 61 billion in 2022 to Won 9 billion in 2023, mainly reflecting fluctuations in the market price and margin of aromatics products.

Income Tax Expenses

The Company's income tax expenses decreased by 62.6%, or Won 620 billion, from Won 991 billion in 2022 to Won 371 billion in 2023, primarily due to a 59.7%, or Won 2,256 billion, decrease in profit before income tax from Won 3,780 billion in 2022 to Won 1,524 billion in 2023. The Company's effective tax rate was 26.21% in 2022 and 24.34% in 2023, while the statutory tax rate in Korea applicable to the Company was 27.5% for 2022 and 26.4% for 2023. The Company's effective tax rate was lower than the statutory tax rate primarily due to the effects of tax credits received by the Company in each of the two years and other miscellaneous adjustments in the case of 2022. See Note 17 of the notes to the Company's consolidated annual financial statements as of and for the years ended December 31, 2023 and 2022 included elsewhere in this Offering Circular.

Profit for the Year

Due to the factors described above, the Company's profit for the year decreased by 58.7%, or Won 1,637 billion, from Won 2,789 billion in 2022 to Won 1,153 billion in 2023. Net margin decreased from 4.8% in 2022 to 2.4% in 2023.

Liquidity and Capital Resources

Liquidity

The Company's principal sources of liquidity have historically been:

- cash generated by its operations, principally from sales of products; and
- proceeds from short-term and long-term borrowings as well as issuances of bonds.

The Company's principal cash requirements or uses have historically been:

- cash required for its operations, including purchases of raw materials, employee costs, transportation costs, fees and advertising expenses;
- capital expenditures for property, plant and equipment;
- interest and principal payments on the Company's short-term and long-term borrowings and bonds; and
- payments of cash dividends to the Company's shareholders.

The Company had net working capital (defined as current assets minus current liabilities) of Won 5,123 billion as of December 31, 2022, Won 5,200 billion as of December 31, 2023, Won 4,668 billion as of December 31, 2024 and Won 3,914 billion as of June 30, 2025. The Company's holdings of cash and cash equivalents were Won 1,561 billion as of December 31, 2022, Won 1,265 billion as of December 31, 2023, Won 1,276 billion as of December 31, 2024 and Won 1,093 billion as of June 30, 2025. The Company manages its liquidity risk to maintain adequate net working capital by continually monitoring projected cash flows. The Company also aims to mitigate liquidity risk by contracting with financial institutions with respect to bank overdrafts and banking facility agreements in order to ensure the availability of sufficient funds. The Company believes that cash from its operations, current and future financing arrangements (including short-term and long-term borrowing facilities and issuances of bonds) and existing cash and cash equivalents are likely to be sufficient to satisfy its operating cash requirements, capital expenditure needs and debt service requirements for the foreseeable future.

Cash Flows

The following table sets forth the Company's cash flows for the periods indicated.

	As of or For the Years Ended December 31,			As of or For the Six Months Ended June 30,	
	2022	2023	2024	2024	2025
	(In billions of Won)				
Net cash provided by operating activities	₩1,459	₩ 2,050	₩ 1,918	₩ 723	₩ 429
Net cash used in investing activities	(476)	(331)	(499)	(238)	(356)
Net cash used in financing activities	(507)	(2,019)	(1,438)	(819)	(241)
Cash and cash equivalents at beginning of the period	1,079	1,561	1,265	1,265	1,276
Cash and cash equivalents at end of period	1,561	1,265	1,276	948	1,093
Net increase (decrease) in cash and cash equivalents, net of effect of movements in exchange rates on cash held	482	(296)	11	(317)	(183)

Cash Flows from Operating Activities

The Company's net cash provided by operating activities decreased from Won 723 billion in the first half of 2024 to Won 429 billion in the first half of 2025. Such change principally reflected the Company's recognition of net profit of Won 317 billion in the first half of 2024 compared to net loss of Won 45 billion in the first half of 2025 as described above, as well as a smaller decrease in accounts payable—trade in the first half of 2024 compared to the first half of 2025, mainly reflecting a continued decrease in the international market price of crude oil. Such changes were offset in part by income tax paid of Won 306 billion in the first half of 2024 compared to income tax received of Won 41 billion (mainly reflecting deterioration in the Company's profitability between the periods), as well as an increase in accounts and notes receivable of Won 215 billion in the first half of 2024 compared to a decrease of Won 122 billion in the first half of 2025 (mainly reflecting decreases in the sales volume and average selling price of the Company's refined petroleum products).

The Company's net cash provided by operating activities decreased from Won 2,050 billion in 2023 to Won 1,918 billion in 2024. Such change principally reflected a significant decrease in the Company's profit from Won 1,153 billion in 2023 to Won 109 billion in 2024 as described above, as well as a decrease in short-term financial assets of Won 624 billion in 2023 compared to an increase of Won 4 billion in 2024, mainly reflecting the Company's activities to manage its financial assets and liquidity and an increase in accounts payable-trade of Won 245 billion in 2023 compared to a decrease of Won 96 billion in 2024, mainly reflecting a decrease in the international market price of crude oil. Such changes were offset in part by an increase in inventory of Won 59 billion in 2023 compared to a decrease of Won 674 billion in 2024, also mainly reflecting a decrease in the international market price of crude oil, a decrease in income tax paid from Won 1,014 billion in 2023 to Won 407 billion in 2024, mainly reflecting the decrease in profit before income tax, and a smaller decrease in accounts receivables of Won 47 billion in 2023 compared to Won 497 billion in 2024, mainly reflecting a decrease in the average selling price of the Company's refined petroleum products.

The Company's net cash provided by operating activities increased from Won 1,459 billion in 2022 to Won 2,050 billion in 2023. Such change principally reflected an increase in short-term financial assets of Won 803 billion in 2022 compared to a decrease of Won 624 billion in 2023, mainly reflecting the Company's activities to manage its financial assets and liquidity, as well as a larger increase in inventory of Won 851 billion in 2022 compared to Won 59 billion in 2023, mainly reflecting an increase in the international market price of crude oil in 2022 compared to a decrease in 2023. Such changes were offset in significant part by a decrease in the Company's profit from Won 2,789 billion in 2022 to Won 1,153 billion in 2023 as described above, as well as a significant increase in income tax paid from Won 132 billion in 2022 to Won 1,014 billion in 2023, mainly reflecting the Company's payment of income tax in 2023 for taxable income earned in 2022, during which year its profitability had significantly improved.

Cash Flows from Investing Activities

Net cash used in investing activities increased from Won 238 billion in the first half of 2024 to Won 356 billion in the first half of 2025. Such increase was attributable primarily to an increase in cash used in purchases of property, plant and equipment from Won 255 billion in the first half of 2024 to Won 410 billion in the first half of 2025, mainly reflecting increased expenditures on the maintenance and revamping of the Company's refined petroleum facilities.

Net cash used in investing activities increased from Won 331 billion in 2023 to Won 499 billion in 2024. Such increase was attributable primarily to a net decrease in short-term financial assets of Won 164 billion in 2023 compared to a net increase of Won 17 billion in 2024, mainly reflecting the Company's investment activities to manage its financial assets and liquidity, as well as an increase in cash used in purchases of property, plant and equipment from Won 534 billion in 2023 to Won 585 billion in 2024, mainly reflecting increased expenditures on replacing its obsolete property, plant and equipment and revamping its facilities. Such changes were offset in part by an increase in proceeds from sale of property, plant and equipment from Won 69 billion in 2023 to Won 119 billion in 2024, which was mainly attributable to the sale of certain less profitable service stations.

Net cash used in investing activities decreased from Won 476 billion in 2022 to Won 331 billion in 2023. Such decrease was attributable primarily to a net increase in short-term financial assets of Won 128 billion in 2022 compared to a net decrease of Won 164 billion in 2023, mainly reflecting the Company's investment activities to manage its financial assets and liquidity. Such change was offset in part by a decrease in proceeds from sale of property, plant and equipment from Won 182 billion in 2022 (which was mainly attributable to the sale of certain less profitable service stations) to Won 69 billion in 2023.

Cash Flows from Financing Activities

Net cash used in financing activities decreased from Won 819 billion in the first half of 2024 to Won 241 billion in the first half of 2025. Such change was attributable mainly to a significant decrease in the Company's payment of dividends from Won 461 billion in the first half of 2024 to Won 44 billion in the first half of 2025, as well as a decrease in net repayment of short-term financial liabilities from Won 588 billion in the first half of 2024 to Won 290 billion in the first half of 2025. Such changes were partially offset by a decrease in cash inflow from net settlement of derivative instruments from Won 109 billion in the first half of 2024 to Won 4 billion in the first half of 2025.

Net cash used in financing activities decreased from Won 2,019 billion in 2023 to Won 1,438 billion in 2024. Such change was mainly attributable to a decrease in the Company's payment of dividends from Won 1,116 billion in 2023 to Won 538 billion in 2024, as well as a decrease in net repayment of short-term liabilities from Won 1,284 billion in 2023 to Won 1,075 billion in 2024. Such decreases were partially offset by a decrease in net proceeds from long-term financial liabilities from Won 544 billion in 2023 to Won 220 billion in 2024.

Net cash used in financing activities increased from Won 507 billion in 2022 to Won 2,019 billion in 2023. Such increase was attributable mainly to an increase in net repayment of short-term financial liabilities from Won 298 billion in 2022 to Won 1,284 billion in 2023, as well as an increase in the Company's payment of dividends from Won 421 billion in 2022 to Won 1,116 billion in 2023. Such increases were offset in part by a net increase in proceeds from long-term financial liabilities from Won 383 billion in 2022 to Won 544 billion in 2023.

Capital Expenditures

The Company's capital expenditures for recent years were aimed at the replacement of the Company's obsolete property, plant and equipment and revamping and maintenance of its production, storage and distribution facilities. The Company's capital expenditures amounted to Won 527 billion in 2022, Won 534 billion in 2023, Won 585 billion in 2024 and Won 410 billion in the first half of 2025. The Company currently expects its capital expenditures, principally for replacing its property, plant and equipment and revamping its facilities, for 2025 and 2026 to be similar to those in 2024.

Short-Term Borrowings and Long-Term Debt

As of June 30, 2025, the Company had short-term borrowings of Won 1,120 billion, which consisted of acceptances payable to banks of Won 370 billion and working funds and other short-term borrowings from banks of Won 750 billion. In addition, Won 1,281 billion of the Company's long-term borrowings and bonds as of June 30, 2025 were scheduled to become due on or prior to June 30, 2026.

As of June 30, 2025, the Company had outstanding bonds (prior to discounts) of Won 2,711 billion (including Won 1,203 billion scheduled to become due on or prior to June 30, 2026), of which Won 1,221 billion was denominated in foreign currencies. Maturities of the Company's bonds outstanding as of June 30, 2025 were as follows:

Year Ending December 31,	Bonds denominated in Won	Bonds denominated in foreign currencies	Total
		(In billions of Won)	
2025	–	407	407
2026	390	407	797
2027	230	–	230
2028	220	407	627
Thereafter	650	–	650
Total	₩1,490	₩1,221	₩2,711

As of June 30, 2025, the Company had long-term borrowings of Won 312 billion (including Won 78 billion scheduled to become due on or prior to June 30, 2026), which consisted of Won borrowings of Won 213 billion and foreign currency borrowings of Won 99 billion.

The Company believes that it has various options to meet its financing needs, including short-term and long-term borrowing facilities and issuances of bonds. However, the ability of the Company to continue to obtain debt financing at a reasonable cost will depend on several factors, some of which may be outside its control, including general economic conditions, the liquidity of the Korean and international capital markets and the Government's policies regarding Won and foreign currency debt.

Lease Payments

Pursuant to K-IFRS 1116, Leases, the Company recognizes right-of-use assets representing its rights to use the underlying assets and lease liabilities representing its obligation to make lease payments in relation to substantially all of its lease arrangements, except for certain short-term leases and leases of low-value assets. The Company's lease liabilities primarily relate to vessels, structures and other assets leased from third parties in the ordinary course of its business. As of June 30, 2025, the contractual maturities with respect to the Company's current and long-term lease liabilities (including estimated interest payments) were as follows:

Maturity	Amount
	(In billions of Won)
Within 1 year	₩169
1 to 5 years	494
Thereafter	153
Total	₩816

Dividends

The Company paid dividends on its common stock of Won 421 billion in 2022, Won 1,116 billion in 2023, Won 538 billion in 2024, and Won 44 billion in the first half of 2025.

Quantitative and Qualitative Disclosures about Market Risk

Market risk is the risk of loss related to adverse changes in market prices, including foreign exchange risk, interest rate risk and commodity risk associated with crude oil prices. The Company's finance department is responsible for managing foreign exchange and interest rate risks, while its crude oil department manages crude oil price risk. The following discussion addresses market risk only and does not present other risks which the Company faces in the normal course of its business, including country risk, credit risk and legal risk.

Crude Oil Price Risk

The Company is exposed to the risk of price fluctuations for crude oil, purchases of which accounted for approximately 67.5% of the Company's cost of sales in 2024 and 66.9% in the first half of 2025, and other feedstock. During such periods, the Company imported all of its crude oil requirements from overseas sources. See "Risk Factors—Risks Relating to the Company—Fluctuations in market prices of crude oil may adversely affect the Company's margins and profits" and "—Dependence on foreign sources of crude oil may subject the Company to difficulties in meeting its crude oil needs in sufficient quantities and at prices acceptable to the Company." In order to mitigate the effect of crude oil price volatility, the Company engages in various exposure management activities, including adjusting crude pricing term to current month and hedging transactions using commodity swaps and forward contracts.

Exchange Rate Risk

The Company is exposed to foreign exchange risk related to its purchases of raw materials, mainly crude oil imports. Prices for these materials are based on prices stated in, and in many cases are paid for in, currencies other than Won. The Company is also exposed to foreign exchange risk related to foreign currency-denominated liabilities. As a result, changes in exchange rates, particularly between the Won and the U.S. dollar, affect the Company's ability to pay interest and principal on its foreign currency-denominated short-term and long-term debt. See "Risk Factors—Risks Relating to the Company—Foreign exchange rate fluctuations between the Won and foreign currencies can adversely affect the Company's financial results." From time to time, the Company enters into currency forward contracts and currency swaps to hedge the risks from changes in foreign currency exchange rates. See Note 7.6 of the notes to the Company's consolidated annual financial statements as of and for the years ended December 31, 2024 and 2023 and Note 5.5 of the notes to the Company's unaudited condensed consolidated interim financial statements as of June 30, 2025 and for the six-month periods ended June 30, 2025 and 2024 included elsewhere in this Offering Circular.

Interest Rate Risk

The Company is also subject to market risk exposure arising from changing interest rates. Upward fluctuations in interest rates increase the cost of additional debt and the interest cost of borrowings and bonds with variable interest rates. As of June 30, 2025, 25% of the Company's borrowings and bonds were subject to variable interest rates. From time to time, the Company uses interest rate derivatives such as interest rate swaps to manage possible adverse cash flow movements in the future. These derivatives allow the Company to swap floating rate borrowings into fixed rates. As of June 30, 2025, the Company was effectively hedged against interest rate risk arising from financial instruments through its interest rate risk management policy. See Note 26(d) of the notes to the Company's consolidated annual financial statements as of and for the years ended December 31, 2024 and 2023 and Note 24(d) of the notes to the Company's unaudited condensed consolidated interim financial statements as of June 30, 2025 and for the six-month periods ended June 30, 2025 and 2024 included elsewhere in this Offering Circular.

BUSINESS

OVERVIEW

The Company is one of the largest petroleum refining companies in Korea, as well as a leading producer of certain petrochemical products. The Company is currently ranked second among Korean petroleum refining companies in terms of refining capacity.

The Company's principal business activities consist of the production and marketing of refined petroleum products, petrochemicals (consisting of various aromatics products, polypropylene products and polyethylene products) and lubricants (including base oil). Such activities (with the exception of lubricants production, which takes place at the Company's facilities located in Incheon) are carried out at the Company's Yeosu production complex located in southern Korea, which includes the world's fifth-largest single-site oil refinery with a refining capacity of 800,000 BPSD.

The Company also operates an extensive storage, transportation and sales network in Korea for the Company's refined petroleum products. The Company seeks to maintain secure demand for its refined petroleum products through its domestic retail sales and distribution network. As of June 30, 2025, the Company's sales network for refined petroleum products included 2,327 service stations (including 332 LPG filling stations), representing approximately 18.5% of the service stations in Korea. Of these, the Company owned or controlled 334 service stations. According to Korea National Oil Corporation, the Company's domestic market share for its light oil refined petroleum products was approximately 21.8% in 2024 and 22.8% in the first half of 2025 in terms of sales volume.

The Company has invested significant capital in refinery-related initiatives to improve its crude oil processing efficiency, expand refining capacity, increase production of higher value refined products and meet evolving environmental standards. The Company's heavy oil upgrading plants convert low value-added and low quality heavy oil products, such as bunker-C, into higher margin and more environmentally friendly low-sulfur light oil products, such as gasoline, diesel and kerosene. The Company has a heavy oil upgrading ratio of approximately 34.3% as of June 30, 2025, the second highest among Korean refiners based on the data relating to the other Korean refiners as published by the MOTIE. In addition, in July 2021, the Company commenced commercial operations of a mixed feed cracker facility in Yeosu, which currently has a production capacity of up to 900,000 MTA of ethylene and 500,000 MTA of polyethylene, in order to further diversify the Company's product portfolio and expand its petrochemical business. The Company intends to continue to strategically invest in its production facilities and in developing leading technology to produce higher margin, higher value-added products and enhance the overall quality of its products. The Company also expects that continued modernization and rationalization of its facilities will improve production efficiency, increase opportunities for vertical integration and result in cost savings.

The Company is owned 50% by Chevron through two of its subsidiaries and 50% by GS Energy. The Company was established in 1967 in Korea as a petroleum refining joint venture between Lucky Chemical Industrial Corp., the founding company of the LG Group, and Caltex, a U.S. corporation engaged in international petroleum refining and marketing. In May 1996, the Company changed its name from "Honam Oil Refinery Co., Ltd." to "LG-Caltex Oil Corporation." Following a series of restructurings, the shares that Caltex held in the Company are now held by Chevron (Overseas) Holdings Ltd. and Chevron Global Energy Inc. The LG Group also underwent a series of restructurings in an effort to improve corporate governance and operational efficiency. In July 2004, LG Corporation (which had previously owned 50% of the Company's shares) split itself into two separate holding companies, LG Corporation and GS Holdings. As a result, the Company became a subsidiary of GS Holdings. In March 2005, the Company changed its name from "LG-Caltex Oil Corporation" to "GS Caltex Corporation." The Company benefits from vertical integration provided through its affiliation with GS Holdings and Chevron. See "—Raw Materials" and "—Sales and Distribution."

In January 2012, GS Holdings established a new wholly-owned subsidiary, GS Energy, to serve as an intermediate holding company for the Company and transferred all of its shares in the Company to GS Energy. From June 2012 to June 2013, the Company also transferred certain of its non-core operations to GS Energy, including its natural gas distribution, LNG-fired heat and power generation, renewable energy development and oil and natural gas exploration and development businesses. Such divestments were made in furtherance of the Company's renewed focus on its core businesses of petroleum refining, petrochemicals production and lubricants

production. The Company intends to continue to strategically grow its core businesses and maintain a high level of business alignment with Chevron, which remains an important strategic business partner as well as a shareholder of the Company.

The Company's sales were Won 58,532 billion in 2022, Won 48,608 billion in 2023 and Won 47,614 billion in 2024, and Won 24,499 billion in the first half of 2024 and Won 21,838 billion in the first half of 2025. The Company reported net profit of Won 2,789 billion in 2022, Won 1,153 billion in 2023 and Won 109 billion in 2024, and net profit of Won 317 billion in the first half of 2024 and net loss of Won 45 billion in the first half of 2025. The Company had total assets of Won 23,174 billion and total equity of Won 13,099 billion as of December 31, 2024, and total assets of Won 21,885 billion and total equity of Won 12,981 billion as of June 30, 2025.

PRODUCTS

The Company produces three principal groups of products:

- Refined petroleum products;
- Petrochemical products, primarily consisting of aromatics, polypropylene and polyethylene and olefin; and
- Lubricant products (including base oil).

The following table sets forth the sales of the Company by product group and related percentage data for the periods indicated.

	Year ended December 31,						Six months ended June 31,			
	2022		2023		2024		2024		2025	
	(in billions of Won, except percentages)									
Refined Petroleum Products:										
Gasoline	₩ 7,016	12.0%	₩ 5,776	11.9%	₩ 5,971	12.5%	₩ 3,144	12.8%	₩ 2,725	12.5%
Kerosene	765	1.3	714	1.5	672	1.4	372	1.5	507	2.3
Diesel	18,379	31.4	14,337	29.5	13,289	27.9	6,868	28.0	5,869	26.9
Bunker-C and others[1]	21,596	36.9	18,070	37.2	17,871	37.5	9,047	36.9	7,745	35.5
Sub-total	47,757	81.6	38,897	80.0	37,804	79.4	19,431	79.3	16,847	77.1
Petrochemical Products:										
Aromatics	5,712	9.8	4,782	9.8	5,102	10.7	2,592	10.6	2,521	11.5
Polypropylene[2]	556	1.0	509	1.0	501	1.1	253	1.0	249	1.1
Polyethylene	502	0.9	501	1.0	396	0.8	232	0.9	238	1.1
Olefin[3]	1,569	2.7	1,493	3.1	1,474	3.1	783	3.2	896	4.1
Others	400	0.7	375	0.8	427	0.9	208	0.8	206	0.9
Sub-total	8,739	14.9	7,660	15.8	7,900	16.6	4,068	16.6	4,110	18.8
Lubricant products:										
Lubricants and others	648	1.1	734	1.5	701	1.5	359	1.5	355	1.6
Base Oil	1,387	2.4	1,317	2.7	1,210	2.5	641	2.6	526	2.4
Sub-total	2,036	3.5	2,051	4.2	1,911	4.0	1,000	4.1	881	4.0
Total	₩58,532	100.0%	₩48,608	100.0%	₩47,614	100.0%	₩24,499	100.0%	₩21,838	100.0%

(1) Also includes naphtha, propane, butane, jet A-1, light residual fuel oil ("LRFO"), asphalt and other miscellaneous products.

(2) Includes excess propylene sold to third parties.

(3) Primarily includes excess ethylene sold to third parties.

Refined Petroleum Products

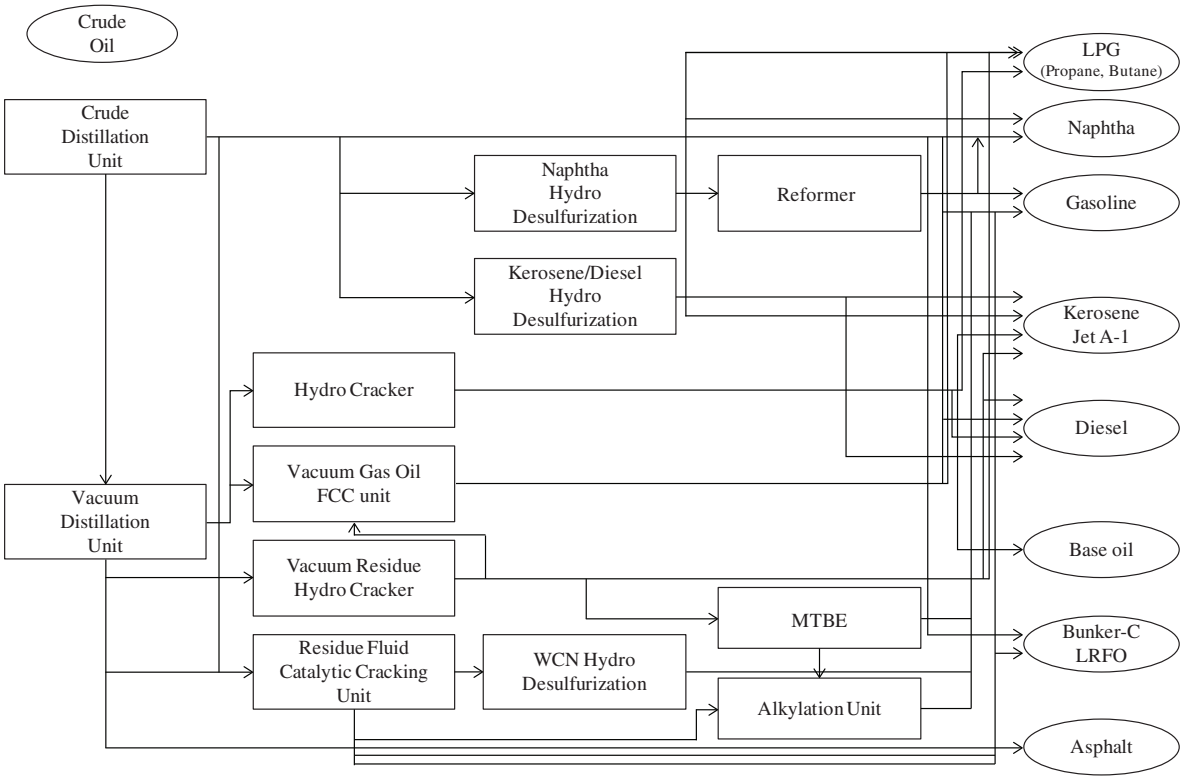
The Company's petroleum refining activities are carried out at its production complex in Yeosu, which commenced operations in 1967. See "—Production Facilities." As of June 30, 2025, the Yeosu complex had a total refining capacity of approximately 800,000 BPSD. At the Yeosu complex, crude oil is refined and processed into a variety of products, consisting of light oils (such as gasoline, naphtha and LPG (including propane and butane)), middle distillates (such as diesel, kerosene and jet A-1) and heavy oils (such as bunker-C, LRFO and asphalt).

The following chart sets forth the principal end uses of the main refined petroleum products produced by the Company:

Product	Principal End Uses
Light Oils:	
Gasoline	Fuel for automobiles
Naphtha(1)	Feedstock for petrochemicals
Propane(1)	Fuel for heating and gas turbines
Butane(1)	Fuel for automobiles, feedstock for city gas
Middle Distillates	
Diesel	Fuel for automobiles, trucks, heating
Kerosene	Heating fuel
Jet A-1(1)	Fuel for civilian jets
Heavy Oils:	
Bunker-C(1)	Industrial fuel, fuel for shipping
LRFO(1)	Industrial fuel, fuel for shipping
Asphalt(1)	Road construction

(1) Included in the Company's "others" refined petroleum products category.

The following diagram illustrates the petroleum refining process of the Company from crude oil to refined petroleum products.



In terms of sales revenues, diesel and gasoline are currently the most important refined petroleum products of the Company, accounting for 27.9% and 12.5%, respectively, of the Company's total sales revenues in 2024, and 26.9% and 12.5%, respectively, of such revenues in the first half of 2025.

The following table, which is based on information published by Korea National Oil Corporation, sets forth the annual consumption volume in Korea for refined petroleum products and related percentage growth data for the periods indicated.

	Year ended December 31,					
	2022		2023		2024	
	Thousands of Barrels	% Growth	Thousands of Barrels	% Growth	Thousands of Barrels	% Growth
Gasoline	88,368	4.1%	90,361	2.3%	95,043	5.2%
Kerosene	16,008	(4.8)	14,138	(11.7)	13,446	(4.9)
Diesel	163,658	(1.5)	160,492	(1.9)	155,067	(3.4)
Heavy Oils (including bunker-C)	22,909	2.9	19,413	(15.3)	18,205	(6.2)
Others[(1)]	656,333	1.3	641,594	(2.3)	676,637	5.5
Total	947,276	1.0	925,998	(2.2)	958,398	3.5

(1) Primarily consists of naphtha, as well as jet fuel, LPG and other miscellaneous petroleum products.

The Company does not anticipate undertaking a significant expansion of its petroleum refining capacity in the near future. In response to domestic demand for refined petroleum products toward light oils and low-sulfur products, due in particular to the increasing use of such products in transportation and household heating and increasing demand for cleaner fuels, the Company has from time to time made capital expenditures aimed at improving production efficiency for products such as gasoline, diesel and kerosene and low-sulfur products. From December 2005 to January 2013, the Company built new heavy oil upgrading plants at its Yeosu complex. The completion of such plants increased the Company's yield of high value refined products, added new base oil and polypropylene production capacity and reduced feedstock costs by improving the complex's ability to process heavy oil.

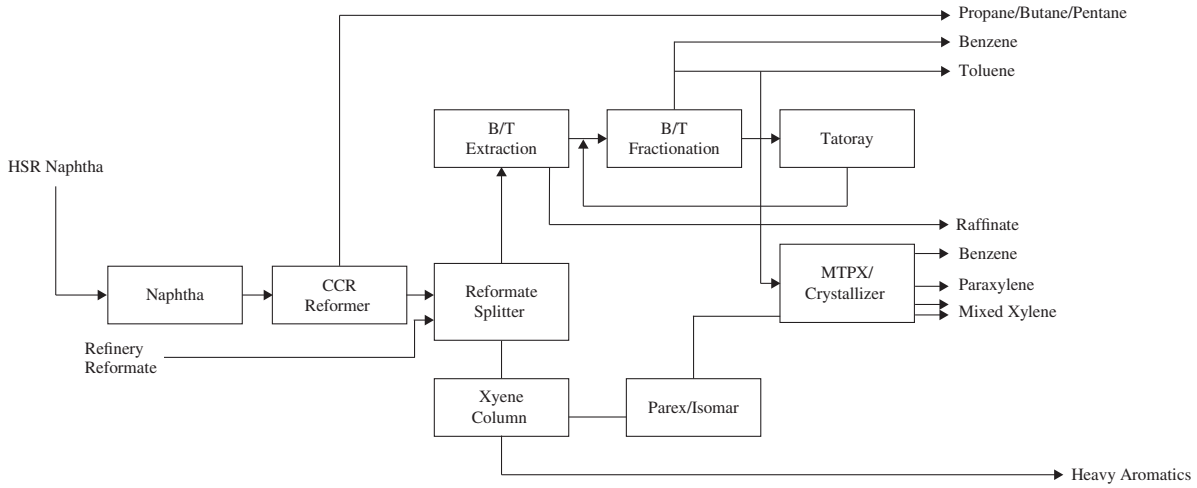
The Company imports all of the crude oil feedstock used in its petroleum refining activities. In 2024, approximately 23% of the Company's crude oil requirements was supplied through GS Caltex Singapore Pte., Ltd., one of the Company's subsidiaries. See "—Raw Materials."

Petrochemical Products

Aromatics

The Company commenced production of aromatics in 1990 and is currently one of the leading producers of aromatics in Korea. According to the Korea Petrochemical Industry Association, the Company's domestic market share was approximately 12.5% for paraxylene, 11.8% for benzene, 10.0% for mixed xylene and 6.2% for toluene in 2024 in terms of production capacity.

The following diagram illustrates the aromatics production process of the Company.



The Company produces aromatics by processing naphtha at facilities located at its Yeosu complex. See "—Production Facilities." The Company's total aromatics production capacity amounted to approximately 2,800,000 MTA as of June 30, 2025.

The Company's aromatics products consist principally of benzene, paraxylene, mixed xylene and toluene. Benzene is a feedstock for a number of downstream petrochemicals, including styrenic resins, nylon and epoxy resin. Paraxylene is used to produce terephthalic acid, a raw material for polyester fiber and resin. Mixed xylene is a feedstock for paraxylene, orthoxylene and solvents. Toluene is a raw material for polyurethane and solvents. A number of by-products result from the Company's aromatics production activities, including heavy aromatics, raffinate and pentane, which the Company mainly uses as gasoline blending stock.

The following table sets forth the Company's sales revenues for aromatics for the periods indicated.

	Year ended December 31,			Six months ended June 30,	
	2022	2023	2024	2024	2025
	(in billions of Won)				
Paraxylene	₩2,160	₩1,714	₩1,677	₩ 742	₩ 874
Benzene	1,836	1,148	1,403	616	667
Toluene	419	583	521	376	199
Mixed Xylene	871	926	960	596	503
Solvents and others	427	410	541	263	277
Total	₩5,712	₩4,782	₩5,102	₩2,592	₩2,521

Paraxylene and benzene are currently the most important aromatics products of the Company in terms of sales revenues. Paraxylene accounted for 3.5% and 4.0% of the Company's total sales revenues, while benzene accounted for 2.9% and 3.1% of the Company's total sales revenues, in 2024 and the first half of 2025, respectively.

The Company currently operates a large-scale single-site paraxylene plant with a total production capacity of 1,350,000 MTA across three units. The third paraxylene unit, which has a production capacity of 450,000 MTA, employs MTPX technology, an advanced technology developed by Exxon-Mobil. MTPX technology converts toluene to paraxylene and benzene at lower operating costs compared to conventional technologies.

The Company's total benzene production capacity is currently 930,000 MTA, which is one of the largest single-site benzene production capacities in the world, and its total toluene production capacity is currently 170,000 MTA.

The Company benefits from the vertical integration of its petroleum refining and aromatics production activities. The Company currently supplies most of its naphtha feedstock requirements and the majority of other feedstock requirements for aromatics through its petroleum refining operations. See "—Raw Materials." A certain portion of the Company's aromatics output is sold under long-term supply arrangements with major customers, including Samnam Petrochemical Co., Ltd. ("Samnam"), in which the Company owns a 20% equity interest. See "—Sales and Distribution—Petrochemical Products—Aromatics."

Polypropylene

The Company commenced its production of polypropylene in 1988 and is currently one of the leading polypropylene producers in Korea. The Company's polypropylene production facilities are primarily located at its Yeosu complex and have a total production capacity of approximately 184,000 MTA. See "—Production Facilities." The production process for polypropylene involves the combination of propylene, the principal feedstock, with other raw materials such as ethylene, hydrogen and nitrogen in reactors through a gas-phase polymerization process. The Company's polypropylene products are used principally by downstream plastics manufacturers to produce various products including a wide variety of household and industrial goods as well as high quality automobile and electronics parts. The Company also operates a polypropylene compounding plant with a capacity of 41,000 MTA in Jinju.

The Company also operates two wholly-owned subsidiaries in China, GS Caltex (Langfang) Plastics Co., Ltd. and GS Caltex (Suzhou) Plastics Co., Ltd., both of which primarily produce compounded polypropylene products for the Chinese market. In addition, the Company's wholly-owned subsidiary GS Caltex Czech, s.r.o. primarily produces compounded polypropylene products for the European market. In July 2025, the Company divested of its entire equity stake in its former wholly-owned subsidiary GS Caltex Mexico S. de R.L. de C.V., which produced compounded polypropylene products for the North American market, as part of its strategy to rebalance its product portfolio and geographic focus.

The Company's production capacity for propylene (the primary feedstock for polypropylene) exceeds its propylene requirements, and the Company sells its excess propylene both domestically and abroad.

Polyethylene

The Company commenced its production of high-density polyethylene in July 2021 following the completion of its new mixed feed cracker facility in Yeosu and has quickly become one of the leading polyethylene producers in Korea. The Company's polyethylene production facilities have a total production capacity of approximately 500,000 MTA. See "—Production Facilities." The production process for polyethylene involves the combination of ethylene, the principal feedstock, with certain catalysts in reactors through a gas-phase polymerization process. The Company's polyethylene products are used principally by downstream plastics manufacturers to produce various packaging materials such as plastic bags, bottles and films.

A significant majority of the Company's polyethylene output is exported to overseas customers on the spot market. The Company's production capacity for ethylene (the primary feedstock for polyethylene), which is produced at its mixed feed cracker facility in Yeosu as described above, exceeds its ethylene requirements, and the Company sells its excess ethylene both domestically and abroad.

Lubricant Products

The Company's lubricant products consist of lubricant oils and base oils. The Company is one of the leading producers of lubricant products in Korea, and commenced production of lubricant oils in 1969 and significantly expanded its operations with the addition of an automated grease plant in 1986 and the completion of an expansion project at its lubricant oil blending plant in 1994. The Company produces approximately 500 different types of lubricant oil and grease products for automobiles, marine vessels and industrial machinery, of which automobile lubricant oil products are the most important in terms of both sales revenues and volume.

The Company produces its lubricant oil products at its lubricant oil blending and grease plants located in Incheon, which have a production capacity of approximately 9,153 barrels of lubricant oil per day and 8,000 metric tons of grease per year, respectively. Lubricant oil products are produced by blending base oils such as

150N, 220N, 500N, 600N and 150BS grade oils with additives such as detergents, dispergents, viscosity-index improvers and other various functional improvers. The Company imported a majority of its additives requirements in 2024. See "—Raw Materials."

The Company began commercial production of base oils in October 2007, upon the completion of new base oil production facilities located within the Company's second heavy oil upgrading plant. The Company's total base oil production capacity is currently 29,381 barrels per day, most of which consist of Group II and Group III base oil. The Company believes that having internal base oil production capacity creates significant synergies, including by enabling vertical integration of its lubricant oil production process. In 2024, approximately 90% of the Company's requirements for base oils were supplied internally. As a result of increasingly stringent regulatory emissions standards, market demand for high-quality automotive lubricant oils has continued to grow. In light of this market trend, the Company believes that its ability to produce its own high-quality base oils (the primary component of lubricant oils) will continue to be important.

SALES AND DISTRIBUTION

Refined Petroleum Products

The Company's single largest market for refined petroleum products is Korea. The Company's sales of refined petroleum products in 2024 and the first half of 2025 amounted to Won 37,803 billion and Won 16,847 billion, respectively, of which 28.5% and 29.7% were generated in Korea.

The following table sets forth the domestic and export sales revenues of the Company for refined petroleum products for the periods indicated. The Company deems sales denominated in Won as domestic sales and sales denominated in U.S. dollars as export sales.

	Year ended December 31,			Six months ended June 30,	
	2022	2023	2024	2024	2025
	(in billions of Won)				
Domestic[(1)]	₩14,359	₩11,436	₩10,775	₩ 5,533	₩ 5,004
Export	33,398	27,461	27,028	13,898	11,843
Total	₩47,757	₩38,897	₩37,803	₩19,431	₩16,847

(1) Includes sales to both the private sector and the Government.

The majority of the Company's domestic sales are to the private sector. These sales are conducted through the Company's sales network in Korea for refined petroleum products, which included 2,327 service stations (including 332 LPG filling stations) as of June 30, 2025. Of these, the Company owned or controlled 334 service stations. In recent periods, the Company has been engaged in activities to further strengthen the competitiveness of its service stations, including by their rebranding under its new "Energy Plus" brand since 2022 and by offering ancillary services such as electric vehicle and nitrogen vehicle charging stations, logistics, vehicle maintenance and/or car sharing services at certain of its service stations. The Company also conducts sales directly to certain major corporate customers.

Domestic sales of heavy oils, naphtha and jet fuel are made primarily to large industrial and governmental users directly by the Company, while domestic sales of light oils (other than naphtha), kerosene and diesel are made primarily to retail and small industrial customers through the Company's network of sales agents and service stations.

The Company's exports of refined petroleum products consist principally of gasoline, diesel, bunker-C and jet fuel. The Company's major export markets for its refined petroleum products are Southeast Asia, China, Australia, Japan and the United States. The majority of export sales are direct exports, principally through GS Caltex Singapore Pte. Ltd., the Company's wholly-owned trading subsidiary, as well as Chevron U.S.A. Inc. and other Chevron affiliates, which in turn sell these products to their respective networks of purchasers and traders. The remainder of export sales are primarily sales made to foreign ships refueling in Korea, commercial airlines and the U.S. military in Korea.

Petrochemical Products

The following table sets forth the domestic and export sales revenues of the Company for the Company's primary petrochemical products for the periods indicated. The Company deems sales denominated in Won as domestic sales and sales denominated in U.S. dollars as export sales.

	Year ended December 31,			Six months ended June 30,	
	2022	2023	2024	2024	2025
	(in billions of Won)				
Aromatics					
Domestic	₩ 538	₩ 555	₩ 678	₩ 314	₩ 289
Export	5,173	4,226	4,425	2,278	2,231
Total	₩5,712	₩4,782	₩5,102	₩2,592	₩2,521
Polypropylene					
Domestic	₩ 254	₩ 257	₩ 241	₩ 124	₩ 113
Export	302	252	260	129	136
Total	₩ 556	₩ 509	₩ 501	₩ 253	₩ 249
Polyethylene					
Domestic	₩ 133	₩ 150	₩ 149	₩ 74	₩ 87
Export	370	352	247	158	151
Total	₩ 502	₩ 501	₩ 396	₩ 232	₩ 238

Aromatics

In recent years, the Company has mainly focused on export sales of its aromatics products, in light of increasing demand for such products from foreign manufacturers, especially those located in China and other parts of Asia, and in order to increase and diversify its customer base. The Company's sales of aromatics in 2024 and the first half of 2025 amounted to Won 5,102 billion and Won 2,521 billion, respectively, of which 86.7% and 88.5% were export sales.

The Company's sales of aromatics in recent years have consisted mainly of paraxylene and benzene, which are sold primarily to domestic and overseas petrochemical manufacturers as feedstock for production of downstream products (including those for export), as well as to traders overseas. The major markets for the Company's direct exports of paraxylene are China and Taiwan, whereas the major markets for direct exports of benzene are China and the United States.

A significant portion of the Company's aromatics output is sold pursuant to long-term supply arrangements with major customers. Such sales are generally denominated in U.S. dollars and are therefore recorded as export sales. The Company sold approximately 40% and 22% of its annual benzene sales volume to Huchems Co., Ltd. and Kumho P&B Chemicals Co., Ltd., respectively, in 2024 based on one-year renewable supply contracts, which have been renewed in January 2025, providing for the supply of a portion of its benzene requirements at prices that are adjusted monthly based on an agreed price formula. In addition, approximately 60% of the Company's sales volume of paraxylene was sold to Samnam in 2024. Samnam uses paraxylene to produce terephthalic acid, a raw material for polyester. An agreement among the shareholders of Samnam grants the Company the perpetual right and obligation to supply at least 75% of Samnam's paraxylene requirements. The Company's supply contract with Samnam, which is automatically renewed annually, provides for the supply of a fixed quantity of paraxylene at prices that are adjusted quarterly based on prevailing term contract prices in the region.

Polypropylene

The Company's sales of polypropylene in 2024 and the first half of 2025 amounted to Won 501 billion and Won 249 billion, respectively, of which 51.9% and 54.6% were export sales. The Company's export sales of polypropylene products are mainly to overseas plastics manufacturers (including international subsidiaries of

Korean manufacturers) and dealers. The major markets for the Company's polypropylene exports are China, Europe, Southeast Asia and Latin America. The Company has local subsidiaries in China and the Czech Republic which engage in the production and marketing of polypropylene products. See "—Products—Petrochemical Products—Polypropylene."

Domestic sales of polypropylene are made to downstream plastics manufacturers as well as to industrial end-users, including LG Electronics and Hyundai Motor Company (including its affiliate Kia Motors Corp.), which use polypropylene to produce various automobile parts and home electronics appliance parts, respectively.

Polyethylene and Olefin

The Company's sales of polyethylene in 2024 and the first half of 2025 amounted to Won 396 billion and Won 238 billion, respectively, of which 62.4% and 63.4% were export sales. The Company's sales of olefin products, which primarily consist of its excess ethylene production, in 2024 and the first half of 2025 amounted to Won 1,474 billion and Won 896 billion, respectively, a substantial majority of which were export sales. Most of the Company's polyethylene output is currently sold on the spot market rather than pursuant to long-term supply arrangements, while most of its excess ethylene output is exported under annual term contracts to downstream petrochemical producers directly or through trading companies.

Lubricant Products

The Company's sales of lubricant products in 2024 and the first half of 2025 amounted to Won 1,911 billion and Won 881 billion, respectively, which included sales of base oils of Won 1,210 billion and Won 526 billion, respectively.

In 2024 and the first half of 2025, 42.1% and 43.0%, respectively, of the Company's lubricant oil sales revenues were generated in the domestic market. Sales of lubricant oils to the Company's sales agents (and through such sales agents to service stations and other retail outlets for resale to retail customers) accounted for more than a majority of the Company's domestic lubricant oil sales revenues in 2024, with the balance of such sales made primarily to the Government and other direct customers.

In 2024 and the first half of 2025, 88.2% and 86.5%, respectively, of the Company's base oil sales revenues were generated in export markets, mainly from sales to large-scale industrial purchasers in Southeast Asia, China and India.

RAW MATERIALS

The Company imports all of its requirements for crude oil, the principal raw material used by the Company in its petroleum refining activities, from overseas sources. In 2024, the Company imported 262 million barrels of crude oil, or approximately 26% of Korea's total crude oil imports. Approximately 76% of the crude oil imported by the Company in 2024 were sweet crudes and the remaining 24% were sour crudes.

In 2024, approximately 23% of the Company's crude oil requirements were supplied through GS Caltex Singapore Pte., Ltd., one of the Company's subsidiaries, which purchases crude oil from state-owned petroleum entities of oil exporting countries pursuant to one-year supply contracts and from affiliates of other major international oil companies such as BP, SIETCO and Total on the spot market. Spot market purchases are made at the prevailing spot market price, generally to meet fluctuations in supply or demand.

In 2024, approximately half of the Company's crude oil requirements were supplied directly by or through Chevron U.S.A. Singapore Branch, pursuant to the Crude Oil and Products Sale and Purchase Agreement executed in February 2007. Under the Crude Oil and Products Sale and Purchase Agreement, Chevron U.S.A. Singapore Branch has agreed to supply to the Company, and the Company has agreed to purchase from or through Chevron U.S.A. Singapore Branch, up to 50% of the Company's annual crude oil requirements, and the Company and Chevron U.S.A. Singapore Branch cooperate to source crude oil and export petroleum products. More specifically, the Crude Oil and Products Sale and Purchase Agreement enhances the Company's ability to source the most competitive suppliers of crude oil in the crude market, secure crude oil supply and optimize economic efficiency in crude oil procurement and sales of petroleum products. Performance under the Crude Oil and

Products Sale and Purchase Agreement is assessed by the Company on a monthly basis in order to achieve the most competitive crude selection process and product sales. The Crude Oil and Products Sale and Purchase Agreement, which is renewed by mutual agreement each year, was last renewed in January 2025.

The price of crude oil imported by the Company tends to fluctuate based on market conditions. Approximately 59% of the Company's crude oil requirements in 2024 were imported under supply contracts with state-owned petroleum companies of oil exporting countries, such as Abu Dhabi National Oil Company, Saudi Arabian Oil Company, Republic of Iraq State Organization for Marketing of Oil and Kuwait Petroleum Corporation. Such supply contracts typically provide for the supply of a fixed quantity (within a specified range) of crude oil during a period of one or more years, at prices linked to international crude prices. The remaining 41% of the Company's crude oil requirements were imported under contracts of limited duration with major oil trading companies, which typically provide that prices are variable depending on market prices prevailing at the time of supply, or purchased in the spot market from time to time at the prevailing market price.

The market price of crude oil has fluctuated significantly in recent years, due in part to the global COVID-19 pandemic, and in more recent periods, it has been affected by the ongoing war between Russia and Ukraine since February 2022 and the ensuing sanctions imposed against Russia, and the decisions by the member countries of OPEC+ to reduce their crude oil supply volume from October 2022 to March 2025 (which reductions have been eased commencing April 2025). The Company has historically been able to pass on a substantial portion, but not all, of any increase in crude oil costs to its customers through price increases for its refined petroleum products, which typically lag between one to two weeks. See "Risk Factors—Risks Relating to the Company—Fluctuations in market prices of crude oil may adversely affect the Company's margins and profits."

The following table sets forth the volume of crude oil imports by the Company by region of origin and related percentage data for the periods indicated.

	Year ended December 31,						Six months ended June 30,			
	2022		2023		2024		2024		2025	
	(in thousands of barrels, except percentages)									
Middle East	180,785	67.2%	184,482	69.4%	194,852	74.2%	97,828	75.0%	89,351	71.0%
Africa/North Sea	30,436	11.3%	–	–	2,062	0.8%	–	–	1,976	1.6%
Asia/Australia	7,666	2.9%	16,165	6.1%	2,307	0.9%	1,278	1.0%	4,314	3.4%
Americas	49,976	18.6%	65,034	24.5%	63,370	24.1%	31,376	24.0%	30,254	24.0%
Total	268,863	100%	265,681	100%	262,591	100%	130,482	100%	125,895	100%

The principal raw material used by the Company in its aromatics production is naphtha. In 2024, the Company used 28.9 million barrels of naphtha for its aromatics production, all of which was supplied internally through the Company's petroleum refining operations.

In 2024, the Company used approximately 180 thousand metric tons of propylene for its polypropylene production and 300 thousand metric tons of ethylene for its polyethylene production. All of the Company's propylene requirements (the primary feedstock for polypropylene) and ethylene requirements (the primary feedstock for polyethylene) are supplied internally.

The principal raw materials used by the Company in its lubricant oil production are base oils such as 150N, 220N, 500N, 600N and 150BS grade oils and additives such as detergents, dispergents and viscosity-index improvers. In 2024, approximately 90% of the Company's requirements for base oils were supplied internally. Most of the additives used by the Company in its lubricant oil production are imported, primarily from the United States, Singapore and Europe.

The Company believes that its supply contracts with its raw materials suppliers, including affiliated suppliers, contain commercial terms and conditions that are customary for the industry.

STORAGE AND TRANSPORTATION

The Company arranges for the transport of all of its crude oil by tankers contracted on consecutive voyage charter and spot voyage charter bases. Crude tankers generally unload at the Company's three crude unloading wharfs located in Yeosu, which are capable of accommodating crude carriers of up to 255,000, 320,000 and 120,000 dead-weight tons, respectively. Crude oil is transferred from the wharfs through pipelines to the Company's 23 crude oil storage tanks at the Yeosu complex. The Company also operates three product-loading wharfs at Yeosu with 12 separate berths, as well as a separate LPG loading wharf.

Refined petroleum products and aromatics produced by the Company are stored at 337 product tanks located at the Yeosu complex. The Company distributes its refined petroleum products either directly from the Yeosu complex or through marine terminals and an inland terminal located throughout Korea. The Company owns six marine terminals in Korea, equipped with a total of 92 storage tanks, as well as an inland terminal equipped with nine product tanks.

The Company's refined petroleum products are transported from the Yeosu complex to the Company's marine and inland terminals and to customers in Korea by means of ships, pipelines and tank trucks. The Company, together with its major domestic competitors and the Government, are shareholders of Daehan Oil Pipeline Corporation, a cooperative joint venture which operates a 47 kilometer pipeline between Incheon and Goyang, a 468 kilometer south-north pipeline that connects Pangyo with, among other locations, Yeosu, a 465 kilometer south-north pipeline that connects Pangyo with, among other locations, Onsan and a 93 kilometer pipeline that connects Daesan with Cheonan. These pipelines are used by the Company and its major domestic competitors.

The Company's aromatics products are generally exported through the Company's product-loading wharfs located at Yeosu. These products are also transported through pipelines to downstream petrochemical companies based in Yeosu that purchase such products from the Company. Polypropylene, polyethylene and lubricant products produced by the Company are transported both by land and by sea. The Company owns two product tankers (to transport finished products) and one LPG carrier.

PRODUCTION FACILITIES

Substantially all of the production facilities in Korea for the Company's refined petroleum products, aromatics, polypropylene and base oils are located at its Yeosu complex. The Company's production facilities for lubricant oils are located in Incheon. The following table sets forth certain information regarding the principal domestic production facilities of the Company.

Name of Facility	Commencement of Operation	Current Capacity	Products Produced
Refined Petroleum Products:			
Crude Distillation Units (No. 1, 2, 3 and 4)	1969, 1972, 1981, 1996	800,000 BPSD	Intermediate petroleum products
Vacuum Unit	1971, 2007	162,000 BPSD	Asphalt, Vacuum gas oil
No. 1, 2, 3 and 4 Gas Oil Hydrodesulfurization Units	1991, 1996, 1998, 2009	282,000 BPSD	Low-sulfur diesel
Naphtha Kerosene Hydrotreating Unit	1969, 1981, 1990, 1997	119,000 BPSD	Low-sulfur naphtha and kerosene
Reformer Unit	1969, 1981	17,000 BPSD	Reformate
Residual Fluid Catalytic Cracking Unit (No. 1 Heavy Oil Upgrading Unit)	1995	94,000 BPSD	Gasoline, diesel, propylene
Whole Cracked Naphtha Hydrotreating Unit	1997	35,000 BPSD	Naphtha desulfurization
Alkylation Unit	2005, 2015	19,000 BPSD	Alkylate (high-octane gasoline)
Crude Naphtha Splitting Unit	2006	110,000 BPSD	Heavy straight run naphtha and light straight run naphtha
Hydrocracker Unit (No. 2 Heavy Oil Upgrading Unit)	2007	62,000 BPSD	Diesel, kerosene

Name of Facility	Commencement of Operation	Current Capacity	Products Produced
Vacuum Residue Hydrocracker Unit (No. 3 Heavy Oil Upgrading Unit)	2010	66,000 BPSD	Diesel, kerosene
Vacuum Gas Oil Fluidized Catalytic Cracking Unit (No. 4 Heavy Oil Upgrading Unit)	2013	53,000 BPSD	Gasoline, diesel, kerosene
Petrochemical Products:			
Aromatics Plant	1990, 1992, 2000, 2007	2,800,000 MTA	Benzene, toluene, mixed xylene
Paraxylene Units (No. 1, 2 and 3)	1990, 1995, 2003	1,350,000 MTA	Paraxylene
Polypropylene Plant	1989, 1998, 2016	184,000 MTA	Polypropylene
Continuous Catalytic Regeneration Reformer (No. 1 and 2)	1990, 1997, 2007	89,000 BPSD	Reformate
Xylene Unit	2006	27,000 BPSD	Light reformate, mixed xylene
Mixed Feed Cracker	2021	900,000 MTA (ethylene); 500,000 MTA (polyethylene)	Ethylene and polyethylene
Lubricant Products:			
Lubricant Oil Blending Unit	1969, 1991, 1997	9,153 BPSD	Lubricants
Grease Plant	1986	8,000 MTA	Grease
Base Oil Plant	2007	30,000 BPSD	Base oil

Through its overseas subsidiaries, the Company also operates production facilities for petrochemical products outside Korea. The following table sets forth certain information regarding the principal overseas production facilities of the Company.

Subsidiary	Name of Facility	Commencement of Operation	Current Capacity	Products Produced
China:				
GS Caltex (Langfang) Plastics Co., Ltd.	Compounded Polypropylene Plant	2006	51,000 MTA	Compounded polypropylene
GS Caltex (Suzhou) Plastics Co., Ltd.	Compounded Polypropylene Plant	2010	67,000 MTA	Compounded polypropylene
Czech Republic:				
GS Caltex Czech, s.r.o.	Compounded Polypropylene Plant	2011	60,000 MTA	Compounded polypropylene

The Company conducts regular maintenance and repair activities with respect to its production facilities, generally once every four years for each unit. Such activities generally last for a period of approximately one month, during which operations at the relevant facilities are suspended.

RESEARCH AND DEVELOPMENT

The Company's research and development activities are carried out principally at its research center located in Daedeok Innopolis, a research and development district in Yuseong-gu, Daejeon Metropolitan City, that is home to major research institutes and corporate research centers in Korea. Established in 1986, the Company's research center is composed of multiple laboratories fulfilling the research and development needs of the Company, including research on petroleum and petrochemical products and technology, polymers, process optimization, environmentally-friendly products and technology, catalysts and the development of advanced materials.

The Company has succeeded in developing a number of products, including performance-enhancing additives for gasoline and diesel and various new high-performance and environmentally-friendly engine oils and other lubricant products. The Company has also developed high value-added specialty chemicals, petrochemical products and separation process technology.

In 2024 and the first half of 2025, approximately 0.2% and 0.1%, respectively, of the Company's sales revenue was allocated to research and development expenses. Research and development expenses (excluding capital expenditures for research and development facilities and amounts recorded as intangible assets) in 2024 and the first half of 2025 amounted to Won 75 billion and Won 31 billion, respectively.

INSURANCE

The Company maintains property all-risk insurance with respect to its facilities, raw materials and inventories; business interruption insurance; commercial general liability insurance; aviation product and refueling liability insurance; marine cargo insurance with respect to its crude oil, refined petroleum product imports, lubricants and other petrochemical products; automobile liability insurance; tank lorry insurance; director and officer liability insurance; environmental impairment insurance; and personal information leakage liability insurance. All such insurance policies (except erection all-risk insurance, which is generally project-specific and purchased for the duration of a given project) are renewed annually, at which time the insured amounts are determined. The Company believes that its insurance policies adequately cover the risks associated with its business.

EMPLOYEES

As of June 30, 2025, the Company (excluding its subsidiaries) had 3,124 full time employees, of whom 1,841 were employed in connection with the Company's petroleum refining business, 447 were employed in connection with the Company's petrochemical business, 105 were employed in connection with the Company's lubricants business and 727 were employed in other capacities.

The Company, like most Korean companies, grants its employees annual increases in basic wages and pays periodic bonuses. Average wage increases in 2022, 2023 and 2024 from the previous year amounted to 5.0%, and 7.6% and 6.1%, respectively. The Company also provides a wide range of benefits to its employees, including pension benefits, subsidized housing and housing loans, medical insurance, periodic health checks, education subsidies for employees' children and the use of recreational facilities.

For employees based in Korea, in accordance with the National Pension Act of Korea, the Company contributes an amount equal to 4.5% of an employee's standard monthly wages, and each employee contributes 4.5% of his or her standard monthly wages, into his or her personal pension account. In addition, in accordance with the Korean Employee Retirement Income Security Act, the Company also operates pension plans for its employees, who have the option of choosing either a defined benefit plan or a defined contribution plan. The Company also operates defined benefit plans and defined contribution plans in overseas subsidiaries in accordance with the applicable local regulations and practices of each country. On a consolidated basis, the Company had net defined benefit assets of Won 48 billion as of June 30, 2025.

As of June 30, 2025, approximately half of the Company's employees belonged to a union, membership in which is open only to certain Company employees. Informal meetings take place between employee and management representatives as and when necessary and at least once a month, while formal meetings take place once each quarter. The Company negotiates collective bargaining agreements every two years with its labor union, which it last entered into in November 2023, and annually negotiates a wage agreement. The annual wage increase is determined jointly by employee and management representatives in consideration of the Company's performance and the rate of inflation and economic growth in Korea. The Company has not experienced any strikes or other material labor disputes since 2004 and considers its current relations with its work force to be good.

COMPETITION

Petroleum Refining Segment

Following the completion of the Company's fourth crude distillation unit, which commenced operations in December 1996, the Company has consistently had the second-largest refining capacity among domestic petroleum refiners. According to Korea National Oil Corporation, the Company ranked third among Korean refiners with a market share in the domestic light oil refined petroleum market of 21.8% and 22.8%, respectively,

in 2024 and the first half of 2025 based on sales volume. Due in part to the Government's strict regulation of the petroleum refining industry in the past, which favored existing large market participants, and in part to the Company's long operating experience, large crude distillation capacity, historically secure crude oil supply from Chevron, stable customer relationships and extensive transport and retail distribution network, the Company has been able to maintain a leading position in the domestic petroleum refining industry throughout its operating history. The Company believes that it can maintain its leading position in the Korean refined petroleum products market through continued strategic capital expenditures and operational excellence, its focus on the production of light oils and low-sulfur products with higher margins and the improvement in the quality of its service stations throughout Korea.

The Company's competitors in the domestic petroleum refining industry consist principally of three other major domestic petroleum refiners, SK Energy, HD Hyundai Oilbank and S-Oil Corporation. Furthermore, following the deregulation of the Korean petroleum refining market in January 1997, there have been new entrants into the market that import refined products and market them primarily to non-affiliated service stations. In addition, the Government has been promoting reduction in the retail prices of refined light oil products such as gasoline and diesel, including by introducing Government-operated discount service stations nationwide in the fourth quarter of 2011, which in turn has contributed to a decrease in the Company's margins from its petroleum refining business. In its export markets, the Company competes with a variety of competitors ranging from the "supermajor" oil companies to large local state-owned and private refiners.

The Company's results of operations may be impacted by developments in the global economy that affect demand for its refined petroleum products, which has experienced significant volatility in recent years. Following a period of recovery in demand in 2021 and the first half of 2022 (which was preceded by a significant slowdown due to the debilitating effects of the COVID-19 pandemic on the global economy in 2020), the global demand for refined petroleum products has generally weakened in light of increased weakness and uncertainty in the global economy and financial markets, among others, due to increasing inflationary pressures and significant fluctuations in policy interest rates globally. Such weakness and uncertainty have been exacerbated in the first half of 2025 in part due to the imposition of universal "reciprocal" tariffs by the United States on its trading partners and the resulting tension and deterioration of economic and trade relations between the United States and many of these countries (including China), as well as the ongoing hostilities in the Middle East following the Israel-Hamas war and the Iran-Israel conflict.

The Company's results of operations may also be impacted by its competitors' expansion projects and refinery improvements that result in an increase in the overall regional or local production volume of refined petroleum products. Following delays in the expansion projects of the Company's overseas competitors largely due to the aforementioned negative impact of COVID-19, such projects have since generally resumed or been completed, and the overall refining capacity of the industry has increased in recent years. Furthermore, prices in the Korean and global market for refined petroleum products have been affected by, among other things, the disruptions in the supply of crude oil in part due to the ongoing war between Russia and Ukraine since February 2022 and the ensuing sanctions imposed against Russia by the United States and other countries, which contributed to a significant increase in the market price of crude oil in the first half of 2022, as well as the decisions by the member countries of OPEC+ to reduce their crude oil supply volume from October 2022. Such decisions were extended into the first half of 2025 until these countries decided to begin increasing their crude oil supply volume commencing in April 2025. As a result of such developments, the Company's refining margins have fluctuated significantly in recent years. While refining margins were temporarily strengthened when supply disruptions and logistical risks emerged, they have generally decreased in recent years as the start-up of new large-scale refining facilities, increased exports from producers in Asia and concerns over slowing demand placed downward pressure on the market.

The foregoing developments in turn have led to increased uncertainty regarding future prospects for the industry, as well as difficulty in accurately forecasting future results of operations and cash flows on the part of industry participants, including the Company. Overall, despite periods of temporary rebounds, the global refined petroleum market has remained unstable and relatively weak in recent years, which conditions may be further exacerbated by continued uncertainty in the global economy as well as future changes in major crude oil-producing countries' production policies and increases in geopolitical tensions. Such volatility may result in further fluctuations in prices and sales volumes, which may have a material adverse effect on the Company's operating margins and results of operations. See "Risk Factors—Risks Relating to the Company—The Company operates in highly competitive markets, and the Company's failure to successfully compete would adversely affect its market position and business."

In addition, the global refined petroleum industry is facing continued threat of a long-term reduction in demand for gasoline and diesel for motor vehicle use as the market share of electric vehicles in the global automotive industry continues to increase. While the Company is actively pursuing strategies to diversify its product portfolio to reduce the degree of its reliance on sales of refined petroleum products, no assurance can be given that the Company will not be adversely affected by future declines in demand for refined petroleum products for motor vehicle use.

Petrochemicals Segment

In the petrochemical industry, the Company faces competition mainly from global producers (including other major Korean petrochemical companies), both in domestic and export markets, primarily on the basis of price and quality. The petrochemical industry is highly cyclical and demand for petrochemical products has fluctuated depending on general economic conditions in Korea, as well as in various Asian economies, in particular China and Southeast Asia. An imbalance between supply and demand, as well as the emergence of low cost producers in the Middle East which are located near fuel sources, have resulted in pricing pressures as well as uncertainty regarding future prospects for the global petrochemical industry.

The petrochemical industry has suffered in the past from, and continues to face the prospects of, an oversupply of petrochemical products as a result of continued expansion of petrochemical production capacity in Asia and the Middle East. Following a period of recovery in global economic activities in 2021 and the first half of 2022, in line with which the global petrochemical industry also showed signs of recovery, the global petrochemical industry has faced renewed weakness and uncertainty, as recovery in global demand has since slowed in light of weaker global economic conditions and the impact of the temporary rebound in demand from China following the resumption of its economic activities in the second half of 2022 was not as strong as initially anticipated. Such weakness and uncertainty were exacerbated in the first half of 2025 by due to concerns over export disruptions stemming from an increase in trade tensions between the United States and China following the imposition of significantly higher tariffs against each other, which applied further downward pressure on prices and margins of petrochemical products until those countries adopted measures to suspend such increased tariffs.

Furthermore, in August 2025, the Government urged major participants of the Korean petrochemical industry to propose restructuring plans to reduce the domestic industry capacity of naphtha cracker facilities (which produce polypropylene, polyethylene and olefin products) in order to enhance their economic viability by the end of 2025. In September 2025, a creditors' committee formed by various domestic financial institutions with credit exposure to Korean petrochemical companies announced that such financial institutions would provide liquidity support to those companies that submit satisfactory restructuring plans. While the Company believes that its mixed feed cracker facility, which uses naphtha as its primary feedstock, uniquely benefits from having access to a stable internal supply of naphtha, and currently has no plans to scale down the operation of such facility, the Company cannot predict the outcome of any plans that may be developed by its domestic competitors. No assurance can be given that any such plans that are adopted by the Company's domestic competitors will not lead to increased consolidation in the Korean petrochemical industry, or that they may not have an adverse effect on the Company's competitive position in the market.

Lubricants Segment

In the lubricant oil market, the Company faces competition from a wide variety of existing and new competitors ranging from supermajor oil companies and large state-owned refining companies to specialized producers that focus on a limited number of product lines. The Company's primary competitors in the base oil market consist of large regional petroleum refining companies and state-owned refineries. In the domestic lubricant market, the Company competes principally with domestic petroleum refining companies and their affiliates, such as SK Enmove (which is a sister company of SK Energy and is in the process of being merged with its affiliate SK On, a leading manufacturer of rechargeable batteries) and S-Oil Total, while in the overseas lubricant market, the Company's main competitors consist of supermajor oil companies and state-owned oil companies. The lubricant oil market in recent years has been characterized by intense competition resulting from expansion of production capacity, erosion of average selling prices and frequent changes in performance requirements for lubricant products driven by rapidly changing technologies and evolving industry and regulatory standards in the automotive industry, which has negatively impacted the profitability of Korean lubricant producers, including the Company.

The global market for lubricant and base oil products showed stronger margins in 2023 due to a rebound in demand from China as a result of the general resumption of its economic activities following the COVID-19 pandemic, as well as stronger economic conditions in India and the Middle East. In 2024, margins were further supported by stronger market demand for heavy grade marine lubricants, in part due to growth in international trades involving Asian countries and an increase in cargo volumes resulting from vessel upsizing, as well as a temporary supply shortage of base oil products due in part to a fire at a major Taiwanese refinery complex and pre-scheduled maintenance shutdowns of certain other leading Asian manufacturers' facilities. However, renewed weakness and uncertainty in the global economy and financial markets in the first half of 2025 have adversely affected the margins for lubricant and base oil products.

For a discussion of the risks relating to the Company's competitive landscape, see "Risk Factors—Risks Relating to the Company—The Company operates in highly competitive markets, and the Company's failure to successfully compete would adversely affect its market position and business."

ENVIRONMENTAL MATTERS

The Company is vigorous in its efforts to engage in environmentally responsible management of, and to protect the environment from damage resulting from, its operations.

The production activities of the Company are subject to regulation under the Air and Environmental Preservation Act (the "AEPA") and the Water and Ecosystem Preservation Act (the "WEPA") of Korea. The AEPA and WEPA and the regulations thereunder prescribe maximum permissible levels of pollutants that can be contained in air emissions and waste water, respectively, discharged by the Company's production facilities. Pursuant to its environmental management master plan, the Company operates environmental control facilities at its production facilities that reduce the level of pollutants contained in air and water discharges to permissible levels. The Company continually strives to improve the environmental soundness of its production facilities through capital investment and improving operating efficiency and management. In addition to efforts to meet mandated environmental protection standards, the Company voluntarily adopted a leak detection and repair program at its refinery site and installed a vapor recovery unit at its petroleum product storage tanks and loading racks to prevent volatile organic compounds from being emitted into the atmosphere. The Company first received Standardization of International Organizations 14001 certification in 1999 and has reacquired such certification every three years since then.

The AEPA and the regulations thereunder also regulate the chemical content of certain petroleum products, including gasoline, diesel and fuel oil. The products of the Company currently meet the applicable requirements under such regulations. Stricter oxidized sulfur compound emissions restrictions have been imposed by the Government, effective from January 2006. Stricter regulations on levels of sulfur, aromatics and olefins contained in fuel for automobiles also have been imposed by the Government, effective from January 2009. In addition, stricter regulations have been imposed by the Government on levels of aromatics and sulfur contained in fuel for automobiles, effective from January 2015. In light of such stricter requirements, the Company has made significant capital expenditures to construct new facilities. Furthermore, in response to increasing domestic demand for cleaner refined petroleum products with lower sulfur content, the Company has constructed four middle distillated desulfurization units, four heavy oil upgrading units and two alkylation units, and has also been refurbishing these units periodically. See "—Production Facilities."

The Company's production activities are also subject to the Soil Environment Preservation Act (the "SEPA"), which took effect from January 1996. Under the SEPA, facilities that meet certain standards and cause soil contamination, such as underground storage tanks, must undergo periodic soil contamination testing. The SEPA and the regulations thereunder define what constitutes soil contamination and require persons determined to have caused soil contamination to carry out clean-up or other remedial action. In December 2002, the Company entered into a voluntary agreement with the Ministry of Environment and adopted a plan to clean up any contaminations at its manufacturing facilities, service stations and oil depots. This agreement was last renewed in March 2013. The Company's environmental remediation costs did not have a material adverse effect on its results of operations in each of 2022, 2023 and 2024.

Furthermore, the production activities of the Company are subject to the Act on the Registration and Evaluation of Chemicals (the "REC Act"), which was enacted in May 2013 for the purpose of protecting the environment from risks caused by chemicals. Under the REC Act, which took effect from January 2015, the Company must obtain a registration of chemicals with the Ministry of Environment, which evaluates the degrees of hazard for such chemicals.

The production activities of the Company may also be subject to other Korean environmental laws, such as the Noise and Vibration Act, Waste Management Act, Ground Water Act and Chemicals Control Act. Under such environmental laws, a business entity that conducts production activity that may cause environmental pollution as described therein must obtain a permit or file a report and must comply with the relevant regulations.

The Company's production activities are also subject to the Act on the Integrated Control of Pollutant-Discharging Facilities (the "ICPDF Act"), which was enacted in December 2015. Under the ICPDF Act, beginning at the end of 2022, the Company is required to obtain a permit for its pollutant-discharging facilities, which permit takes precedence over the AEPA, the Noise and Vibration Act, the WEPA, the SEPA, and the Waste Management Act with regard to the permission and control of such facilities through integrated criteria for the discharge of pollutants that were previously regulated separately pursuant to such environmental laws. Accordingly, the Company acquired such permit in December 2022 and has since been required to comply with the maximum permitted discharging criteria prescribed in the Enforcement Decree of the ICPDF Act.

In addition, the production activities of the Company are subject to the Framework Act on Carbon Neutrality and Green Growth to Cope with Climate Crisis (the "CNGGCCC Act"), which was enacted in September 2021 and amended in March 2023, and the Act on the Allocation and Trading of Greenhouse Gas Emissions Permits (the "ATGGEP Act"), which was enacted in May 2012 and amended in March 2022. The CNGGCCC Act and the ATGGEP Act and regulations thereunder form the basis for an emissions trading scheme in Korea to reduce greenhouse gas emission in a cost-effective manner.

The CNGGCCC Act and the guidelines on greenhouse gas target management system issued by the Ministry of Environment confer on the Government the authority to establish and enforce a national strategy for carbon neutrality and green growth and establish a system to manage greenhouse gas emissions targets for each entity that emits greenhouse gases above a certain level specified by the Presidential Decree under the CNGGCCC Act. Each such entity must comply with the greenhouse gas emissions targets and report its compliance thereof to the Government. The Government may order such entity to make improvements in case the entity fails to meet the greenhouse gas emissions targets. If the entity is found to be in violation of the Government's order, the Government may impose an administrative fine, in an amount not exceeding Won 5 million for the first violation, Won 7 million for the second violation, and Won 10 million for the third violation.

The ATGGEP Act allows the trading of greenhouse gas emissions permits on the emissions trading market. An emissions permit represents the right to emit a specified volume of the specified pollutant and entities that emit greenhouse gases are required to hold a number of permits equivalent to their emissions. An entity that needs to increase the volume of emissions allocated to such entity must purchase emissions permits on the emissions trading market from those who require fewer permits. If an entity emits greenhouse gases in excess of the permits it holds, a penalty surcharge not exceeding three times the average market price of emissions permits for the relevant year, up to a maximum of Won 100,000 per ton of greenhouse gas emitted in excess of such permits held by such entity, may be imposed. Under the ATGGEP Act, the Government is authorized to establish a plan for allocating national emissions permits in multi-year phases (the first two of which will be three-year phases and the rest will be five-year phases) and designate entities that will be allocated emissions permits five months before the start of each such phase. Such designated entities will be excluded from the application of the greenhouse gas target management system pursuant to the CNGGCCC Act and may purchase emissions permits on the emissions trading market.

In January 2014, the Government designated Korea Exchange Inc. as an emissions permit exchange and established a Master Plan on the Emissions Trading Scheme, which sets out the timeline and basic operating directives for the emissions trading scheme. In accordance with such Master Plan, the allocation plan on national emissions permits for the first phase was introduced in September 2014 and the designation of entities that will be allocated emission permits for the first phase was completed in December 2014. The allocation plan for the first phase commenced on January 1, 2015 and ended on December 31, 2017. The first phase provided, among others, the comprehensive operation standard for emissions allocation and trading by specific industry and business, the total amount of emissions permits and the allocation criteria for each entity. During the first phase, 100% of the emissions permits were allocated to designated entities free of charge. In January 2017, the Government established the Master Plan on the Emissions Trading Scheme for the second phase that commenced on January 1, 2018 and ended on December 31, 2020, which defines the objectives of, and the basic direction for, medium- to long-term policies on the emissions trading scheme. During the second phase, 97% of the emissions permits were allocated to designated entities free of charge. In December 2019, the Government

established the Master Plan on the Emissions Trading Scheme for the third and the fourth phase that commenced on January 1, 2021 and will end on December 31, 2030. In accordance with such Master Plan, the allocation plan for emissions permits for the third phase, which commenced on January 1, 2021 and will end on December 31, 2025, was established in September 2020. During the third phase and thereafter, the allocation rate of emissions permits are determined by the allocation plan, provided that the ratio of emissions permits that are allocated free of charge must be within the limit of 90% and may not exceed such rate applicable to the immediately preceding phase. In addition, a notice of the number of emissions permits to be allocated to each designated entity will be given to the relevant designated entity at least two months prior to the commencement of each phase. In December 2024, the Government established the Master Plan on the Emissions Trading Scheme for the fourth and fifth phases, which will commence on January 1, 2026 and end on December 31, 2035. In accordance with such Master Plan, the allocation plan for emissions permits for the fourth phase will be established thereafter, and is expected to set forth detailed standards for the emissions trading scheme, including the total volume of allowances, the ratio of free and paid allocations, and the method of allocation.

In addition, the production activities of the Company are subject to the Act on Compensation and Remedy for Environmental Pollution (the "CREP Act"), which was enacted in December 2014 to provide prompt and fair remedy for environmental pollution damage by establishing practical means of compensation. Under the CREP Act, which took effect from January 2016, the Company is obligated to compensate up to Won 200 billion for environmental pollution damage caused by facilities of the Company even without negligence, and a causal relationship will be presumed if it is highly probable that the facility was the cause of the damage. Also, under the CREP Act, the Company is obligated to enroll, and has enrolled, in insurance plans to cover compensation liabilities for environmental pollution damage.

While the Company believes it is in compliance in all material respects with applicable environmental laws and regulations, the discharge of oil, gas or other pollutants into the air, soil or water may nevertheless give rise to liabilities to the Government or third parties and may require the Company to incur costs to remedy the damage caused by such discharges. Furthermore, no assurance can be given that environmental laws will not, in the future, result in curtailment of production activities or otherwise adversely affect the Company's operations and financial condition. See "Risk Factors—Risks Relating to Regulation—The Company is subject to strict environmental, health and safety regulations."

Environmental, social and governance ("ESG") matters are at the core of the management philosophy of the GS Group. As a responsible corporate citizen and a member of the GS Group, the Company has been making significant efforts in the field of ESG matters, including efforts to reduce its greenhouse gas emissions and create circular economy in its overall business value chain from the procurement of raw materials to production, sales and waste management. Some of the Company's recent and ongoing initiatives and achievements in ESG matters include:

- Increased use of low-carbon raw materials, including carbon neutral crude oil;
- Increased use of low-carbon energy (such as liquid natural gas) to power its production facilities;
- Reuse of carbon dioxide emitted in its manufacturing process to produce raw materials for petrochemical products and fuel and investments in improving the energy efficiency of its production facilities;
- Introduction of eco-friendly high-performance products, including several types with certified eco-labels and making continued investments in research and development of eco-friendly products;
- Introduction of hydrogen and electric vehicle charging stations at certain of its service stations;
- Expanding the Company's business into bio-diesel production and production of chemicals and fuel using biomass as raw material; and
- Enhancing the Company's water treatment and waste material management facilities and processes to promote reuse and recycling of wastewater and other waste materials.

The Company maintains a dedicated ESG Management Committee, which is composed of the Company's chief executive officer and other senior officers. The ESG Management Committee meets quarterly to discuss and set the Company's overall ESG strategy. Under the supervision of the ESG Management Committee, the Company's ESG Task Force actively implements and manages the Company's ESG strategies, including managing and monitoring its greenhouse emission levels and reduction targets.

HEALTH AND SAFETY

The Company believes that it is in compliance with applicable health and safety laws and regulations in all material respects. Health and safety are a priority at all of the Company's facilities. The Company has implemented a number of initiatives to create a safer workplace, including maintaining short- and long-term objectives for hazard reduction and conducting specialized safety testing of its machinery and regular training programs for its employees. The Company has also established a dedicated on-site department in charge of the health and safety of its employees as well as an on-site clinic, which operates individually tailored programs to promote a healthy lifestyle for the Company's employees.

LEGAL PROCEEDINGS

The Company is not currently involved in any litigation, administrative proceeding or arbitration, the outcome of which would, in the reasonable judgment of the Company's management, have a material adverse effect on the Company's financial condition or results of operations.

DIRECTORS AND STATUTORY AUDITORS

The board of directors has ultimate responsibility for the administration of the affairs of the Company. The articles of incorporation of the Company provide for a board of directors of a minimum of nine and a maximum of ten directors and two statutory auditors. Directors and statutory auditors are elected at a general meeting of shareholders by a majority vote of those present or represented, provided that those voting in favor hold shares representing more than one-half of the total number of the issued and outstanding shares. The stockholders of the Company are GS Energy, Chevron (Overseas) Holdings Ltd. and Chevron Global Energy Inc., an affiliate of Chevron (Overseas) Holdings Ltd. See "Shareholders." Every resolution by the board of directors requires the affirmative vote of at least two-thirds of the entire board of directors, provided that, in the event that less than two-thirds of the entire board of directors cast affirmative votes, the board of directors may resolve to reconvene a new meeting at a reasonable time and place to address those issues not resolved. If at such reconvened meeting one-half of the board of directors casts affirmative votes, and all other directors cast negative votes, abstain or are not present, the Chairman may cast an additional vote. The term of office for directors expires each year at the conclusion of the ordinary general meeting of shareholders. The term of office for a statutory auditor expires at the conclusion of the ordinary general meeting of shareholders convened with respect to the last fiscal year which ends on or before the date three years from the date of acceptance of office by that statutory auditor. However, directors and statutory auditors may serve any number of consecutive terms and may be removed from office at any time by a special resolution adopted at a general meeting of shareholders.

The representative director is elected by the board of directors. The representative director, acting in conjunction with the Accountability Committee, appoints key executives and such other officers as he considers necessary. All matters concerning the administration of the affairs of the Company are decided by the board of directors unless delegated to others. The board of directors has an Audit Committee, an Accountability Committee, an LNG Procurement Management Committee and a Safety, Health and Environment Committee.

The current management structure of the Company is the result of the Shareholders' Agreement dated February 11, 2005 among GS Holdings, Chevron (Overseas) Holdings Ltd., Chevron Global Energy Inc. and the Company.

Under the Commercial Code of Korea, statutory auditors, who are not required to be certified public accountants, are required to, among other things, examine the agenda for, and financial statements and other reports to be submitted by the board of directors to, the general meeting of shareholders and to review the administration by the board of directors of the Company's affairs. Statutory auditors are entitled to attend and to express opinions at meetings of the board of directors, but they are not entitled to vote. In addition to statutory auditors, under the Act on External Audit of Stock Companies, the Company must appoint independent certified public accountants, whose primary statutory duty is to examine the financial statements of the Company.

The names and positions of the directors and statutory auditors of the Company are set forth below. The business address of all of the directors is that of the registered office of the Company.

Name	Age	Title	Outside Occupation	Position Held Since
S.H. Hur.....	55	President and Chief Executive Officer; Chairman of the Board of Directors; Standing Director	None	2019
S.H. Lee.....	59	Standing Director; Head of Supply & Trading	None	2022
S.M. Kim	58	Chief Safety Officer; Standing Director; Head of Production	None	2024
S.K. Hong	66	Non-standing Director	Vice Chairman & Chief Executive Officer, GS Holdings Corporation	2020

Name	Age	Title	Outside Occupation	Position Held Since
Y.S. Huh.....	57	Non-standing Director	President & Chief Executive Officer, GS Energy	2019
B.T. Fish	62	Non-standing Director	President, International Products, Chevron Corporation	2019
M. Badenhorst ...	49	Non-standing Director	Vice President, Health, Safety & Environment, Chevron Corporation	2023
A. F.B. Behdjet..	53	Non-standing Director	Vice President & General Counsel, Downstream, Chemicals & Midstream, Chevron Corporation	2021
M.T. Reilly.....	56	Non-standing Director	Assistant Treasurer, Enterprise Finance, Chevron Corporation	2023
B.C. Payne	51	Non-standing Director	Country Chairman, Chevron Korea, Chevron Corporation	2022
T.H. Lee.....	54	Auditor	Chief Financial Officer, GS Holdings	2022
S. Sundararajan..	58	Auditor	Senior Advisor to Country Chairman, Chevron Korea	2024

BOARD COMMITTEES

Audit Committee

Under the Company's articles of incorporation, the Company is required to have an audit committee under the board of directors. This committee is composed of four members. They are appointed by a resolution of the board of directors and are required to ensure that the Company's financial statements are properly and effectively audited by independent qualified accountants and to assist the board of directors in relation to the Company's maintenance of an effective internal audit system. This committee was established in 2005 and currently consists of S.K. Hong, Y.S. Huh, M.T. Reilly and B.C. Payne.

Accountability Committee

This committee is composed of three members. They are appointed by a resolution of the board of directors and are required to monitor effectiveness of the governance framework and establish an appropriate incentive framework for the key executives. This committee was established in 2005 and currently consists of S.H. Huh, B.T. Fish and A. F.B. Behdjet.

LNG Procurement Management Committee

This committee is composed of two members. They are appointed by a resolution of the board of directors and are required to provide a forum to review, approve and administer all activities relating to LNG procurement, marketing, trading and transportation, which activities were transferred to GS Energy in 2012. This committee was established in 2004 and currently consists of S.H. Lee and B.C. Payne.

Health, Safety & Environment Committee

This committee is composed of two members. They are appointed by a resolution of the board of directors and are required to review, monitor and approve matters relating to health, safety and the environment. This committee was established in 2023 and currently consists of S.M. Kim and M. Badenhorst.

COMPENSATION

The aggregate of remuneration paid and benefits in kind granted to the directors of the Company by the Company in 2024 was Won 12.7 billion.

SUBSIDIARIES AND AFFILIATES

As of June 30, 2025, the Company had 15 subsidiaries and five affiliates. The following table sets forth certain information with regard to the Company's subsidiaries and affiliates as of June 30, 2025.

Name	Amount of Invested Capital	Company's Ownership Percentage	Principal Business	Location
	(in millions of Won)			
Subsidiaries:				
GS MBiz Co., Ltd.	₩54,046	100.0%	Electronic commerce and sale of petroleum products	Korea
GS Caltex Singapore Pte., Ltd.	240	100.0%	International trading	Singapore
GS Caltex (Langfang) Plastics Co., Ltd.	4,882	100.0%	Production and sale of compound polypropylene	China
InnoPolytech Co., Ltd.	6,529	100.0%	Toll manufacturing and production of plastic products	Korea
GS Caltex India Pvt. Ltd.	7,911	100.0%	Sale of lubricant oil	India
Sangji Shipping Co., Ltd.	600	100.0%	Shipping	Korea
GS Bio Co., Ltd.	6,889	100.0%	Petroleum substitute fuel manufacturing	Korea
GS EcoMetal Co., Ltd.	8,728	100.0%	Recycling and restoration of disposed catalysts	Korea
GS Caltex (Suzhou) Plastics Co., Ltd.	10,919	100.0%	Production and sale of compound polypropylene	China
GS Caltex Czech, s.r.o.	5,482	100.0%	Production and sale of compound polypropylene	Czech Republic
GS Caltex China Co., Ltd.	3,353	100.0%	Sale of lubricant oil	China
GS Caltex Mexico S. de R.L. de C.V.[(1)]	7,148	100.0%	Production and sale of compound polypropylene	Mexico
Pancotec Co., Ltd.	250	100.0%	Facilities maintenance service	Korea
Hanul Love Co., Ltd.	50	100.0%	Convenience business and commercial food service	Korea
Suzhou GS Caltex Trading Co., Ltd.	1,041	100.0%	Sale of compound polypropylene	China

(1) In July 2025, the Company divested of its entire equity stake in GS Caltex Mexico S. de. R.L. C.V.

Name	Book Value of Investment (in millions of Won)	Company's Ownership Percentage	Principal Business	Location
Affiliates:				
Daehan Oil Pipeline Corp. ...	₩235,650	28.6%	Operation of petroleum energy distribution system	Korea
Samnam Petrochemical Co., Ltd.	42,425	20.0%	Manufacture of petrochemical products	Korea
Green Eco Technology Co., Ltd.	3,113	15.0%	Manufacture of recycled plastic materials	Japan
Eco G&R Co., Ltd.	1,800	40.0%	Automotive plastics recycling	Korea
PT AGPA Refinery Complex	63,719	40.0%	Manufacture of edible refined and processed oils	Indonesia

SHAREHOLDERS

As of the date of this Offering Circular, the outstanding shares of the Company's common stock, Won 10,000 par value per share (the "Common Shares"), were owned as follows:

Stockholder	Number of Common Shares Held	Percentage of Total Common Shares Outstanding
Chevron Corporation		
Chevron (Overseas) Holdings Ltd.	10,400,000	40.00%
Chevron Global Energy Inc.	2,600,000	10.00
	13,000,000	50.00
GS Energy Corporation	13,000,000	50.00
Total	26,000,000	100.00%

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The Company engages from time to time in various transactions with related parties, including its jointly controlling entities, investees with significant influence, and affiliates and other related companies. The Company believes that it has conducted its transactions with related parties as it would in comparable arm's-length transactions with a non-related party, on a basis substantially as favorable to the Company as would be obtainable in such transactions.

In the event that the Company enters into certain transactions with specially-related parties such as its affiliates, the Company is required to (i) obtain the approval of its board of directors and (ii) disclose such transactions pursuant to the Monopoly Regulation and Fair Trade Act. The transactions that require the approval of the Company's board of directors and disclosure pursuant to the Monopoly Regulation and Fair Trade Act are those where the transaction value (the aggregate amount incurred over a fiscal quarter in case of the fourth item below) (i) exceeds 5% of the greater of the Company's total capital or paid-in capital (provided that if such amount is less than Won 500 million, the threshold shall be deemed to be Won 500 million) or (ii) exceeds Won 10 billion in the following four transaction categories:

(1) providing funds for or dealing with provisional payment or loan payment;

(2) providing or dealing with securities such as stocks or corporate bonds;

(3) providing or dealing with assets such as real estate or intangible assets; and

(4) providing services or products for or dealing with the affiliate as a counterpart or for such affiliate.

JOINTLY CONTROLLING ENTITIES

The Company's jointly controlling entities consist of all three of its shareholders, GS Energy, Chevron (Overseas) Holdings and Chevron Global Energy, and GS Holdings, which owns 100% of GS Energy. The Company's transactions with its jointly controlling entities consist primarily of payments of dividends to the Company's three shareholders. The Company paid dividends of Won 421 billion in 2022, Won 1,116 billion in 2023, Won 538 billion in 2024 and Won 44 billion in the first half of 2025 to the three shareholders.

INVESTEES WITH SIGNIFICANT INFLUENCE

The Company's investees with significant influence include, among others, Daehan Oil Pipeline Corporation and Samnam. The Company's transactions with its investees with significant influence consist primarily of sales of the Company's products to Samnam that are used in its business operations as well as purchases of components and services used in the manufacturing, transportation and marketing of the Company's products. The Company's sales to Samnam amounted to Won 732 billion in 2022, Won 734 billion in 2023, Won 719 billion in 2024 and Won 328 billion in the first half of 2025.

AFFILIATES AND OTHER RELATED COMPANIES

The Company also enters into transactions with various affiliates and other related companies including Chevron U.S.A. Inc., Chevron Singapore Pte. Ltd., Chevron Products Company, Inc., Qingdao Lidong Chemical Co., Ltd., GS E&R Corp., GS Aromatics Pte. Ltd., GS Global Singapore Pte. Ltd., GS Global Corp. and Lotte GS Chemical Corporation. The Company's transactions with these affiliates and other related companies consist primarily of purchases of raw materials and components used in the Company's products, in particular crude oil from Chevron U.S.A. Inc., and sales of the Company's products used by the affiliates and other related companies in their respective business operations. The Company's purchases of inventories from Chevron U.S.A. Inc. totaled Won 17,295 billion in 2022, Won 12,336 billion in 2023, Won 12,940 billion in 2024 and Won 5,479 billion in the first half of 2025, and the Company's sales to Chevron U.S.A. Inc. amounted to Won 7,985 billion in 2022, Won 6,530 billion in 2023, Won 6,298 billion in 2024 and Won 2,459 billion in the first half of 2025.

For further information relating to the Company's transactions with related parties, see Note 23 of the notes to the Company's annual consolidated financial statements as of and for the years ended December 31, 2024 and 2023, Note 23 of the notes to the Company's annual consolidated financial statements as of and for the years ended December 31, 2023 and 2022 and Note 21 of the notes to the Company's unaudited condensed consolidated interim financial statements as of June 30, 2025 and for the six-month periods ended June 30, 2025 and 2024 included elsewhere in this Offering Circular.

GOVERNMENT REGULATION

Historically, due to the importance of petroleum to the economy of Korea, the Government exercised significant control over the domestic petroleum refining industry. The Petroleum and Petroleum Alternative Fuel Business Act, as amended (formerly, the Petroleum Business Act; the "PBA"), confers on the MOTIE the authority to exercise a wide range of controls over the Korean petroleum industry. Pursuant to the PBA, companies wishing to engage in petroleum refining, export and import activities are required to register with the MOTIE. Companies wishing to engage in petroleum sales activities are required to register with the applicable local metropolitan area or province and, in the case of those who intend to engage in the production of petroleum by-products, with the MOTIE. Moreover, such registered companies engaging in petroleum refining, export, import or sales businesses are required to maintain a certain volume of stockpile of onshore crude oil and refined petroleum products. Currently, such stockpiling requirements applicable to such registered companies are up to 60 days' estimated domestic sales volume, as determined and announced by the MOTIE.

Pursuant to the PBA, the Government collects a surcharge from domestic refiners, importers and vendors of crude oil and petroleum products. The surcharge is currently levied at a rate of Won 16 per liter of crude oil or petroleum product, except for natural gas, high-grade gasoline and butane, with surcharges for natural gas levied at Won 3,800 per ton (or Won 20,605 per ton until December 31, 2025 and 24,242 per ton thereafter, if the natural gas is not used for electric power generation), high-grade gasoline at Won 36 per liter and butane at Won 62,283 per ton, and the surcharges that have been levied and collected are managed under a special account for energy and resources businesses, together with other similar surcharges. The funds deposited under such special account are normally used for, among others, oil exploration and production activities, energy development projects and development of a management system for oil crises. In 2024, the Company's net payments for this surcharge amounted to approximately Won 156 billion.

The Government also levies a customs duty on crude oil and refined petroleum products at rates that are set based on the import price of crude oil and refined petroleum products. Customs duties are levied at a rate of up to 3% for both crude oil and refined petroleum products depending on the type of product. Net customs duties amounting to Won 151 billion were paid by the Company in 2024.

The Government at the end of 1995 introduced amendments to the PBA to deregulate the domestic petroleum refining industry in two areas. Pursuant to such amendments, price controls with respect to all refined petroleum products were eliminated, and approval and reporting requirements with respect to the import, export and domestic retail distribution of refined petroleum products were relaxed in January 1997. However, the Government is empowered to set a ceiling with respect to the sales price in an emergency situation. The Government further liberalized the Korean petroleum market in August 1998, opening it to free competition, including from overseas companies. The Company believes that the high capital cost associated with developing a distribution network in Korea, constructing new facilities and meeting Government stockpiling requirements will continue to be a hindrance to new entrants.

By virtue of an amendment to the PBA, which was promulgated as of March 22, 2004, any production, distribution or consumption of pseudo-petroleum products has been prohibited. Under such amendment, the definition of pseudo-petroleum products was re-defined to capture, among other things, certain petroleum products which had been sold in Korea as "imitation gasoline," and anyone who breaches the prohibition may be subject to a cease and desist order against such illegal activities and/or an order to close or dismantle the facilities for production, storage and sales in question from the relevant government authorities. In addition, in the event that such government orders are not duly complied with, the government authorities which issued such orders are authorized to enforce the orders through a proxy. The Company believes that the amended PBA effectively lessened the market disruption effect of pseudo-petroleum products in Korea which competed against the Company's products prior to the amendment of the PBA.

In October 2004, the PBA was renamed the "Petroleum and Petroleum Alternative Fuel Business Act" in an effort to formally incorporate petroleum alternative fuel into the legal regime and to provide relevant requirements and regulations for manufacturing and sales activities related to it.

The Government introduced additional amendments to the PBA in January 2009 in order to facilitate the stabilization and increase the transparency of domestic petroleum prices. Pursuant to such amendments, importers and exporters of petroleum and sellers of petroleum products are required to file a report on the sales price of petroleum products with the MOTIE. As such, petroleum refiners such as the Company are required to disclose, on a real-name basis, the sales prices of their petroleum products, including gasoline and diesel, supplied to gas stations on a weekly and monthly basis. Failure to file such report or filing of a false report may result in an administrative fine not exceeding Won 30 million.

In addition, the Act on the Promotion of the Development, Use and Diffusion of New and Renewable Energy (the "PDURE Act") was amended in July 2013 to further promote the use of renewable energy sources and the growth of related industries. Pursuant to such amendments, petroleum refineries and importers and exporters of petroleum are required to include a certain minimum percentage of fuel produced from renewable energy sources in their transportation fuel products. The currently applicable legally required minimum percentage of renewable energy fuel is 4.0% beginning January 1, 2024, which is subject to increase by 0.5% every three years thereafter until reaching 5.0% beginning January 1, 2030. Such minimum percentage threshold is also subject to further review of the Government every three years. If petroleum refineries and importers fail to meet such requirements, the MOTIE may impose a penalty surcharge up to an amount calculated by multiplying the corresponding shortfall by 150/100 of the average trading price of the relevant year. An amendment to the PDURE Act adopted in January 2015 included the abolishment of Government support for enterprises specialized in installing new and renewable energy facilities such as petroleum refineries and importers.

TERMS AND CONDITIONS OF THE NOTES

The following is a summary of the terms and conditions of the Notes to be issued by the Company under the Fiscal Agency Agreement (as defined below). The following statements do not purport to be a complete description of the Notes and the Fiscal Agency Agreement and are qualified in their entirety by reference to the provisions of the Notes and the Fiscal Agency Agreement.

In acting under the Fiscal Agency Agreement the agents appointed by the Company (the "Agents" and each an "Agent") thereunder are acting solely as agents for the Company and do not assume any obligation or relationship of agency or trust for or with the Noteholders except as specifically described in the Fiscal Agency Agreement or below.

1. General

(a) This Note is one of a duly authorized issue of Notes of the Company of the aggregate principal amount of US$300,000,000 known as its "4.250% Notes due 2030" (the "Notes") issued or to be issued pursuant to a Fiscal Agency Agreement, dated as of October 28, 2025 (as amended from time to time, the "Fiscal Agency Agreement"), among the Company, Citicorp International Limited, as fiscal agent (such bank and its successors as such fiscal agent being hereinafter called the "Fiscal Agent") and Citibank, N.A., London Branch as the paying agent, transfer agent and registrar, the terms of which are hereby incorporated by reference. Copies of the Fiscal Agency Agreement are on file and available for inspection at the corporate trust office of the Fiscal Agent (the "Corporate Trust Office"), and reference thereto is made for a description of the rights and limitations of rights thereunder of the Holders of the Notes and the duties and immunities of the Fiscal Agent. In acting under the Fiscal Agency Agreement, the agents appointed by the Company thereunder are acting solely as agents for the Company and do not assume any obligation or relationship of agency or trust for or with the Holder of this Note except as specifically described below or in the Fiscal Agency Agreement with respect to the Fiscal Agent. The Holders of Notes will be entitled to the benefits of, and be bound by and deemed to have notice of, all of the provisions of the Fiscal Agency Agreement. As used herein, the term "Holder" means the person in whose name a Note is registered in the Note Register.

(b) The Notes are issuable only as fully registered Notes without coupons in denominations of US$200,000 and any integral multiple of US$1,000 in excess of US$200,000 and shall not be divided into Notes with denominations of less than US$200,000 until the date on which all of the Notes have become due and payable.

(c) The Company covenants that until the earlier to occur of the date on which all of the Notes shall have been delivered to the Fiscal Agent for cancellation and the date on which all of the Notes have become due and payable and moneys sufficient to pay the principal of and interest on all of the Notes shall have been made available for payment and either paid or returned to the Company as provided herein, the Company will at all times maintain a Fiscal Agent (which in each case shall be a bank or trust company having a combined capital and surplus of at least US$50,000,000, legally qualified to act as Fiscal Agent and having an established place of business in Hong Kong or London). Subject to the foregoing, the Company reserves the right at any time to vary or terminate the appointment of any of the Fiscal Agent and such additional agents as the Company may determine.

2. Payments

(a) Payments of principal of and interest on this Note will be made in such coin or currency of the United States of America as at the time of payment is legal tender for the payment of public and private debts.

(b) Payment of the principal of this Note shall be made, upon presentation and surrender hereof, by check drawn on the account of the Fiscal Agent, at the option of the person to whom interest is payable as provided below, either (i) at the Corporate Trust Office of the Fiscal Agent or (ii) subject to any laws or regulations applicable thereto and to the right of the Company to terminate the appointment of any such paying agency, at such other paying agencies as the Company may designate.

(c) Payments of interest on this Note shall be made by a wire transfer in same day funds to the registered account of each Holder or if it does not have a registered account, by check drawn on the account of the Fiscal Agent mailed to the address of the person entitled thereto as such address shall appear on the Note Register. The interest so payable on any Interest Payment Date will be paid to the person in whose name this Note is registered at the close of business on the fifteenth day preceding such Interest Payment Date (each, a "Record Date"), whether or not a business day, notwithstanding the cancellation, transfer or exchange of this Note subsequent to the Record Date and on or prior to such Interest Payment Date, and no interest otherwise so payable on any Interest Payment Date shall be paid on this Note if the name of its Holder was entered as such on the Note Register after the close of business on the Record Date next preceding such Interest Payment Date, except if and to the extent the Company shall default in the payment of the interest due on such Interest Payment Date, in which case such defaulted interest shall (unless paid together with principal of this Note in full other than on an Interest Payment Date) be paid to the person in whose name this Note is registered at the close of business on a subsequent record date (which shall be not less than five business days prior to the date of payment of such defaulted interest) established by notice given by mail by or on behalf of the Company to the Holders of Notes not less than 15 days preceding such subsequent record date. If interest is paid together with principal in full on a date that is not an Interest Payment Date, such interest shall be paid upon presentation and surrender of this Note to the Fiscal Agent or to a paying agent.

(d) Notwithstanding Paragraphs (b) and (c) of this Condition, the Holder of this Note if it is a Global Note shall receive, and any Holder of at least US$10,000,000 in aggregate principal amount of Notes may by notice to the Fiscal Agent at least ten days prior to any Interest Payment Date elect to receive, payments of principal (upon presentation and surrender of this Note), and payments of interest due on and subsequent to such Interest Payment Date by wire transfer in immediately available funds to such bank account as such Holder may direct in writing.

(e) In any case where the date for the payment of any principal of or interest on any Note is not a day on which banking institutions at each of London, New York and Seoul are open for business (a "Business Day"), then payment of such principal or interest need not be made on such date but may be made on the next succeeding Business Day with the same force and effect as if made on the date for such payment of principal or interest, and no interest shall accrue for the period after such date.

(f) Any moneys paid by the Company to the Fiscal Agent for the payment of the principal of or interest on any Notes and remaining unclaimed at the end of two years after such principal or interest shall have become due and payable and shall have been paid to the Fiscal Agent by the Company shall then be repaid to the Company, and upon such repayment, all liability of the Fiscal Agent with respect to such moneys shall thereupon cease and the Holder of any Note representing a claim therefor shall thereafter look only to the Company for payment thereof.

3. Calculation of Interest

Interest on the Notes will be calculated on the basis of a 360-day year consisting of twelve 30-day months.

4. Optional Redemption Due to Changes in Tax Treatment

The Notes may be redeemed at the option of the Company, in whole, but not in part, upon not less than 30 nor more than 60 days' notice, at any time at a redemption price equal to the principal amount thereof plus accrued interest to (but excluding) the date fixed for redemption if, as a result of any change in, expiration of or amendment to the laws of the Republic (or of any political subdivision or taxing authority thereof or therein) or any regulations or rulings promulgated thereunder or any change in the official interpretation or official application of such laws, regulations or rulings, or any change in the official application or interpretation of, or any execution of or amendment to, any treaty or treaties affecting taxation to which the Republic (or such political subdivision or taxing authority) is a party, which change, amendment, expiration or treaty becomes effective on or after October 21, 2025, the Company is or would be obligated on the next succeeding due date for a payment with respect to the Notes to pay Additional Amounts (as described in Condition 6 below) with respect to the Notes, and such obligation cannot be avoided by the use of reasonable measures available to the

Company; provided, however, that (i) no such notice of redemption may be given earlier than 60 days prior to the earliest date on which the Company would be obligated to pay such Additional Amounts, and (ii) at the time such notice of redemption is given, such obligation to pay such Additional Amounts remains in effect. Before giving any notice of such redemption, the Company shall deliver to the Fiscal Agent a certificate of the Company stating that the Company 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.

5. Purchase

The Company may at any time purchase Notes by tender (available to all Noteholders alike) or in the open market at any price. If the Company shall acquire any Notes, such acquisition shall not operate as or be deemed for any purpose to be a satisfaction of the indebtedness represented by such Notes unless and until such Notes are delivered to the Fiscal Agent for cancellation and are cancelled and retired by the Fiscal Agent. The Company will not sell, and will cause its "affiliates" (as defined in paragraph (a)(1) of Rule 144 under the Securities Act) not to sell, any Note as to which it or they hold or acquire any beneficial interest; provided that affiliates of the Company may sell Notes to the Company or to other such affiliates.

6. Taxation

All payments of principal of and interest on the Notes shall be made by the Company without withholding or deduction for, or on account of, any present or future taxes, duties, assessments or governmental charges of whatever nature imposed or levied by or on behalf of the Republic or by or within any political subdivision thereof or any authority therein having power to tax ("Korean Tax"), unless deduction or withholding of such Korean Tax is required by law. In the event that the deduction or withholding of Korean Tax is required by law, the Company will pay such additional amounts ("Additional Amounts") as will result in the payment to the Holder of this Note of the amounts which would otherwise have been receivable in respect of principal and interest in the absence of such deduction or withholding, except that no such Additional Amount shall be payable in respect of this Note:

(a) to or on behalf of a Holder who is subject to such Korean Tax in respect of such Note by reason of such Holder being or having been connected with the Republic (or any political subdivision thereof) other than merely by holding such Note or receiving principal or interest in respect thereof; or

(b) to or on behalf of a Holder who would not be liable for or subject to such deduction or withholding by making a declaration of non-residence or other similar claim for exemption to the relevant tax authority if, after having been requested in writing by the Company to make such a declaration or claim, such Holder fails to do so within 30 days; or

(c) to or on behalf of a Holder who presents a Note (where presentation is required) more than 30 days after the relevant date except to the extent that the Holder thereof would have been entitled to such Additional Amounts on presenting a Note for payment on the last day of such 30-day period; for this purpose the "relevant date" in relation to any payments of interest on, or principal of, any Note means: (i) the due date for payment thereof; or (ii) if the full amount of the monies payable on such date has not been received by the Fiscal Agent on or prior to such due date, the date on which, the full amount of such monies having been so received; notice to that effect is duly given to Holders of the Notes in accordance with, the Fiscal Agency Agreement; or

(d) if withholding or deduction is imposed on a payment to an individual and is required to be made pursuant to European Council Directive 2003/48/EC (as amended from time to time) on the taxation of savings income or any law implementing or complying with, or introduced in order to conform to, such Directive; or

(e) to or on behalf of a Holder who would have been able to avoid the withholding or deduction by the presentation (where presentation is required) of the relevant Note to, or otherwise accepting payment from, another paying agent in a member state of the European Union; or

(f) any combination of (a), (b), (c), (d) or (e) above.

The obligation of the Company to pay such Additional Amounts in respect of taxes, duties, assessments and governmental charges shall not apply to (a) any estate, inheritance, gift, sales, transfer, personal property or any similar tax, assessment or other governmental charge or (b) any tax, assessment or other governmental charge which is payable other than by deduction or withholding from payments of principal or interest on this Note; provided that, except as otherwise set forth in this Note and in the Fiscal Agency Agreement, the Company shall pay all stamp and other duties, if any, which may be imposed by the Republic, the United States, or any respective political subdivision thereof or any taxing authority of or in the foregoing, with respect to the Fiscal Agency Agreement or as a consequence of the initial issuance of this Note.

References to principal or interest in respect of this Note shall be deemed also to refer to any additional amounts which may be payable as set forth in the Note.

7. Transfer, Exchange and Replacement

(a) The transfer of this Note is registrable (upon the terms and subject to the conditions set forth in the Fiscal Agency Agreement and subject to the reasonable requirements of the Company and the Fiscal Agent) on the Note Register upon surrender of this Note for registration at the Corporate Trust Office of the Fiscal Agent, duly endorsed by, or accompanied by a written instrument of transfer in a form approved by the Company and the Fiscal Agent duly executed by, the Holder hereof or his attorney duly authorized in writing.

(b) In the manner and subject to the limitations and upon payment of the charges (if any) provided in the Fiscal Agency Agreement, Notes may be exchanged for a like aggregate principal amount of Notes of other authorized denominations or for a beneficial interest in a Global Note.

(c) No service charge shall be made for any exchange or registration of transfer provided for in Conditions 7(a) and 7(b) hereof, but the Company may require payment of a sum sufficient to cover any tax or other governmental charge payable in connection therewith.

(d) No registrations of transfers or exchanges of Notes shall be made after notice of redemption of the Notes has been given.

(e) All Notes issued upon any registration of transfer or exchange of Notes shall be the valid obligations of the Company, evidencing the same debt, and entitled to the same benefits, as the Notes surrendered upon such registration of transfer or exchange. Any new Note delivered pursuant to this Condition 7 shall be so dated that neither gain nor loss of interest shall result from such transfer or exchange.

(f) If any Note shall at any time become mutilated or destroyed or stolen or lost, then, provided that such Note, or evidence of the destruction, theft or loss thereof (together with the indemnity hereinafter referred to and such other documents or proof as may be required in the premises) shall be delivered to the Corporate Trust Office of the Fiscal Agent, a replacement Note of like tenor and principal amount will be issued by the Company and, at its request, authenticated by the Fiscal Agent and delivered by the Fiscal Agent at its Corporate Trust Office, in exchange for the Note so mutilated, or in lieu of the Note so destroyed or stolen or lost; provided further, that, in the case of destroyed, stolen or lost Notes, (i) neither the Company nor the Fiscal Agent shall have notice that such Notes have been acquired by a bona fide purchaser, and (ii) the Company and the Fiscal Agent shall have received evidence satisfactory to them that such Notes were destroyed, stolen or lost, and the Company and the Fiscal Agent shall have received an indemnity satisfactory to each of them. All expenses and reasonable charges associated with procuring such indemnity, and the cost of the preparation and issue of a replacement for any Note mutilated, destroyed, stolen or lost, shall be paid by the Holder of such Note. In case such mutilated, destroyed, stolen or lost Note has become or is about to become due and payable, the Company in its discretion may, instead of issuing a new Note, pay or cause to be paid such Note. Every new Note issued pursuant to this Paragraph (f) in exchange for or in lieu of any mutilated, destroyed, stolen or lost Note, shall constitute an additional original contractual obligation of the Company, whether or not the mutilated, destroyed, stolen or lost Note shall be at any time enforceable by anyone. Any new Note delivered pursuant to this Paragraph (f) shall be so dated that neither gain nor loss of interest shall result from such replacement. To the extent permitted by law, the provisions of this Paragraph (f) are exclusive and shall preclude (to the extent lawful) all other rights and remedies with respect to the replacement or payment of mutilated, destroyed, stolen or lost Notes.

(g) The Company and the Fiscal Agent may deem and treat the registered Holder hereof as the absolute owner hereof (notwithstanding any notice of ownership or other writing hereon) for the purposes of receiving payment hereon or on account hereof and for all other purposes, whether or not this Note shall be overdue.

(h) The Company has appointed the Corporate Trust Office of the Fiscal Agent as its agent for transfers, and for exchanges and replacements, of Notes and has agreed to cause to be kept at the office of the Fiscal Agent a register (the "Note Register") in which, subject to such reasonable regulations as it may prescribe, the Company shall provide for such registration and registration of transfers.

(i) All Notes issued as a result of any transfer, exchange or replacement of Notes shall be delivered to the Holder at the Corporate Trust Office of the Fiscal Agent or (at the risk of the Holder) sent by mail to such address as is specified by the Holder in the request for transfer, exchange or replacement.

8. Covenants of the Company

(a) Limitation on Liens. So long as any of the Notes are outstanding, the Company will not itself, and will not permit any Subsidiary to, create, incur, issue or assume or guarantee any Debt secured by any mortgage, charge, pledge, encumbrance or other security interest (a "Lien") on any property or asset (including any document or instrument in respect of goods or accounts receivable) of the Company or such Subsidiary, whether now owned or hereafter acquired, or any income or profits therefrom, without in any such case effectively providing that the Notes (together with, if the Company shall so determine, any other Debt of the Company or such Subsidiary then existing or thereafter created which is not subordinate to the Securities) shall be secured equally and ratably with or prior to such secured Debt unless, after giving effect thereto, the aggregate principal amount of all such secured Debt then outstanding (provided that for this purpose the amount of all such secured Debt shall not exceed the fair market value of the property or asset securing such Debt, determined in good faith by the Board of Directors of the Company), plus Attributable Debt of the Company and its Subsidiaries in respect of Sale/Leaseback Transactions as described in Condition 8(b) below (other than such Sale/Leaseback Transactions as are permitted by Paragraph (2) of Condition 8(b)) would not exceed an amount equal to 15% of Net Tangible Assets.

The foregoing restrictions will not apply to Debt secured by:

(1) any Lien existing on the date of the Fiscal Agency Agreement or any Lien existing on any real property or tangible personal property prior to the acquisition thereof by the Company or any of its Subsidiaries, which Lien was not granted in anticipation of such acquisition;

(2) any Lien securing Debt payable to a bank located in the Republic, a governmental institution of the Republic or a branch outside the Republic of a bank incorporated in the Republic;

(3) any Lien securing Debt incurred or assumed for the purpose of financing the purchase price of any real property or tangible personal property or the cost of construction, improvement or repair of all or any part thereof; provided that (A) such Lien attaches thereto concurrently with or within 180 days after the acquisition thereof or completion of construction, improvement or repair thereof, (B) such Lien is limited to such acquired or constructed real or tangible personal property or improvements and (C) the principal amount of the Debt secured by such Lien, together with the amount of all other Debt secured by Liens on such property, shall not exceed the cost (which shall be deemed to include, without duplication, the amount of Debt secured by Liens, including existing Liens, on such property) of such property to the Company or any Subsidiary;

(4) any Lien with respect to Debt of a person prior to the time (A) such person became a Subsidiary of the Company, (B) such person merges into or consolidates with a Subsidiary of the Company or (C) another Subsidiary of the Company merges into or consolidates with such person (in a transaction in which such person becomes a Subsidiary of the Company), which Debt was not incurred or issued in anticipation of such transaction and was outstanding prior to such transaction;

(5) any Lien securing Debt owing to the Company or to a Subsidiary; or

(6) any Lien arising out of the refinancing, extension, renewal or refunding of any Debt secured by any Lien permitted by any of the foregoing paragraphs, to the extent of the amount of such Debt; provided that such Debt is not secured by any additional property or assets.

For the purposes of this Condition 8(a) and Condition 8(b), the giving of a guarantee which is secured by a Lien on any property or asset, and the creation of a Lien on any property or asset to secure Debt which existed prior to the creation of such Lien, shall be deemed to involve the creation of Debt in an amount equal to the principal amount guaranteed or secured by such Lien; but the amount of Debt secured by Liens shall be computed without cumulating the underlying Debt with any guarantee thereof or Lien securing the same.

(b) Limitation on Sale and Leaseback Transactions. So long as any of the Notes are outstanding, neither the Company nor any Subsidiary may enter into any Sale/Leaseback Transaction after the date of the Fiscal Agency Agreement (other than such Sale/Leaseback Transactions as are permitted by Paragraph (2) below) unless either:

(1) the Attributable Debt of the Company and its Subsidiaries in respect of such Sale/Leaseback Transaction and all other Sale/Leaseback Transactions entered into after the date of the Fiscal Agency Agreement (other than such Sale/Leaseback Transactions as are permitted by Paragraph (2) below), plus the aggregate principal amount of Debt secured by Liens then outstanding (calculated in accordance with Condition 8(a) and excluding any such Debt secured by Liens described in Paragraphs (1) through (6) in Condition 8(a)) without equally and ratably securing the Notes, would not exceed 15% of Net Tangible Assets; or

(2) the Company, within twelve months after such Sale/Leaseback Transaction, applies or causes a Subsidiary, as the case may be, to apply an amount equal to the net proceeds of such sale or transfer of the property or asset which is the subject of such Sale/Leaseback Transaction to the retirement of Debt of the Company or a Subsidiary, as the case may be, which is not subordinate to the Notes; provided that the amount to be so applied shall be reduced by (i) the principal amount of Notes delivered within twelve months after such Sale/Leaseback Transaction to the Fiscal Agent for retirement and cancellation, and (ii) the principal amount of Debt of the Company or a Subsidiary, other than the Notes, voluntarily retired by the Company or a Subsidiary within twelve months after such Sale/Leaseback Transaction. Notwithstanding the foregoing, no retirement referred to in this paragraph may be effected by payment at maturity or pursuant to any mandatory sinking fund payment or any mandatory prepayment provision.

The foregoing restrictions will not apply to any transaction between the Company and a Subsidiary.

(c) Certain Definitions. The following terms (except as otherwise expressly provided or unless the context otherwise clearly requires) for all purposes of the Fiscal Agency Agreement and the Notes shall have the respective meanings specified in this Condition. All accounting terms used herein and not expressly defined shall have the meanings given to them in accordance with the International Financial Reporting Standard as adopted by Korea ("K-IFRS").

"Attributable Debt" means, with respect to any Sale/Leaseback Transaction, the lesser of (i) the fair market value of the property or asset subject to such transaction and (ii) the present value (discounted at a rate per annum equal to the discount rate of a capital lease obligation with a like term in accordance with K-IFRS) of the obligations of the lessee for net rental payments (excluding amounts on account of maintenance and repairs, insurance, taxes, assessments and similar charges) during the term of the lease.

"Debt" means, with respect to any person as of any date of determination, without duplication, (i) all obligations, contingent or otherwise, of such person for borrowed money, (ii) all obligations of such person evidenced by bonds, notes or other similar instruments, (iii) all obligations of such person in respect of letters of credit or other similar instruments, (iv) all obligations of such person to pay the unpaid purchase price of any property or service, (v) all obligations secured by a Lien on any property or asset of such person, whether or not such obligations are assumed by such person and (vi) all obligations of others guaranteed by such person to the extent of such guarantees. The amount of Debt of any person as of any date of determination shall be the outstanding balance at such date of all unconditional obligations as described above, the maximum liability of such person for any such contingent obligations at such date and, in the case of clause (v), the lesser of the fair market value (as determined in good faith by the board of directors of such person) at such date of the property or asset of such person subject to a Lien securing the obligations of others and the amount of such obligations secured.

"Long-term Debt" means any bond, note or other similar evidence of indebtedness for money borrowed having a maturity of more than one year from the date such indebtedness was incurred or having a maturity of less than or equal to one year but by its terms being renewable or extendible, at the option of the borrower, beyond one year from the date such indebtedness was incurred.

"Net Tangible Assets" means, at any date, the total amount of assets of the Company and its consolidated Subsidiaries, including investments in unconsolidated Subsidiaries, 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 the consolidated Subsidiary in question, as the case may be), (ii) all goodwill, trade names, trademarks, patents, unamortized debt discount and expense and other like intangible assets and (iii) all write-ups of fixed assets, net of accumulated depreciation thereon, after December 31, 2021, other than as permitted under the Asset Revaluation Law, or successor law, of the Republic, all as set forth on the most recent balance sheet of the Company and its consolidated Subsidiaries and computed in accordance with K-IFRS.

"person" means any individual, corporation, partnership, joint venture, association, joint stock company, trust, unincorporated organization or government or any agency or political subdivision thereof.

"Sale/Leaseback Transaction" means any arrangement with any person which provides for the leasing by the Company or any Subsidiary, for an initial term of three years or more, of any property or asset (other than marine vessels), whether now owned or hereafter acquired, which is to be sold or transferred by the Company or any Subsidiary after the date hereof to such person for a sale price of US$1,000,000 (or the equivalent thereof) or more.

"Subsidiary" means any corporation or other entity of which securities or other ownership interests having ordinary voting power to elect a majority of the board of directors or other persons performing similar functions are at the time directly or indirectly owned by the Company.

(d) Provision of Information to Holders. The Company covenants that for so long as this Note is a "restricted security" within the meaning of Rule 144 under the Securities Act, the Company shall, at any time when it is not subject to either the periodic reporting requirements of Section 13 or Section 15(d) of the United States Securities Exchange Act of 1934, as amended, and is not exempt from the requirements of Rule 12g3-2(b) thereunder, provide to any Holder of this Note or prospective purchaser of this Note designated by such Holder, upon the request of such prospective purchaser or Holder, the information required to be provided by Rule 144A(d)(4) under the Securities Act.

9. Merger and Consolidation

Nothing contained in the Fiscal Agency Agreement or in the Notes shall prevent any consolidation of the Company with, or merger of the Company into, any other corporation or corporations (whether or not affiliated with the Company), or successive consolidations or mergers to which the Company or its successor or successors shall be a party or parties, or shall prevent any sale, transfer, lease or conveyance of the property of the Company as an entirety or substantially as an entirety; provided that (a) in case the Company shall consolidate with or merge into another corporation, or sell, transfer, lease or convey its property as an entirety or substantially as an entirety to any corporation, the corporation formed by such consolidation or into which the Company is merged or the corporation which acquires by sale, transfer, lease or conveyance the property of the Company as an entirety or substantially as an entirety shall be a corporation organized under the laws of the Republic and shall expressly assume, by an agreement supplemental hereto executed and delivered to the Fiscal Agent, the due and punctual payment of the principal of and interest on the Notes, and any Additional Amounts, according to their tenor, and the due and punctual performance and observance of all of the covenants and conditions of the Fiscal Agency Agreement and the Notes on the part of the Company to be performed or observed; (b) immediately after giving effect to such transaction and treating any indebtedness which becomes an obligation of the Company as a result of such transaction as having been incurred by the Company at the time of such transaction, no Event of Default (as defined below), and no event which, after notice or lapse of time or both, would become an Event of Default, shall have occurred and be continuing; (c) if, as a result of any such consolidation or merger or such sale, transfer, lease or conveyance, properties or assets of the Company or a Subsidiary would become subject to a Lien which would not be permitted by the Notes, the Company or such successor corporation, as the case may be, shall take such steps as shall be necessary effectively to secure the Notes (together with, if the Company shall so determine, any other indebtedness of the Company or such Subsidiary then existing or thereafter created which is not subordinate to the Notes) equally and ratably with (or prior to) all indebtedness secured thereby; and (d) the Company has delivered to the Fiscal Agent an Officer's Certificate and an opinion of counsel as to matters of law stating that such consolidation, merger, sale, transfer, lease or conveyance and, if a supplemental agreement is required in connection with such transaction, such supplemental agreement comply with the Fiscal Agency Agreement and the Notes and that all conditions precedent herein provided for relating to such transaction have been complied with.

10. Events of Default

In case one or more of the following "Events of Default" shall have occurred and be continuing, that is to say:

(a) default in the payment of any installment of interest upon any of the Notes as and when the same shall become due and payable, and continuance of such default for a period of 30 days; or

(b) default in the payment of all or any part of the principal of any of the Notes as and when the same shall become due and payable, and continuance of such default for a period of 7 days, whether at maturity, upon redemption or otherwise; or

(c) failure on the part of the Company duly to observe or perform any other of the covenants or agreements on the part of the Company contained herein or in the Fiscal Agency Agreement for a period of 60 days after the date on which written notice specifying such failure, stating that such notice is a "Notice of Default" hereunder and demanding that the Company remedy the same, shall have been given by registered or certified mail, return receipt requested, to the Company at the office of the Fiscal Agent by the Holders of at least 10% in aggregate principal amount of the Notes at the time outstanding; or

(d) any Debt of the Company in the aggregate outstanding principal amount of US$15,000,000 or more either (i) becoming due and payable prior to the due date for payment thereof by reason of acceleration thereof following default by the Company or (ii) not being repaid at, and remaining unpaid after, maturity as extended by the period of grace, if any, applicable thereto, or any guarantee given by the Company in respect of Debt of any other person in the aggregate outstanding principal amount of US$15,000,000 or more not being honored when, and remaining dishonored after becoming, due and called; provided that, if any such default under any such Debt shall be cured or waived, then the default hereunder by reason thereof shall be deemed to have been cured and waived; or

(e) 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 Company 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 Company 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 Company to be bankrupt or insolvent and such decree or order shall remain unstayed and in effect for a period of 60 consecutive days; or

(f) the Company 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 Company or for any substantial part of its property, or cease 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 its creditors, or take corporate action in furtherance of any such action; then if such Event of Default is continuing, the Holders of 25% or more in aggregate outstanding principal amount of the Notes may, by written demand to the Company at the office of the Fiscal Agent, declare the Notes immediately due and payable. Upon such declaration, the Fiscal Agent shall give notice thereof to the Company and to the Holders of the Notes, by mail and publication. If, after any such declaration and before any judgment or decree for the payment of the moneys due shall have been obtained or entered, the Company pays or deposits with the Fiscal Agent all amounts then due with respect to the Notes (other than amounts due solely because of such declaration) and cures all other Events of Default with respect to the Notes, such defaults may be waived and such declaration may be annulled and rescinded by the Holders of more than 50% in aggregate outstanding principal amount of the Notes by written notice thereof to the Company at the office of the Fiscal Agent.

11. Meetings of Holders; Modifications and Amendments

(a) The Company at any time may, and at any time after the Notes shall have become immediately due and payable due to a default upon a request in writing made by Holders holding not less than 10% of the aggregate outstanding principal amount of the Notes the Fiscal Agent shall, convene a meeting of Holders of the Notes. Any such request in writing by the Holders shall be delivered to the Fiscal Agent. Further provisions concerning meetings of the Holders are set forth in the Fiscal Agency Agreement.

(b) Modifications and amendments to the Fiscal Agency Agreement or the Notes requiring consent of Holders may be made, and future compliance therewith or past defaults by the Company may be waived, with the consent of the Company and the Holders of more than 50% in aggregate principal amount of the Notes at the time outstanding, or of such lesser percentage as may act at a meeting of Holders held in accordance with the provisions of the Fiscal Agency Agreement; provided that no such modification, amendment or waiver of the Fiscal Agency Agreement or any Note may, without the consent of each Holder affected thereby, (i) change the stated maturity of the principal of or interest on any such Note; (ii) reduce the principal of or interest on any such Note; (iii) change the currency of payment of the principal of or interest on any such Note; or (iv) reduce the above-stated percentage of aggregate principal amount of Notes outstanding or reduce the quorum requirements or the percentage of votes required for the taking of any action. Any modifications, amendments or waivers consented to or approved at a meeting will be conclusive and binding on all Holders of Notes whether or not they have given such consent or were present at such meeting, and on all future Holders of Notes whether or not notation of such modifications, amendments or waivers is made upon the Notes. Any instrument given by or on behalf of any Holder of a Note in connection with any consent to any such modification, amendment or waiver will be irrevocable once given and will be conclusive and binding on all subsequent Holders of such Note.

(c) At a meeting of the Holders of the Notes called for any of the above purposes, persons entitled to vote a majority in aggregate principal amount of the Notes at the time outstanding shall constitute a quorum. In the absence of a quorum at any such meeting, the meeting may be adjourned for a period of not less than ten days; in the absence of a quorum at any such adjourned meeting, such adjourned meeting may be further adjourned for a period of not less than ten days; at the reconvening of any meeting further adjourned for lack of a quorum, the persons entitled to vote 25% in aggregate principal amount of the Notes at the time outstanding shall constitute a quorum for the taking of any action set forth in the notice of the original meeting. At a meeting or an adjourned meeting duly convened and at which a quorum is present as aforesaid, any resolution to modify or amend, or to waive compliance with, any of the covenants or conditions referred to above (other than those set forth in Clauses (i)-(iv) of Condition 11(b) hereof) shall be effectively passed if passed by the persons entitled to vote the lesser of (i) a majority in aggregate principal amount of Notes then outstanding or (ii) 75% in aggregate principal amount of the Notes represented and voting at the meeting.

(d) The Fiscal Agency Agreement and the terms and conditions of the Notes may be modified, supplemented or amended by the Company and the Fiscal Agent, without the consent of the Holder of any Note, for the purpose of adding to the covenants of the Company for the benefit of the Holders, surrendering any right or power conferred upon the Company, securing the Notes, curing any ambiguity, correcting or supplementing any defective provision therein, implementing the provisions of Section 11 hereof or in any other manner which the Company and the Fiscal Agent may mutually deem necessary or desirable and which shall not adversely affect the interests of the Holders of the Notes in any material respect, to all of which each Holder of any Note shall, by acceptance thereof, consent.

12. Notices to Holders

Except as otherwise expressly provided herein, whenever the Fiscal Agency Agreement or this Note requires that the Company or the Fiscal Agent give notice to the Holder hereof, the Company or the Fiscal Agent will cause such notice to be mailed to the Holders of Notes at their respective addresses as they appear on the Note Register. If by reason of the suspension of regular mail service, or by reason of any other cause, it shall be impracticable to give notice to the Holders of Notes in the manner prescribed herein, then such notification in lieu thereof as shall be made by the Company or by the Fiscal Agent on behalf of and at the instruction of the Company shall constitute sufficient provision of such notice, if such notification shall, so far as may be practicable, approximate the terms and conditions of the notice in lieu of which it is given. Neither the failure to give notice nor any defect in any notice given to any particular Holder of a Note shall affect the sufficiency of any notice with respect to other Notes.

13. Valid Obligations

The Company hereby certifies and declares that all acts, conditions and things required to be done and performed and to have happened precedent to the creation and issuance of this Note, and to constitute the same the valid and legally binding obligation of the Company enforceable in accordance with its terms, have been done and performed and have happened in due and strict compliance with the applicable laws of the State of New York.

14. Governing Law and Submission to Jurisdiction

(a) THIS NOTE SHALL BE GOVERNED BY, AND INTERPRETED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

(b) The Company (a) agrees that any legal suit, action or proceeding arising out of or based upon the Fiscal Agency Agreement or the Notes may be instituted in any state or Federal court in the State and County of New York, United States of America, (b) waives, to the extent it may effectively do so, any objection which it may have now or hereafter to the laying of the venue of any such suit, action or proceeding, and (c) irrevocably submits to the jurisdiction of any such court in any such suit, action or proceeding. The Company hereby designates GS Futures LLC as the Company's authorized agent to accept and acknowledge on its behalf service of any and all process which may be served in any such suit, action or proceeding in any such court and agrees that service of process upon said agent at its office at GS Futures LLC, located at 126 2nd Avenue, San Mateo, CA, 94401, United States (or at such other address as such agent may designate by written notice to the Company and the Fiscal Agent), and written notice of said service to the Company, mailed or delivered to it, at 508, Nonhyeon-ro, Gangnam-gu, Seoul 06141, Korea, Attention: Team Leader, International Finance and Insurance Team, shall be deemed in every respect effective service of process upon the Company in any such suit, action or proceeding and shall be taken and held to be valid personal service upon the Company, whether or not the Company shall then be doing, or at any time shall have done, business within the State of New York, and that any such service of process shall be of the same force and validity as if service were made upon it according to the laws governing the validity and requirements of such service in such State, and waives all claim of error by reason of any such service. Neither such appointment nor such acceptance of jurisdiction shall be interpreted to include actions brought under the United States Federal securities laws. Said designation and appointment shall be irrevocable until all of the Notes authenticated and delivered become due and payable and moneys sufficient to pay the principal of and interest on such Notes shall have been made available for payment and either paid or returned to the Company as provided herein.

FORM OF THE NOTES

Capitalized terms used in this section and not otherwise defined shall have the meanings given to them in "Terms and Conditions of the Notes."

Upon issuance, the Notes are expected to be represented by Global Notes in fully registered form. The Global Notes will be deposited with or on behalf of DTC and registered in the name of a nominee of DTC. A Global Note may not be transferred except as a whole by DTC to a nominee of DTC or by a nominee of DTC to DTC or another nominee of DTC or by DTC or any such nominee to a successor of or a nominee of such successor.

Upon the issuance of the Global Notes, DTC will credit, on its book-entry registration and transfer system, the respective principal amounts of the Notes represented by such Global Notes to the accounts of persons that have accounts with DTC ("participants"), including depositaries for Euroclear and Clearstream. The accounts to be initially credited shall be designated by the Initial Purchasers participating in the initial offer and sale of the Notes. Ownership of beneficial interests in the Global Notes will be limited to participants or persons that may hold interests through participants. Ownership of beneficial interests in such Global Notes will be shown on, and the transfer of that ownership will be effected only through, records maintained by DTC for such Global Notes (with respect to interests of participants) or by participants or persons that hold through participants (with respect to interests of persons other than participants).

DTC or its nominee, as the case may be, as registered Holder of the Global Notes will be considered the sole owner or holder of the Notes represented by each Global Note for all purposes under the Notes and the Fiscal Agency Agreement.

Principal and interest payments on Notes represented by the Global Notes registered in the name of DTC or its nominee will be made to DTC or its nominee, as the case may be, as the registered owner of such Global Notes. None of the Company, the Fiscal Agent or any paying agent for such Notes will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in such Global Notes or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

The Company expects that DTC, upon receipt of any payment of principal or interest, will credit participants' accounts with payments in amounts proportionate to their respective beneficial interests in the principal amount of such Global Notes as shown on the records of DTC. The Company also expects that payments by participants to owners of beneficial interests in such Global Notes held through such participants will be governed by standing instructions and customary practices, as is now the case with securities held for the account of customers registered in "street names," and will be the responsibility of such participants.

If (i) at any time DTC notifies the Company in writing that it is unwilling or unable to continue as depositary or ceases to be a "clearing agency" under the Exchange Act, and a successor depositary is not appointed by the Company within 90 days after the Company is notified by DTC or becomes aware of such condition, or (ii) the Notes have become immediately due and payable pursuant to Condition 10, the Company will issue Notes in definitive registered form in exchange for the Global Notes representing such Notes. The Notes will be issued only in fully registered form without coupons in denominations of US$200,000 and integral multiples of US$1,000 in excess thereof. If the Notes are issued in definitive registered form, the Company will make payments of principal of, and any premium (if any) and interest on the Notes, and transfers and exchanges of the Notes will be affected, subject to the terms of the Fiscal Agency Agreement and the Notes (without any service charge) upon surrender of the Notes.

For so long as the Notes are listed on the SGX-ST and the rules of the SGX-ST so require, in the event that a Global Note is exchanged for definitive Notes in certificated form, the Company will appoint and maintain a paying agent in Singapore, where the Notes may be presented or surrendered for payment or redemption. In addition, in the event that a Global Note is exchanged for definitive Notes in certificated form, an announcement of such exchange will be made by or on behalf of the Company through the SGX-ST and such announcement will include all material information with respect to the delivery of the definitive Notes in certificated form, including details of the paying agent in Singapore.

TAXATION

UNITED STATES TAXATION

The following is a summary of certain U.S. federal income tax considerations that may be relevant to a U.S. Holder (as defined below) of a Note. This summary is based on provisions of the Internal Revenue Code of 1986, as amended (the "Code"), applicable Treasury regulations laws, rulings and decisions now in effect, and the United States-Republic of Korea Income Tax Convention (the "Treaty"), all of which are subject to change, possibly with retroactive effect. This summary deals only with U.S. Holders of Notes that will hold Notes as capital assets and that acquired the Notes upon original issuance at their issue price. It does not address particular tax considerations that may be applicable to investors that are subject to special tax rules, such as banks, tax-exempt entities, insurance companies, regulated investment companies, dealers in securities or currencies, traders in securities electing to mark to market, persons that will hold Notes as a position in a "straddle" or conversion transaction, or as part of a "synthetic security" or other integrated financial transaction, entities or arrangements taxed as partnerships for U.S. federal income tax purposes or the partners therein, U.S. expatriates, nonresident alien individuals present in the United States for more than 182 days in a taxable year, U.S. Holders that are engaged in a trade or business in Korea, or U.S. Holders that have a "functional currency" other than the U.S. dollar.

This summary addresses only U.S. federal income tax consequences and does not address consequences arising under state, local, foreign tax laws, the alternative minimum tax or the Medicare tax on net investment income, or under special timing rules prescribed under section 451(b) of the Code. Investors should consult their own tax advisors in determining the tax consequences to them of holding Notes under such tax laws, as well as the application to their particular situation of the U.S. federal income tax considerations discussed below.

As used herein, a "U.S. Holder" is a beneficial owner of a Note that is a citizen or resident of the United States or a U.S. domestic corporation or that otherwise will be subject to U.S. federal income taxation on a net income basis in respect of the Note.

Payments of Interest and Additional Amounts

The gross amount of stated interest and any Additional Amounts (i.e., without reduction for Korean withholding taxes determined utilizing the appropriate Korean withholding tax rate applicable to the U.S. Holder) will be taxable to a U.S. Holder as ordinary interest income at the time it accrues or is actually or constructively received, in accordance with the U.S. Holder's method of accounting for U.S. federal income tax purposes. It is expected, and this discussion assumes, that the Notes will be issued with less than a de minimis amount of original issue discount ("OID"). In general, however, if the Notes are issued with OID at or above a de minimis threshold, a U.S. Holder will be required to include OID in gross income, as ordinary income, under a "constant-yield method" before the receipt of cash attributable to such income, regardless of the U.S. Holder's regular method of accounting for U.S. federal income tax purposes.

As discussed in "—Korean Taxation—Tax on Interest," interest paid on the Notes to a U.S. Holder is expected to be exempt from Korean taxes. If, however, that tax exemption were to cease to apply, then, subject to generally applicable limitations and conditions, Korean interest withholding tax paid at the appropriate rate applicable to the U.S. Holder may be eligible for credit against such U.S. Holder's U.S. federal income tax liability. These generally applicable limitations and conditions include requirements adopted by the United States Internal Revenue Services (the "IRS") in regulations promulgated in December 2021, and any Korean tax will need to satisfy these requirements in order to be eligible to be a creditable tax for a U.S. Holder. In the case of a U.S. Holder that consistently elects to apply a modified version of these rules under temporary guidance and complies with specific requirements set forth in such guidance, the Korean tax on interest generally will be treated as meeting the requirements and therefore as a creditable tax. In the case of all other U.S. Holders, the application of these requirements to the Korean tax on interest is uncertain and we have not determined whether these requirements have been met. If the Korean interest tax is not a creditable tax or the U.S. Holder does not elect to claim a foreign tax credit for any foreign income taxes paid or accrued in the same taxable year, the U.S. Holder may be able to deduct the Korean tax in computing such U.S. Holder's taxable income for U.S. federal income tax purposes. Interest and Additional Amounts will constitute income from sources without the United States and, for U.S. Holders that elect to claim foreign tax credits, generally will constitute "passive category income" for foreign tax credit purposes.

The availability and calculation of foreign tax credits and deductions for foreign taxes depend on a U.S. Holder's particular circumstances and involve the application of complex rules to those circumstances. The temporary guidance discussed above also indicates that the Treasury and the IRS are considering proposing amendments to the December 2021 regulations and that the temporary guidance can be relied upon until additional guidance is issued that withdraws or modifies the temporary guidance. U.S. Holders should consult their own tax advisors regarding the application of these rules to their particular situations.

Sale, Exchange and Retirement of the Notes

Upon the sale, exchange or retirement of a Note, a U.S. Holder generally will recognize gain or loss equal to the difference between the amount realized on the sale, exchange or retirement (less any accrued interest, which will be taxable as such) and the U.S. Holder's tax basis in such Note. A U.S. Holder's tax basis in a Note will generally equal the cost of the Note to the U.S. Holder. Gain or loss recognized upon a sale, exchange or retirement of a Note generally will be long-term capital gain or loss if the U.S. Holder has held the Note for more than one year at the time of disposition. Long-term capital gains recognized by an individual holder generally are subject to tax at a lower rate than short-term capital gains or ordinary income. The deduction of capital losses is subject to limitations.

As discussed in "Korean Taxation—Tax on Capital Gains," no Korean tax is currently expected to be imposed in respect of a sale or other disposition of Notes by a U.S. Holder (excluding sale or disposition to a Korean resident). If Korean tax were to be imposed on such a disposition of Notes, a U.S. Holder generally will not be entitled to credit any Korean tax imposed on the sale, exchange, retirement or other taxable disposition of the Notes against such U.S. Holder's U.S. federal income tax liability, except in the case of a U.S. Holder that consistently elects to apply a modified version of the U.S. foreign tax credit rules that is permitted under temporary guidance and complies with the specific requirements set forth in such guidance. Additionally, capital gain or loss recognized by a U.S. Holder on the sale or other disposition of the Notes generally will be U.S. source gain or loss for U.S. foreign tax credit purposes. Consequently, even if the withholding tax qualifies as a creditable tax, a U.S. Holder may not be able to credit the tax against its U.S. federal income tax liability unless such credit can be applied (subject to generally applicable conditions and limitations) against tax due on other income treated as derived from foreign sources. If the Korean tax is not a creditable tax, the tax would reduce the amount realized on the sale or other disposition of the Notes even if the U.S. Holder has elected to claim a foreign tax credit for other taxes in the same year. The temporary guidance discussed above also indicates that the Treasury and the IRS are considering proposing amendments to the December 2021 regulations and that the temporary guidance can be relied upon until additional guidance is issued that withdraws or modifies the temporary guidance. U.S. Holders should consult their own tax advisors regarding the application of the foreign tax credit rules to a sale or other disposition of the Notes and any Korean tax imposed on such sale or disposition.

Specified Foreign Financial Assets

Individual U.S. Holders that own "specified foreign financial assets" with an aggregate value in excess of $50,000 on the last day of the taxable year or $75,000 at any time during the taxable year are generally required to file an information statement along with their tax returns, currently on IRS Form 8938, with respect to such assets. "Specified foreign financial assets" include any financial accounts held at a non-U.S. financial institution, as well as securities issued by a non-U.S. issuer (which may include Notes issued in certificated form) that are not held in accounts maintained by financial institutions. Higher reporting thresholds apply to certain individuals living abroad and to certain married individuals. Regulations extend this reporting requirement to certain entities that are treated as formed or availed of to hold direct or indirect interests in specified foreign financial assets based on certain objective criteria. U.S. Holders who fail to report the required information could be subject to substantial penalties. In addition, the statute of limitations for assessment of tax would be suspended, in whole or part. Prospective investors should consult their own tax advisors concerning the application of these rules to their investment in the Notes, including the application of the rules to their particular circumstances.

Information Reporting and Backup Withholding

Information returns will be filed with the IRS in connection with payments on the Notes made to, and the proceeds of dispositions of Notes effected by, certain U.S. Holders. In addition, certain U.S. Holders may be subject to backup withholding in respect of such amounts if they do not provide their taxpayer identification numbers to the person from whom they receive payments. Holders who are not U.S. persons (as defined in the Code) may be required to comply with applicable certification procedures to establish that they are not U.S. Holders in order to establish an exemption from the application of such information reporting requirements and backup withholding. The amount of any backup withholding from a payment to a 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. Investors should consult their tax advisers about these rules and any other reporting obligations that may apply to their ownership or disposition of Notes. Investors should consult their tax advisers about these rules and any other reporting obligations that may apply to their ownership or disposition of Notes.

KOREAN TAXATION

The information provided below does not purport to be a complete summary of Korean tax law and practice currently applicable. Prospective investors who are in any doubt as to their tax position should consult with their own professional advisors.

The taxation of non-resident individuals and non-resident corporations ("Non-Residents") depends on whether they have a "permanent establishment" (as defined under Korean law and applicable tax treaty) in Korea to which the relevant Korean source income is attributable or with which such income is effectively connected. Non-Residents without a permanent establishment in Korea are taxed in the manner described below. Non-Residents with permanent establishments in Korea are taxed in accordance with different rules.

Tax on Interest

Interest on the Notes paid to Non-Residents, being foreign currency-denominated bonds issued outside of Korea, is exempt from income tax and corporation tax (whether payable by withholding or otherwise) pursuant to the Special Tax Treatment Control Law (the "STTCL").

If the tax exemption under the STTCL referred to above were to cease to be in effect, the rate of income tax or corporation tax applicable to interest on the Notes, for a Non-Resident without a permanent establishment in Korea, would be 14% of income. In addition, a tax surcharge called a local income tax would be imposed at the rate of 10% of the income or corporation tax (raising the total tax rate to 15.4%).

The tax rates may be reduced by an applicable tax treaty, convention or agreement between Korea and the country of the recipient of the income.

In order to obtain the benefit of a reduced rate available under applicable tax treaties, a Non-Resident holder must submit an application for reduced rate to the party liable for the withholding before the receipt of the relevant interest payment (if there is no change in the contents of such application, it is not required to submit such application again within three years thereafter), together with a certificate of the Non-Resident holder's tax residence issued by a competent authority of the Non-Resident's resident country. Other than in a case where the real beneficiary of the domestic source income is a governmental organization of the other country that is party to a tax treaty prescribed by the Ministry of Economy and Finance (including the government of the other contracting state to the relevant tax treaty, a local government, or a central bank), if the amount of tax reduction or exemption for a Non-Resident corporation is Won 1 billion or more (including in a case where the aggregate amount of tax previously exempted under the tax treaty for the preceding one year period, dating from the last day of the month in which the payment of such Korean source income is made, is Won 1 billion or more), such Non-Resident corporation must additionally submit (i) the names and addresses of the members of its board of directors, (ii) personal details and current equity holdings of its shareholders (provided that, if there are more than 100 shareholders, the non-resident holder may instead provide a statement showing the total number of shareholders and the aggregate investment amount from each country of shareholder's tax residence) and (iii) its financial statements (including all accompanying schedules), tax returns or the audit reports submitted to the country of its tax residence for the immediately preceding three years (or, if the entity has been in existence for

less than three years, for the period from its incorporation to the day before the date of application). If the Non-Resident holder was unable to receive the benefit of a reduced rate due to his or her failure to timely submit the aforementioned application, the Non-Resident holder may still receive a tax treaty benefit by submitting evidentiary documents to the relevant tax office within 5 years thereafter. If interest is paid to an overseas investment vehicle, the overseas investment vehicle (subject to certain exceptions) must submit a report of overseas investment vehicle and a schedule of beneficial owners. The foregoing matter is discussed in more detail below.

Tax on Capital Gains

Korean tax laws currently exclude from Korean taxation gains made by a Non-Resident without a permanent establishment in Korea from the sale of the Notes to other Non-Residents (other than to their permanent establishments in Korea). In addition, capital gains earned by Non-Residents from the transfer of the Notes taking place outside Korea are currently exempt from taxation by virtue of STTCL, provided that the issuance of the Notes is deemed to be an overseas issuance and is denominated in a foreign currency under the STTCL.

If the exclusion or exemption from Korean taxation referred to above were to cease to be in effect, in the absence of an applicable treaty reducing or eliminating tax on capital gains, the applicable rate of tax would be the lower of 11% (including local income tax) of the gross realization proceeds or (subject to the production of satisfactory evidence of the acquisition cost and certain direct transaction costs of the relevant Note) 22% (including local income tax) of the realized gain (i.e., the excess of the gross realization proceeds over the acquisition cost and certain direct transaction costs) made. If such evidence shows that no gain (or a loss) was made on the sale, no Korean tax is payable. There is no provision under relevant Korean tax law to allow offsetting of gains and losses or otherwise aggregating transactions for the purpose of computing the net gain attributable to sales of Notes issued by Korean companies.

The purchaser or any other designated withholding agent of Notes is obliged under Korean law to withhold the applicable amount of Korean tax and make payment thereof to the relevant Korean tax authority. Unless the seller can claim the benefit of an exemption from tax under an applicable tax treaty and on the failure of the seller to produce satisfactory evidence of his acquisition cost and certain direct transaction costs in relation to the Notes being sold, the purchaser or such withholding agent must withhold an amount equal to 11% (including local income tax) of the gross realization proceeds. The purchaser or withholding agent must pay any withholding tax to the competent Korean tax office no later than the tenth day of the month following the month in which the payment for the purchase of the relevant Notes occurred. Failure to transmit the withheld tax to the Korean tax authorities in time subjects the purchaser or such withholding agent to penalties under Korean tax laws. The Korean tax authorities may attempt to collect such tax from (i) the Non-Resident who is liable for withholding tax on Korea-source gains, as a purchaser or (ii) the withholding agent who is obliged to withhold such tax, through proceedings against payments due to the Non-Resident from its Korean investments and the assets, or (iii) revenues of any of the Non-Resident's branch or representative offices in Korea.

Inheritance Tax and Gift Tax

Korean inheritance tax is imposed upon (a) all assets (wherever located) of the deceased if at the time of his death he was a Korean resident and (b) all property located in Korea that passes on death (irrespective of the residence of the deceased). Gift tax is imposed in similar circumstances to the above. The taxes are imposed if the value of the relevant property is above a certain limit and the rate varies from 10% to 50%. At present, Korea has not entered into any tax treaties regarding its inheritance or gift taxes.

Under Korean inheritance and gift tax laws, bonds issued by Korean corporations are deemed located in Korea irrespective of where they are physically located or by whom they are owned, and, consequently, the Korean inheritance and gift taxes will be imposed on transfers of the Notes by inheritance or gift. Prospective purchasers should consult their personal tax advisors regarding the consequences of the imposition of the Korean inheritance or gift tax.

Stamp Duty and Securities Transaction Tax

No stamp, issue or registration duties will be payable in Korea by the Holders in connection with the issue of the Notes except for a nominal amount of stamp duty on certain documents executed in Korea which will be paid by the Company. No securities transaction tax will be imposed upon the transfer of the Notes.

Tax Treaties

At the date of this Offering Circular, Korea has tax treaties with, inter alia, Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Luxembourg, The Netherlands, New Zealand, Norway, Singapore, Sweden, Switzerland, the United Kingdom and the United States of America, under which the rate of withholding tax on interest is reduced, generally to between 10 and 15% (including local income tax), and the tax on capital gains is often eliminated.

A special withholding tax system took effect on July 1, 2006. Under the system, there is a special procedure to apply the Korea-Malaysia tax treaty on certain Korean source income. Payments made to the residents of Labuan, Malaysia will be subject to the default Korean withholding tax rates (generally 15.4% for interest and the lower of 11% of gross realization proceeds or 22% of capital gains (including local income tax)) rather than the reduced or exempted rate available under the Korea-Malaysia tax treaty. A Labuan taxpayer, however, will be given an opportunity to obtain a refund by proving that it is entitled to the tax treaty benefits as a beneficial owner of the income and is an actual resident of Labuan, Malaysia. A Labuan taxpayer may also file an application with the National Tax Service (the "NTS") for confirmation that it is entitled to the tax treaty benefits and obtain an advance confirmation from the NTS prior to receiving Korean source income.

In order for a Non-Resident to obtain the benefit of a tax exemption on certain Korean source incomes, such as interest and capital gains, under an applicable tax treaty, Korean tax law requires such Non-Resident (or its agents) to submit to the payer of such Korean source income an application for tax exemption under a tax treaty along with a certificate of tax residency of such Non-Resident issued by a competent authority of the Non-Resident's country of tax residence, subject to certain exceptions. If the amount of tax reduction or exemption for a Non-Resident corporation is Won 1 billion or more, such Non-Resident corporation must additionally submit (i) the names and addresses of the members of its board of directors, (ii) personal details and current equity holdings of its shareholders and (iii) its audit reports for the past three years. The payer of such Korean source income, in turn, is required to submit such application to the relevant district tax office by the ninth day of the month following the date of the first payment of such income. An application for tax exemption submitted by a Non-Resident remains effective for three years from submission, and if any material changes occur with respect to information provided in the application, an application reflecting such change must be newly submitted.

If the Korean source incomes are paid to Non-Residents through an overseas investment vehicle, such investment vehicle must obtain an application for tax exemption from each Non-Resident, who are the beneficial owners of the Korean source income and submit to the payer of such Korean source income an overseas investment vehicle report, together with the applications for tax exemption prepared by the Non-Resident beneficial owners. An overseas investment vehicle means an organization established outside of Korea that manages funds collected through investment solicitation by way of acquiring, disposing of, or otherwise investing in investment targets and distributes the outcome of such management to investors. However, if such overseas investment vehicle is deemed to be a beneficial owner pursuant to the Corporate Tax Act and its Enforcement Decree, it is required to submit an overseas investment vehicle report including a schedule of investors in each country, together with the aforementioned application and certificate of the Non-Resident holder's tax residence.

However, this requirement does not apply to exemptions under Korean tax law.

At present, Korea has not entered into any tax treaties regarding its inheritance or gift tax.

Withholding and Gross Up

As mentioned above, interest on the Notes is exempt from any withholding or deduction on account of income tax or corporation tax pursuant to STTCL. However, in the event that the payer or the Company is required by law to make any withholding or deduction for or on account of any Korean taxes (as more fully described in "Description of the Notes—Additional Amounts") the Company has agreed to pay (subject to the customary exceptions as set out in "Description of the Notes—Additional Amounts") such Additional Amounts as may be necessary in order that the net amounts received by the holder of any Note after such withholding or deduction shall equal the respective amounts which would have been received by such holder in the absence of such withholding or deduction.

PLAN OF DISTRIBUTION

Under the terms and conditions contained in a purchase agreement dated October 21, 2025 (the "Purchase Agreement"), the Company has agreed to sell to BNP PARIBAS, Citigroup Global Markets Inc., Mizuho Securities Asia Limited and Morgan Stanley & Co. International plc (together, the "Initial Purchasers"), the following principal amount of Notes.

Initial Purchasers	Principal Amount of the Notes
BNP PARIBAS	US$ 75,000,000
Citigroup Global Markets Inc.	75,000,000
Mizuho Securities Asia Limited	75,000,000
Morgan Stanley & Co. International plc	75,000,000
Total	US$300,000,000

The Purchase Agreement provides that the Initial Purchasers are obligated to purchase all of the Notes, if any are purchased. The Purchase Agreement also provides that if an Initial Purchaser defaults, the purchase commitments of non-defaulting Initial Purchasers may be increased or the offering may be terminated. Each of the Initial Purchasers proposes to offer the Notes initially at the offering price on the cover page of this Offering Circular. After the initial offering, the offering price may be changed.

The Company has agreed to indemnify the Initial Purchasers against certain liabilities (including liabilities under the Securities Act) incurred in connection with the issue and sale of the Notes. The Purchase Agreement may be terminated in certain circumstances prior to payment of the issue price to the Company.

The Initial Purchasers are offering the Notes, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the Notes, and other conditions contained in the Purchase Agreement, such as the receipt by the Initial Purchasers of officer's certificates and legal opinions. The Initial Purchasers reserve the right to withdraw, cancel or modify offers to investors and to reject orders in whole or in part.

Commissions and Discounts

The purchase price for the Notes will be the offering price set forth on the cover page of this Offering Circular net of a combined management and underwriting commission. After the initial offering, the offering price or any other term of the offering may be changed.

New Issue of Notes

The Notes are a new issue of securities with no established trading market. The Initial Purchasers have advised that they presently intend to make a market in the Notes after completion of the offering. However, they are under no obligation to do so and may discontinue any market-making activities at any time without any notice. The Company cannot assure the liquidity of the trading market for the Notes. If an active trading market for the Notes does not develop, the market price and liquidity of the Notes may be adversely affected. If the Notes are traded, they may trade at a discount from their initial offering price, depending on prevailing interest rates, the market for similar securities, the operating performance and financial condition of the Company, general economic conditions and other factors.

Settlement

Delivery of the Notes is expected on or about October 28, 2025.

No Sales of Similar Securities

For a period of three months days after the date hereof, the Company will not, without the prior written consent of the Initial Purchasers, (i) offer, sell, contract to sell or otherwise dispose of any non-Won denominated debt securities of the Company which mature more than one year after such Closing Date and which are substantially similar to the Notes, or (ii) offer or sell any securities in the United States within six months after the Closing Date in such a manner that registration of the Notes shall be required.

Short Positions

In connection with the offering, the Initial Purchasers may purchase and sell the Notes in the open market. These transactions may include short sales and purchases on the open market to cover positions created by short sales. Short sales involve the sale by the Initial Purchasers of a greater principal amount of Notes than they are required to purchase in the offering. The Initial Purchasers must close out any short position by purchasing Notes in the open market. A short position is more likely to be created if the Initial Purchasers are concerned that there may be downward pressure on the price of the Notes in the open market after pricing that could adversely affect investors who purchase in the offering.

Similar to other purchase transactions, the Initial Purchasers' purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of the Notes or preventing or retarding a decline in the market price of the Notes. As a result, the price of the Notes may be higher than the price that might otherwise exist in the open market.

None of the Company and the Initial Purchasers make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the Notes. In addition, none of the Company and the Initial Purchasers make any representation that the Initial Purchasers will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

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 this offering and are subject to additional requirements under the SFC Code.

Prospective investors who are directors, employees or major shareholders of the Company, a CMI or its group companies would be considered under the SFC Code as having an Association with the Company, the CMI or the relevant group company. CMIs should specifically disclose whether their investor clients have any Association when submitting orders for the Notes. In addition, private banks should take all reasonable steps to identify whether their investor clients may have any Associations with the Company or any CMI (including its group companies) and inform the Initial Purchasers accordingly.

CMIs are informed that, unless otherwise notified, the marketing and investor targeting strategy for this 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 set out elsewhere in this Offering Circular.

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 inquire 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 Notes (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 Company. In addition, CMIs (including private banks) should not enter into arrangements which may result in prospective investors paying different prices for the Notes.

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 Initial Purchasers in control of the order book should consider disclosing order book updates to all CMIs.

When placing an order for the Notes, private banks should disclose, at the same time, whether 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 Initial Purchasers (if any) to categorize it as a proprietary order and apply the "proprietary orders" requirements of the SFC Code to such order.

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 orders should be sent to: dl.asia.syndicate@asia.bnpparibas.com; DCM.Omnibus@citi.com; Omnibus_Bond@hk.mizuho-sc.com; omnibus_debt@morganstanley.com.

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 Company, 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 this offering. CMIs that receive such underlying investor information are reminded that such information should be used only for submitting orders in this offering. The relevant Initial Purchasers 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 Initial Purchaser 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 Initial Purchasers 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 "S SI 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, organised or a resident in a comprehensively sanctioned country or territory, including Cuba, Iran, North Korea, Syria, 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

General

No action has been or will be taken in any jurisdiction that would permit a public offering of the Notes, or the possession, circulation or distribution of this Offering Circular or any amendment or supplement to this Offering Circular, in any country or jurisdiction where action for any such purposes is required. Accordingly, the Notes may not be offered or sold, directly or indirectly, and neither this Offering Circular nor any other offering material or advertisements in connection with the Notes may be distributed or published, in or from any country or jurisdiction except under circumstances that will result in compliance with applicable laws and regulations.

United States

The Notes 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 in transactions exempt from, or not subject to, the registration requirements of the Securities Act and applicable state securities laws. In addition, until 40 days after the commencement of this offering, an offer or sale of Notes within the United States by an Initial Purchaser (whether or not participating in this offering) may violate the registration requirements of the Securities Act if such offer or sale is made otherwise than in accordance with Rule 144A.

The Initial Purchasers, through their respective affiliates, acting as selling agents where applicable, propose to offer the Notes to certain non-U.S. persons in offshore transactions in reliance on Regulation S and in accordance with applicable law and propose to offer the Notes to qualified institutional buyers in the United States pursuant to Rule 144A. Each of the Initial Purchasers has agreed with the Company that, except as permitted under the Purchase Agreement, it will not offer, sell or deliver the Notes within the United States or to U.S. persons. Any offer or sale of the Notes in the United States in reliance on Rule 144A will be made by broker-Initial Purchasers who are registered as such under the Exchange Act. Terms used in this paragraph have the meanings given to them by Regulation S. Transfer of the Notes will be restricted as described under "Transfer Restrictions."

European Economic Area

In relation to each Member State of the EEA, each Initial Purchaser has represented and agreed that it has not made and will not make an offer of Notes which are the subject of the offering contemplated by this Offering Circular to the public in that Member State other than:

(a) to any legal entity which is a qualified investor as defined in the Prospectus Regulation;

(b) 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 Initial Purchaser or Initial Purchasers nominated by the Company for any such offer; or

(c) in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of Notes shall require the Company or any Initial Purchaser to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purposes of this provision, the expression an "offer of Notes to the public" in relation to any Notes in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes, and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129, as amended.

United Kingdom

Each of the Initial Purchasers has represented and agreed that:

(a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) received by it in connection with the issue or sale of the Notes in circumstances in which Section 21(1) of the FSMA does not apply to the Company; and

(b) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the Notes in, from or otherwise involving the United Kingdom.

Korea

The Notes have not been registered with the FSC under the FSCMA. Accordingly, the Notes have not been and will not be offered, delivered, or sold directly or indirectly in Korea or to any resident of Korea (as defined in the Foreign Exchange Transactions Act of Korea and the regulations thereunder) or to others for re-offering or resale directly or indirectly in Korea or to any resident of Korea except as otherwise permitted under applicable Korean laws and regulations. In addition, within one year following the issuance of the Notes, the Notes may not be transferred to any resident of Korea other than a Korean QIB registered with the KOFIA as a Korean QIB, provided that the amount of the Notes acquired by such Korean QIBs in the primary market is limited to no more than 20% of the aggregate issue amount of the Notes.

Japan

The Notes have not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948, as amended, the "Financial Instruments and Exchange Act"). Accordingly, each Initial Purchaser has represented and agreed that it has not, directly or indirectly, offered or sold and will not, directly or indirectly, offer or sell any Notes in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan) or to others for re-offering or re-sale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Act and other relevant laws and regulations of Japan.

Hong Kong

Each Initial Purchaser has represented and agreed that:

(a) it has not offered or sold and will not offer or sell in Hong Kong, by means of any document, any Notes other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong (the "SFO") and any rules made under the SFO; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong (the "C(WUMP)O") or which do not constitute an offer to the public within the meaning of the C(WUMP)O; and

(b) it has not issued or had in its possession for the purposes of issue, and will not issue or have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or document relating to the Notes, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to the Notes which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made under the SFO.

Italy

The offering of the Notes has not been registered with the *Commissione Nazionale per le Società e la Borsa* ("CONSOB") pursuant to Italian securities legislation and, accordingly, the Notes may not be offered, sold or delivered, nor may copies of this Offering Circular or of any other document relating to any Notes be distributed in Italy, except in accordance with any Italian securities, tax and other applicable laws and regulations.

Each Initial Purchaser has represented and agreed that it has not offered, sold or delivered, and will not offer, sell or deliver, any Notes or distribute any copy of this Offering Circular or any other document relating to the Notes in Italy except:

(a) to qualified investors (*investitori qualificati*), as defined pursuant to Article 100 of Legislative Decree No. 58 of 24 February 1998 (the "Financial Services Act") and Article 34-ter, paragraph 1, letter (b) of CONSOB Regulation No. 11971 of 14 May 1999 (the "Issuers Regulation"), all as amended from time to time; or

(b) in other circumstances which are exempted from the rules on public offerings pursuant to Article 100 of the Financial Services Act and Issuers Regulation.

In any event, any offer, sale or delivery of the Notes or distribution of copies of this Offering Circular or any other document relating to the Notes in Italy under paragraphs (a) or (b) above must be:

(i) made by an investment firm, bank or financial intermediary permitted to conduct such activities in Italy in accordance with the Financial Services Act, Legislative Decree No. 385 of 1 September 1993 (the "Banking Act") and CONSOB Regulation No. 20307 of 15 February 2018, all as amended from time to time;

(ii) in compliance with Article 129 of the Banking Act, as amended from time to time, and the implementing guidelines of the Bank of Italy, as amended from time to time; and

(iii) in compliance with any other applicable laws and regulations, including any limitation or requirement which may be imposed from time to time by CONSOB or the Bank of Italy or other competent authority.

Singapore

Each Initial Purchaser has acknowledged that this Offering Circular has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each Manager has represented, warranted and agreed that it has not offered or sold any Notes or caused the Notes to be made the subject of an invitation for subscription or purchase and will not offer or sell any Notes or cause the Notes to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this Offering Circular or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Notes, 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, as modified or amended from time to time (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.

Switzerland

This Offering Circular is not intended to constitute an offer or solicitation to purchase or invest in the Notes described herein. The Notes may not be publicly offered, sold or advertised, directly or indirectly, in, into or from Switzerland, and will not be listed on SIX Swiss Exchange ("SIX") or on any other exchange or regulated trading facility in Switzerland. Neither this Offering Circular nor any other offering or marketing material relating to the Notes constitutes a prospectus as such term is understood pursuant to article 652a or article 1156 of the Swiss Code of Obligations or a listing prospectus within the meaning of the listing rules of the SIX or any other regulated trading facility in Switzerland or a simplified prospectus or a prospectus as such term is defined in the Swiss Collective Investment Scheme Act, and neither this Offering Circular nor any other offering or marketing material relating to the Notes may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this Offering Circular nor any other offering or marketing material relating to the offering, nor the Company or the Notes have been or will be filed with or approved by any Swiss regulatory authority. The Notes are not subject to the supervision by any Swiss regulatory authority, e.g., the Swiss Financial Markets Supervisory Authority ("FINMA"), and investors in the Notes will not benefit from protection or supervision by such authority.

Other Relationships

Some of the Initial Purchasers and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with the Company or its affiliates. They have received, or may in the future receive, customary fees and commissions for these transactions.

The Initial Purchasers or certain of their affiliates may purchase Notes and be allocated Notes for asset management and/or proprietary purposes but not with a view to distribution. The Initial Purchasers or their respective affiliates may purchase Notes for its or their own account and enter into transactions, including credit derivatives, such as asset swaps, repackaging and credit default swaps relating to Notes and/or other securities of the Company at the same time as the offer and sale of Notes 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 Notes to which this Offering Circular relates (notwithstanding that such selected counterparties may also be purchasers of Notes). The Company has been advised by the Initial Purchasers that they may offer and sell Notes to or through any of their respective affiliates and any such affiliate may offer and sell Notes purchased by it to or through any Initial Purchaser.

In addition, in the ordinary course of their business activities, the Initial Purchasers and their affiliates may make or hold 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. Such investments and securities activities may involve securities and/or instruments of the Company and its affiliates. Certain of the Initial Purchasers or their affiliates that have a lending relationship with the Company routinely hedge their credit exposure to the Company consistent with their customary risk management policies. Typically, such Initial Purchasers and their affiliates would hedge such exposure by entering into

transactions which consist of either the purchase of credit default swaps or the creation of short positions in the Company's securities, including potentially the Notes. Any such short positions could adversely affect future trading prices of the Notes. The Initial Purchasers and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

TRANSFER RESTRICTIONS

Because of the following restrictions, investors are advised to consult legal counsel prior to making any offer, resale, pledge or other transfer of the Notes offered pursuant to this Offering Circular.

Transfer Restrictions under U.S. Securities Laws

The Notes have not been and will not be registered under the Securities Act or the securities laws of any state of the United States or the securities laws of any other jurisdiction. The Notes 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 in reliance on Rule 144A to QIBs. The Notes may also be offered and sold to non-U.S. persons in offshore transactions in reliance on Regulation S.

Each purchaser of the Notes hereunder will be deemed to have represented and agreed as follows (terms used in this paragraph that are defined in Rule 144A or in Regulations S under the Securities Act are used in this Offering Circular as defined in the Securities Act):

(1) it is purchasing the Notes for its own account or an account with respect to which it exercises sole investment discretion, and it and any such account (i) is a QIB, and is aware that the sale to it is being made in reliance on Rule 144A or (ii) is outside the United States and is not a U.S. person;

(2) it acknowledges that the Notes have not been and will not be registered under the Securities Act or with any securities regulatory authority of any jurisdiction and may not be offered or sold within the United States except as set forth below;

(3) it understands and agrees that if in the future it decides to sell, pledge or otherwise transfer any Notes or any beneficial interest in any Notes, such Notes may be offered, resold, pledged or transferred only (A)(i) to the Company, (ii) to a person whom the seller reasonably believes is a qualified institutional buyer in a transaction meeting the requirements of Rule 144A, (iii) to a non-U.S. person in an offshore transaction meeting the requirements of Rule 903 or 904 of Regulation S under the Securities Act, (iv) pursuant to an exemption from registration under the Securities Act provided by Rule 144 under the Securities Act (if available) or (v) pursuant to another exemption from the Securities Act, provided that, as a condition to the registration of the transfer thereof, the Company or the Fiscal Agent may require the delivery of any documents, including an opinion of counsel that it, in its sole discretion, may deem necessary or appropriate to evidence compliance with such exemption, or (B) pursuant to an effective registration statement under the Securities Act, and, in each of such cases in accordance with any applicable securities laws of any state of the United States;

(4) it agrees to, and each subsequent holder is required to, notify any purchaser of the Notes from it of the resale restrictions referred to in clause (3)(A) above, if then applicable;

(5) it understands and agrees that Notes initially offered in the United States to QIBs will be represented by one or more Restricted Global Notes and that Notes initially offered to non-U.S. persons outside the United States in reliance on Regulation S will be represented by one or more Unrestricted Global Notes;

(6) it understands that the Restricted Global Notes will, unless otherwise agreed by the Company, bear a legend substantially to the following effect:

"THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"). THE HOLDER HEREOF, BY PURCHASING THIS SECURITY, AGREES FOR THE BENEFIT OF GS CALTEX CORPORATION (THE "COMPANY") THAT THIS SECURITY MAY BE OFFERED, RESOLD, PLEDGED OR OTHERWISE TRANSFERRED ONLY (A)(i) TO THE COMPANY, (ii) TO A PERSON WHOM THE SELLER REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER, AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT, IN A TRANSACTION MEETING

THE REQUIREMENTS OF RULE 144A UNDER THE SECURITIES ACT, (iii) TO A NON-U.S. PERSON IN AN OFFSHORE TRANSACTION MEETING THE REQUIREMENTS OF RULE 903 OR 904 OF REGULATION S UNDER THE SECURITIES ACT, (iv) PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT PROVIDED BY RULE 144 UNDER THE SECURITIES ACT (IF AVAILABLE) OR (v) PURSUANT TO ANOTHER EXEMPTION FROM THE SECURITIES ACT, PROVIDED THAT, AS A CONDITION TO THE REGISTRATION OF THE TRANSFER THEREOF, THE COMPANY OR THE FISCAL AGENT MAY REQUIRE THE DELIVERY OF ANY DOCUMENTS, INCLUDING AN OPINION OF COUNSEL THAT IT, IN ITS SOLE DISCRETION, MAY DEEM NECESSARY OR APPROPRIATE TO EVIDENCE COMPLIANCE WITH SUCH EXEMPTION, OR (B) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT, AND, IN EACH OF SUCH CASES IN ACCORDANCE WITH ANY APPLICABLE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES."

(7) it understands that the offer or sale of Notes represented by the Unrestricted Global Notes may not be made to a U.S. person or for the account or benefit of a U.S. person (other than a distributor) until the 40th day following the later of the commencement of the offering and the original issue date of the Notes and that the Unrestricted Global Notes will bear a legend to the following effect unless otherwise agreed to by the Company:

"THIS SECURITY (OR ITS PREDECESSOR) WAS ORIGINALLY ISSUED IN A TRANSACTION EXEMPT FROM REGISTRATION UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND MAY NOT BE TRANSFERRED IN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, ANY U.S. PERSON EXCEPT PURSUANT TO AN AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND ALL APPLICABLE STATE SECURITIES LAWS. TERMS USED ABOVE HAVE THE MEANINGS GIVEN TO THEM IN REGULATION S UNDER THE SECURITIES ACT."

(8) it acknowledges that prior to any proposed transfer of the Notes in certificated form or of beneficial interests in the Global Notes (other than pursuant to an effective registration statement), the holder of the Notes or the holder of beneficial interests in the Global Notes, as the case may be, may be required to provide certificates and other documentation relating to the manner of such transfer and submit such certifications and other documentation as provided in the Fiscal Agency Agreement; and

(9) it acknowledges that the Company, the Initial Purchasers, the Fiscal Agent and others will rely upon the truth and accuracy of the foregoing acknowledgments, representations and agreements and agrees that if any of such acknowledgments, representations or warranties deemed to have been made by virtue of its purchase of the Notes are no longer accurate, it shall promptly notify the Company; and if it is acquiring any Notes as a fiduciary or agent for one or more accounts, it represents that it has sole investment discretion with respect to each such account and that it has full power to make the foregoing acknowledgments, representations and agreements on behalf of each such account.

Transfer Restrictions under Korean Laws and Regulations

Each purchaser of the Notes, by accepting delivery of this Offering Circular, will be deemed to have acknowledged, represented and agreed as follows:

THE NOTES HAVE NOT BEEN REGISTERED WITH THE FINANCIAL SERVICES COMMISSION OF KOREA UNDER THE FINANCIAL INVESTMENT SERVICES AND CAPITAL MARKETS ACT OF KOREA. ACCORDINGLY, THE NOTES HAVE NOT BEEN AND WILL NOT BE OFFERED, DELIVERED, OR SOLD DIRECTLY OR INDIRECTLY IN KOREA OR TO ANY RESIDENT OF KOREA (AS DEFINED IN THE FOREIGN EXCHANGE TRANSACTIONS ACT OF KOREA AND THE REGULATIONS THEREUNDER) OR TO OTHERS FOR RE-OFFERING OR RESALE DIRECTLY OR INDIRECTLY IN KOREA OR TO ANY RESIDENT OF KOREA EXCEPT AS OTHERWISE PERMITTED UNDER APPLICABLE KOREAN LAWS AND REGULATIONS.

IN ADDITION, WITHIN ONE YEAR FOLLOWING THE ISSUANCE OF THE NOTES, THE NOTES MAY NOT BE TRANSFERRED TO ANY RESIDENT OF KOREA OTHER THAN A QUALIFIED INSTITUTIONAL INVESTOR (OR A "KOREAN QIB," AS DEFINED IN THE REGULATION ON THE ISSUANCE OF SECURITIES AND PUBLIC DISCLOSURE, ETC. OF KOREA) REGISTERED WITH THE KOREA FINANCIAL INVESTMENT ASSOCIATION AS A KOREAN QIB, PROVIDED THAT THE AMOUNT OF THE NOTES ACQUIRED BY SUCH KOREAN QIBS IN THE PRIMARY MARKET IS LIMITED TO NO MORE THAN 20% OF THE AGGREGATE ISSUE AMOUNT OF THE NOTES.

Transfer Restrictions under Singapore Law

Where the Notes are initially subscribed or purchased by (i) an institutional investor (as defined in Section 4A of 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, the Notes may only be sold or transferred: (a) at any time, to an institutional investor (as defined in Section 4A of the SFA) pursuant to Section 274 of the SFA, or (b) at any time, 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, or (c) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

LEGAL MATTERS

Certain legal matters with respect to the issue and sale of the Notes will be passed upon for the Company by Yulchon LLC and for the Initial Purchasers by Cleary Gottlieb Steen & Hamilton LLP. Yulchon LLC may rely on the opinion of Cleary Gottlieb Steen & Hamilton LLP with respect to matters of New York law, and Cleary Gottlieb Steen & Hamilton LLP may rely on the opinion of Yulchon LLC with respect to matters of Korean law.

INDEPENDENT AUDITORS

The consolidated financial statements of the Company as of and for the years ended December 31, 2024 and 2023 and as of and for the years ended December 31, 2023 and 2022 included in this Offering Circular have been audited by KPMG Samjong Accounting Corp. ("KPMG"), independent auditors, as stated in their reports appearing herein, each of which includes an other matter paragraph regarding the restriction in use of their report.

With respect to the unaudited condensed consolidated interim financial statements of the Company as of June 30, 2025 and for the three- and six-month periods ended June 30, 2025 and 2024 included herein, KPMG, independent auditors, have reported that they applied limited procedures in accordance with professional standards for review of such information. However, their separate report included herein, which includes an other matter paragraph regarding the restriction in use of their report, states that they did not audit and they do not express an opinion on such interim financial information. Accordingly, the degree of reliance on their separate report on such information should be restricted in light of the limited nature of the review procedures applied.

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Independent Auditors' Review Report

To the Board of Directors and Shareholders of
GS Caltex Corporation:

Reviewed financial statements
We have reviewed the accompanying condensed consolidated interim financial statements of **GS** Caltex Corporation and its subsidiaries (the "Group"), which comprise the condensed consolidated interim statement of financial position as at June 30, 2025, the condensed consolidated interim statements of income (loss) and comprehensive income (loss) for the three and six-month periods ended June 30, 2025 and 2024, changes in equity and cash flows for the six-month periods ended June 30, 2025 and 2024 and notes, comprising a summary of material accounting policy information and other explanatory information.

Management's responsibility for the consolidated financial statements
Management is responsible for the preparation and fair presentation of these condensed consolidated interim financial statements in accordance with Korean International Financial Reporting Standards ("K-IFRS") No. 1034, *Interim Financial Reporting*, and for such internal control as management determines is necessary to enable the preparation of condensed consolidated interim financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' review responsibility
Our responsibility is to issue a report on these condensed consolidated interim financial statements based on our reviews.

We conducted our reviews in accordance with the Review Standards for Quarterly and Semiannual Financial Statements established by the Securities and Futures Commission of the Republic of Korea. A review of interim financial statements 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 Korean Standards on Auditing and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion
Based on our reviews, nothing has come to our attention that causes us to believe that the accompanying condensed consolidated interim financial statements referred to above do not present fairly, in all material respects, in accordance with K-IFRS No. 1034, *Interim Financial Reporting*.

Other matters
The consolidated statement of financial position of the Group as at December 31, 2024 and the related consolidated statements of income, comprehensive income, changes in equity and cash flows for the year then ended, which are not accompanying this report, were audited by us in accordance with Korean Standards on Auditing and our report thereon, dated February 18, 2025, expressed an unqualified opinion. The accompanying consolidated statement of financial position of the Group as at December 31, 2024, presented for comparative purposes, is not different from that audited by us in all material respects.

The procedures and practices utilized in the Republic of Korea to review such condensed consolidated interim financial statements may differ from those generally accepted and applied in other countries.

Our report is solely for the use of those in connection with the potential offering of US$ notes by GS Caltex Corporation and it is not to be used for any other purpose.

KPMG Samjong Accounting Corp.

Seoul, Republic of Korea
August 13, 2025

This report is effective as of August 13, 2025, the review report date. Certain subsequent events or circumstances, which may occur between the review report date and the time of reading this report, could have a material impact on the accompanying condensed consolidated interim financial statements and notes thereto. Accordingly, the readers of the review report should understand that the above review report has not been updated to reflect the impact of such subsequent events or circumstances, if any.

GS Caltex Corporation and Subsidiaries
Unaudited Condensed Consolidated Interim Statements of Financial Position

As of June 30, 2025 and December 31, 2024

(In millions of won)

	Note		June 30, 2025	December 31, 2024
Assets:				
Cash and cash equivalents	4,5	₩	1,093,049	1,276,128
Accounts and notes receivable	5,21		3,446,356	3,681,304
Short-term financial assets	5		336,817	309,116
Inventories	6		4,496,517	5,095,044
Prepaid income taxes			1,919	50,015
Other current assets	23		943,871	1,035,967
Assets held for sale	26		27,780	14,595
Total current assets			**10,346,309**	**11,462,169**
Long-term financial assets	5		256,754	344,015
Investments in associates	11		346,707	338,131
Property, plant and equipment	7,21		10,722,514	10,834,624
Investment properties	8		57,640	58,114
Intangible assets	9		73,456	77,257
Defined benefit assets, net	13		52,165	28,980
Deferred income tax assets	15		6,375	5,672
Other non-current assets	23		23,163	24,681
Total non-current assets			**11,538,774**	**11,711,474**
Total assets		₩	**21,885,083**	**23,173,643**

See accompanying notes to the unaudited condensed consolidated interim financial statements.

GS Caltex Corporation and Subsidiaries
Unaudited Condensed Consolidated Interim Statements of Financial Position, Continued

As of June 30, 2025 and December 31, 2024

(In millions of won)

	Note		June 30, 2025	December 31, 2024
Liabilities:				
Accounts payable-trade	5,21,24	₩	2,053,174	2,998,617
Short-term financial liabilities	5,24,25		3,097,344	2,711,169
Income taxes payable			8,973	10,740
Other current liabilities	23		1,272,653	1,073,883
Total current liabilities			**6,432,144**	**6,794,409**
Long-term financial liabilities	5,24,25		2,318,098	3,122,577
Defined benefit liabilities, net	13		4,128	2,848
Deferred income tax liabilities	15		77,123	79,732
Other non-current liabilities	12,14,23		72,520	75,451
Total non-current liabilities			**2,471,869**	**3,280,608**
Total liabilities			**8,904,013**	**10,075,017**
Equity:				
Common stock	1,16		260,000	260,000
Capital surplus			68,330	68,330
Capital adjustments			(61,189)	(61,189)
Accumulated other comprehensive income	5,16		41,255	71,399
Retained earnings			12,672,674	12,760,086
Equity attributable to owners of the Parent Company			**12,981,070**	**13,098,626**
Non-controlling interests			**-**	**-**
Total equity			**12,981,070**	**13,098,626**
Total liabilities and equity		₩	**21,885,083**	**23,173,643**

See accompanying notes to the unaudited condensed consolidated interim financial statements.

GS Caltex Corporation and Subsidiaries
Unaudited Condensed Consolidated Interim Statements of Income (Loss)

For the three-month and six-month periods ended June 30, 2025 and 2024

(In millions of won)

	Note		June 30, 2025		June 30, 2024	
			Three-month period ended	Six-month period ended	Three-month period ended	Six-month period ended
Sales	3,17,21	₩	10,723,984	21,837,798	12,642,393	24,499,304
Cost of sales	20,21		(10,710,759)	(21,420,541)	(12,124,690)	(23,309,118)
Selling, general and administrative expenses	18,20		(270,769)	(558,686)	(309,640)	(565,568)
Operating profit (loss)	3		**(257,544)**	**(141,429)**	**208,063**	**624,618**
Share of profit of equity method accounted investees	11		3,500	7,709	4,805	11,743
Finance income	5		807,575	1,832,896	635,611	1,139,054
Finance costs	5		(719,192)	(1,758,328)	(742,708)	(1,387,423)
Other income	19		118,242	182,115	50,160	111,598
Other expenses	19		(104,588)	(166,320)	(38,119)	(93,510)
Profit (Loss) before income taxes			**(152,007)**	**(43,357)**	**117,812**	**406,080**
Income tax benefits (expenses)	15		24,962	(1,204)	(21,182)	(89,277)
Profit (Loss) for the period		₩	**(127,045)**	**(44,561)**	**96,630**	**316,803**
Profit (Loss) attributable to:						
Owners of the Parent Company		₩	(127,045)	(44,561)	96,630	316,803
Non-controlling interests			-	-	-	-

See accompanying notes to the unaudited condensed consolidated interim financial statements.

GS Caltex Corporation and Subsidiaries
Unaudited Condensed Consolidated Interim Statements of Comprehensive Income (Loss)

For the three-month and six-month periods ended June 30, 2025 and 2024

(In millions of won)

	Note		June 30, 2025		June 30, 2024	
			Three-month period ended	Six-month period ended	Three-month period ended	Six-month period ended
Profit (Loss) for the period		₩	**(127,045)**	**(44,561)**	**96,630**	**316,803**
Other comprehensive income (loss), net of tax:						
Items that will not be reclassified to profit or loss:						
Remeasurements of defined benefit liability			762	749	305	(161)
Net change in fair value of financial assets at fair value through other comprehensive income			4,978	4,996	1,251	566
Changes in equity method accounted investee's retained earnings			-	-	44	1,711
Items that will be reclassified subsequently to profit or loss:						
Changes in equity method accounted investee's capital			(2,842)	(5,487)	(145)	710
Effective portion of changes in unrealized fair value of cash flow hedges	5		1,690	1,147	4,192	(1,250)
Foreign currency translation differences			(32,617)	(30,800)	13,918	31,002
Total other comprehensive income (loss) for the period, net of tax			**(28,029)**	**(29,395)**	**19,565**	**32,578**
Total comprehensive income (loss) for the period		₩	**(155,074)**	**(73,956)**	**116,195**	**349,381**
Total comprehensive income (loss) attributable to:						
Owners of the Parent Company		₩	(155,074)	(73,956)	116,195	349,381
Non-controlling interests			-	-	-	-

See accompanying notes to the unaudited condensed consolidated interim financial statements.

GS Caltex Corporation and Subsidiaries
Unaudited Condensed Consolidated Interim Statements of Changes in Equity

For the six-month periods ended June 30, 2025 and 2024

(In millions of won)

	Owners of the Parent Company							
	Common stock	Capital surplus	Capital adjustments	Accumulated other comprehensive income (loss)	Retained earnings	Total	Non-controlling interests	Total equity
Balance at January 1, 2025	**₩ 260,000**	**68,330**	**(61,189)**	**71,399**	**12,760,086**	**13,098,626**	**-**	**13,098,626**
Total comprehensive income (loss):								
Loss for the period	-	-	-	-	(44,561)	(44,561)	-	(44,561)
Other comprehensive income (loss), net of tax:								
Net change in fair value of financial assets at fair value through other comprehensive income	-	-	-	4,996	-	4,996	-	4,996
Changes in equity method accounted investee's capital	-	-	-	(5,487)	-	(5,487)	-	(5,487)
Effective portion of changes in unrealized fair value of cash flow hedges	-	-	-	1,147	-	1,147	-	1,147
Foreign currency translation differences	-	-	-	(30,800)	-	(30,800)	-	(30,800)
Remeasurements of defined benefit liability	-	-	-	-	749	749	-	749
Total other comprehensive income (loss)	-	-	-	(30,144)	749	(29,395)	-	(29,395)
Total comprehensive loss	**-**	**-**	**-**	**(30,144)**	**(43,812)**	**(73,956)**	**-**	**(73,956)**
Transactions with owners and other, recorded directly in equity:								
Dividends	-	-	-	-	(43,600)	(43,600)	-	(43,600)
Balance at June 30, 2025	**₩ 260,000**	**68,330**	**(61,189)**	**41,255**	**12,672,674**	**12,981,070**	**-**	**12,981,070**

See accompanying notes to the unaudited condensed consolidated interim financial statements.

GS Caltex Corporation and Subsidiaries
Unaudited Condensed Consolidated Interim Statements of Changes in Equity, Continued

For the six-month periods ended June 30, 2025 and 2024

(In millions of won)

	Owners of the Parent Company							
	Common stock	Capital surplus	Capital adjustments	Accumulated other comprehensive income (loss)	Retained earnings	Total	Non-controlling interests	Total equity
Balance at January 1, 2024	₩ **260,000**	**68,330**	**(61,189)**	**8,015**	**13,223,779**	**13,498,935**	**-**	**13,498,935**
Total comprehensive income (loss):								
Profit for the period	-	-	-	-	316,803	316,803	-	316,803
Other comprehensive income (loss), net of tax:								
Net change in fair value of financial assets at fair value through other comprehensive income	-	-	-	566	-	566	-	566
Changes in equity method accounted investee's capital	-	-	-	710	-	710	-	710
Changes in equity method accounted investee's retained earnings	-	-	-	-	1,711	1,711	-	1,711
Effective portion of changes in unrealized fair value of cash flow hedges	-	-	-	(1,250)	-	(1,250)	-	(1,250)
Foreign currency translation differences	-	-	-	31,002	-	31,002	-	31,002
Remeasurements of defined benefit liability	-	-	-	-	(161)	(161)	-	(161)
Total other comprehensive income	-	-	-	31,028	1,550	32,578	-	32,578
Total comprehensive income	**-**	**-**	**-**	**31,028**	**318,353**	**349,381**	**-**	**349,381**
Transactions with owners and other, recorded directly in equity:								
Dividends	-	-	-	-	(461,000)	(461,000)	-	(461,000)
Balance at June 30, 2024	₩ **260,000**	**68,330**	**(61,189)**	**39,043**	**13,081,132**	**13,387,316**	**-**	**13,387,316**

See accompanying notes to the unaudited condensed consolidated interim financial statements.

GS Caltex Corporation and Subsidiaries
Unaudited Condensed Consolidated Interim Statements of Cash Flows

For the six-month periods ended June 30, 2025 and 2024

(In millions of won)

		June 30, 2025	June 30, 2024
Cash flows from operating activities:			
Profit (Loss) for the period	₩	(44,561)	316,803
Adjustments for:			
Retirement benefits		20,349	17,847
Bad debt expense		896	4,077
(Reversal of) Impairment losses on valuation of inventories		(6,680)	4,815
Depreciation		479,337	472,190
Amortization		13,016	12,293
Interest expense		96,074	111,205
Loss (Gain) on valuation of derivative instruments, net		110,195	(102,023)
Gain on transaction of derivative instruments, net		(9,054)	(43,062)
Foreign currency transaction loss (gain), net		(852)	29,160
Foreign currency translation loss (gain), net		(192,809)	176,579
Gain on disposal of property, plant and equipment, net		(9,312)	(18,243)
Gain on disposal of assets held for sale, net		(8,279)	-
Income tax expenses		1,204	89,277
Interest income		(22,136)	(22,314)
Dividends income		(602)	(700)
Share of profit of equity method accounted investees, net		(7,709)	(11,743)
Others, net		(1,159)	(1,143)
Changes in assets and liabilities:			
Accounts and notes receivable		121,926	(214,850)
Short-term financial assets		(57,346)	15,679
Inventories		602,429	501,373
Other current assets		96,850	(124,802)
Other non-current assets		908	(224)
Accounts payable-trade		(823,426)	(333,760)
Short-term financial liabilities		(58,991)	(42,032)
Other current liabilities		185,647	264,450
Long-term financial liabilities		(530)	(97)
Other non-current liabilities		(2,017)	(5,757)
Payment of retirement and severance benefits		(203)	(1,599)
Contributions to plan assets		(41,000)	-
Interest received		17,798	35,301
Interest paid		(84,920)	(114,188)
Dividends received		12,737	14,795
Income tax received (paid)		41,124	(306,232)
Net cash provided by operating activities	₩	**428,904**	**723,075**

See accompanying notes to the unaudited condensed consolidated interim financial statements.

GS Caltex Corporation and Subsidiaries
Unaudited Condensed Consolidated Interim Statements of Cash Flows, Continued

For the six-month periods ended June 30, 2025 and 2024

(In millions of won)

		June 30, 2025	June 30, 2024
Cash flows from investing activities:			
Decrease in short-term financial assets	₩	35,584	31,833
Decrease in long-term financial assets		4,739	2,746
Proceeds from sale of property, plant and equipment		46,310	39,691
Proceeds from sale of intangible assets		-	50
Proceeds from sale of investment properties		302	-
Proceeds from sale of assets held for sale		28,013	-
Proceeds from sale of memberships		657	1,254
Receipt subsidies for property, plant and equipment		107	263
Increase in short-term financial assets		(28,402)	(34,710)
Increase in long-term financial assets		(12,381)	(4,376)
Purchases of property, plant and equipment		(409,934)	(255,467)
Purchases of investment properties		(139)	-
Purchases of intangible assets		(143)	(198)
Purchases of investments in associates		(20,457)	(19,409)
Net cash used in investing activities		**(355,744)**	**(238,323)**
Cash flows from financing activities:			
Proceeds from short-term financial liabilities		5,534,401	4,000,687
Proceeds from long-term financial liabilities		162,363	206,780
Proceeds from deposits, net		(402)	(520)
Settlement of derivative instruments, net		4,426	108,505
Payment of lease liabilities		(73,563)	(84,783)
Repayment of short-term financial liabilities		(5,824,812)	(4,588,526)
Dividends paid		(43,600)	(461,000)
Net cash used in financing activities		**(241,187)**	**(818,857)**
Net decrease in cash and cash equivalents		**(168,027)**	**(334,105)**
Cash and cash equivalents at the beginning of period		1,276,128	1,265,126
Effect of movements in exchange rates on cash held		(15,052)	17,466
Cash and cash equivalents at the end of period	₩	**1,093,049**	**948,487**

See accompanying notes to the unaudited condensed consolidated interim financial statements.

1. General Information

1.1 The Parent Company

GS Caltex Corporation ("**GS** Caltex" or the "Parent Company") was incorporated under a joint venture agreement between Caltex Petroleum Corporation and Lucky Limited in 1966 and incorporated as Honam Oil Refinery Co., Ltd. in 1967 under the laws of the Republic of Korea. The Parent Company's principal business activities consist of petroleum refining and marketing, production of petrochemicals, including paraxylene, benzene, toluene and polypropylene, and blending of lubricant oils. Such activities (with the exception of lubricant oil blending, which takes place at facilities located in Incheon) are carried out at the Parent Company's Yeosu refinery complex located in southern Korea, and the headquarters of the Parent Company is located at 508, Nonhyun-ro, Gangnam-gu in Seoul.

On July 1, 2004, LG Corp. (which had owned 50% of the Parent Company's shares as of June 30, 2004) was split into two separate holding companies, LG Corp. and **GS** Holdings Corporation. As a result, the Parent Company became a subsidiary of **GS** Holdings Corporation. On March 31, 2005, the Parent Company changed its name from LG-Caltex Oil Corporation to **GS** Caltex Corporation. On January 1, 2013, **GS** Energy Corporation was established through the spin-off of the energy holding business unit of **GS** Holdings Corporation, in which 50% of the shares in the Parent Company were transferred to the newly-established company. As of June 30, 2025, the ownership of the Parent Company is as follows:

Shareholders	Number of common shares held (in shares)	Percentage of ownership
Chevron Corporation:		
Chevron (Overseas) Holdings Ltd.	10,400,000	40%
Chevron Global Energy Inc.	2,600,000	10%
GS Energy Corporation	13,000,000	50%
	26,000,000	100%

Certain agreements with Chevron Global Energy Inc. (the "CGEI") provide that CGEI is to supply a portion of the Parent Company's crude oil and other feed-stock as well as technical assistance in the manufacturing of petroleum products. The Parent Company is registered under the Foreign Capital Inducement Law of the Republic of Korea. Under this registration, profits attributable to Chevron (Overseas) Holdings Ltd. and CGEI are fully remittable. Further, repatriation of capital is guaranteed after satisfying certain conditions.

June 30, 2025 and 2024

1. General Information, Continued

1.2 Subsidiaries

(a) Details of subsidiaries as of June 30, 2025 and December 31, 2024 are as follows:

Subsidiaries	Location	Ownership		Main business
		Jun 30, 2025	Dec 31, 2024	
GS Mbiz Co., Ltd.	Seoul, Korea	100.00%	100.00%	Electronic commerce and sale of petroleum products
GS Caltex Singapore Pte., Ltd.	Singapore	100.00%	100.00%	International trading
GS Caltex (Langfang) Plastics Co., Ltd.	China	100.00%	100.00%	Production and sale of compound polypropylene
InnoPolytech Co., Ltd.	Jinju, Korea	100.00%	100.00%	Toll manufacturing and production of plastic products
GS Caltex India Pvt. Ltd.	India	100.00%	100.00%	Sale of lubricant oil
Sangji Shipping Co., Ltd.	Yeosu, Korea	100.00%	100.00%	Shipping
GS Bio Co., Ltd.	Yeosu, Korea	100.00%	100.00%	Petroleum substitute fuel manufacturing
GS EcoMetal Co., Ltd.	Ulsan, Korea	100.00%	100.00%	Recycling and restoration of disposed catalysts
GS Caltex (Suzhou) Plastics Co., Ltd.	China	100.00%	100.00%	Production and sale of compound polypropylene
GS Caltex Czech, s.r.o.	Czech	100.00%	100.00%	Production and sale of compound polypropylene
GS Caltex China Co., Ltd.	China	100.00%	100.00%	Sale of lubricant oil
GS Caltex Mexico S.de R.L.de C.V.	Mexico	100.00%	100.00%	Production and sale of compound polypropylene
Pancotec Co., Ltd.	Yeosu, Korea	100.00%	100.00%	Facilities maintenance service
Hanul Love Co., Ltd.	Yeosu, Korea	100.00%	100.00%	Convenience business and commercial food service
Suzhou **GS** Caltex Trading Co., Ltd.	China	100.00%	100.00%	Sale of compound polypropylene

(b) Condensed financial information of main subsidiaries

Condensed financial information of main subsidiaries as of and for the six-month period June 30, 2025 is as follows:

Subsidiaries	Won (millions)			
	Assets	Liabilities	Sales	Net profit
GS Mbiz Co., Ltd.	₩ 156,836	67,834	110,832	204
GS Caltex Singapore Pte., Ltd.	1,352,700	1,107,399	10,565,642	10,077
GS Caltex (Langfang) Plastics Co., Ltd.	74,989	7,286	63,842	1,718
InnoPolytech Co., Ltd.	23,056	11,012	63,042	1,698
GS Caltex India Pvt. Ltd.	38,193	27,394	58,692	240
GS Bio Co., Ltd.	137,792	42,946	133,739	4,422
GS EcoMetal Co., Ltd.	99,836	21,390	41,070	6,286
GS Caltex (Suzhou) Plastics Co., Ltd.	78,635	23,808	63,491	1,803
GS Caltex Czech, s.r.o.	114,515	58,129	100,853	6,008

2. Basis of Preparation and Changes in Accounting Policies

2.1 Basis of accounting

These condensed consolidated interim financial statements have been prepared in accordance with Korean International Financial Reporting Standards ("K-IFRS") No. 1034 '*Interim Financial Reporting*', as prescribed in the Act on External Audit of Stock Companies of the Republic of Korea, and should be read in conjunction with **GS** Caltex Corporation and its Subsidiaries (the "Group")'s last annual consolidated financial statements as of and for the year ended December 31, 2024. They do not include all of the information required for a complete set of K-IFRS financial statements. However, selected explanatory notes are included to explain events and transactions that are significant to an understanding of the changes in the Group's consolidated financial position and performance since the last annual consolidated financial statements.

2.2 Use of estimates and judgments

The preparation of the condensed consolidated interim financial statements in conformity with K-IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

The significant judgments made by management in applying the Group's accounting policies and the key sources of estimation uncertainty were the same as those applied to the consolidated financial statements as of and for the year ended December 31, 2024.

2.3 Changes in accounting policies

The accounting policies applied in these condensed consolidated interim financial statements are the same as those applied in the Group's consolidated financial statements as at and for the year ended December 31, 2024. There are accounting standards which are effective for annual periods beginning after January 1, 2025, but they have no significant impact on these condensed consolidated interim financial statements.

2.4 Accounting standards issued but not yet effective

A number of new accounting standards and amendments to accounting standards are effective for annual periods beginning after January 1, 2025 and earlier application is permitted. The Group has not early adopted any of the forthcoming new or amended accounting standards in preparing these condensed consolidated interim financial statements.

3. Operating Segments Information

(a) The Group has three reportable segments – Petroleum refining, Lubricants, and Petrochemicals. The Petroleum refining segment produces petroleum products and raw materials of petrochemicals which are essential to human living. Based on naphtha, gas oil or natural gas is produced from refinery complexes. The Lubricants segment produces lubricants and base oils which are raw materials of lubricants. The Petrochemicals segment produces olefin products and aromatic products through high temperature decomposition or catalytic reaction processes and uses such products to produce synthetic rubber, synthetic fiber raw materials, synthetic detergents and chemicals.

(b) Segment results for the six-month period ended June 30, 2025 are as follows:

	Won (millions)			
	Petroleum refining	Lubricants	Petrochemicals	Total
Total sales	₩ 26,761,489	988,568	4,214,797	31,964,854
Inter-segment sales	(9,914,739)	(107,724)	(104,593)	(10,127,056)
Sales to external customers	₩ 16,846,750	880,844	4,110,204	21,837,798
Depreciation and amortization	₩ 345,522	17,290	129,541	492,353
Operating profit (loss)	(262,869)	205,934	(84,494)	(141,429)

Segment results for the six-month period ended June 30, 2024 are as follows:

	Won (millions)			
	Petroleum refining	Lubricants	Petrochemicals	Total
Total sales	₩ 31,342,796	1,126,163	4,161,252	36,630,211
Inter-segment sales	(11,911,804)	(126,228)	(92,875)	(12,130,907)
Sales to external customers	₩ 19,430,992	999,935	4,068,377	24,499,304
Depreciation and amortization	₩ 352,271	14,598	117,614	484,483
Operating profit	274,601	242,188	107,829	624,618

4. Cash and Cash Equivalents

Cash and cash equivalents as of June 30, 2025 and December 31, 2024 are summarized as follows:

		Won (millions)	
		June 30, 2025	December 31, 2024
Cash on hand	₩	92	76
Deposits and others		1,092,957	1,276,052
	₩	1,093,049	1,276,128

5. Financial Instruments

5.1 Financial Assets

Details of financial assets as of June 30, 2025 are summarized as follows:

		Won (millions)			
		Financial assets at FVTPL	Financial assets at amortized cost	Financial assets at FVOCI	Fair value-hedging instrument
Cash and cash equivalents	₩	-	1,093,049	-	-
Accounts and notes receivable		-	3,463,071	-	-
Allowance for doubtful accounts		-	(16,715)	-	-
Short-term financial assets		27,456	238,415	-	72,176
Allowance for doubtful accounts		-	(725)	-	-
Present value discounts		-	(505)	-	-
Total current financial assets		27,456	4,776,590	-	72,176
Long-term financial assets		31,469	176,962	74,557	11,510
Allowance for doubtful accounts		-	(28,547)	-	-
Present value discounts		-	(9,197)	-	-
Total non-current financial assets		31,469	139,218	74,557	11,510
	₩	58,925	4,915,808	74,557	83,686

The book value of financial assets measured at amortized cost approximates their fair value.

June 30, 2025 and 2024

5. Financial Instruments, Continued

5.1 Financial Assets, Continued

Details of financial assets as of December 31, 2024 are summarized as follows:

	Won (millions)			
	Financial assets at FVTPL	Financial assets at amortized cost	Financial assets at FVOCI	Fair value-hedging instrument
Cash and cash equivalents	₩ -	1,276,128	-	-
Accounts and notes receivable	-	3,697,650	-	-
Allowance for doubtful accounts	-	(16,346)	-	-
Short-term financial assets	5,600	213,986	-	94,290
Allowance for doubtful accounts	-	(672)	-	-
Present value discounts	-	(4,088)	-	-
Total current financial assets	5,600	5,166,658	-	94,290
Long-term financial assets	31,108	172,226	68,759	103,604
Allowance for doubtful accounts	-	(28,478)	-	-
Present value discounts	-	(3,204)	-	-
Total non-current financial assets	31,108	140,544	68,759	103,604
	₩ 36,708	5,307,202	68,759	197,894

The book value of financial assets measured at amortized cost approximates their fair value.

Details of financial assets which are restricted in use mainly due to being provided as collateral for borrowings as of June 30, 2025 are summarized as follows:

Accounts	Financial instruments	Bank	Restriction	Won (millions) Amount
Long-term financial assets	Deposit for opening checking accounts	Shinhan Bank and 7 others	Restriction on cash withdrawals	₩ 26

June 30, 2025 and 2024

5. Financial Instruments, Continued

5.2 Financial Liabilities

Details of financial liabilities as of June 30, 2025 are summarized as follows:

		Won (millions)		
		Financial liabilities at FVTPL	Financial liabilities at amortized cost	Fair value-hedging instrument
Accounts payable-trade	₩	-	2,053,174	-
Short-term financial liabilities		27,094	3,075,659	61
Present value discounts		-	(5,470)	-
Total current financial liabilities		27,094	5,123,363	61
Long-term financial liabilities		-	2,407,503	-
Present value discounts		-	(89,405)	-
Total non-current financial liabilities		-	2,318,098	-
	₩	27,094	7,441,461	61

The book value of financial liabilities measured at amortized cost approximates their fair value.

Details of financial liabilities as of December 31, 2024 are summarized as follows:

		Won (millions)		
		Financial liabilities at FVTPL	Financial liabilities at amortized cost	Fair value-hedging instrument
Accounts payable-trade	₩	-	2,998,617	-
Short-term financial liabilities		44,879	2,669,793	52
Present value discounts		-	(3,555)	-
Total current financial liabilities		44,879	5,664,855	52
Long-term financial liabilities		-	3,231,591	-
Present value discounts		-	(109,014)	-
Total non-current financial liabilities		-	3,122,577	-
	₩	44,879	8,787,432	52

The book value of financial liabilities measured at amortized cost approximates their fair value.

5. Financial Instruments, Continued

5.3 Finance Income

Details of finance income for the six-month periods ended June 30, 2025 and 2024 are summarized as follows:

		Won (millions)	
		June 30, 2025	June 30, 2024
Interest income (*)	₩	22,136	22,314
Dividends income		602	700
Gain on valuation of derivative instruments		5,961	110,647
Gain on transaction of derivative instruments		66,829	51,132
Foreign currency transaction gain		1,446,513	872,944
Foreign currency translation gain		290,855	81,317
	₩	1,832,896	1,139,054

(*) Interest income recognized as a result of present value adjustment using the effective interest method on financial assets is ₩3,336 million and ₩1,631 million, respectively, for the six-month periods ended June 30, 2025 and 2024.

5.4 Finance Costs

Details of finance costs for the six-month periods ended June 30, 2025 and 2024 are summarized as follows:

		Won (millions)	
		June 30, 2025	June 30, 2024
Interest expense (*)	₩	96,074	111,205
Loss on valuation of derivative instruments		110,716	4,045
Loss on transaction of derivative instruments		33,214	94,988
Foreign currency transaction loss		1,420,167	917,728
Foreign currency translation loss		98,046	257,896
Others		111	1,561
	₩	1,758,328	1,387,423

(*) Interest expense recognized as a result of present value adjustment using the effective interest method on financial liabilities is ₩17,085 million and ₩17,840 million, respectively, for the six-month periods ended June 30, 2025 and 2024.

June 30, 2025 and 2024

5. Financial Instruments, Continued

5.5 Derivative Instruments and Hedge Accounting

(a) Details of the valuation gain (loss) and other comprehensive income (loss) of derivative instruments for the six-month period ended June 30, 2025 are summarized as follows:

		Won (millions)			
		Book value	Other comprehensive income (loss), net	Finance income (costs), net	Other expenses, net
Held for trading	Commodity derivatives	₩ (5,380)	128	-	(5,440)
	Foreign exchange swap / Currency forward	5,742	-	5,742	-
Cash flow hedge (*)	Currency swap	81,083	2,989	(110,497)	-
	Currency forward	2,542	(1,842)	-	-

(*) The effective portion of changes in the fair value of currency swaps and currency forwards, net of tax, is recognized as accumulated other comprehensive income (loss). The Group recognized ₩1,147 million as other comprehensive income for the six-month period ended June 30, 2025.

June 30, 2025 and 2024

5. Financial Instruments, Continued

5.5 Derivative Instruments and Hedge Accounting, Continued

(b) Currency swaps

The Group entered into currency swap contracts to hedge against foreign exchange risks of foreign currency denominated bonds and long-term borrowings. Details of the contracts as of June 30, 2025 are summarized as follows:

				Contract amount		
				Buy (thousand USD)		Sell (million Won)
Derivatives	Contractor	Effective date	Expiration date			
Currency Swaps	Korea Development Bank	Jul. 16, 2019	Jul. 16, 2026	USD 6,250	₩	7,375
		Nov. 29, 2019	Jul. 16, 2026	5,000		5,875
		Mar. 03, 2020	Mar. 04, 2027	15,313		18,380
		Sep. 03, 2020	Sep. 03, 2027	25,875		30,693
		Jun. 28, 2021	Jun. 28, 2028	20,250		22,858
	Kookmin Bank and 2 other banks	Jul. 27, 2020	Jul. 27, 2025	100,000		120,370
		Jul. 27, 2020	Jul. 28, 2025	100,000		120,370
		Jul. 27, 2020	Jul. 28, 2025	100,000		119,810
	Kookmin Bank	Jul. 11, 2022	Jan. 05, 2026	300,000		390,180
	Korea Development Bank and 2 other banks	Aug. 07, 2023	Aug. 07, 2028	100,000		133,800
		Aug. 07, 2023	Aug. 07, 2028	100,000		133,800
		Aug. 07, 2023	Aug. 07, 2028	100,000		133,800

Valuation gains and losses from the above currency swap contracts are recognized in other comprehensive income (loss) as permitted under cash flow hedge accounting.

The Group also entered into foreign exchange swap contracts to hedge against foreign exchange risks of USD denominated short-term borrowings and acceptances payable to banks. As of June 30, 2025, the Group has 11 foreign exchange swap contracts outstanding to sell USD 430 million. The Group does not apply hedge accounting to the swaps and, accordingly, changes in the fair value of these contracts are reflected in the condensed consolidated interim statement of income (loss).

(c) Commodity derivatives

The Group entered into forward contracts such as differential swaps to hedge against fluctuations in crude oil and petroleum product prices. As of June 30, 2025, the Group has 289 commodity swap contracts outstanding to buy 4,130,000 barrels of oil and 349 commodity swap contracts outstanding to sell 4,740,000 barrels of oil. The Group does not apply hedge accounting to these derivatives and accordingly, changes in the fair value of these contracts are reflected in the condensed consolidated interim statement of income (loss).

June 30, 2025 and 2024

5. Financial Instruments, Continued

5.6 Fair Value

(a) Assumptions for determining fair value of financial assets and liabilities

Fair value of financial instruments traded in an active market with standardized transaction terms and conditions is determined by the listed market price.

When estimating fair value of financial instruments which are not traded in an active market, the Group uses valuation techniques commonly used by market participants and entity-specific inputs for pricing.

The fair value of financial instruments is determined based on the following assumptions:

The fair value of derivatives is based on their listed market price, if available. If a listed market price is not available, then fair value is estimated by discounted cash flows using a yield curve.

The fair value of financial assets measured at amortized cost is determined by the present value of future cash flows, which is discounted according to either the internal rate of return, the weighted average borrowing rate, or the national bond rate at the reporting date depending on the characteristics of transaction. The book value of current financial assets measured at amortized cost approximates their fair value.

(b) Interest rate information used for determining fair value

Interest rates used to discounting estimated cash flows as of June 30, 2025 and December 31, 2024 are summarized as follows:

	June 30, 2025	December 31, 2024
Long-term loans	2.14% ~ 6.51%	2.14% ~ 6.51%
Deposits	0.84% ~ 3.53%	0.84% ~ 3.53%

June 30, 2025 and 2024

5. Financial Instruments, Continued

5.6 Fair Value, Continued

(c) The fair value measurements classified by fair value hierarchy as of June 30, 2025 are as follows:

	Won (millions)				
	Fair value (*)			Book value
	Level 1	Level 2	Level 3	
Financial assets:				
Financial assets at FVTPL	₩ -	27,456	31,469	58,925
Financial assets at FVOCI	26,239	-	48,318	74,557
Fair value-hedging instrument	-	83,686	-	83,686
Financial liabilities:				
Financial liabilities at FVTPL	₩ -	27,094	-	27,094
Fair value-hedging instrument	-	61	-	61

The fair value measurements classified by fair value hierarchy as of December 31, 2024 are as follows:

	Won (millions)				
	Fair value (*)			Book value
	Level 1	Level 2	Level 3	
Financial assets:				
Financial assets at FVTPL	₩ -	5,600	31,108	36,708
Financial assets at FVOCI	19,451	-	49,308	68,759
Fair value-hedging instrument	-	197,894	-	197,894
Financial liabilities:				
Financial liabilities at FVTPL	₩ -	44,879	-	44,879
Fair value-hedging instrument	-	52	-	52

(*) Financial assets and liabilities carried at fair value by each hierarchy based on the inputs used in the valuation techniques are defined as follows:

— Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities
— Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices)
— Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs)

6. Inventories

(a) Inventories as of June 30, 2025 and December 31, 2024 are summarized as follows:

		Won (millions)	
		June 30, 2025	December 31, 2024
Merchandise goods	₩	68,704	63,241
Finished goods		1,388,541	1,521,175
Work-in-process		568,414	595,338
Raw materials		1,191,733	1,046,447
Goods in transit		1,182,023	1,779,683
Supplies		108,081	106,695
Others		696	820
		4,508,192	5,113,399
Provision for losses on valuation of inventories		(11,675)	(18,355)
	₩	4,496,517	5,095,044

(b) ₩6,680 million of a decrease in provision for losses on valuation of inventories was credited to profit or loss for the period ended June 30, 2025 and ₩4,815 million of an increase in provision for losses on valuation of inventories was charged to profit or loss for the period ended June 30, 2024.

June 30, 2025 and 2024

7. Property, Plant and Equipment (PP&E)

(a) Changes in property, plant and equipment for the six-month period ended June 30, 2025 are summarized as follows:

	Won (millions)							
	Land	Buildings	Structures	Machinery	Others	Right-of-use assets	Construction -in-progress	Total
Cost:								
Balance at January 1, 2025	**₩ 2,398,250**	**918,596**	**3,382,716**	**10,589,962**	**886,867**	**1,296,868**	**539,803**	**20,013,062**
Additions	-	78	250	201	4,835	-	359,468	364,832
Disposals and retirement	(15,444)	(9,474)	(6,902)	(77,635)	(14,198)	-	-	(123,653)
Others (*)	(31,208)	13,589	39,184	282,232	34,713	(70,224)	(398,086)	(129,800)
Balance at June 30, 2025	**₩ 2,351,598**	**922,789**	**3,415,248**	**10,794,760**	**912,217**	**1,226,644**	**501,185**	**20,124,441**
Accumulated depreciation:								
Balance at January 1, 2025	**₩ -**	**385,200**	**1,940,413**	**5,482,540**	**690,355**	**679,930**	**-**	**9,178,438**
Depreciation	-	12,124	64,070	291,944	32,333	78,866	-	479,337
Disposals and retirement	-	(7,332)	(5,815)	(72,400)	(14,029)	-	-	(99,576)
Others (*)	-	(2,865)	(1,082)	(1,971)	(425)	(149,929)	-	(156,272)
Balance at June 30, 2025	**₩ -**	**387,127**	**1,997,586**	**5,700,113**	**708,234**	**608,867**	**-**	**9,401,927**
Carrying amount:								
Balance at January 1, 2025	**₩ 2,398,250**	**533,396**	**1,442,303**	**5,107,422**	**196,512**	**616,938**	**539,803**	**10,834,624**
Balance at June 30, 2025	**₩ 2,351,598**	**535,662**	**1,417,662**	**5,094,647**	**203,983**	**617,777**	**501,185**	**10,722,514**

(*) Others include amounts transferred between accounts, such as reclassifications to assets held for sale.

7. Property, Plant and Equipment (PP&E), Continued

(b) Changes in property, plant and equipment for the year ended December 31, 2024 are summarized as follows:

	Won (millions)							
	Land	Buildings	Structures	Machinery	Others	Right-of-use assets	Construction-in-progress	Total
Cost:								
Balance at January 1, 2024	**₩ 2,459,224**	**900,612**	**3,350,335**	**10,334,930**	**849,678**	**1,510,271**	**472,936**	**19,877,986**
Additions	-	44	777	1,751	18,235	-	578,625	599,432
Disposals and retirement	(52,591)	(15,103)	(20,344)	(78,876)	(28,897)	-	(102)	(195,913)
Others (*)	(8,383)	33,043	51,948	332,157	47,851	(213,403)	(511,656)	(268,443)
Balance at December 31, 2024	**₩ 2,398,250**	**918,596**	**3,382,716**	**10,589,962**	**886,867**	**1,296,868**	**539,803**	**20,013,062**
Accumulated depreciation:								
Balance at January 1, 2024	**₩ -**	**370,070**	**1,825,372**	**4,980,711**	**653,911**	**772,650**	**-**	**8,602,714**
Depreciation	-	24,316	130,615	572,814	62,296	170,664	-	960,705
Disposals and retirement	-	(11,140)	(14,984)	(75,475)	(26,994)	-	-	(128,593)
Others (*)	-	1,954	(590)	4,490	1,142	(263,384)	-	(256,388)
Balance at December 31, 2024	**₩ -**	**385,200**	**1,940,413**	**5,482,540**	**690,355**	**679,930**	**-**	**9,178,438**
Carrying amount:								
Balance at January 1, 2024	**₩ 2,459,224**	**530,542**	**1,524,963**	**5,354,219**	**195,767**	**737,621**	**472,936**	**11,275,272**
Balance at December 31, 2024	**₩ 2,398,250**	**533,396**	**1,442,303**	**5,107,422**	**196,512**	**616,938**	**539,803**	**10,834,624**

(*) Others include amounts transferred between accounts, such as reclassifications to assets held for sale.

(c) The following assets are pledged as collateral for the Group's borrowings as of June 30, 2025:

		Won (millions)		
Asset	Collateral provider	Book value	Pledged amount	Lender
Land, Buildings, Machinery and Equipment	**GS** Mbiz Co., Ltd.	₩ 19,173	6,000	Shinhan Bank
	GS Ecometal Co., Ltd.	28,763	16,200	Korea Development Bank
	GS Caltex (Suzhou) Plastics Co., Ltd.	5,807	15,133	China Merchants Bank

(d) Right-of-use assets as of June 30, 2025 and December 31, 2024 are summarized as follows:

	Won (millions)	
	June 30, 2025	December 31, 2024
Gas stations	₩ 111,907	95,281
Buildings	24,879	1,428
Vessels	463,689	506,057
Others	17,302	14,172
	₩ 617,777	616,938

8. Investment Properties

(a) Changes in investment properties for the six-month period ended June 30, 2025 are summarized as follows:

		Won (millions)		
		Land	Buildings	Total
Cost:				
Balance at January 1, 2025	₩	**40,884**	**21,661**	**62,545**
Additions		-	139	139
Reclassification		-	(60)	(60)
Disposals and retirement		(32)	(270)	(302)
Balance at June 30, 2025	₩	**40,852**	**21,470**	**62,322**
Accumulated depreciation:				
Balance at January 1, 2025	₩	**-**	**4,431**	**4,431**
Depreciation		-	251	251
Balance at June 30, 2025	₩	**-**	**4,682**	**4,682**
Carrying amount:				
Balance at January 1, 2025	₩	**40,884**	**17,230**	**58,114**
Balance at June 30, 2025	₩	**40,852**	**16,788**	**57,640**

(b) Changes in investment properties for the year ended December 31, 2024 are summarized as follows:

		Won (millions)		
		Land	Buildings	Total
Cost:				
Balance at January 1, 2024	₩	**30,368**	**14,264**	**44,632**
Reclassification (*)		10,516	7,397	17,913
Balance at December 31, 2024	₩	**40,884**	**21,661**	**62,545**
Accumulated depreciation:				
Balance at January 1, 2024	₩	**-**	**4,040**	**4,040**
Depreciation		-	391	391
Balance at December 31, 2024	₩	**-**	**4,431**	**4,431**
Carrying amount:				
Balance at January 1, 2024		**30,368**	**10,224**	**40,592**
Balance at December 31, 2024	₩	**40,884**	**17,230**	**58,114**

(*) Property, plant and equipment were reclassified to investment properties during 2024.

9. Intangible Assets

(a) Changes in intangible assets for the six-month period ended June 30, 2025 are summarized as follows:

	Won (millions)				
	Goodwill	Software	Contributed assets	Other intangible assets	Total
Cost:					
Balance at January 1, 2025 ₩	**107**	**295,734**	**28,523**	**67,787**	**392,151**
Additions	-	40	-	103	143
Disposals and retirement	-	(4,319)	(989)	(1,241)	(6,549)
Others	-	7,015	-	1,941	8,956
Balance at June 30, 2025 ₩	**107**	**298,470**	**27,534**	**68,590**	**394,701**
Accumulated amortization:					
Balance at January 1, 2025 ₩	**-**	**250,862**	**17,174**	**46,858**	**314,894**
Amortization	-	10,758	785	1,473	13,016
Disposals and retirement	-	(4,317)	(989)	(1,241)	(6,547)
Others	-	(68)	-	(50)	(118)
Balance at June 30, 2025 ₩	**-**	**257,235**	**16,970**	**47,040**	**321,245**
Carrying amount:					
Balance at January 1, 2025 ₩	**107**	**44,872**	**11,349**	**20,929**	**77,257**
Balance at June 30, 2025 ₩	**107**	**41,235**	**10,564**	**21,550**	**73,456**

(b) Changes in intangible assets for the year ended December 31, 2024 are summarized as follows:

	Won (millions)				
	Goodwill	Software	Contributed assets	Other intangible assets	Total
Cost:					
Balance at January 1, 2024 ₩	**107**	**271,919**	**25,387**	**67,954**	**365,367**
Additions	-	163	-	708	871
Disposals and retirement	-	(3,640)	(3,136)	(1,848)	(8,624)
Others	-	27,292	6,272	973	34,537
Balance at December 31, 2024 ₩	**107**	**295,734**	**28,523**	**67,787**	**392,151**
Accumulated amortization:					
Balance at January 1, 2024 ₩	**-**	**232,091**	**19,084**	**44,141**	**295,316**
Amortization	-	22,196	1,226	3,375	26,797
Disposals and retirement	-	(3,640)	(3,136)	(739)	(7,515)
Others	-	215	-	81	296
Balance at December 31, 2024 ₩	**-**	**250,862**	**17,174**	**46,858**	**314,894**
Carrying amount:					
Balance at January 1, 2024 ₩	**107**	**39,828**	**6,303**	**23,813**	**70,051**
Balance at December 31, 2024 ₩	**107**	**44,872**	**11,349**	**20,929**	**77,257**

10. Joint Operation

Details of joint operation as of June 30, 2025 and December 31, 2024 are summarized as follows:

		Ownership (%)	
Joint operation	Location	June 30, 2025	December 31, 2024
Energy Plus Seoullo (*)	Seoul, Korea	40.90%	40.90%

(*) The Group agreed to participate and co-operate with **GS** Retail Co., Ltd. in the lease of the Group's facility space, and accounted for the arrangement as a joint operation. During 2024, the name of the joint operation was changed from Yeokjeon Flagship Joint Development to Energy Plus Seoullo.

11. Investments in Associates

(a) Details of the balance of investments in associates accounted for using the equity method as of June 30, 2025 are summarized as follows:

Company	Location	Principal operation	Ownership (%)		Won (millions)
Daehan Oil Pipeline Corp.	Seongnam, Korea	Operation of petroleum energy distribution system	28.62%	₩	235,650
Samnam Petrochemical Co., Ltd.	Seoul, Korea	Manufacture of petrochemical product	20.00%		42,425
Green Eco Technology Co., Ltd. (*)	Japan	Manufacture of recycled plastic materials	15.00%		3,113
Eco G&R Co., Ltd.	Hwaseong, Korea	Manufacture of mechanically recycled plastic (ELV materials)	40.00%		1,800
PT AGPA Refinery Complex	Indonesia	Manufacture of refined edible and processed oils	40.00%		63,719
				₩	346,707

Details of the balance of investments in associates accounted for using the equity method as of December 31, 2024 are summarized as follows:

Company	Location	Principal operation	Ownership (%)		Won (millions)
Daehan Oil Pipeline Corp.	Seongnam, Korea	Operation of petroleum energy distribution system	28.62%	₩	239,874
Samnam Petrochemical Co., Ltd.	Seoul, Korea	Manufacture of petrochemical product	20.00%		42,295
Green Eco Technology Co., Ltd. (*)	Japan	Manufacture of recycled plastic materials	15.00%		3,328
Eco G&R Co., Ltd.	Hwaseong, Korea	Manufacture of mechanically recycled plastic (ELV materials)	40.00%		1,664
PT AGPA Refinery Complex	Indonesia	Manufacture of refined edible and processed oils	40.00%		50,970
				₩	338,131

(*) The Group owns less than 20% of the equity interests but has determined that it has significant influence over the investee.

11. Investments in Associates, Continued

(b) Changes in investments in associates for the six-month period ended June 30, 2025 are summarized as follows:

	Won (millions)					
Company	Balance at January 1, 2025	Additions	Share of profit (loss) of equity method accounted investees	Dividends	Others	Balance at June 30, 2025
Daehan Oil Pipeline Corp.	₩ 239,874	-	7,371	(11,595)	-	235,650
Samnam Petrochemical Co., Ltd.	42,295	-	670	(540)	-	42,425
Green Eco Technology Co., Ltd.	3,328	-	(221)	-	6	3,113
Eco G&R Co., Ltd.	1,664	-	136	-	-	1,800
PT AGPA Refinery Complex	50,970	20,457	(247)	-	(7,461)	63,719
	₩ 338,131	20,457	7,709	(12,135)	(7,455)	346,707

(c) Condensed financial information of major associates as of and for the six-month period ended June 30, 2025 is summarized as follows:

	Won (millions)			
Company	Assets	Liabilities	Sales	Net profit (loss)
Daehan Oil Pipeline Corp.	₩ 1,065,156	309,692	96,639	25,976
Samnam Petrochemical Co., Ltd.	420,092	207,492	502,118	2,252
Green Eco Technology Co., Ltd.	12,750	11,357	7,403	(297)
Eco G&R Co., Ltd.	4,707	2,911	3,366	341
PT AGPA Refinery Complex	177,428	13,126	-	(618)

12. Provisions

(a) Provision for Restoration

On December 26, 2002, the Group entered into a voluntary agreement with the Ministry of Environment and adopted a plan to detect and restore any contaminations at the Group's manufacturing facilities, service stations and oil depots. The environmental remediation liabilities recorded as provision in the condensed consolidated interim statements of financial position are ₩37,146 million and ₩38,331 million as of June 30, 2025 and December 31, 2024, respectively.

(b) Provision for Loyalty Points

The Group's marketing efforts include providing free **GS** & Point Program to the rewards-card holders without any condition to purchase the Group's products or services. As of June 30, 2025 and December 31, 2024, the Group recorded a provision for the estimated amount to be redeemed by customers in the future as non-current liabilities amounting to ₩899 million and ₩933 million, respectively.

June 30, 2025 and 2024

13. Retirement Benefits

The Group sponsors both defined benefit and defined contribution plans. In connection with the defined benefit plans, when an employee reaches the retirement age of 58 ~ 60, the employee is entitled to the rights to receive retirement benefits as specified in the Group's human resource policies. The most recent valuation of the Group's obligation and plan assets in regard to its defined benefit plan was performed by Willis Towers Watson & Co. as of June 30, 2025 using the projected unit credit method.

(a) Details of defined benefit assets as of June 30, 2025 and December 31, 2024 are summarized as follows:

		Won (millions)	
		June 30, 2025	December 31, 2024
Present value of defined benefit obligations	₩	(501,812)	(493,976)
Fair value of plan assets		549,849	520,108
Defined benefit assets, net (*)	₩	48,037	26,132

(*) The amount of defined benefit liabilities is included.

(b) The components of retirement benefit costs for the six-month periods ended June 30, 2025 and 2024 are summarized as follows:

		Won (millions)	
		June 30, 2025	June 30, 2024
Defined benefit plan:			
Current service costs	₩	20,334	18,699
Interest costs, net		15	(852)
		20,349	17,847
Defined contribution plan:			
Payment for the defined contribution plan		5,845	7,162
	₩	26,194	25,009

14. Deferred Revenue

(a) Customer Loyalty Program

For the **GS** & Point Program, the fair value of the considerations received or receivable in respect of the initial sale is allocated between the award credits ("**GS** & Points") and the other components of the sale. Such amount allocated to the **GS** & Points is deferred and revenue is recognized only when the **GS** & Points are redeemed and the Group has fulfilled its obligations to supply products and services. The Group recorded ₩10,714 million and ₩10,964 million as deferred revenue as of June 30, 2025 and December 31, 2024, respectively.

(b) Government Grants

Development agreement between the Group and DY DEOKYANG Co.,Ltd. has been made to carry out national R&D project concerning collaboration on the development of eco-friendly mobility interior CMF design for carbon neutrality. The project started from April 1, 2022 and will be completed by December 31, 2025. If the project is successful, the Group is obligated to repay 32% of the subsidy amount as fixed technical fees. The Group was awarded government grants amounting to ₩145 million in relation to national projects including the above project. ₩12,166 million and ₩13,373 million were recognized as deferred revenue as of June 30, 2025 and December 31, 2024, respectively.

15. Income Taxes

(a) The components of income tax expenses (benefits), for the six-month periods ended June 30, 2025 and 2024 are summarized as follows:

	Won (millions)	
	June 30, 2025	June 30, 2024
Current tax	₩ 7,840	112,049
Adjustments on prior year tax	(2,935)	10,028
Changes in deferred tax assets/liabilities	(3,701)	(32,800)
Income tax expenses (benefits)	₩ 1,204	89,277

(b) Details of tax expense recorded in equity for the six-month periods ended June 30, 2025 and 2024 are summarized as follows:

	Won (millions)	
	June 30, 2025	June 30, 2024
Current tax	₩ (269)	58
Deferred tax	(389)	1,364
	₩ (658)	1,422

June 30, 2025 and 2024

15. Income Taxes, Continued

(c) The Parent Company does not expect to be liable to pay top-up tax for its taxed subsidiaries because effective tax rate for each jurisdiction is above the 15 percent minimum rate.

16. Equity

16.1 Common Stock

As of June 30, 2025 and December 31, 2024, the number of shares authorized to issue, the number of shares issued and the par value of a share of the Parent Company's common stock are 27,000,000 shares, 26,000,000 shares and ₩10,000, respectively.

16.2. Accumulated Other Comprehensive Income (Loss)

Accumulated other comprehensive income (loss), net of tax, as of June 30, 2025 and December 31, 2024 are summarized as follows:

	Won (millions)	
	June 30, 2025	December 31, 2024
Unrealized loss on valuation of FVOCI financial assets	₩ (5,823)	(12,610)
Changes in equity method accounted investee's capital	(3,646)	3,809
Effective portion of changes in unrealized fair value of cash flow hedges	(8,647)	(10,206)
Foreign currency translation difference	53,638	84,438
Accumulated other comprehensive income before income tax	35,522	65,431
Income tax effect	5,733	5,968
	₩ 41,255	71,399

17. Sales

Details of sales for the six-month periods ended June 30, 2025 and 2024 are summarized as follows:

		Won (millions)	
		June 30, 2025	June 30, 2024
Types of revenue:			
Sales of goods	₩	21,748,392	24,374,686
Rendering of services and others		89,406	124,618
		21,837,798	24,499,304
Geographic area:			
Domestic		5,857,283	6,399,224
Foreign		15,980,515	18,100,080
	₩	21,837,798	24,499,304

18. Selling, General and Administrative Expenses

Details of selling, general and administrative expenses for the six-month periods ended June 30, 2025 and 2024 are summarized as follows:

		Won (millions)	
		June 30, 2025	June 30, 2024
Salaries	₩	82,655	86,893
Retirement benefits		10,271	9,923
Other employee benefits		58,445	66,497
Subcontractors		49,251	51,218
Rent		9,979	9,938
Transportation		89,461	94,769
Advertising		27,893	22,549
Depreciation		69,904	64,975
Fees		80,907	77,936
Amortization		7,453	7,116
Travel		5,932	6,714
Taxes and dues		19,398	18,962
Insurance		1,742	1,781
Bad debt expense		896	4,077
Others		44,499	42,220
	₩	558,686	565,568

June 30, 2025 and 2024

19. Other Income and Other Expense

(a) Details of other income for the six-month periods ended June 30, 2025 and 2024 are summarized as follows:

		Won (millions)	
		June 30, 2025	June 30, 2024
Gain on valuation and transactions of commodity derivatives	₩	99,976	56,847
Gain on disposal of property, plant and equipment		17,918	19,420
Gain on disposal of assets held for sale		8,898	-
Rental income		2,144	1,985
Government grants		1,046	1,901
Others (*)		52,133	31,445
	₩	182,115	111,598

(*) Others primarily consist of brokerage income.

(b) Details of other expense for the six-month periods ended June 30, 2025 and 2024 are summarized as follows:

		Won (millions)	
		June 30, 2025	June 30, 2024
Loss on valuation and transactions of commodity derivatives	₩	104,068	56,441
Loss on disposal of property, plant and equipment		8,606	1,177
Loss on disposal of assets held for sale		619	-
Expenses related to investment properties		723	408
Others (*)		52,304	35,484
	₩	166,320	93,510

(*) Others primarily consist of brokerage fee.

20. Classification of Expenses by Nature

Details of expenses by nature for the six-month periods ended June 30, 2025 and 2024 are summarized as follows:

		Won (millions)	
		June 30, 2025	June 30, 2024
Changes in finished goods and work-in-process	₩	144,092	(145,472)
Raw materials consumption		20,052,056	22,241,738
Employee benefits		344,834	401,187
Depreciation and amortization		492,353	484,483
Bad debt expense		896	4,077
Transportation		143,878	146,526
Advertising		28,238	22,976
Subcontractors, material costs and rent		238,282	240,966
Fees and commissions		88,806	84,964
Taxes and dues		36,990	39,103
Utilities		315,493	273,404
Others		93,309	80,734
	₩	21,979,227	23,874,686

June 30, 2025 and 2024

21. Transactions and Balances with Related Parties and Others

(a) Summary of Related Parties and Others

Details of main related parties as of June 30, 2025 and December 31, 2024 are as follows:

Relationships	June 30, 2025	December 31, 2024
Joint control entities	**GS** Holdings Corp. **GS** Energy Corporation Chevron (Overseas) Holdings Ltd. Chevron Global Energy Inc.	**GS** Holdings Corp. **GS** Energy Corporation Chevron (Overseas) Holdings Ltd. Chevron Global Energy Inc.
Investees with significant influence	Daehan Oil Pipeline Corporation Samnam Petrochemical Co., Ltd. Green Eco Technology Co., Ltd. Eco G&R Co., Ltd. PT AGPA Refinery Complex	Daehan Oil Pipeline Corporation Samnam Petrochemical Co., Ltd. Green Eco Technology Co., Ltd. Eco G&R Co., Ltd. PT AGPA Refinery Complex
Others	Chevron U.S.A. Inc. Chevron Global Marine Products LLC Chevron Products Company, Inc. Chevron Singapore Pte. Ltd. Chevron Oronite Pte. Ltd. Chevron South Korea IP Holdings Ltd. Chevron Australia Pty. Ltd. Chevron (International) Trading Pte. Ltd. **GS** Global Singapore Pte. Ltd. **GS** Aromatics Pte. Ltd. Qingdao Lidong Chemical Co., Ltd. **GS** Energy Trading Singapore Pte. Ltd. Advanced Refining Technologies LLC SY ENERGY PTE. LTD. **GS** E&R Corp. **GS** Sports Ltd. Boryeong LNG Terminal Co., Ltd. **GS** Global Corp. **GS** Engineering & Construction Corp. Samyang Int'l Co., Ltd. Lotte **GS** Chemical Corporation, etc.	Chevron U.S.A. Inc. Chevron Global Marine Products LLC Chevron Products Company, Inc. Chevron Singapore Pte. Ltd. Chevron Oronite Pte. Ltd. Chevron South Korea IP Holdings Ltd. Chevron Australia Pty. Ltd. Chevron (International) Trading Pte. Ltd. **GS** Global Singapore Pte. Ltd. **GS** Aromatics Pte. Ltd. Qingdao Lidong Chemical Co., Ltd. **GS** Energy Trading Singapore Pte. Ltd. Advanced Refining Technologies LLC SY ENERGY PTE. LTD. **GS** E&R Corp. **GS** Sports Ltd. Boryeong LNG Terminal Co., Ltd. **GS** Global Corp. **GS** Engineering & Construction Corp. Samyang Int'l Co., Ltd. Lotte **GS** Chemical Corporation, etc.

June 30, 2025 and 2024

21. Transactions and Balances with Related Parties and Others, Continued

(b) Transactions with Related Parties and Others

Significant transactions which occurred in the normal course of business with related parties for the six-month period ended June 30, 2025 are summarized as follows:

		Won (millions)					
Relationships	Related parties	Sales	Purchases of inventories	Purchases of property, plant, equipment and others	Dividends received (paid)	Purchases of shares	Others
Joint control entities	**GS** Holdings Corp.	₩ 22	-	-	-	-	32,787
	GS Energy Corporation	52	-	-	(21,800)	-	1,337
	Chevron (Overseas) Holdings Ltd.	-	-	-	(17,440)	-	-
	Chevron Global Energy Inc.	-	-	-	(4,360)	-	-
Investees with significant influence	Samnam Petrochemical Co., Ltd.	327,699	5,817	-	540	-	8,021
	Daehan Oil Pipeline Corporation	2	-	-	11,595	-	25,599
	Eco G&R Co., Ltd.	2	2,941	-	-	-	4
	PT AGPA Refinery Complex	-	-	-	-	20,457	-
Others	Chevron U.S.A. Inc.	2,458,578	5,479,100	-	-	-	4,967
	Chevron Global Marine Products LLC	29,486	-	-	-	-	-
	Chevron Products Company, Inc.	50,866	116,720	-	-	-	-
	Chevron Singapore Pte. Ltd.	246,026	96,072	-	-	-	-
	Chevron Oronite Pte. Ltd.	-	22,052	-	-	-	-
	Chevron South Korea IP Holdings Ltd.	-	-	-	-	-	21,062
	Chevron Australia Pty. Ltd.	-	99,246	-	-	-	-
	Chevron (International) Trading Pte. Ltd.	3,445	1,709,804	-	-	-	-
	GS Global Singapore Pte. Ltd.	242,037	-	-	-	-	-
	GS Aromatics Pte. Ltd.	14,070	-	-	-	-	-
	Qingdao Lidong Chemical Co., Ltd.	607,483	-	-	-	-	-
	GS Energy Trading Singapore Pte. Ltd.	27,361	25,701	-	-	-	-
	Advanced Refining Technologies LLC	-	67,859	-	-	-	-
	SY ENERGY PTE. LTD.	194,818	-	-	-	-	-
	GS E&R Corp.	192,895	-	-	-	-	-
	GS Sports Ltd.	2	-	-	-	-	7,082
	Boryeong LNG Terminal Co., Ltd.	-	17,063	-	-	-	-
	GS Global Corp.	57,065	129,583	72	-	-	-
	GS Engineering & Construction Corp.	498	-	23,696	-	-	-
	Samyang Int'l Co., Ltd.	31,370	-	-	-	-	3
	Lotte **GS** Chemical Corporation	153,480	25,322	-	-	-	-

June 30, 2025 and 2024

21. Transactions and Balances with Related Parties and Others, Continued

(b) Transactions with Related Parties and Others, Continued

Significant transactions which occurred in the normal course of business with related parties for the six-month period ended June 30, 2024 are summarized as follows:

		Won (millions)					
Relationships	Related parties	Sales	Purchases of inventories	Purchases of property, plant, equipment and others	Dividends received (paid)	Purchases of shares	Others
Joint control entities	**GS** Holdings Corp.	₩ 20	-	-	-	-	34,976
	GS Energy Corporation	63	-	-	(230,500)	-	643
	Chevron (Overseas) Holdings Ltd.	-	-	-	(184,400)	-	-
	Chevron Global Energy Inc.	-	-	-	(46,100)	-	-
Investees with significant influence	Samnam Petrochemical Co., Ltd.	397,817	-	-	3,180	-	11,077
	Daehan Oil Pipeline Corporation	2	-	-	10,915	-	24,752
	Eco G&R Co., Ltd.	2	3,402	-	-	-	-
	PT AGPA Refinery Complex	-	-	-	-	19,409	-
Others	Chevron U.S.A. Inc.	3,006,663	5,914,933	-	-	-	2,165
	Chevron Global Marine Products LLC	24,845	-	-	-	-	-
	Chevron Products Company, Inc.	95,934	170,474	-	-	-	-
	Chevron Singapore Pte. Ltd.	255,199	117,322	-	-	-	514
	Chevron Oronite Pte. Ltd.	-	17,868	-	-	-	-
	Chevron South Korea IP Holdings Ltd.	-	-	-	-	-	23,203
	Chevron Australia Pty. Ltd.	-	104,834	-	-	-	-
	Chevron (International) Trading Pte. Ltd.	-	1,501,634	-	-	-	-
	GS Global Singapore Pte. Ltd.	68,647	-	-	-	-	-
	GS Aromatics Pte. Ltd.	-	48,776	-	-	-	-
	Qingdao Lidong Chemical Co., Ltd.	706,189	-	-	-	-	-
	GS Energy Trading Singapore Pte. Ltd.	-	64,172	-	-	-	-
	Advanced Refining Technologies LLC	-	18,220	-	-	-	-
	SY ENERGY PTE. LTD.	312,928	-	-	-	-	-
	GS E&R Corp.	190,781	-	-	-	-	27
	GS Sports Ltd.	13	-	-	-	-	7,311
	Boryeong LNG Terminal Co., Ltd.	-	16,390	-	-	-	-
	GS Global Corp.	58,532	40,574	161	-	-	-
	GS Engineering & Construction Corp.	1	-	8,888	-	-	3
	Samyang Int'l Co., Ltd.	29,139	-	-	-	-	1
	Lotte **GS** Chemical Corporation	129,743	35,291	-	-	-	-

June 30, 2025 and 2024

21. Transactions and Balances with Related Parties and Others, Continued

(c) Account balances with Related Parties and Others

Significant account balances with related parties as of June 30, 2025 are summarized as follows:

		Won (millions)			
		Receivables		Payables	
Relationships	Related parties	Accounts receivable	Other receivables	Accounts payable	Other payables
Joint control entities	**GS** Holdings Corp.	₩ 4	13,640	-	93
	GS Energy Corporation	3	2	-	-
Investees with significant influence	Samnam Petrochemical Co., Ltd.	148,716	550	5,731	1,051
	Daehan Oil Pipeline Corporation	-	11,635	-	4,645
Others	Chevron U.S.A. Inc.	514,369	-	781,249	-
	Chevron Global Marine Products LLC	8,176	-	-	-
	Chevron Singapore Pte. Ltd.	43,952	-	394	-
	Chevron (International) Trading Pte. Ltd.	3,387	-	60,963	-
	GS Global Singapore Pte. Ltd.	76,426	-	-	-
	Qingdao Lidong Chemical Co., Ltd.	238,247	915	-	-
	GS Energy Trading Singapore Pte. Ltd.	27,113	-	-	-
	SY ENERGY PTE. LTD.	26,160	-	-	-
	GS E&R Corp.	2	2	-	8,330
	GS Global Corp.	14,854	-	16,464	-
	Samyang Int'l Co., Ltd.	11,557	-	-	-
	Lotte **GS** Chemical Corporation	32,281	-	-	-

21. Transactions and Balances with Related Parties and Others, Continued

(c) Account balances with Related Parties and Others, Continued

Significant account balances with related parties as of December 31, 2024 are summarized as follows:

		Won (millions)			
		Receivables		Payables	
Relationships	Related parties	Accounts receivable	Other receivables	Accounts payable	Other payables
Joint control entities	**GS** Holdings Corp.	₩ 4	13,640	-	-
	GS Energy Corporation	3	221	-	3
Investees with significant influence	Samnam Petrochemical Co., Ltd.	138,756	174	-	2,190
	Daehan Oil Pipeline Corporation	-	40	-	5,292
Others	Chevron U.S.A. Inc.	520,749	-	1,338,153	-
	Chevron Global Marine Products LLC	10,685	-	-	-
	Chevron Products Company, Inc.	4,678	-	519	-
	Chevron Singapore Pte. Ltd.	33,343	-	46	-
	Chevron Oronite Pte. Ltd.	-	-	5,769	-
	Chevron South Korea IP Holdings Ltd.	-	12	-	-
	GS Global Singapore Pte. Ltd.	17,554	-	-	-
	Qingdao Lidong Chemical Co., Ltd.	223,318	856	-	-
	Advanced Refining Technologies LLC	-	-	6,686	-
	SY ENERGY PTE. LTD.	33,790	-	-	-
	GS E&R Corp.	2	10	-	11,621
	GS Sports Ltd.	-	2,402	-	-
	Boryeong LNG Terminal Co., Ltd.	1,634	-	386	-
	GS Global Corp.	8,572	-	10,054	-
	GS Engineering & Construction Corp.	-	-	-	8,777
	Samyang Int'l Co., Ltd.	9,874	-	-	30
	Lotte **GS** Chemical Corporation	24,537	470	4,891	-

22. Commitments and Contingencies

22.1 GS Caltex Corporation (the "Parent Company")

(a) As of June 30, 2025, 2 blank checks have been provided to the Korea National Oil Corporation as collateral for the Parent Company's payment of petroleum import tax and other transactions.

(b) Seven banks including KEB Hana Bank have provided the Parent Company with credit (overdraft) lines amounting to ₩178,000 million in aggregate as of June 30, 2025. In addition, the Parent Company has ₩170,000 million commercial paper program with Shinhan Bank as of June 30, 2025.

22.2 GS Mbiz Co., Ltd.

(a) **GS** Mbiz has franchise agreements with 371 stores relating to Auto-Oasis business and receives a portion of the sales from the stores as a franchise fee as stated in the agreement. **GS** Mbiz recorded sales amounting to ₩4,180 million and ₩4,319 million relating to the agreements for the six-month periods ended June 30, 2025 and 2024, respectively.

(b) **GS** Mbiz entered into secured loan agreement up to ₩4,000 million with Shinhan Bank, and credit loan agreement up to ₩4,000 million with Shinhan Bank, ₩2,000 million with Woori Bank, ₩4,000 million with Kookmin Bank, and ₩5,000 million with NongHyup Bank.

23. Other Assets and Other Liabilities

(a) Other assets as of June 30, 2025 and December 31, 2024 are summarized as follows:

		Won (millions)	
		June 30, 2025	December 31, 2024
Advance payments	₩	161,401	213,156
Prepaid expenses		19,025	14,243
Other receivable (*)		763,445	808,568
Total other current assets		**943,871**	**1,035,967**
Long-term prepaid expenses		431	539
Memberships		22,732	24,142
Total other non-current assets		**23,163**	**24,681**
Total other assets	₩	**967,034**	**1,060,648**

(*) Receivables not based on contractual cash flows are included.

(b) Other liabilities as of June 30, 2025 and December 31, 2024 are summarized as follows:

		Won (millions)	
		June 30, 2025	December 31, 2024
Advances from customers	₩	117,305	109,739
Unearned revenue		106	2,177
Other payable (*)		1,155,242	961,967
Total other current liabilities		**1,272,653**	**1,073,883**
Deferred revenue		22,880	24,597
Provisions		38,045	39,264
Others		11,595	11,590
Total other non-current liabilities		**72,520**	**75,451**
Total other liabilities	₩	**1,345,173**	**1,149,334**

(*) Payables not based on contractual cash flows are included.

June 30, 2025 and 2024

24. Risk Management

(a) Risk management principles

The Group is exposed to a variety of financial risks: credit risk, liquidity risk and market risk (including oil price risk, foreign exchange risk and interest rate risk). The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Group's financial performance.

Risks are generally managed within the relevant Group divisions. Executives of operational divisions have overall responsibility for the establishment and oversight of risk management framework within the divisions. Finance department is responsible for managing foreign exchange, interest rate, liquidity, and refinancing risks. Credit risk and counterparty risk are managed within credit management department. Crude oil department manages the Group's refining margin, refinery inventory price risk, and various position transactions. Risk management in regard to financial instruments aims to reduce the volatility in earnings, financial position, and cash flows, while securing effective and competitive financing for the Group.

The risk management committee regularly reviews and monitors financial risk management principles, policies, risk tolerance, and other risk management activities.

(b) Credit risk management

Credit risk is the risk of having financial loss to the Group where a counterparty to a financial instrument fails to meet its contractual obligations. In order to reduce the risk from defaults caused by the counterparties to contracts, transactions are only made with a customer or counterparty with credit over a certain level and the Group requires sufficient amount of security or collateral from the high-risk counterparties. The Group has established a credit policy under which each new customer is analyzed individually for creditworthiness before the Group's standard payment and delivery terms and conditions are offered. The Group's review includes external ratings.

Trade and other receivables from customers are widely dispersed across various areas and industries. The Group monitors customer's credit risk regularly, and enters into guarantee insurance contracts if necessary. The Group is not exposed to material credit risks from individuals or legal entities grouped according to their similar characteristics.

Credit risk arises principally from the Group's undiscounted carrying amount of the financial assets.

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24. Risk Management, Continued

(c) Liquidity risk management

Liquidity risk is the risk that the Group will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or other financial assets. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always maintain a diversified maturity profile in its portfolio of liabilities. The contractual maturity of financial liabilities as of June 30, 2025 is as follows:

	Won (millions)			
	Within 1 year	1 ~ 5 years	After 5 years	Total
Current liabilities:				
Accounts payable-trade	₩ 2,053,174	-	-	2,053,174
Short-term financial liabilities	2,971,235	-	-	2,971,235
Current lease liabilities	169,117	-	-	169,117
Total current financial liabilities	**5,193,526**	**-**	**-**	**5,193,526**
Non-current liabilities:				
Long-term financial liabilities	57,385	1,799,814	106,420	1,963,619
Non-current lease liabilities	-	493,809	153,016	646,825
Total non-current financial liabilities	**57,385**	**2,293,623**	**259,436**	**2,610,444**
	₩ 5,250,911	**2,293,623**	**259,436**	**7,803,970**

The above contractual maturity of financial liabilities includes estimated interest payments.

24. Risk Management, Continued

(d) Market risk management

The Group uses derivative financial instruments to manage certain exposures to fluctuations in foreign currency exchange rates and interest rates and to manage its margin exposure from changes in oil price.

Oil price risk
The market prices for crude oil and other feed-stocks, as well as refined petroleum products, are subject to significant fluctuations resulting from a variety of factors affecting demand and supply globally. The Group's results of operations in any given period are principally driven by the demand for and prices of refined petroleum products. These factors, combined with the Group's own consumption of crude oil and other feed-stocks and output of refined products, affect operational performance and cash flows in Oil Refining and Petrochemical segments, which are the Group's major business divisions in terms of sales, profits, and net assets.

As the total refining margin is an important determinant of earnings, its fluctuations constitute a significant risk. With the aim of securing a minimum margin per barrel, the Group hedges its refining margin using derivative financial instruments. The level of hedging depends on the forecast for the period in question and management's view of market conditions.

Because of the differences between the qualities of the underlying crude oil and refined petroleum products for which derivative financial instruments can be sold and purchased and the actual quality of the Group's feedstock and refined petroleum products in any given period, the business will remain exposed to some degree of basis risk.

Foreign exchange risk
Since the Group reports in Korean won while the pricing currencies used in the contract with major counterparties are U.S. dollar, the Group's business is vulnerable to short and long term currency rate changes.

The objective of foreign exchange risk management in the Group is to limit the uncertainty created by changes in foreign exchange rates on the future value of cash flows and earnings, and the Group's financial position.

The Group borrows money in foreign currency to hedge foreign currency risk of accounts receivable denominated in foreign currency and enters into foreign currency swap contracts to hedge its foreign currency risk of foreign currency bonds.

Interest rate risk
The Group has long-term borrowings at variable interest rates and where appropriate uses interest rate derivatives such as interest rate swaps to manage possible adverse cash flow movements in the future. These derivatives allow the Group to swap floating rate borrowings into fixed rates effectively. As a result of its policy for management of interest rate risk, the Group is effectively hedged against its interest rate risk, which arises from financial instruments.

25. Bonds and Borrowings

(a) Bonds

Bonds as of June 30, 2025 and December 31, 2024 are summarized as follows:

Bonds	Annual interest rate	Due date		Won (millions) Book value June 30, 2025	Won (millions) Book value December 31, 2024
Global bonds:					
FY-20 (USD 300 million)	1.63%	Jul. 27, 2025	₩	406,920	441,000
FY-22 (USD 300 million)	4.50%	Jan. 05, 2026		406,920	441,000
FY-23 (USD 300 million)	5.38%	Aug. 07, 2028		406,920	441,000
Local debentures:					
FY-15 (₩50,000 million)	-	-		-	50,000
FY-16 (₩50,000 million)	2.42%	Apr. 08, 2026		50,000	50,000
FY-18 (₩50,000 million)	2.87%	Aug. 17, 2028		50,000	50,000
FY-19 (₩80,000 million)	2.25%	Jan. 29, 2026		80,000	80,000
FY-19 (₩230,000 million)	2.42%	Jan. 29, 2029		230,000	230,000
FY-19 (₩70,000 million)	1.99%	Oct. 29, 2029		70,000	70,000
FY-20 (₩140,000 million)	-	-		-	140,000
FY-20 (₩80,000 million)	1.70%	Feb. 13, 2027		80,000	80,000
FY-20 (₩130,000 million)	1.82%	Feb. 13, 2030		130,000	130,000
FY-21 (₩260,000 million)	1.70%	Mar. 03, 2026		260,000	260,000
FY-21 (₩60,000 million)	2.14%	Mar. 03, 2031		60,000	60,000
FY-21 (₩50,000 million)	2.26%	Mar. 03, 2036		50,000	50,000
FY-23 (₩80,000 million)	-	-		-	80,000
FY-23 (₩70,000 million)	4.25%	Mar. 02, 2028		70,000	70,000
FY-24 (₩150,000 million)	3.41%	Jun. 27, 2027		150,000	150,000
FY-24 (₩50,000 million)	3.40%	Jun. 27, 2029		50,000	50,000
FY-25 (₩100,000 million)	2.67%	Apr. 29, 2028		100,000	-
FY-25 (₩60,000 million)	2.80%	Apr. 29, 2030		60,000	-
Total				2,710,760	2,923,000
Less discounts on bonds				(5,816)	(7,452)
Less current portion				(1,203,056)	(711,000)
			₩	1,501,888	2,204,548

The terms of the bonds restrict the scale of sale and leaseback transactions by the Group as well as provision of security interest on or pledge of any assets of the Group.

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25. Bonds and Borrowings, Continued

(b) Short-term borrowings

Short-term borrowings as of June 30, 2025 and December 31, 2024 are summarized as follows:

				Won (millions)	
				Book value	
Financial institution	Short-term borrowings	Annual interest rate		June 30, 2025	December 31, 2024
Kookmin Bank	Working funds	-	₩	-	100,000
	Short-term borrowings (foreign currency)	2.75%		1,892	6,038
KEB Hana Bank	Working funds	-		-	4,428
	Working funds	3M Euribor + 0.80%		5,051	3,147
Korea Development Bank	Working funds	3M Euribor + 0.85%		7,959	7,644
	Working funds	1M SOFR + 1.45%		25,772	27,930
	Facility funds	3.63%		100,000	100,000
	Facility funds	3.44%		50,000	50,000
Woori Bank	Short-term borrowings (foreign currency)	1Y LPR - 0.67%		3,783	-
	Short-term borrowings (foreign currency)	7.28%		3,876	5,157
	Short-term borrowings (foreign currency)	6.73%		4,761	-
Industrial Bank of Korea (China)	Short-term borrowings (foreign currency)	2.50%		5,675	2,596
Credit Agricole	Short-term borrowings (foreign currency)	7.44%		793	-
HDFC Bank	Short-term borrowings (foreign currency)	8.25%		250	1,338
SMBC	Short-term borrowings (foreign currency)	7.06%		3,968	2,579
Mizuho Bank	Working funds	-		-	6,038
China Merchants Bank	Working funds	1Y LPR – 0.70%		7,566	-
Citi Bank (Czech)	Working funds	eSTR + 0.80%		8,870	6,093
Raiffeisen BANK Austria	Short-term borrowings (foreign currency)	3M Euribor + 0.85%		6,367	-
China Construction Bank Corporation	Working funds	-		-	6,038
Woori Bank and others	Acceptances payable to bank (USD)	4.52% ~ 4.57%		370,237	245,577
China Construction Bank Corporation and others	Short-term borrowings (foreign currency)	4.68% ~ 4.86%		513,376	539,392
			₩	1,120,196	1,113,995

June 30, 2025 and 2024

25. Bonds and Borrowings, Continued

(c) Long-term Borrowings

Long-term borrowings in local currency as of June 30, 2025 and December 31, 2024 are summarized as follows:

			Won (millions)	
			Book value	
Financial institution	Annual interest rate		June 30, 2025	December 31, 2024
Korea Development Bank	2.46%	₩	89,286	96,428
	2.42%		53,571	57,857
	2.96%		37,143	40,000
	4.80%		6,000	6,000
	4.55%		7,500	7,500
	1.93%		14,605	11,684
Ministry of Trade, Industry and Energy	1.43%		5,500	5,500
Less current portion of long-term borrowings			(29,397)	(28,846)
		₩	184,208	196,123

Long-term borrowings in foreign currency as of June 30, 2025 and December 31, 2024 are summarized as follows:

			Won (millions)	
			Book value	
Financial institution	Annual interest rate		June 30, 2025	December 31, 2024
Korea Development Bank	3M SOFR + 1.46%	₩	98,593	133,311
Less current portion of long-term borrowings			(48,830)	(52,920)
		₩	49,763	80,391

June 30, 2025 and 2024

26. Assets Held for Sale

The Group's management decided to sell five gas stations held in the petroleum refining segment and entered into a sale agreement for these gas stations. The transactions are expected to be completed within one year, resulting in reclassification of related assets to assets held for sale.

(a) Details of assets classified as held for sale as of June 30, 2025 and December 31, 2024 are as follows:

	Won (millions)	
	June 30, 2025	December 31, 2024
Land	₩ 27,487	13,954
Buildings	132	348
Structures	161	293
	₩ 27,780	14,595

(b) There are no cumulative gains or losses recognized in other comprehensive income (loss) related to the assets held for sale.

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Independent Auditors' Report

To the Board of Directors and Shareholders of
GS Caltex Corporation:

Opinion

We have audited the accompanying consolidated financial statements of GS Caltex Corporation and its subsidiaries (the "Group"), which comprise the consolidated statements of financial position as of December 31, 2024 and 2023, the consolidated statements of income, comprehensive income, changes in equity and cash flows for the years then ended, and notes, comprising material accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 2024 and 2023 and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with Korean International Financial Reporting Standards ("K-IFRS").

Basis for Opinion

We conducted our audits in accordance with Korean Standards on Auditing. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in the Republic of Korea, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with K-IFRS, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated 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.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. 'Reasonable assurance' is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Korean 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 aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Korean Standards on Auditing, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated 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 our 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 we conclude that a material uncertainty exists, then we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' 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 consolidated financial statements, including the disclosures, and whether the consolidated 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. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We 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 we identify during our audit.

Other Matters

The procedures and practices utilized in the Republic of Korea to audit such consolidated financial statements may differ from those generally accepted and applied in other countries.

Our report is solely for the use of those in connection with the potential offering of US$ notes by GS Caltex Corporation and it is not to be used for any other purpose.

KPMG Samjong Accounting Corp.

Seoul, Korea
February 18, 2025

This report is effective as of February 18, 2025, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying consolidated financial statements and notes thereto. Accordingly, the readers of the audit report should understand that the above audit report has not been updated to reflect the impact of such subsequent events or circumstances, if any.

GS Caltex Corporation and Subsidiaries
Consolidated Statements of Financial Position

As of December 31, 2024 and 2023

(In millions of won)

	Note		2024	2023
Assets:				
Cash and cash equivalents	6,7	₩	1,276,128	1,265,126
Accounts and notes receivable	7,23,26		3,681,304	3,912,727
Short-term financial assets	7,26		309,116	297,531
Inventories	8		5,095,044	5,759,005
Prepaid income taxes			50,015	1,063
Other current assets	25		1,035,967	1,008,057
Assets held for sale	30		14,595	-
Total current assets			**11,462,169**	**12,243,509**
Long-term financial assets	7,26		344,015	284,905
Investments in associates	13		338,131	315,338
Property, plant and equipment	9,23		10,834,624	11,275,272
Investment properties	10		58,114	40,592
Intangible assets	11		77,257	70,051
Defined benefit assets, net	15		28,980	64,578
Deferred income tax assets	17		5,672	2,649
Other non-current assets	25		24,681	24,928
Total non-current assets			**11,711,474**	**12,078,313**
Total assets		₩	**23,173,643**	**24,321,822**

See accompanying notes to the consolidated financial statements.

GS Caltex Corporation and Subsidiaries
Consolidated Statements of Financial Position, Continued

As of December 31, 2024 and 2023

(In millions of won)

	Note		2024	2023
Liabilities:				
Accounts payable-trade	7,23,26	₩	2,998,617	2,831,833
Short-term financial liabilities	7,26,27,28		2,711,169	2,931,689
Income taxes payable			10,740	294,745
Other current liabilities	25,29		1,073,883	985,112
Total current liabilities			**6,794,409**	**7,043,379**
Long-term financial liabilities	7,26,27,28		3,122,577	3,557,502
Defined benefit liabilities, net	15		2,848	1,591
Deferred income tax liabilities	17		79,732	148,663
Other non-current liabilities	14,16,25		75,451	71,752
Total non-current liabilities			**3,280,608**	**3,779,508**
Total liabilities			**10,075,017**	**10,822,887**
Equity:				
Common stock	1,18		260,000	260,000
Capital surplus			68,330	68,330
Capital adjustment	18		(61,189)	(61,189)
Accumulated other comprehensive income	7,18		71,399	8,015
Retained earnings	18		12,760,086	13,223,779
Equity attributable to owners of the Parent Company			**13,098,626**	**13,498,935**
Non-controlling interests			**-**	**-**
Total equity			**13,098,626**	**13,498,935**
Total liabilities and equity		₩	**23,173,643**	**24,321,822**

See accompanying notes to the consolidated financial statements.

GS Caltex Corporation and Subsidiaries
Consolidated Statements of Income

For the years ended December 31, 2024 and 2023

(In millions of won)

	Note		2024	2023
Sales	5,19,23	₩	47,614,246	48,607,546
Cost of sales	22,23		(45,952,923)	(45,757,736)
Selling, general and administrative expenses	20,22		(1,113,281)	(1,166,018)
Operating profit	5		**548,042**	**1,683,792**
Share of profit of equity method accounted investees	13		14,196	14,892
Finance income	7,23		2,454,066	4,026,934
Finance costs	7		(2,922,381)	(4,234,574)
Other income	21		254,659	296,577
Other expenses	21		(226,529)	(264,056)
Profit before income taxes			**122,053**	**1,523,565**
Income tax expense	17		(13,044)	(370,834)
Profit for the year		₩	**109,009**	**1,152,731**
Profit attributable to:				
Owners of the Parent Company		₩	**109,009**	**1,152,731**
Non-controlling interests			-	-

See accompanying notes to the consolidated financial statements.

GS Caltex Corporation and Subsidiaries
Consolidated Statements of Comprehensive Income

For the years ended December 31, 2024 and 2023

(In millions of won)

	Note		2024	2023
Profit for the year		₩	**109,009**	**1,152,731**
Other comprehensive income (loss), net of tax:				
Items that will not be reclassified to profit or loss:				
Remeasurements of defined benefit liability	15		(38,275)	(36,069)
Net change in fair value of financial assets at fair value through other comprehensive income			(954)	(8,332)
Changes in equity method accounted investee's retained earnings			443	(1,579)
Items that will be reclassified subsequently to profit or loss:				
Changes in equity method accounted investee's capital			3,370	(902)
Effective portion of changes in unrealized fair value of cash flow hedges	7		5,940	(17,021)
Foreign currency translation differences			57,658	5,659
Total other comprehensive income (loss) for the year, net of tax			**28,182**	**(58,244)**
Total comprehensive income for the year		₩	**137,191**	**1,094,487**
Total comprehensive income attributable to:				
Owners of the Parent Company		₩	137,191	1,094,487
Non-controlling interests			-	-

See accompanying notes to the consolidated financial statements.

GS Caltex Corporation and Subsidiaries
Consolidated Statements of Changes in Equity

For the years ended December 31, 2024 and 2023

(In millions of won)

	Owners of the Parent Company							
	Common stock	Capital surplus	Capital adjustments	Accumulated other comprehensive income (loss)	Retained earnings	Total	Non-controlling interests	Total equity
Balance at January 1, 2024	**₩ 260,000**	**68,330**	**(61,189)**	**8,015**	**13,223,779**	**13,498,935**	**-**	**13,498,935**
Total comprehensive income:								
Profit for the year	-	-	-	-	109,009	109,009	-	109,009
Other comprehensive income (loss), net of tax:								
Net change in fair value of financial assets at fair value through other comprehensive income	-	-	-	(3,584)	2,630	(954)	-	(954)
Changes in equity method accounted investee's capital	-	-	-	3,370	-	3,370	-	3,370
Changes in equity method accounted investee's retained earnings	-	-	-	-	443	443	-	443
Effective portion of changes in unrealized fair value of cash flow hedges	-	-	-	5,940	-	5,940	-	5,940
Foreign currency translation differences	-	-	-	57,658	-	57,658	-	57,658
Remeasurements of defined benefit liability	-	-	-	-	(38,275)	(38,275)	-	(38,275)
Total other comprehensive income (loss)	-	-	-	63,384	(35,202)	28,182	-	28,182
Total comprehensive income	**-**	**-**	**-**	**63,384**	**73,807**	**137,191**	**-**	**137,191**
Transactions with owners and others, recorded directly in equity:								
Year-end dividends	-	-	-	-	(461,000)	(461,000)	-	(461,000)
Interim dividends	-	-	-	-	(76,500)	(76,500)	-	(76,500)
	-	**-**	**-**	**-**	**(537,500)**	**(537,500)**	**-**	**(537,500)**
Balance at December 31, 2024	**₩ 260,000**	**68,330**	**(61,189)**	**71,399**	**12,760,086**	**13,098,626**	**-**	**13,098,626**

See accompanying notes to the consolidated financial statements.

GS Caltex Corporation and Subsidiaries
Consolidated Statements of Changes in Equity, Continued

For the years ended December 31, 2024 and 2023

(In millions of won)

	Owners of the Parent Company							
	Common stock	Capital surplus	Capital adjustments	Accumulated other comprehensive income (loss)	Retained earnings	Total	Non-controlling interests	Total equity
Balance at January 1, 2023	**₩ 260,000**	**68,330**	**(61,189)**	**28,611**	**13,224,396**	**13,520,148**	**-**	**13,520,148**
Total comprehensive income:								
Profit for the year	-	-	-	-	1,152,731	1,152,731	-	1,152,731
Other comprehensive income (loss), net of tax:								
Net change in fair value of financial assets at fair value through other comprehensive income	-	-	-	(8,332)	-	(8,332)	-	(8,332)
Changes in equity method accounted investee's capital	-	-	-	(902)	-	(902)	-	(902)
Changes in equity method accounted investee's retained earnings	-	-	-	-	(1,579)	(1,579)	-	(1,579)
Effective portion of changes in unrealized fair value of cash flow hedges	-	-	-	(17,021)	-	(17,021)	-	(17,021)
Foreign currency translation differences	-	-	-	5,659	-	5,659	-	5,659
Remeasurements of defined benefit liability	-	-	-	-	(36,069)	(36,069)	-	(36,069)
Total other comprehensive loss	-	-	-	(20,596)	(37,648)	(58,244)	-	(58,244)
Total comprehensive income (loss)	**-**	**-**	**-**	**(20,596)**	**1,115,083**	**1,094,487**	**-**	**1,094,487**
Transactions with owners and others, recorded directly in equity:								
Year-end dividends	-	-	-	-	(836,800)	(836,800)	-	(836,800)
Interim dividends	-	-	-	-	(278,900)	(278,900)	-	(278,900)
	-	-	-	-	(1,115,700)	(1,115,700)	-	(1,115,700)
Balance at December 31, 2023	**₩ 260,000**	**68,330**	**(61,189)**	**8,015**	**13,223,779**	**13,498,935**	**-**	**13,498,935**

See accompanying notes to the consolidated financial statements.

GS Caltex Corporation and Subsidiaries
Consolidated Statements of Cash Flows

For the years ended December 31, 2024 and 2023

(In millions of won)

		2024	2023
Cash flows from operating activities:			
Profit for the year	₩	109,009	1,152,731
Adjustments for:			
Retirement benefits		35,797	29,430
Bad debt expense (reversal of allowance for doubtful accounts)		(2,615)	761
(Reversal of) Impairment losses on valuation of inventories		10,938	(125,657)
Depreciation		960,705	1,035,523
Amortization		26,797	24,328
Interest expense		220,729	262,377
Foreign currency transaction loss, net		34,811	12,311
Foreign currency translation loss, net		285,151	16,509
Gain on valuation of derivative instruments, net		(139,875)	(47,440)
Gain on transaction of derivative instruments, net		(60,295)	(40,014)
Gain on disposal of property, plant and equipment, net		(45,361)	(19,339)
Income tax expense		13,044	370,834
Interest income		(42,097)	(56,122)
Dividends income		(700)	(1,538)
Share of profit of equity method accounted investees, net		(14,196)	(14,892)
Gain on exemption of debts		-	(10,872)
Loss on disposal of financial assets at FVTPL		685	-
Others, net		(2,862)	(18,489)
Changes in assets and liabilities:			
Accounts and notes receivable		497,183	46,561
Short-term financial assets		(3,902)	623,814
Inventories		673,603	(59,046)
Other current assets		(22,010)	34,490
Other non-current assets		(672)	393
Accounts payable-trade		(96,380)	244,892
Short-term financial liabilities		11,045	(260,441)
Other current liabilities		79,615	38,954
Long-term financial liabilities		1,920	(299)
Other non-current liabilities		(13,514)	(2,469)
Payment of retirement and severance benefits		(2,924)	(6,204)
Contributions to plan assets		(47,530)	(21,910)
Interest received		38,496	84,382
Interest paid		(195,003)	(247,453)
Dividends received		14,795	17,986
Income tax paid		(406,594)	(1,013,685)
Net cash provided by operating activities	₩	**1,917,793**	**2,050,406**

See accompanying notes to the consolidated financial statements.

GS Caltex Corporation and Subsidiaries
Consolidated Statements of Cash Flows, Continued

For the years ended December 31, 2024 and 2023

(In millions of won)

		2024	2023
Cash flows from investing activities:			
Decrease in short-term financial assets	₩	48,102	208,893
Decrease in long-term financial assets		7,220	7,310
Proceeds from sale of property, plant and equipment		119,348	68,769
Proceeds from intangible assets		1,109	91
Proceeds from sale of investment property		-	1,531
Receipt of subsidies for property, plant and equipment		3,094	6,293
Increase in short-term financial assets		(65,005)	(45,483)
Increase in long-term financial assets		(9,020)	(11,148)
Acquisition of investments in associates		(19,409)	(33,235)
Purchases of property, plant and equipment		(584,952)	(534,026)
Purchases of intangible assets		(871)	(474)
Others, net		1,256	69
Net cash used in investing activities		**(499,128)**	**(331,410)**
Cash flows from financing activities:			
Proceeds from short-term financial liabilities		10,089,348	6,717,198
Proceeds from long-term financial liabilities		219,964	546,568
Settlement of derivative instruments, net		126,773	72,848
Payment of lease liabilities		(168,960)	(237,754)
Repayment of short-term financial liabilities		(11,163,832)	(8,001,072)
Repayment of long-term financial liabilities		-	(2,777)
Dividends paid		(537,500)	(1,115,700)
Others, net		(3,742)	1,817
Net cash used in financing activities		**(1,437,949)**	**(2,018,872)**
Net decrease in cash and cash equivalents		**(19,284)**	**(299,876)**
Cash and cash equivalents at the beginning of year		1,265,126	1,560,671
Effect of movements in exchange rates on cash held		30,286	4,331
Cash and cash equivalents at end of year	₩	**1,276,128**	**1,265,126**

See accompanying notes to the consolidated financial statements.

December 31, 2024 and 2023

1. General Information

1.1 The Parent Company

GS Caltex Corporation ("GS Caltex" or the "Parent Company") was incorporated under a joint venture agreement between Caltex Petroleum Corporation and Lucky Limited in 1966 and incorporated as Honam Oil Refinery Co., Ltd. in 1967 under the laws of the Republic of Korea. The Parent Company's principal business activities consist of petroleum refining and marketing, production of petrochemicals, including paraxylene, benzene, toluene and polypropylene, and blending of lubricant oils. Such activities (with the exception of lubricant oil blending, which takes place at facilities located in Incheon) are carried out at the Parent Company's Yeosu refinery complex located in southern Korea, and the headquarters of the Parent Company is located at 508, Nonhyun-ro, Gangnam-gu in Seoul.

On July 1, 2004, LG Corp. (which had owned 50% of the Parent Company's shares as of June 30, 2004) was split into two separate holding companies, LG Corp. and GS Holdings Corporation. As a result, the Parent Company became a subsidiary of GS Holdings Corporation. On March 31, 2005, the Parent Company changed its name from LG-Caltex Oil Corporation to GS Caltex Corporation. On January 1, 2013, GS Energy Corporation was established through the spin-off of the energy holding business unit of GS Holdings Corporation, in which 50% of the shares in the Parent Company were transferred to the newly-established company. As of December 31, 2024, the ownership of the Parent Company is as follows:

Shareholders	Number of common shares held	Percentage of ownership
Chevron Corporation:		
Chevron (Overseas) Holdings Ltd.	10,400,000	40%
Chevron Global Energy Inc.	2,600,000	10%
GS Energy Corporation	13,000,000	50%
	26,000,000	100%

Certain agreements with Chevron Global Energy Inc. (the "CGEI") provide that CGEI is to supply a portion of the Parent Company's crude oil and other feed-stock as well as technical assistance in the manufacturing of petroleum products. The Parent Company is registered under the Foreign Capital Inducement Law of the Republic of Korea. Under this registration, profits attributable to Chevron (Overseas) Holdings Ltd. and CGEI are fully remittable. Further, repatriation of capital is guaranteed after satisfying certain conditions.

December 31, 2024 and 2023

1. General Information, Continued

1.2 Subsidiaries

(a) Details of subsidiaries as of December 31, 2024 and 2023 are as follows:

Subsidiaries	Location	Ownership 2024	Ownership 2023	Main Business
GS Mbiz Co., Ltd.	Seoul, Korea	100.00%	100.00%	Electronic commerce and sale of petroleum products
GS Caltex Singapore Pte., Ltd.	Singapore	100.00%	100.00%	International trading
GS Caltex (Langfang) Plastics Co., Ltd.	China	100.00%	100.00%	Production and sale of compound polypropylene
InnoPolytech Co., Ltd.	Jinju, Korea	100.00%	100.00%	Toll manufacturing and production of plastic products
GS Caltex India Pvt. Ltd.	India	100.00%	100.00%	Sale of lubricant oil
Sangji Shipping Co., Ltd.	Yeosu, Korea	100.00%	100.00%	Shipping
GS Bio Co., Ltd.	Yeosu, Korea	100.00%	100.00%	Petroleum substitute fuel manufacturing
GS EcoMetal Co., Ltd.	Ulsan, Korea	100.00%	100.00%	Recycling and restoration of disposed catalysts
GS Caltex (Suzhou) Plastics Co., Ltd.	China	100.00%	100.00%	Production and sale of compound polypropylene
GS Caltex Czech, s.r.o.	Czech	100.00%	100.00%	Production and sale of compound polypropylene
GS Caltex China Co., Ltd.	China	100.00%	100.00%	Sale of lubricant oil
GS Caltex Mexico S.de R.L.de C.V.	Mexico	100.00%	100.00%	Production and sale of compound polypropylene
Pancotec Co., Ltd.	Yeosu, Korea	100.00%	100.00%	Facilities maintenance service
Hanul Love Co., Ltd.	Yeosu, Korea	100.00%	100.00%	Convenience business and commercial food service
Suzhou **GS** Caltex Trading Co., Ltd.	China	100.00%	100.00%	Sale of compound polypropylene

(b) Condensed financial information of main subsidiaries

Condensed financial information of main subsidiaries as of and for the year ended December 31, 2024 is as follows:

Subsidiaries	Won (millions) Assets	Liabilities	Sales	Net profit
GS Mbiz Co., Ltd.	₩ 166,087	72,965	235,813	4,322
GS Caltex Singapore Pte., Ltd.	1,916,271	1,602,000	23,403,138	29,306
GS Caltex (Langfang) Plastics Co., Ltd.	85,206	11,394	131,641	3,321
InnoPolytech Co., Ltd.	20,873	10,536	106,963	954
GS Caltex India Pvt. Ltd.	31,248	19,799	107,409	1,003
GS Bio Co., Ltd.	128,472	38,046	184,665	6,999
GS EcoMetal Co., Ltd.	96,046	23,881	65,962	8,709
GS Caltex (Suzhou) Plastics Co., Ltd.	90,030	31,472	137,119	4,857
GS Caltex Czech, s.r.o.	101,595	42,630	172,640	11,518

2. Basis of Preparation

(a) Statement of Compliance

The consolidated financial statements have been prepared in accordance with Korean International Financial Reporting Standards ("K-IFRS") as prescribed in the Act on External Audit of Stock Companies of the Republic of Korea.

The consolidated financial statements were authorized for issue by management on January 24, 2025, and are expected to be submitted to shareholders' meeting for approval on February 27, 2025.

(b) Basis of Measurement

The consolidated financial statements have been prepared on the historical cost basis, except for the following material items in the statement of financial position:

- ✓ derivative financial instruments measured at fair value;
- ✓ financial instruments measured at fair value; and
- ✓ liabilities for defined benefit plans recognized at the net of the total present value of defined benefit obligations less the fair value of plan assets.

(c) Functional and Presentation Currencies

These consolidated financial statements are presented in Korean won, which is the Parent Company's functional currency and the currency of the primary economic environment in which the Parent Company operates. All financial information presented in Korean won has been rounded to the nearest million.

(d) Use of Estimates and Judgments

The preparation of the consolidated financial statements in conformity with K-IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

December 31, 2024 and 2023

2. Basis of Preparation, Continued

(d) Use of Estimates and Judgments, Continued

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment within the next financial year are included in the following note:

Note 15 – Retirement Benefits
Note 17 – Income taxes

Fair Value Measurement

A number of the Group's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities.

When measuring the fair value of an asset or a liability, the Group uses market observable data as far as possible. Fair values are categorized into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

- ✓ Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;
- ✓ Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- ✓ Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

If the inputs used to measure the fair value of an asset or a liability are categorized into different levels of the fair value hierarchy, then the fair value measurement is categorized in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

The Group recognizes transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

Further information about the assumptions made in measuring fair values is included in the following note:

Note 7 – Financial Instruments

December 31, 2024 and 2023

3. Changes in Accounting Policies

(a) Classification of Liabilities as Current or Non-current and Non-current Liabilities with Covenants

The Group has adopted *Classification of Liabilities as Current or Non-current (Amendments to K-IFRS 1001) and Non-current Liabilities with Covenants (Amendments to K-IFRS 1001)* from January 1, 2024. The amendments apply retrospectively.

They clarify certain requirements for determining whether a liability should be classified as current or non-current and require new disclosures for non-current loan liabilities that are subject to covenants within 12 months after the reporting period. This resulted in a change in the accounting policy for the classification of liabilities that can be settled in a Group entity's own shares (e.g. convertible notes issued by a Group entity). Previously, The Group did not consider any counterparty conversion options when classifying the related liabilities as current or non-current. Under the new policy, when a liability includes a counterparty conversion option whereby the liability may be settled by a transfer of a Group entity's own shares, the Group takes into account the conversion option in classifying the host liability as current or non-current unless the option is classified as equity under K-IFRS 1032. The Group's other liabilities were not impacted by the amendments.

Despite the change in policy, there is no retrospective impact on the comparative statement of financial position, as the Group had no outstanding convertible notes as at December 31, 2023. The amendments do not have a significant impact on the financial statements.

(b) Disclosure of Supplier Finance Arrangements

The Group has adopted the amendments of *K-IFRS 1007 Statement of Cash Flows and K-IFRS 1107 Financial Instruments: Disclosures* that introduce additional disclosure requirements for companies entering into supplier finance arrangements for periods beginning on or after January 1, 2024.

Under the amendments to K-IFRS 1007 and K-IFRS 1107, the disclosure requirements will enable users to assess the effects of the arrangements on the Group's liabilities and cash flows, and the Group's exposure to liquidity risk. The Group has assessed the impact and relevant information is disclosed in Note 7 to the consolidated financial statements.

4. Material Accounting Policies

The material accounting policies applied by the Group in the preparation of its consolidated financial statements are included below. The accounting policies set out below have been applied consistently to all periods presented in these consolidated financial statements except for changes in accounting policies explained in Note 3.

(a) Operating Segments

An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses that relate to transactions with the Group's other components. All operating segments' operating results are reviewed regularly by the Group's chief operating decision maker in deciding how to allocate resources in assessing its performance, and for which discrete financial information is available. The prices agreed among the Group companies for intra-group transactions are based on normal commercial practices which would apply between independent businesses.

(b) Basis of Consolidation

Subsidiaries
Subsidiaries are entities controlled by the Group. The Group controls an entity when it 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. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control commences until the date that on which control ceases.

Transactions eliminated on consolidation
Intra-group balances and transactions, and any unrealized income and expenses arising from intra-group transactions, are eliminated. Unrealized gains arising from transactions with equity accounted investees are eliminated against the investment to the extent of the Group's interest in the investee. Unrealized losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment.

Changes in the Parent Company's ownership
Changes in the Parent Company's ownership interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions with owners in their capacity as owners.

Interests in equity-accounted investees
The Group's interests in equity-accounted investees comprise interests in associates.

Associates are those entities in which the Group has significant influence, but not control or joint control, over the financial and operating policies. A joint venture is an arrangement in which the Group has joint control, whereby the Group has rights to the net assets of the arrangement, rather than rights to its assets and obligations for its liabilities.

Interests in associates and the joint venture are accounted for using the equity method. They are recognized initially at cost, which includes transaction costs. Subsequent to initial recognition, the consolidated financial statements include the Group's share of the profit or loss and OCI (Other Comprehensive Income) of equity-accounted investees, until the date on which significant influence or joint control ceases.

December 31, 2024 and 2023

4. Material Accounting Policies, Continued

(b) Basis of Consolidation, Continued

Business combinations under common control
Business combinations under common control are accounted for in the consolidated accounts prospectively from the date the Group obtains the ownership interest. Assets and liabilities are recognized upon consolidation at their carrying amount in the consolidated financial statements of the ultimate parent entity. Any difference between the fair value of the consideration paid and the amounts at which the assets and liabilities are recorded is recognized directly in equity in the business combinations under common control reserve.

(c) Cash and Cash Equivalents

Cash and cash equivalents comprise cash balances and call deposits with maturities of three months or less from the acquisition date that are subject to an insignificant risk of changes in their fair value, and are used by the Group in the management of its short-term commitments. Equity investments are excluded from cash equivalents unless they are, in substance, cash equivalents, such as preferred shares when it has a short maturity with a specified redemption date.

(d) Inventories

The Group determines its cost of inventories using the 'monthly gross average' method for raw materials, work-in-process, products and merchandise, 'moving average' method for all supplies, the 'specific identification' method for goods in transit and the 'weighted average' method for the other inventories. Its cost of inventories includes expenditure incurred in acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing location and condition. In the case of manufactured inventories and work in process, cost includes an appropriate share of production overheads based on normal operating capacity.

The carrying amount of inventory is recognized as cost of goods sold when revenue from the sale of the inventory is recognized. Inventories are measured 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 of completion and selling expenses. The amount of any write-down of inventories to net realizable value and all losses of inventories are recognized as an expense during the period the write-down or loss occurs and included in cost of sales. The amount of any reversal of write-down of inventories, arising from an increase in net realizable value, are recognized as a reduction in the amount of inventories recognized as an expense in the period in which the reversal occurs and included in cost of sales.

December 31, 2024 and 2023

4. Material Accounting Policies, Continued

(e) Non-derivative Financial Assets

Recognition and initial measurement
The Group recognizes accounts receivable and debt securities initially when they are originated and subsequently measures them at amortized cost. The Group recognizes other financial assets when the Group becomes a party to the contractual provisions of the instrument.

A financial asset (other than a trade receivable without a significant financing component that is initially measured at the transaction price) is initially measured at fair value and, for an item not at FVTPL, transaction costs that is directly attributable to its acquisition. An account receivable without a significant financing component is measured at its transaction price.

Classification and subsequent measurement
On initial recognition, a financial asset is classified as amortized cost, FVOCI-debt investment, FVOCI-equity investment or FVTPL. A financial asset is not reclassified without a change of the business model in which a financial asset is managed and its contractual cash flow characteristics. A financial asset which changes its business model is reclassified on a first day of the first reporting period after its change.

A financial asset is measured at amortized cost if it meets both of the following conditions and is not designated as at FVTPL.

- It is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- Its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

A debt investment is measured at FVOCI if it meets both of the following conditions and is not designated as at FVTPL.

- It is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- Its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

On initial recognition of an equity investment that is not held for trading, the Group may irrevocably elect to present subsequent changes in the investment's fair value in OCI. This election is made on an investment-by-investment basis.

All financial assets not classified as measured at amortized cost or FVOCI as described above are measured at FVTPL. This includes all derivative financial assets. On initial recognition, the Group may irrevocably designate a financial asset that otherwise meets the requirements to be measured at amortized cost or at FVOCI as at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

A financial portfolio which satisfies the definition of short-term trading or is evaluated its performance based on the fair value is measured at FVTPL.

4. Material Accounting Policies, Continued

(e) Non-derivative Financial Assets, Continued

The following accounting policies apply to the subsequent measurement of financial assets.

	Subsequent measurement
Financial assets at FVTPL	These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognized in profit or loss.
Financial assets at amortized cost	These assets are subsequently measured at amortized cost using the effective interest method. The amortized cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognized in profit or loss. Any gain or loss on derecognition is recognized in profit or loss.
Debt investments at FVOCI	These assets are subsequently measured at fair value. Interest income calculated using the effective interest method, foreign exchange gains and losses and impairment are recognized in profit or loss. Other net gains and losses are recognized in OCI. On derecognition, gains and losses accumulated in OCI are reclassified to profit or loss.
Equity investments at FVOCI	These assets are subsequently measured at fair value. Dividends are recognized as income in profit or loss unless the dividend clearly represents a recovery of part of the cost of the investment. Other net gains and losses are recognized in OCI and are never reclassified to profit or loss.

Derecognition of financial assets

The Group derecognizes a financial asset when the contractual rights to the cash flows from the asset expires, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. If the Group neither transfers nor retains substantially all the risks and rewards of ownership of the financial assets, the Group determines whether it has retained control of the financial asset. If the Group has not retained control, it derecognizes the financial asset and if the Group has retained control, it continues to recognize the financial asset to the extent of its continuing involvement in the financial asset.

If the Group retains substantially all the risks and rewards of ownership of the transferred financial assets, the Group continues to recognize the transferred financial assets and recognizes financial liabilities for the consideration received.

Offsetting between financial assets and financial liabilities

Financial assets and financial liabilities are offset and the net amount is presented in the consolidated statement of financial position only when the Group currently has a legally enforceable right to offset the recognized amounts, and there is the intention to settle on a net basis or to realize the asset and settle the liability simultaneously.

4. Material Accounting Policies, Continued

(f) Derivative Financial Instruments, Including Hedge Accounting

Derivatives are initially recognized at fair value. Subsequent to initial recognition, derivatives are measured at fair value, and changes therein are accounted for as described below.

Hedge accounting
The Group holds forward exchange contracts, interest rate swaps, currency swaps and other derivative contracts to manage interest rate risk and foreign exchange risk.

The Group designates derivatives as hedging instruments to hedge the risk of changes in the fair value of assets, liabilities or firm commitments (a fair value hedge) and foreign currency risk of highly probable forecasted transactions or firm commitments (a cash flow hedge).

On initial designation of the hedge, the Group formally documents the relationship between the hedging instruments and hedged items, including the risk management objectives and strategy in undertaking the hedge transaction, together with the methods that will be used to assess the effectiveness of the hedging relationship.

Cash flow hedge
When a derivative is designated to hedge the variability in cash flows attributable to a particular risk associated with a recognized asset or liability or a highly probable forecasted transaction that could affect profit or loss, the effective portion of changes in the fair value of the derivative is recognized in other comprehensive income, net of tax, and presented in the hedging reserve in equity. Any ineffective portion of changes in the fair value of the derivative is recognized immediately in profit or loss.

If the hedging instrument no longer meets the criteria for hedge accounting, expires, is sold, terminated, exercised, or the designation is revoked, then hedge accounting is discontinued prospectively. The cumulative gain or loss on the hedging instrument that has been recognized in other comprehensive income is reclassified to profit or loss in the periods during which the forecasted transaction occurs. If the forecasted transaction is no longer expected to occur, then the balance in other comprehensive income is recognized immediately in profit or loss.

Other derivative financial instruments
Changes in the fair value of other derivative financial instrument not designated as a hedging instrument are recognized immediately in profit or loss.

(g) Impairment of Financial Assets

Financial instruments and contract assets
The Group measures loss allowances for the following financial assets at an amount equal to ECLs:
- financial assets at amortized cost; and
- contract assets recognized in accordance with K-IFRS No.1115

The Group measures loss allowances at an amount equal to lifetime ECLs, except for the following, which are measured as 12-month ECLs:
- debt securities that are determined to have low credit risk at the reporting date; and
- other debt securities and bank balances for which credit risk (i.e. the risk of default occurring over the expected life of the financial instrument) has not increased significantly since initial recognition.

December 31, 2024 and 2023

4. Material Accounting Policies, Continued

(g) Impairment of Financial Assets, Continued

The Group has elected to measure loss allowances for trade receivables and contract assets at an amount equal to lifetime ECLs.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Group's historical experience and informed credit assessment and including forward-looking information.

Measurement of ECLs
ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the entity in accordance with the contract and the cash flows that the Group expects to receive). ECLs are discounted at the effective interest rate of the financial asset.

Credit-impaired financial assets
At each reporting date, the Group assesses whether financial assets carried at amortized cost and debt securities at FVOCI are credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Evidence that a financial asset is credit-impaired includes the following observable data:
- significant financial difficulty of the borrower or issuer;
- a breach of contract such as a default or being more than 90 days past due;
- the restructuring of a loan or advance by the Group on terms that the Group would not consider otherwise;
- it is probable that the borrower will enter bankruptcy or other financial reorganization; or
- the disappearance of an active market for a security because of financial difficulties.

Presentation of allowance for ECL in the statement of financial position
Loss allowances for financial assets measured at amortized cost are deducted from the gross carrying amount of the assets.

Write-off
The gross carrying amount of a financial asset is written off when the Group has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof. The Group individually makes an assessment with respect to the timing and amount of write-off based on whether there is a reasonable expectation of recovery. The Group expects no significant recovery from the amount written off. However, financial assets that are written off could be still subject to enforcement activities in order to comply with the Group's procedures for recovery of amounts due.

4. Material Accounting Policies, Continued

(h) Property, Plant and Equipment

Property, plant and equipment are initially measured at cost and after initial recognition, are carried at cost less accumulated depreciation and accumulated impairment losses. The cost of property, plant and equipment includes expenditures arising directly from the construction or acquisition of the asset, any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management and the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

Subsequent costs are recognized in the carrying amount of property, plant and equipment at cost or, if appropriate, as separate items if it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. The costs of the day-to-day servicing are recognized in profit or loss as incurred.

Property, plant and equipment, except for land, are depreciated over estimated useful lives that appropriately reflect the pattern in which the asset's future economic benefits are expected to be consumed on a straight-line basis.

The estimated useful lives for the current and comparative periods are as follows:

	Useful lives (years)
Buildings	10 ~ 45
Structures	5 ~ 40
Machinery	4 ~ 33
Others	3 ~ 25

A component that is significant compared to the total cost of property, plant and equipment is depreciated over its separate useful life.

Depreciation methods, useful lives and residual values are reviewed at the end of each reporting date and adjusted, if appropriate. The change is accounted for as a change in an accounting estimate.

(i) Borrowing costs

The Group capitalizes borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset. Other borrowing costs are recognized in expense as incurred.

To the extent that the Group borrows funds specifically for the purpose of obtaining a qualifying asset, the Group determines the amount of borrowing costs eligible for capitalization as the actual borrowing costs incurred on that borrowing during the period less any investment income on the temporary investment of those borrowings. To the extent that the Group borrows funds generally and uses them for the purpose of obtaining a qualifying asset, the Group determines the amount of borrowing costs eligible for capitalization by applying a capitalization rate to the expenditures on that asset. The capitalization rate is the weighted average of the borrowing costs applicable to the borrowings of the Group that are outstanding during the period, other than borrowings made specifically for the purpose of obtaining a qualifying asset. The amount of borrowing costs that the Group capitalizes during a period does not exceed the amount of borrowing costs incurred during that period.

December 31, 2024 and 2023

4. Material Accounting Policies, Continued

(j) Leases

At inception of a 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. To assess whether a contract conveys the right to control the use of an identified asset, the Group uses the definition of a lease in K-IFRS No.1116.

i. As a lessee

The Group had elected the practical expedient not to separate non-lease components and account for the lease and non-lease components as a single lease component for the leases of property. For the leases of vessels, the Group has applied to allocate the consideration in the contract to each lease component on the basis of its relative stand-alone prices at commencement or on modification of a contract that contains a lease component.

The Group recognizes a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred 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.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlying asset to the Group by the end of the lease term or the cost of the right-of-use asset reflects that the Group will exercise a purchase option. In that case the right-of-use asset will be depreciated over the useful life of the underlying asset, which is determined on the same basis as those of property and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group's incremental borrowing rate. Generally, the Group uses its incremental borrowing rate as the discount rate.

The Group determines its incremental borrowing rate by obtaining interest rates from various external financing sources and makes certain adjustments to reflect the terms of the lease and type of the asset leased.

4. Material Accounting Policies, Continued

(j) Leases, continued

Lease payments included in the measurement of the lease liability comprise the following:

- fixed payments, including in-substance fixed payments;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable under a residual value guarantee; and
- the exercise price under a purchase option that the Group is reasonably certain to exercise, lease payments in an optional renewal period if the Group is reasonably certain to exercise an extension option, and penalties for early termination of a lease unless the Group is reasonably certain not to terminate early.

The lease liability is measured at amortized cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, if the Group changes its assessment of whether it will exercise a purchase, extension or termination option or if there is a revised in-substance fixed lease payment.

When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

The Group presents right-of-use assets that do not meet the definition of investment property in 'property, plant and equipment' and lease liabilities in 'loans and borrowings' in the statement of financial position.

Short-term leases and leases of low-value assets

The Group has elected not to recognize right-of-use assets and lease liabilities for leases of low-value assets and short-term leases, such as IT equipment. The Group recognizes the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

ii. As a lessor

At inception or on modification of a contract that contains a lease component, the Group allocates the consideration in the contract to each lease component on the basis of their relative standalone prices.

When the Group acts as a lessor, it determines at lease inception whether each lease is a finance lease or an operating lease.

To classify each lease, the Group makes an overall assessment of whether the lease transfers substantially all of the risks and rewards incidental to ownership of the underlying asset. If this is the case, then the lease is a finance lease; if not, then it is an operating lease. As part of this assessment, the Group considers certain indicators such as whether the lease is for a major part of the economic life of the asset.

When the Group is an intermediate lessor, it accounts for its interests in the head lease and the sub-lease separately. It assesses the lease classification of a sub-lease with reference to the right-of-use asset arising from the head lease, not with reference to the underlying asset. If a head lease is a short-term lease to which the Group applies the exemption described above, then it classifies the sub-lease as an operating lease.

4. Material Accounting Policies, Continued

(j) Leases, continued

If an arrangement contains lease and non-lease components, then the Group applies K-IFRS No.1115 to allocate the consideration in the contract.

The Group applies the derecognition and impairment requirements in K-IFRS No.1109 to the net investment in the lease. The Group further regularly reviews estimated unguaranteed residual values used in calculating the gross investment in the lease.

The Group recognizes lease payments received under operating leases as income on a straight-line basis over the lease term as part of 'revenue by rendering of services and others'.

(k) Intangible assets

Intangible assets are measured initially at cost and, subsequently, are carried at cost less accumulated amortization and accumulated impairment losses.

Amortization of intangible assets is calculated on a straight-line basis over the estimated useful lives of intangible assets from the date that they are available for use. The residual value of intangible assets is zero.

The estimated useful lives are as follows:

	Useful lives (years)
Software	4 ~ 5
Other intangible assets	4 ~ 40

Amortization periods and the amortization methods for intangible assets with finite useful lives are reviewed at the end of each reporting period. If it is appropriate to change, such a change is accounted for as a change in an accounting estimate.

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognized in profit or loss as incurred.

(l) Government Grants

Government grants are recognized initially as deferred revenue at fair value only when there is reasonable assurance that they will be received and the Group will comply with the conditions associated with the grant. Grants that compensate the Group for expenses incurred are recognized in profit or loss as other income on a systematic basis over the useful life of the asset.

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4. Material Accounting Policies, Continued

(m) Investment Property

Property held for the purpose of earning rentals or benefiting from capital appreciation is classified as investment property. Investment property is initially measured at its cost. Transaction costs are included in the initial measurement. Subsequently, investment property is carried at depreciated cost less any accumulated impairment losses.

Subsequent costs are recognized in the carrying amount of investment property at cost or, if appropriate, as separate items if it is probable that future economic benefits associated with the items will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. The costs of the day-to-day servicing are recognized in profit or loss as incurred.

Investment property, except for land, is depreciated on a straight-line basis over respective estimated useful lives of 10 ~ 45 years.

Depreciation methods, useful lives and residual values are reviewed at the end of each reporting date and adjusted, if appropriate. The change is accounted for as a change in an accounting estimate.

(n) Impairment of Non-financial Assets

The carrying amounts of the Group's non-financial assets, other than assets arising from retirement benefits, inventories, deferred tax assets and non-current assets held for sale, are reviewed at the end of the reporting period to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. Goodwill, irrespective of whether there is any indication of impairment, are tested for impairment annually by comparing their recoverable amount to their carrying amount.

The Group estimates the recoverable amount of an individual asset. However, if it is impossible to measure the individual recoverable amount of an asset, then the Group estimates the recoverable amount of each cash-generating unit ("CGU"). A CGU is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or group of assets. The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. Value in use is based on the estimated future cash flows, discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU.

An impairment loss is recognized if the carrying amount of an asset or a CGU exceeds its recoverable amount. Impairment losses are recognized in profit or loss.

An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

4. Material Accounting Policies, Continued

(o) Non-Current Assets Held for Sale

The Group classifies a non-current asset (or disposal group) as held for sale if its carrying amount is recovered principally through a sale transaction rather than through continuing use. For this to be the case, the asset (or disposal group) must be available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such assets (or disposal groups) and its sale must be highly probable. The Group measures a non-current asset (or disposal group) classified as held for sale at the lower of its carrying amount and fair value less costs to sell. If impairment loss for any initial or subsequent write-down of the asset (or disposal group) to fair value less costs to sell occurs, an impairment loss is recognized immediately in profit or loss. When reversal of an impairment loss is recognized, it can be also recognized in profit or loss to the extent that an accumulated impairment loss on the same asset was previously recognized in profit or loss.

Non-current asset or disposal group classified as held for sale are not depreciated.

(p) Non-derivative Financial Liabilities

The Group classifies non-derivative financial liabilities into financial liabilities at fair value through profit or loss or financial liabilities at amortized cost in accordance with the substance of the contractual arrangement and the definitions of financial liabilities. The Group recognizes financial liabilities in the consolidated statement of financial position when the Group becomes a party to the contractual provisions of the financial liability.

Financial liabilities at fair value through profit or loss
Financial liabilities at fair value through profit or loss include financial liabilities held for trading or designated as such upon initial recognition. Subsequent to initial recognition, financial liabilities at fair value through profit or loss are measured at fair value, and changes therein are recognized in profit or loss. The amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of that liability shall be presented in other comprehensive income. Upon initial recognition, transaction costs that are directly attributable to the acquisition are recognized in profit or loss as incurred.

Financial liabilities at amortized cost
Non-derivative financial liabilities other than financial liabilities at fair value through profit or loss are classified as financial liabilities at amortized cost. At the date of initial recognition, financial liabilities at amortized cost are measured at fair value minus transaction costs that are directly attributable to the issuance. Subsequent to initial recognition, financial liabilities at amortized cost are measured at amortized cost using the effective interest method.

Derecognition of financial liabilities
The Group removes a financial liability from its statement of financial position only when the obligation specified in the contract is discharged or cancelled or expires. If the contractual term is changed and the cash flow becomes substantially changed, the Group extinguishes the original financial liability and recognizes a new financial liability. The difference between the carrying amount of a financial liability extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognized in profit or loss.

4. Material Accounting Policies, Continued

(q) Employee Benefits

Short-term employee benefits
Short-term employee benefits are employee benefits that are due to be settled within 12 months after the end of the period in which the employees render the related service. When an employee has rendered service to the Group during an accounting period, the Group recognizes the undiscounted amount of short-term employee benefits expected to be paid in exchange for that service as profit or loss.

Other long-term Employee Benefits
The Group's net obligation in respect of other long-term employee benefits is the amount of future benefit that employees have earned in return for their service in the current and prior periods. That benefit is discounted to determine its present value. Remeasurements are recognized in profit or loss in the period in which they arise.

Retirement benefits: defined contribution plans
When an employee has rendered service to the Group during a period, the Group recognizes the contribution payable to a defined contribution plan in exchange for that service as a liability (accrued expense), after deducting any contribution already paid. If the contribution already paid exceeds the contribution due for service before the end of the reporting period, the Group recognizes that excess as an asset (prepaid expense) to the extent that the prepayment will lead to a reduction in future payments or a cash refund.

Retirement benefits: defined benefit plans
The Group's net obligation in respect of defined benefit plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in the current and prior periods, discounting that amount and deducting the fair value of any plan assets.

The calculation of defined benefit obligations is performed annually by a qualified actuary using the projected unit credit method. When the calculation results in a potential asset for the Group, the recognized asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan. To calculate the present value of economic benefits, consideration is given to any applicable minimum funding requirements.

Remeasurements of the net defined benefit liability, which comprise actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest), are recognized immediately in other comprehensive income and retained earnings. The Group determines the net interest expense (income) on the net defined benefit liability (asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the then-net defined benefit liability (asset), taking into account any changes in the defined benefit liability (asset) during the period as a result of contributions and benefit payments. Net interest expense and other expenses related to defined benefit plans are recognized in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailments is recognized immediately in profit or loss. The Group recognizes gains and losses on the settlement of a defined benefit plan when the settlement occurs.

4. Material Accounting Policies, Continued

(r) Provisions

Provisions are recognized when the Group has a present legal or constructive 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.

The risks and uncertainties that inevitably surround many events and circumstances are taken into account in reaching the best estimate of a provision. Where the effect of the time value of money is material, provisions are determined at the present value of the expected future cash flows.

When some or all of the expenditures required to settle a provision are expected to be reimbursed by another party, the reimbursement is recognized when, and only when, it is virtually certain that reimbursement will be received if the entity settles the obligation. The reimbursement is treated as a separate asset.

Provisions are reviewed at the end of each reporting period and adjusted to reflect the current best estimates. If it is no longer probable that an outflow of resources embodying economic benefits will be required to settle the obligation, the provision is reversed.

The provision is used only for expenditures related to initial recognition.

(s) Emission Rights

Greenhouse gases emission right
Greenhouse Gases Emission Right consists of emission allowances which are allocated from the government free of charge or purchased from the market. The cost includes any directly attributable costs incurred during the normal course of business.

Emission rights held for the purpose of performing the obligation are classified as intangible asset and are initially measured at cost and subsequent to initial recognition, are carried at cost less accumulated impairment losses. Emission rights held for short-swing profits are classified as current asset and are measured at fair value with any changes in fair value recognized as profit or loss in the respective reporting period.

The Group derecognizes an emission right asset when the emission allowance is unusable, disposed or submitted to government in which the future economic benefits are no longer expected to be probable.

Emission liability
Emission liability is a present obligation of submitting emission rights to the government with regard to emission of greenhouse gas. Emission liability is recognized when there is a probable outflow of resources in performing the obligation and the costs required to perform the obligation are reliably estimable. The emission liability is measured based on the expected quantity of emission for the performing period in excess of emission allowance in possession, and the unit price for such emission rights in the market as of the end of the reporting period. The Group derecognizes emission liability when emission rights are submitted to the government.

4. Material Accounting Policies, Continued

(t) Foreign Currencies

Foreign currency transactions
Transactions in foreign currencies are translated to the respective functional currencies of Group entities at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are retranslated to the functional currency using the reporting date's exchange rate. Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined.

Foreign exchange differences from translation of monetary items are recognized in profit or loss, except for a financial liability designated as a hedge of the net investment in a foreign operation, or qualifying cash flow hedges, which are recognized in other comprehensive income. When gains or losses on non-monetary items are recognized in other comprehensive income, exchange components of those gains or losses are recognized in other comprehensive income. Conversely, when gains or losses on non-monetary items are recognized in profit or loss, exchange components of those gains or losses are recognized in profit or loss.

Foreign operations
If the presentation currency of the Group is different from a foreign operation's functional currency, the financial statements of the foreign operation are translated into the presentation currency using the following methods:

The assets and liabilities of foreign operations, whose functional currency is not the currency of a hyperinflationary economy, are translated to presentation currency at exchange rates at the reporting date. The income and expenses of foreign operations are translated to functional currency at exchange rates at the dates of the transactions. Foreign currency differences are recognized in other comprehensive income.

When a foreign operation is disposed of, the relevant amount in the translation is transferred to profit or loss as part of the profit or loss on disposal. On the partial disposal of a subsidiary that includes a foreign operation, the relevant proportion of such cumulative amount is reattributed to non-controlling interest. In any other partial disposal of a foreign operation, the relevant proportion is reclassified to profit or loss.

4. Material Accounting Policies, Continued

(u) Equity Capital

Common shares are classified as equity. Incremental costs directly attributable to the issuance of common shares and share options are recognized as a deduction from equity, net of any tax effects.

(v) Revenue from Contracts with Customers

Revenue from the sale of goods, rendering of services or use of the Group assets is measured at the fair value of the consideration received or receivable, net of returns, trade discounts and volume rebates. There are five steps to recognize revenue from every contract: 1) identifying the contract, 2) identifying performance obligations, 3) determining the transaction price, 4) allocating the transaction price to performance obligations, and 5) recognizing revenue when the performance obligation is satisfied.

Sales of petroleum and petrochemical products
The Group produces and sells petroleum, petrochemical and lubricants products by refining crude oil, naphtha, etc. Revenue is recognized when customers obtain control of the products which is generally when the products are delivered.

For certain sales transactions for which the customer bears the shipping costs, the customer obtains control of the goods upon shipment, and the Group only arranges for the goods to be delivered to the customer. In such cases, the Group is acting as an agent for the shipping activities and, hence, the revenue related to the shipping activities is recognized on a net basis.

Customer loyalty program
For sales of goods and services under the GS & Point Program, the consideration received or receivable is allocated between award credits ("GS & Points") and other revenue based on the relative stand-alone selling prices of the sale. The amount allocated to the loyalty program is deferred, and is recognized as revenue when loyalty points are redeemed or the likelihood of the customer redeeming the loyalty points becomes remote.

(w) Finance Income and Finance Costs

Finance income comprises interest income, dividend income, gains on disposal of financial assets, changes in fair value of financial assets at FVTPL, and gains on hedging instruments that are recognized in profit or loss. Interest income is recognized as it accrues in profit or loss, using the effective interest method. Dividend income is recognized in profit or loss on the date that the Group's right to receive dividend is established.

Finance costs comprises interest expense on borrowings, unwinding of the discount on provisions, loss on disposal of financial assets, changes in fair value of financial assets at FVTPL, impairment losses recognized on financial assets, and losses on hedging instruments that are recognized in profit or loss. Borrowing costs that are not directly attributable to the acquisition, construction or production of a qualifying asset are recognized in profit or loss using the effective interest method.

4. Material Accounting Policies, Continued

(x) Income Taxes

Income tax expense comprises current and deferred tax. Current tax and deferred tax are recognized in profit or loss except to the extent that it relates to a business combination, or items recognized directly in equity or in other comprehensive income.

Current tax

Current tax is the expected tax payable or receivable on the taxable profit or loss for the year, using tax rates enacted or substantively enacted at the end of the reporting period and any adjustment to tax payable in respect of previous years. The taxable profit is different from the accounting profit (loss) for the period since the taxable profit is calculated excluding the temporary differences, which will be taxable or deductible in determining taxable profit (tax loss) of future periods, and non-taxable or non-deductible items from the accounting profit (loss).

Deferred tax

Deferred tax is recognized, using the asset-liability method, in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The Group recognizes a deferred tax liability for all taxable temporary differences associated with investments in subsidiaries, associates, and interests in joint ventures, except to the extent that the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. The Group recognizes a deferred tax asset for all deductible temporary differences arising from investments in subsidiaries and associates, to the extent that it is probable that the temporary difference will reverse in the foreseeable future and taxable profit will be available against which the temporary difference can be utilized.

The carrying amount of a deferred tax asset is reviewed at the end of each reporting period and the Group reduces the carrying amount to the extent that it is no longer probable that sufficient taxable profit will be available to allow the benefit of part or all of that deferred tax asset to be utilized.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and deferred tax assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset only if there is a legally enforceable right to offset the related current tax liabilities and assets, and they relate to income taxes levied by the same tax authority and they intend to settle current tax liabilities and assets on a net basis. Income tax applicable to dividend payments is recognized when the dividend payable is recognized.

Global minimum top-up tax

The Group has determined that global minimum top-up tax which it is required to pay under Pillar Two legislation is an income tax in the scope of K-IFRS No. 1012, Income Taxes. The Group has applied a temporary mandatory relief from deferred tax accounting for the impacts of the global minimum top-up tax and accounts for it as a current tax when it is incurred.

December 31, 2024 and 2023

4. Material Accounting Policies, Continued

(y) New Standards or Amendments Not Yet Adopted

A number of new standards are effective for annual periods beginning after January 1, 2024 and earlier application is permitted; however, the Group has not early adopted the new or amended standards in preparing these consolidated financial statements.

The following amended standards and interpretations are not expected to have a significant impact on the Group's consolidated financial statements;

- Lack of Exchangeability (Amendments to K-IFRS No. 1021, *'The Effects of Changes in Foreign Exchange Rates'*)
- Classification and Measurement of Financial Instruments (Amendments to K-IFRS No. 1107, *'Financial Instruments : Disclosures' and* K-IFRS No. 1109, *'Financial Instruments')*

5. Operating Segments, Customer and Geographic Information

(a) The Group has three reportable segments – Petroleum refining, Lubricants, and Petrochemicals. The Petroleum refining segment produces petroleum products and raw materials of petrochemicals which are essential to human living. Based on naphtha, gas oil or natural gas is produced from refinery complexes. The Lubricants segment produces lubricants and base oils which are raw materials of lubricants. The Petrochemicals segment produces olefin products and aromatic products through high temperature decomposition or catalytic reaction processes and uses such products to produce synthetic rubber, synthetic fiber raw materials, synthetic detergents and chemicals.

(b) Segment results for the year ended December 31, 2024 are as follows:

		Won (million)			
		Petroleum refining	Lubricants	Petrochemicals	Total
Total sales	₩	59,716,178	2,136,934	8,085,881	69,938,993
Inter-segment sales		(21,913,331)	(225,757)	(185,659)	(22,324,747)
Sales from external customers	₩	37,802,847	1,911,177	7,900,222	47,614,246
Depreciation and amortization		713,381	30,736	243,385	987,502
Operating profit (loss)	₩	(18,582)	484,537	82,087	548,042

Segment results for the year ended December 31, 2023 are as follows:

		Won (million)			
		Petroleum refining	Lubricants	Petrochemicals	Total
Total sales	₩	63,090,691	2,153,336	7,870,884	73,114,911
Inter-segment sales		(24,193,771)	(102,577)	(211,017)	(24,507,365)
Sales from external customers	₩	38,896,920	2,050,759	7,659,867	48,607,546
Depreciation and amortization		771,542	35,369	252,940	1,059,851
Operating profit	₩	880,275	465,013	338,504	1,683,792

December 31, 2024 and 2023

5. Operating Segments, Customer and Geographic Information, Continued

(c) Measurement

The accounting policies applied for segment information are the same as the material accounting policies described in notes 4. The Group's chief operating decision maker evaluates segment results based on operating profit determined under K-IFRS.

Segment assets and liabilities are not reported to the chief operating decision maker, and therefore are not disclosed.

(d) Geographical and customer information

The Group mainly operates in three geographical areas, the Republic of Korea (where the Parent Company domiciles), Singapore and China. The geographical information of sales is presented based on the geographical locations of the selling entities.

Details by geographical sales for the years ended December 31, 2024 and 2023 are summarized as follows:

		Won (millions)	
Country		2024	2023
Korea	₩	35,092,358	34,782,887
Singapore		11,936,366	13,274,627
China		262,188	245,909
Others		323,334	304,123
	₩	47,614,246	48,607,546

Details by geographical non-current assets (*) as of December 31, 2024 and 2023 are summarized as follows:

		Won (millions)	
Country		2024	2023
Korea	₩	10,954,936	11,411,697
Singapore		1,060	1,014
China		21,084	17,963
Others		46,576	44,747
	₩	11,023,656	11,475,421

(*) For the purpose of geographic information reporting, financial instruments, investments in associates, and deferred income tax assets are excluded.

(e) Except for the related parties described in note 23, there is no customer that accounts for more than 10% of the Group's sales for each of the years ended December 31, 2024 and 2023.

6. Cash and Cash Equivalents

Cash and cash equivalents as of December 31, 2024 and 2023 are summarized as follows:

	Won (millions)	
	2024	2023
Cash on hand	₩ 76	47
Deposits and others	1,276,052	1,265,079
	₩ 1,276,128	1,265,126

7. Financial Instruments

7.1 Financial Assets

Details of financial assets as of December 31, 2024 are summarized as follows:

	Won (millions)			
	Financial assets at FVTPL	Financial assets at amortized cost	Financial assets at FVOCI	Fair value-hedging instrument
Cash and cash equivalents	₩ -	1,276,128	-	-
Accounts and notes receivable	-	3,697,650	-	-
Allowance for doubtful accounts	-	(16,346)	-	-
Short-term financial assets	5,600	213,986	-	94,290
Allowance for doubtful accounts	-	(672)	-	-
Present value discounts	-	(4,088)	-	-
Total current financial assets	5,600	5,166,658	-	94,290
Long-term financial assets	31,108	172,226	68,759	103,604
Allowance for doubtful accounts	-	(28,478)	-	-
Present value discounts	-	(3,204)	-	-
Total non-current financial assets	31,108	140,544	68,759	103,604
	₩ 36,708	5,307,202	68,759	197,894

The book value of financial assets measured at amortized cost approximates their fair value.

December 31, 2024 and 2023

7. Financial Instruments, Continued

7.1 Financial Assets, Continued

Details of financial assets as of December 31, 2023 are summarized as follows:

		Won (millions)			
		Financial assets at FVTPL	Financial assets at amortized cost	Financial assets at FVOCI	Fair value-hedging instrument
Cash and cash equivalents	₩	-	1,265,126	-	-
Accounts and notes receivable		-	3,938,638	-	-
Allowance for doubtful accounts		-	(25,911)	-	-
Short-term financial assets		18,638	188,850	-	92,504
Allowance for doubtful accounts		-	(544)	-	-
Present value discounts		-	(1,917)	-	-
Total current financial assets		18,638	5,364,242	-	92,504
Long-term financial assets		31,205	180,606	68,481	36,091
Allowance for doubtful accounts		-	(28,436)	-	-
Present value discounts		-	(3,042)	-	-
Total non-current financial assets		31,205	149,128	68,481	36,091
	₩	49,843	5,513,370	68,481	128,595

The book value of financial assets measured at amortized cost approximates their fair value.

December 31, 2024 and 2023

7. Financial Instruments, Continued

7.1 Financial Assets, Continued

Details of financial assets which are restricted in use mainly due to being provided as collateral for borrowings as of December 31, 2024 are summarized as follows:

Accounts	Financial instruments	Bank	Restriction	Won (millions) Amount
Long-term financial assets	Deposit for opening checking accounts	Shinhan Bank and 7 others	Restriction on cash withdrawals	₩ 26

7.2 Financial Liabilities

Details of financial liabilities as of December 31, 2024 are summarized as follows:

	Won (millions)		
	Financial liabilities at FVTPL	Financial liabilities at amortized cost	Fair value-hedging instrument
Accounts payable-trade	₩ -	2,998,617	-
Short-term financial liabilities	44,879	2,669,793	52
Present value discounts	-	(3,555)	-
Total current financial liabilities	44,879	5,664,855	52
Long-term financial liabilities	-	3,231,591	-
Present value discounts	-	(109,014)	-
Total non-current financial liabilities	-	3,122,577	-
	₩ 44,879	8,787,432	52

The book value of financial liabilities measured at amortized cost approximates their fair value.

December 31, 2024 and 2023

7. Financial Instruments, Continued

7.2 Financial Liabilities, Continued

Details of financial liabilities as of December 31, 2023 are summarized as follows:

		Won (millions)		
		Financial liabilities at FVTPL	Financial liabilities at amortized cost	Fair value-hedging instrument
Accounts payable-trade	₩	-	2,831,833	-
Short-term financial liabilities		7,096	2,927,634	591
Present value discounts		-	(3,632)	-
Total current financial liabilities		7,096	5,755,835	591
Long-term financial liabilities		-	3,653,266	25,186
Present value discounts		-	(120,950)	-
Total non-current financial liabilities		-	3,532,316	25,186
	₩	7,096	9,288,151	25,777

The book value of financial liabilities measured at amortized cost approximates their fair value.

The Group participates in a supplier finance arrangement under which its suppliers may elect to receive early payment of their invoices from the bank. Under the arrangement, the bank agrees to pay amounts due to participating suppliers in respect of invoices owed by the Group, and the Group repays the bank at a later date including interest expenses.

The repayments under the supplier finance arrangement are presented as cash flows from financing activities, and the summary quantitative information about the Group's supplier finance arrangements as of December 31, 2024 are summarized as follows:

		Won (millions)
Carrying amount of financial liabilities		
Presented within Short-term financial liabilities	₩	245,577
− of which suppliers have received payment from the bank		245,577
Range of payment due dates		
Liabilities subject to supplier finance arrangement		80 ~ 110 days after shipping date
Comparable accounts payable that are not part of the arrangement		30 ~ 60 days after shipping date

Non-cash changes

There are no significant non-cash changes in the carrying amounts of the financial liabilities subject to supplier finance agreements.

7. Financial Instruments, Continued

7.3 Finance Income

Details of finance income for the years ended December 31, 2024 and 2023 are summarized as follows:

		Won (millions)	
		2024	2023
Interest income (*)	₩	42,097	56,122
Dividends income		700	1,538
Gain on disposal of financial assets at FVTPL		63	59
Gain on valuation of derivative instruments		178,918	52,424
Gain on transaction of derivative instruments		108,833	132,332
Foreign currency transaction gain		1,944,718	3,695,412
Foreign currency translation gain		178,737	89,047
	₩	2,454,066	4,026,934

(*) Interest income recognized as a result of present value adjustment using the effective interest method on financial assets is ₩3,549 million and ₩3,174 million, respectively, for the years ended December 31, 2024 and 2023.

7.4 Finance Costs

Details of finance costs for the years ended December 31, 2024 and 2023 are summarized as follows:

		Won (millions)	
		2024	2023
Interest expense (*)	₩	220,729	262,377
Loss on valuation of derivative instruments		33,235	7,951
Loss on transaction of derivative instruments		167,983	114,598
Foreign currency transaction loss		2,034,160	3,743,255
Foreign currency translation loss		463,888	105,556
Others		2,386	837
	₩	2,922,381	4,234,574

(*) Interest expense recognized as a result of present value adjustment using the effective interest method on financial liabilities is ₩35,097 million and ₩46,777 million, respectively, for the years ended December 31, 2024 and 2023.

December 31, 2024 and 2023

7. Financial Instruments, Continued

7.5 Income and Loss by Financial Instrument Category

Details of income and loss by financial instrument category for the year ended December 31, 2024 are as follows:

	Won (millions)								
	Financial assets					Financial liabilities			
	Financial assets at FVTPL	Financial assets at amortized cost	Financial assets at FVOCI	Fair value-hedging instrument	Total	Financial liabilities at FVTPL	Financial liabilities at amortized cost	Fair value-hedging instrument	Total
Interest income (expense)	₩ -	42,097	-	-	42,097	-	(220,729)	-	(220,729)
Dividends income	-	-	700	-	700	-	-	-	-
Foreign currency translation gain (loss), net	-	64,676	-	-	64,676	-	(349,827)	-	(349,827)
Gain (Loss) on valuation of derivative instruments, net	-	-	-	178,918	178,918	(33,235)	-	-	(33,235)

Details of income and loss by financial instrument category for the year ended December 31, 2023 are as follows:

	Won (millions)								
	Financial assets					Financial liabilities			
	Financial assets at FVTPL	Financial assets at amortized cost	Financial assets at FVOCI	Fair value-hedging instrument	Total	Financial liabilities at FVTPL	Financial liabilities at amortized cost	Fair value-hedging instrument	Total
Interest income (expense)	₩ -	56,122	-	-	56,122	-	(262,377)	-	(262,377)
Dividends income	-	-	1,538	-	1,538	-	-	-	-
Foreign currency translation gain (loss), net	-	(27,793)	-	-	(27,793)	(280)	11,564	-	11,284
Gain (Loss) on valuation of derivative instruments, net	12,204	-	-	40,220	52,424	(3,601)	-	(4,350)	(7,951)

December 31, 2024 and 2023

7. Financial Instruments, Continued

7.6 Derivative Instruments and Hedge Accounting

(a) Details of the valuation gain (loss) and other comprehensive income (loss) of derivative instruments for the year ended December 31, 2024 are summarized as follows:

		Won (millions)			
		Book value	Other comprehensive income (loss)	Finance income (cost), net	Other costs, net
Held for trading	Commodity derivatives	₩ (6,044)	(235)	-	(5,809)
	Foreign exchange swap	(33,235)	-	(33,235)	-
Cash flow hedge (*)	Currency swap	192,796	2,220	178,918	-
	Currency forward	5,046	3,720	-	-

(*) The effective portion of changes in the fair value of currency swaps and currency forwards, net of tax, is recognized as accumulated other comprehensive income (loss). The Group recognized ₩5,940 million as other comprehensive income for the year ended December 31, 2024.

December 31, 2024 and 2023

7. Financial Instruments, Continued

7.6 Derivative Instruments and Hedge Accounting, Continued

(b) Currency swaps

The Group entered into currency swap contracts to hedge against foreign exchange risks of foreign currency denominated bonds and long-term borrowings. Details of the contracts as of December 31, 2024 are as follows:

				Contract amount		
Derivatives	Contractor	Effective date	Expiration date	Buy (thousand USD)		Sell (million Won)
Currency Swaps	Korea Development Bank	Jul. 16, 2019	Jul. 16, 2026	USD 8,750	₩	10,325
		Nov. 29, 2019	Jul. 16, 2026	7,000		8,225
		Mar. 03, 2020	Mar. 04, 2027	19,688		23,631
		Sep. 03, 2020	Sep. 03, 2027	31,625		37,514
		Jun. 28, 2021	Jun. 28, 2028	23,625		26,668
	Kookmin Bank and 2 other banks	Jul. 27, 2020	Jul. 27, 2025	100,000		120,370
		Jul. 27, 2020	Jul. 28, 2025	100,000		120,370
		Jul. 27, 2020	Jul. 28, 2025	100,000		119,810
	Kookmin Bank	Jul. 11, 2022	Jan. 05, 2026	300,000		390,180
	Korea Development Bank	Aug. 07, 2023	Aug. 07, 2028	100,000		133,800
	And 2 other banks	Aug. 07, 2023	Aug. 07, 2028	100,000		133,800
		Aug. 07, 2023	Aug. 07, 2028	100,000		133,800

Valuation gains and losses from the above currency swap contracts are recognized in other comprehensive income (loss) as permitted under cash flow hedge accounting.

The Group also entered into foreign exchange swap contracts to hedge against foreign exchange risks of USD denominated short-term borrowings and acceptances payable to banks. As of December 31, 2024, the Group has 2 foreign exchange swap contracts outstanding to buy USD 100 million and 15 foreign exchange swap contracts outstanding to sell USD 610 million. The Group does not apply hedge accounting to the swaps and, accordingly, changes in the fair value of these contracts are reflected in the consolidated statements of income.

(c) Commodity derivatives

The Group entered into forward contracts such as differential swaps to hedge against fluctuations in crude oil and petroleum product prices. As of December 31, 2024 the Group has 151 commodity swap contracts outstanding to buy 2,210,000 barrels of oil, 112 commodity swap contracts outstanding to sell 1,970,000 barrels of oil. The Group does not apply hedge accounting to these derivatives and accordingly, changes in the fair value of these contracts are reflected in the consolidated statements of income.

December 31, 2024 and 2023

7. Financial Instruments, Continued

7.7 Fair Value

(a) Assumptions used for determining fair value of financial assets and liabilities

Fair value of financial instruments traded in an active market with standardized transaction terms and conditions is determined by the listed market price.

When estimating fair value of financial instruments which are not traded in an active market, the Group uses valuation techniques commonly used by market participants and entity-specific inputs for pricing.

The fair value of financial instruments is determined based on the following assumptions:

The fair value of derivatives is based on their listed market price, if available. If a listed market price is not available, then fair value is estimated by discounted cash flows using a yield curve.

The fair value of financial assets measured at amortized cost is determined by the present value of future cash flows, which is discounted according to either the internal rate of return, the weighted average borrowing rate, or the national bond rate at the reporting date depending on the characteristics of transaction. The book value of current financial assets measured at amortized cost approximates their fair value.

(b) Interest rate used for determining fair value

Interest rates used to discounting estimated cash flows as of December 31, 2024 and 2023 are summarized as follows:

	December 31, 2024	December 31, 2023
Long-term loans	2.14% ~ 6.51%	2.14% ~ 6.51%
Deposits	0.84% ~ 3.53%	0.84% ~ 2.65%

December 31, 2024 and 2023

7. Financial Instruments, Continued

7.7 Fair Value, Continued

(c) The fair value measurements classified by fair value hierarchy as of December 31, 2024 are as follows:

	Won (millions)				
	Fair value (*)			Book value
	Level 1	Level 2	Level 3	
Financial assets:				
Financial assets at FVTPL	₩ -	5,600	31,108	36,708
Financial assets at FVOCI	19,451	-	49,308	68,759
Fair value-hedging instrument	-	197,894	-	197,894
Financial liabilities:				
Financial liabilities at FVTPL	₩ -	44,879	-	44,879
Fair value-hedging instrument	-	52	-	52

The fair value measurements classified by fair value hierarchy as of December 31, 2023 are as follows:

	Won (millions)				
	Fair value (*)			Book value
	Level 1	Level 2	Level 3	
Financial assets:				
Financial assets at FVTPL	₩ -	18,638	31,205	49,843
Financial assets at FVOCI	16,040	-	52,441	68,481
Fair value-hedging instrument	-	128,595	-	128,595
Financial liabilities:				
Financial liabilities at FVTPL	₩ -	7,096	-	7,096
Fair value-hedging instrument	-	25,777	-	25,777

(*) Financial assets and liabilities carried at fair value by each hierarchy based on the inputs used in the valuation techniques are defined as follows:

— Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities
— Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices)
— Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs)

December 31, 2024 and 2023

8. Inventories

(a) Inventories as of December 31, 2024 and 2023 are summarized as follows:

		Won (millions)	
		2024	2023
Merchandise goods	₩	63,241	71,147
Finished goods		1,521,175	1,507,092
Work-in-process		595,338	615,913
Raw materials		1,046,447	1,233,222
Goods in transit		1,779,683	2,226,663
Supplies		106,695	111,842
Others		820	543
		5,113,399	5,766,422
Provision for losses on valuation of inventories		(18,355)	(7,417)
	₩	5,095,044	5,759,005

(b) ₩10,938 million of an increase in provision for losses on valuation of inventories was charged to profit or loss for the year ended December 31, 2024 and ₩125,657 million of a decrease in provision for losses on valuation of inventories was credited to profit or loss for the year ended December 31, 2023.

December 31, 2024 and 2023

9. Property, Plant and Equipment (PP&E)

(a) Changes in property, plant and equipment for the year ended December 31, 2024 are summarized as follows:

	Won (millions)							
	Land	Buildings	Structures	Machinery	Others	Right-of-use assets	Construction-in-progress	Total
Cost:								
Balance at January 1, 2024	**₩ 2,459,224**	**900,612**	**3,350,335**	**10,334,930**	**849,678**	**1,510,271**	**472,936**	**19,877,986**
Additions	-	44	777	1,751	18,235	-	578,625	599,432
Disposals and other	(52,591)	(15,103)	(20,344)	(78,876)	(28,897)	-	(102)	(195,913)
Others	(8,383)	33,043	51,948	332,157	47,851	(213,403)	(511,656)	(268,443)
Balance at December 31, 2024	**₩ 2,398,250**	**918,596**	**3,382,716**	**10,589,962**	**886,867**	**1,296,868**	**539,803**	**20,013,062**
Accumulated depreciation:								
Balance at January 1, 2024	**₩ -**	**370,070**	**1,825,372**	**4,980,711**	**653,911**	**772,650**	**-**	**8,602,714**
Depreciation	-	24,316	130,615	572,814	62,296	170,664	-	960,705
Disposals and other	-	(11,140)	(14,984)	(75,475)	(26,994)	-	-	(128,593)
Others	-	1,954	(590)	4,490	1,142	(263,384)	-	(256,388)
Balance at December 31, 2024	**₩ -**	**385,200**	**1,940,413**	**5,482,540**	**690,355**	**679,930**	**-**	**9,178,438**
Carrying amount:								
Balance at January 1, 2024	**₩ 2,459,224**	**530,542**	**1,524,963**	**5,354,219**	**195,767**	**737,621**	**472,936**	**11,275,272**
Balance at December 31, 2024	**₩ 2,398,250**	**533,396**	**1,442,303**	**5,107,422**	**196,512**	**616,938**	**539,803**	**10,834,624**

December 31, 2024 and 2023

9. Property, Plant and Equipment (PP&E), Continued

(b) Changes in property, plant and equipment for the year ended December 31, 2023 are summarized as follows:

	Won (millions)							
	Land	Buildings	Structures	Machinery	Others	Right-of-use assets	Construction-in-progress	Total
Cost:								
Balance at January 1, 2023	**₩ 2,498,521**	**904,239**	**3,336,623**	**10,217,344**	**826,000**	**1,761,553**	**331,535**	**19,875,815**
Additions	-	25	830	2,285	14,479	-	517,804	535,423
Disposals and other	(34,767)	(13,110)	(18,352)	(156,732)	(31,737)	-	-	(254,698)
Others	(4,530)	9,458	31,234	272,033	40,936	(251,282)	(376,403)	(278,554)
Balance at December 31, 2023	**₩ 2,459,224**	**900,612**	**3,350,335**	**10,334,930**	**849,678**	**1,510,271**	**472,936**	**19,877,986**
Accumulated depreciation:								
Balance at January 1, 2023	**₩ -**	**353,616**	**1,709,968**	**4,558,010**	**623,719**	**650,854**	**-**	**7,896,167**
Depreciation	-	24,401	129,914	572,077	61,460	247,671	-	1,035,523
Disposals and other	-	(8,132)	(14,510)	(149,761)	(31,344)	-	-	(203,747)
Others	-	185	-	385	76	(125,875)	-	(125,229)
Balance at December 31, 2023	**₩ -**	**370,070**	**1,825,372**	**4,980,711**	**653,911**	**772,650**	**-**	**8,602,714**
Carrying amount:								
Balance at January 1, 2023	**₩ 2,498,521**	**550,623**	**1,626,655**	**5,659,334**	**202,281**	**1,110,699**	**331,535**	**11,979,648**
Balance at December 31, 2023	**₩ 2,459,224**	**530,542**	**1,524,963**	**5,354,219**	**195,767**	**737,621**	**472,936**	**11,275,272**

(c) The following assets are pledged as collateral for the Group's borrowings as of December 31, 2024:

Asset	Collateral provider	Won (millions) Book value	Pledged amount	Lender
Land, Buildings, Machinery and Equipment	GS Mbiz Co., Ltd.	₩ 19,179	6,000	Shinhan Bank
		5,855	18,000	Korea Development Bank
	GS Ecometal Co., Ltd.	26,156	18,000	Korea Development Bank
	GS Caltex (Suzhou) Plastics Co., Ltd.	6,445	17,649	China Construction Bank (CCB)

December 31, 2024 and 2023

9. Property, Plant and Equipment (PP&E), Continued

(d) Changes in Right-of-use assets for the year ended December 31, 2024 are summarized as follows:

	Won (millions)				
	Gas stations	Buildings	Vessels	Others	Total
Cost:					
Balance at January 1, 2024	**₩ 188,166**	**41,651**	**1,262,374**	**18,080**	**1,510,271**
Addition to right-of-use assets	28,551	461	10,111	16,394	55,517
Derecognition of right-of-use assets	(20,887)	(4,475)	(234,374)	(9,968)	(269,704)
Others	-	233	-	551	784
Balance at December 31, 2024	**₩ 195,830**	**37,870**	**1,038,111**	**25,057**	**1,296,868**
Accumulated depreciation:					
Balance at January 1, 2024	**₩ 90,438**	**24,774**	**648,078**	**9,360**	**772,650**
Depreciation	30,859	16,008	113,246	10,551	170,664
Derecognition of right-of-use assets	(20,748)	(4,475)	(229,270)	(8,461)	(262,954)
Others	-	135	-	(565)	(430)
Balance at December 31, 2024	**₩ 100,549**	**36,442**	**532,054**	**10,885**	**679,930**
Carrying amount:					
Balance at January 1, 2024	**₩ 97,728**	**16,877**	**614,296**	**8,720**	**737,621**
Balance at December 31, 2024	**₩ 95,281**	**1,428**	**506,057**	**14,172**	**616,938**

(e) Changes in Right-of-use assets for the year ended December 31, 2023 are summarized as follows:

	Won (millions)				
	Gas stations	Buildings	Vessels (*)	Others	Total
Cost:					
Balance at January 1, 2023	**₩ 189,502**	**70,207**	**1,480,224**	**21,620**	**1,761,553**
Addition to right-of-use assets	15,203	1,290	22,098	8,867	47,458
Derecognition of right-of-use assets	(16,539)	(29,912)	(67,112)	(8,755)	(122,318)
Others	-	66	(172,836)	(3,652)	(176,422)
Balance at December 31, 2023	**₩ 188,166**	**41,651**	**1,262,374**	**18,080**	**1,510,271**
Accumulated depreciation:					
Balance at January 1, 2023	**₩ 76,444**	**38,533**	**523,786**	**12,091**	**650,854**
Depreciation	30,298	16,041	191,435	9,897	247,671
Derecognition of right-of-use assets	(16,304)	(29,912)	(67,143)	(8,334)	(121,693)
Others	-	112	-	(4,294)	(4,182)
Balance at December 31, 2023	**₩ 90,438**	**24,774**	**648,078**	**9,360**	**772,650**
Carrying amount:					
Balance at January 1, 2023	**₩ 113,058**	**31,674**	**956,438**	**9,529**	**1,110,699**
Balance at December 31, 2023	**₩ 97,728**	**16,877**	**614,296**	**8,720**	**737,621**

(*) Others include adjustments made for separation of non-lease components from the leased vessels

10. Investment Properties

(a) Changes in investment property for the year ended December 31, 2024 are summarized as follows:

		Won (millions)		
		Land	Buildings	Total
Cost:				
Balance at January 1, 2024	₩	**30,368**	**14,264**	**44,632**
Reclassification (*)		10,516	7,397	17,913
Balance at December 31, 2024	₩	**40,884**	**21,661**	**62,545**
Accumulated depreciation:				
Balance at January 1, 2024	₩	**-**	**4,040**	**4,040**
Depreciation		-	391	391
Balance at December 31, 2024	₩	**-**	**4,431**	**4,431**
Carrying amount:				
Balance at January 1, 2024		**30,368**	**10,224**	**40,592**
Balance at December 31, 2024	₩	**40,884**	**17,230**	**58,114**

(*) Property, plant and equipment were reclassified to investment properties during the year.

(b) Changes in investment property for the year ended December 31, 2023 are summarized as follows:

		Won (millions)		
		Land	Buildings	Total
Cost:				
Balance at January 1, 2023	₩	**26,097**	**14,023**	**40,120**
Disposals and retirement		(1,078)	-	(1,078)
Reclassification (*)		5,349	241	5,590
Balance at December 31, 2023	₩	**30,368**	**14,264**	**44,632**
Accumulated depreciation:				
Balance at January 1, 2023	₩	**-**	**3,543**	**3,543**
Depreciation		-	334	334
Reclassification (*)		-	163	163
Balance at December 31, 2023	₩	**-**	**4,040**	**4,040**
Carrying amount:				
Balance at January 1, 2023	₩	**26,097**	**10,480**	**36,577**
Balance at December 31, 2023	₩	**30,368**	**10,224**	**40,592**

(*) Property, plant and equipment were reclassified to investment properties during 2023.

10. Investment Properties, Continued

(c) The amounts recognized in profit or loss from investment property for the years ended December 31, 2024 and 2023 are summarized as follows:

		Won (millions)	
		2024	2023
Rental income	₩	3,342	3,191
Operating expense		(1,960)	(1,029)
Gain on disposal of investment properties		-	453
	₩	1,382	2,615

(d) The carrying amount and the fair value of investment property as of December 31, 2024 and 2023 are summarized as follows:

		Won (millions)	
		2024	2023
Carrying amount	₩	58,114	40,592
Fair value		72,305	54,288

11. Intangible Assets

(a) Changes in intangible assets for the year ended December 31, 2024 are summarized as follows:

		Won (millions)				
		Goodwill	Software	Contributed assets	Other intangible assets	Total
Cost:						
Balance at January 1, 2024	₩	**107**	**271,919**	**25,387**	**67,954**	**365,367**
Additions		-	163	-	708	871
Disposals and retirement		-	(3,640)	(3,136)	(1,848)	(8,624)
Others		-	27,292	6,272	973	34,537
Balance at December 31, 2024	₩	**107**	**295,734**	**28,523**	**67,787**	**392,151**
Accumulated amortization:						
Balance at January 1, 2024	₩	**-**	**232,091**	**19,084**	**44,141**	**295,316**
Amortization		-	22,196	1,226	3,375	26,797
Disposals and retirement		-	(3,640)	(3,136)	(739)	(7,515)
Others		-	215	-	81	296
Balance at December 31, 2024	₩	**-**	**250,862**	**17,174**	**46,858**	**314,894**
Carrying amount:						
Balance at January 1, 2024	₩	**107**	**39,828**	**6,303**	**23,813**	**70,051**
Balance at December 31, 2024	₩	**107**	**44,872**	**11,349**	**20,929**	**77,257**

December 31, 2024 and 2023

11. Intangible Assets, Continued

(b) Changes in intangible assets for the year ended December 31, 2023 are summarized as follows:

	Won (millions)				
	Goodwill	Software	Contributed assets	Other intangible assets	Total
Cost:					
Balance at January 1, 2023	**₩ 107**	**259,719**	**26,103**	**65,752**	**351,681**
Additions	-	213	-	80	293
Disposals and retirement	-	(8,691)	(716)	(1,226)	(10,633)
Others	-	20,678	-	3,348	24,026
Balance at December 31, 2023	**₩ 107**	**271,919**	**25,387**	**67,954**	**365,367**
Accumulated amortization:					
Balance at January 1, 2023	**₩ -**	**221,182**	**18,653**	**41,660**	**281,495**
Amortization	-	19,475	1,144	3,709	24,328
Disposals and retirement	-	(8,601)	(713)	(1,226)	(10,540)
Others	-	35	-	(2)	33
Balance at December 31, 2023	**₩ -**	**232,091**	**19,084**	**44,141**	**295,316**
Carrying amount:					
Balance at January 1, 2023	**₩ 107**	**38,537**	**7,450**	**24,092**	**70,186**
Balance at December 31, 2023	**₩ 107**	**39,828**	**6,303**	**23,813**	**70,051**

(c) Research & Development expenses

For the years ended December 31, 2024 and 2023, the Group recognized ₩74,688 million and ₩77,226 million, respectively, as research & development expenses in selling, general and administrative expenses in the consolidated statements of income.

12. Joint Operation

Details of joint operation as of December 31, 2024 and 2023 are summarized as follows:

		Ownership (%)	
Joint operation	Location	2024	2023
Energy Plus Seoullo (*)	Seoul, Korea	40.90%	40.90%

(*) The Group agreed to participate and co-operate with GS Retail Co.,Ltd. in the lease of the Group's facility space, and accounted for the arrangement as a joint operation. During the year, the name of the joint operation was changed from Yeokjeon Flagship Joint Development to Energy Plus Seoullo.

December 31, 2024 and 2023

13. Investments in Associates

(a) Details of the balance of investments in associates accounted for using the equity method as of December 31, 2024 are summarized as follows:

Company	Location	Principal operation	Ownership (%)		Won (millions)
Daehan Oil Pipeline Corp.	Seongnam, Korea	Operation of petroleum energy distribution system	28.62%	₩	239,874
Samnam Petrochemical Co., Ltd.	Seoul, Korea	Manufacture of petrochemical product	20.00%		42,295
Green Eco Technology Co., Ltd. (*)	Japan	Manufacture of recycled plastic materials	15.00%		3,328
Eco G&R Co., Ltd.	Hwaseong, Korea	Manufacture of mechanically recycled plastic (ELV materials)	40.00%		1,664
PT AGPA Refinery Complex	Indonesia	Manufacture of refined edible and processed oils	40.00%	₩	50,970
				₩	338,131

(b) Details of the balance of investments in associates accounted for using the equity method as of December 31, 2023 are summarized as follows:

Company	Location	Principal operation	Ownership (%)		Won (millions)
Daehan Oil Pipeline Corp.	Seongnam, Korea	Operation of petroleum energy distribution system	28.62%	₩	237,912
Samnam Petrochemical Co., Ltd.	Seoul, Korea	Manufacture of petrochemical product	20.00%		44,338
Green Eco Technology Co., Ltd.(*)	Japan	Manufacture of recycled plastic materials	15.00%		3,186
Eco G&R Co., Ltd.	Hwaseong, Korea	Manufacture of mechanically recycled plastic (ELV materials)	40.00%		1,287
PT AGPA Refinery Complex	Indonesia	Manufacture of refined edible and processed oils	40.00%	₩	28,615
				₩	315,338

(*) During 2023, the Group newly acquired 15% of the shares in Green Eco Technology Co., Ltd. held by Sinko Trading Co., Ltd. The Group owns less than 20% of the equity interests but has determined that it has significant influence over the investee.

December 31, 2024 and 2023

13. Investments in Associates, Continued

(c) Changes in investments in associates for the year ended December 31, 2024 are summarized as follows:

Company		Won (millions)					
		Balance at January 1, 2024	Additions	Share of profit (loss) of equity method accounted investees	Dividends	Others	Balance at December 31, 2024
Daehan Oil Pipeline Corp.	₩	237,912	-	13,081	(10,915)	(204)	239,874
Samnam Petrochemical Co., Ltd.		44,338	-	1,241	(3,180)	(104)	42,295
Green Eco Technology Co., Ltd.		3,186	-	130	-	12	3,328
Eco G&R Co., Ltd.		1,287	-	377	-	-	1,664
PT AGPA Refinery Complex		28,615	19,409	(633)	-	3,579	50,970
	₩	315,338	19,409	14,196	(14,095)	3,283	338,131

(d) Changes in investments in associates for the year ended December 31, 2023 are summarized as follows:

Company		Won (millions)					
		Balance at January 1, 2023	Additions	Share of profit (loss) of equity method accounted investees	Dividends	Others	Balance at December 31, 2023
Daehan Oil Pipeline Corp.	₩	236,443	-	12,364	(10,688)	(207)	237,912
Samnam Petrochemical Co., Ltd.		46,900	-	2,655	(5,760)	543	44,338
Green Eco Technology Co., Ltd.		-	3,120	70	-	(4)	3,186
Eco G&R Co., Ltd.		-	1,500	(197)	-	(16)	1,287
PT AGPA Refinery Complex		-	28,615	-	-	-	28,615
	₩	283,343	33,235	14,892	(16,448)	316	315,338

(e) Condensed financial information of associates as of and for the year ended December 31, 2024 is summarized as follows:

Company		Won (millions)			
		Assets	Liabilities	Sales	Net profit (loss)
Daehan Oil Pipeline Corp.	₩	1,082,794	312,528	198,924	45,282
Samnam Petrochemical Co., Ltd.		403,195	190,147	1,097,881	2,642
Green Eco Technology Co., Ltd.		11,693	8,864	7,598	864
Eco G&R Co., Ltd.		4,155	2,699	6,958	942
PT AGPA Refinery Complex		130,425	3,538	-	(1,581)

13. Investments in Associates, Continued

(f) Reconciliation of the Investees' net assets to the carrying amount of the Group's associates for the year ended December 31, 2024 is summarized as follows:

	Won (millions)					
Company	Net assets at December 31, 2024	Ownership (%)	Group's share of net assets	Goodwill	Unrealized profit or loss	Balance at December 31, 2024
Daehan Oil Pipeline Corp.	₩ 770,266	28.62%	220,450	20,105	(681)	239,874
Samnam Petrochemical Co., Ltd.	213,048	20.00%	42,610	-	(315)	42,295
Green Eco Technology Co., Ltd.	2,829	15.00%	424	2,904	-	3,328
Eco G&R Co., Ltd.	1,456	40.00%	583	1,081	-	1,664
PT AGPA Refinery Complex	126,887	40.00%	50,755	215	-	50,970

14. Provisions

(a) Changes in provisions for the years ended December 31, 2024 and 2023 are summarized as follows:

	Won(millions)			
	2024		2023	
	Provision for restoration	Provision for loyalty points	Provision for restoration	Provision for loyalty points
Beginning Balance	₩ **33,040**	**1,109**	**31,712**	**1,719**
Increase	18,225	785	8,477	916
Decrease	(12,934)	(961)	(7,149)	(1,526)
Ending Balance	₩ **38,331**	**933**	**33,040**	**1,109**

(b) Provision for Restoration

On December 26, 2002, the Group entered into a voluntary agreement with the Ministry of Environment and adopted a plan to detect and restore any contaminations at the Group's manufacturing facilities, service stations and oil depots. The environmental remediation liabilities recorded as provision in the consolidated statements of financial position are ₩38,331 million and ₩33,040 million as of December 31, 2024 and 2023, respectively.

(c) Provision for Loyalty Points

The Group's marketing efforts include providing free **GS** & Point Program to the rewards-card holders without any condition to purchase the Group's products or services. As of December 31, 2024 and 2023, the Group recorded a provision for the estimated amount to be redeemed by customers in the future as non-current liabilities amounting to ₩933 million and ₩1,109 million, respectively.

December 31, 2024 and 2023

15. Retirement Benefits

The Group sponsors both defined benefit and defined contribution plans. In connection with the retirement benefit obligations, when an employee reaches the retirement age of 58~60, the employee is entitled to the rights to receive retirement benefits as specified in the Group's human resource policies. The most recent valuation of the Group's obligation and plan assets in regard to its defined benefit plan was performed by Willis Towers Watson & Co. as of December 31, 2024 using the projected unit credit method.

(a) The principal actuarial assumptions used as of December 31, 2024 and 2023 are summarized as follows:

	2024	2023
Discount rate (*)	3.25% ~ 4.25%	4.00% ~ 5.00%
Rate of future salary increases	3.00% ~ 5.00%	3.00% ~ 5.00%

(*) For the purpose of calculating present value of the defined benefit obligations, the Group uses the discount rate determined by reference to market yields at the end of the reporting period on high quality corporate bonds (average of AA0) consistent with the currency and estimated terms of the defined benefit obligations.

(b) Details of defined benefit assets as of December 31, 2024 and 2023 are summarized as follows:

		Won (millions)	
		2024	2023
Present value of defined benefit obligations	₩	(493,976)	(443,001)
Fair value of plan assets		520,108	505,988
Defined benefit assets, net (*)	₩	26,132	62,987

(*) The amount of Defined benefit liabilities is included.

(c) Changes in the present value of defined benefit obligations for the year ended December 31, 2024 are summarized as follows:

		Won (millions)
Balance at January 1, 2024	₩	**443,001**
Payments		(54,020)
Current service costs		37,455
Interest costs		17,751
Remeasurements		51,240
Change of plan (Past service costs)		15
Others		(1,466)
Balance at December 31, 2024	₩	**493,976**

Changes in the present value of defined benefit obligations for the year ended December 31, 2023 are summarized as follows:

		Won (millions)
Balance at January 1, 2023	₩	**397,211**
Payments		(58,899)
Current service costs		34,420
Interest costs		20,008
Remeasurements		50,383
Others		(122)
Balance at December 31, 2023	₩	**443,001**

15. Retirement Benefits, Continued

(d) Changes in the fair value of plan assets for the year ended December 31, 2024 are summarized as follows:

		Won (millions)
Fair value at January 1, 2024	₩	**505,988**
Contribution to plan assets		47,530
Benefits paid by the plan		(51,096)
Interest income on plan assets		19,424
Remeasurements		(242)
Others		(1,496)
Fair value at December 31, 2024	₩	**520,108**

Changes in the fair value of plan assets for the year ended December 31, 2023 are summarized as follows:

		Won (millions)
Fair value at January 1, 2023	₩	**509,954**
Contribution to plan assets		21,910
Benefits paid by the plan		(52,695)
Interest income on plan assets		24,998
Remeasurements		1,933
Others		(112)
Fair value at December 31, 2023	₩	**505,988**

(e) The components of plan assets as of December 31, 2024 and 2023 are summarized as follows:

		Won (millions)	
		2024	2023
Cash and cash equivalents	₩	4	188
Fixed deposits		23,511	44,696
Beneficiary certificates		496,593	461,104
	₩	520,108	505,988

(f) The components of retirement benefit costs for the years ended December 31, 2024 and 2023 are summarized as follows:

		Won (millions)	
		2024	2023
Defined benefit plan:			
Current service costs	₩	37,455	34,420
Interest costs, net		(1,673)	(4,990)
Change of plan (Past service costs)		15	-
Defined contribution plan:			
Payment for the defined contribution plan		7,680	6,906
	₩	43,477	36,336

15. Retirement Benefits, Continued

(g) For the years ended December 31, 2024 and 2023 in relation to the retirement benefit obligations, the following amounts are recognized in the respective accounts.

		Won (millions)	
		2024	2023
Cost of sales	₩	25,817	21,200
Selling, general and administrative expenses		17,660	15,136
	₩	43,477	36,336

(h) The cumulative amounts of remeasurements of defined benefit liability before income tax in the accumulated other comprehensive income (loss) for the years ended December 31, 2024 and 2023 are summarized as follows:

		Won (millions)	
		2024	2023
Beginning	₩	(99,733)	(51,283)
Remeasurements of defined benefit liability before tax		(51,482)	(48,450)
Ending	₩	(151,215)	(99,733)

(i) Reasonably possible changes of 100 basis points at the reporting date to one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligation by the amounts shown below.

		Won (millions)	
		1%p increase	1%p decrease
Discount rate	₩	(29,668)	32,492
Rate of future salary increases		35,175	(31,767)

The sensitivity analysis does not take into account all expected cash flows under the plan, but provides an approximation of the sensitivity of the assumptions used.

16. Deferred Revenue

(a) Customer Loyalty Program

For the GS & Point program, the fair value of the considerations received or receivable in respect of the initial sale is allocated between the award credits ("GS & points") and the other components of the sale. Such amount is deferred and revenue is recognized only when the GS & Points are redeemed and the Group has fulfilled its obligations to supply products and services. The Group recorded ₩10,964 million and ₩11,570 million as deferred revenue as of December 31, 2024 and 2023, respectively.

(b) Government Grants

Development agreement between the Group and DUCKYANG INDUSTRY CO., LTD. has been made to carry out national R&D project concerning collaboration on the development of eco-friendly mobility interior CMF design for carbon neutrality. The project started from April 1, 2022 and will be completed by December 31, 2025. If the project is successful, the Group is obligated to repay 32% of the subsidy amount as fixed technical fees. ₩13,373 million and ₩14,508 million were recognized as deferred revenue as of December 31, 2024 and 2023, respectively.

December 31, 2024 and 2023

17. Income Taxes

(a) The components of income tax expense for the years ended December 31, 2024 and 2023 are summarized as follows:

		Won (millions)	
		2024	2023
Current tax	₩	75,181	319,902
Adjustments on prior year tax		9,485	2,841
Changes in deferred tax assets/liabilities		(71,622)	48,091
Income tax expense	₩	13,044	370,834

(b) Details of tax expense recorded in equity for the years ended December 31, 2024 and 2023 are summarized as follows:

		Won (millions)	
		2024	2023
Current tax	₩	13,207	12,381
Deferred tax		332	8,221
	₩	13,539	20,602

(c) The expected income taxes calculated using the statutory tax rates differ from the actual income taxes amounts for the years ended December 31, 2024 and 2023 for the following reasons:

		Won (millions)	
		2024	2023
Profit before income taxes	₩	122,053	1,523,565
Calculated income tax expense at statutory tax rate		28,312	378,390
Adjustment:			
Tax effects of permanent differences		(1,423)	2,272
Tax credits		(6,689)	(10,680)
Adjustments on prior year tax		(2,498)	439
Tax effect of subsidiaries		283	(1,331)
Effects of changes in tax rate		-	(401)
Others		(4,941)	2,145
Income tax expense	₩	13,044	370,834
Effective tax rate		10.69%	24.34%

December 31, 2024 and 2023

17. Income Taxes, Continued

(d) Changes in deferred tax assets and liabilities for the year ended December 31, 2024 are summarized as follows:

	Won (millions)			
	Beginning balance	Credited (charged) to profit (loss)	Credited (charged) to other comprehensive income (loss)	Ending balance
Accrued expenses	₩ 32,016	(9,736)	-	22,280
Allowance for doubtful accounts	1,075	521	15	1,611
Other investment	8,980	(198)	-	8,782
Foreign currency translation gain (loss)	22,481	34,275	(13)	56,743
Accumulated depreciation	(116,782)	49,385	22	(67,375)
Lease liabilities	221,420	(14,246)	-	207,174
Deemed dividend	51,850	3,947	-	55,797
Equity-method investments	(9,702)	(277)	(222)	(10,201)
Accrued income / prepaid expenses	(334)	209	-	(125)
Accrued expenses/ unearned revenue	509	(129)	16	396
Other provision	18	(6)	6	18
Gain on valuation of financial assets at FVOCI	2,928	-	1,292	4,220
Present value of defined benefit obligation	(10,241)	9,035	151	(1,055)
Provision for restoration	4,245	1,880	-	6,125
Gain (Loss) on valuation of derivatives	4,828	16	(2,131)	2,713
Asset revaluation surplus	(277,788)	3,612	22	(274,154)
Revaluation reserve	(35,401)	-	-	(35,401)
Derivatives	(32,275)	(10,795)	-	(43,070)
Inventories	1,375	(183)	-	1,192
Others	(18,029)	4,217	872	(12,940)
Accumulated deficit	1,949	(2,040)	113	22
Deduction of accumulated deficit	864	2,135	189	3,188
	₩ (146,014)	**71,622**	**332**	**(74,060)**

December 31, 2024 and 2023

17. Income Taxes, Continued

(e) Changes in deferred tax assets and liabilities for the year ended December 31, 2023 are summarized as follows:

	Won (millions)			
	Beginning balance	Credited (charged) to profit (loss)	Credited (charged) to other comprehensive income (loss)	Ending balance
Accrued expenses	₩ 74,688	(42,672)	-	32,016
Allowance for doubtful accounts	293	782	-	1,075
Other investment	9,017	(37)	-	8,980
Foreign currency translation gain (loss)	32,075	(9,631)	37	22,481
Accumulated depreciation	(192,945)	76,243	(80)	(116,782)
Lease liabilities	326,019	(104,599)	-	221,420
Deemed dividend	38,027	13,823	-	51,850
Equity-method investments	(9,355)	(308)	(39)	(9,702)
Accrued income / prepaid expenses	(590)	256	-	(334)
Accrued expenses/ unearned revenue	715	(212)	6	509
Other provision	15	3	-	18
Gain (Loss) on valuation of financial assets at FVOCI	(77)	-	3,005	2,928
Present value of defined benefit obligation	(23,953)	13,712	-	(10,241)
Provision for restoration	2,760	1,485	-	4,245
Gain (Loss) on valuation of derivatives	(1,284)	-	6,112	4,828
Asset revaluation surplus	(279,595)	1,802	5	(277,788)
Revaluation reserve	(35,895)	494	-	(35,401)
Derivatives	(32,328)	53	-	(32,275)
Inventories	1,547	(172)	-	1,375
Others	(18,670)	1,517	(876)	(18,029)
Accumulated deficit	2,658	(760)	51	1,949
Deduction of accumulated deficit	734	130	-	864
	₩ (106,144)	**(48,091)**	**8,221**	**(146,014)**

(f) There are no unused tax credits that are not recognized as deferred tax assets in December 31, 2024 and 2023.

(g) The Group is subject to the global minimum top-up tax under the Pillar 2 model starting from January 1, 2024. The Group, the ultimate parent, does not expect to be liable to pay top-up tax for its taxed subsidiaries because effective tax rate for each jurisdiction is above the 15 percent minimum rate.

December 31, 2024 and 2023

18. Equity

18.1 Common Stock

The number of shares authorized to issue, the number of shares issued and the par value of a share of the Parent Company's common stock are 27,000,000 shares, 26,000,000 shares and ₩10,000 as of December 31, 2024 and 2023, respectively.

18.2 Accumulated Other Comprehensive Income

Accumulated other comprehensive income, net of tax, as of December 31, 2024 and 2023 are summarized as follows:

	Won (millions)	
	2024	2023
Unrealized gain on valuation of FVOCI financial assets	₩ (12,610)	(7,734)
Changes in equity method accounted investee's capital	3,809	217
Effective portion of changes in unrealized fair value of cash flow hedges	(10,206)	(18,277)
Foreign currency translation difference	84,438	26,780
Accumulated other comprehensive loss before income tax	65,431	986
Income tax effect	5,968	7,029
	₩ 71,399	8,015

18.3 Capital Adjustments

Capital adjustments is recorded for the excess of deficit resulted from the difference between the considerations paid for additional acquisition of subsidiary shares from non-controlling interests and subsidiary's related net book value over the amount of the group's capital surplus on the acquisition date.

December 31, 2024 and 2023

18. Equity, Continued

18.4 Statements of Appropriation of Retained Earnings of the Parent Company

Statements of appropriation of retained earnings of the Parent Company for the years ended December 31, 2024 and 2023 are as follows:

Expected Date of Appropriation for 2024: February 27, 2025
Date of Appropriation for 2023: February 28, 2024

	Won (millions)	
	2024	2023
Unappropriated retained earnings		
Balance at beginning of year	₩ 11,881,798	11,601,441
Remeasurements of defined benefit liability	(35,920)	(33,739)
Interim dividends	(76,500)	(278,900)
Net income	67,167	1,053,996
Gain on disposal of FVOCI financial assets	2,630	-
Balance at end of year before appropriation	**11,839,175**	**12,342,798**
Appropriation of retained earnings		
Dividends	(43,600)	(461,000)
Unappropriated retained earnings to be carried over to subsequent year	**₩ 11,795,575**	**11,881,798**

December 31, 2024 and 2023

18. Equity, Continued

18.5 Dividends

(a) Details of interim dividends of the Parent Company for the years ended December 31, 2024 and 2023 are as follows:

		Won	
		2024	2023
Number of shares		26,000,000	26,000,000
Par value per share	₩	10,000	10,000
Dividends as a percentage of par value		29.42%	107.27%
Interim cash dividends	₩	76,500,000,000	278,900,000,000
Dividend per share	₩	2,942	10,727

(b) Details of annual dividends of the Parent Company for the years ended December 31, 2024 and 2023 are as follows:

		Won	
		2024	2023
Number of shares		26,000,000	26,000,000
Par value per share	₩	10,000	10,000
Dividends as a percentage of par value		16.77%	177.31%
Annual cash dividends	₩	43,600,000,000	461,000,000,000
Dividend per share	₩	1,677	17,731

(c) Details of dividend payout ratio of the Parent Company for the years ended December 31, 2024 and 2023 are as follows:

		Won (millions)	
		2024	2023
Dividends	₩	120,100	739,900
Net income		67,167	1,053,996
Dividend payout ratio		178.81%	70.20%

19. Sales

Details of sales for the years ended December 31, 2024 and 2023 are summarized as follows:

		Won (millions)	
		2024	2023
Types of revenue:			
Sales of goods	₩	47,406,317	48,355,827
Rendering of services and others		207,929	251,719
		47,614,246	48,607,546
Geographic area:			
Domestic		12,561,750	13,099,301
Foreign		35,052,496	35,508,245
	₩	47,614,246	48,607,546

20. Selling, General and Administrative Expenses

Details of selling, general and administrative expenses for the years ended December 31, 2024 and 2023 are summarized as follows:

		Won (millions)	
		2024	2023
Salaries	₩	190,331	270,232
Retirement benefits		17,660	15,136
Other employee benefits		93,111	83,874
Subcontractors		119,761	105,547
Rent		21,216	22,029
Transportation		201,535	183,245
Advertising		44,686	48,224
Depreciation		137,939	155,743
Fees		159,075	154,144
Amortization		16,055	14,168
Travel		13,782	15,119
Taxes and dues		19,976	20,721
Insurance		3,615	3,848
Bad debt expenses (reversal of allowance for doubtful accounts)		(2,615)	761
Others		77,154	73,227
	₩	1,113,281	1,166,018

December 31, 2024 and 2023

21. Other Income and Other Expense

(a) Details of other income for the years ended December 31, 2024 and 2023 are summarized as follows:

		Won (millions)	
		2024	2023
Gain on valuation and transactions of commodity derivatives	₩	120,109	137,570
Gain on disposal of property, plant and equipment		57,247	33,673
Gain on disposal of investment property		-	453
Rental income		3,342	3,191
Government grants		3,985	3,543
Others (*)		69,976	118,147
	₩	254,659	296,577

(*) Others primarily consist of brokerage income.

(b) Details of other expense for the years ended December 31, 2024 and 2023 are summarized as follows:

		Won (millions)	
		2024	2023
Loss on valuation and transactions of commodity derivatives	₩	123,682	146,822
Loss on disposal of property, plant and equipment		11,886	14,334
Expenses related to investment property		1,960	1,029
Others (*)		89,001	101,871
	₩	226,529	264,056

(*) Others primarily consist of brokerage fee.

December 31, 2024 and 2023

22. Classification of Expenses by Nature

Details of expenses by nature for the years ended December 31, 2024 and 2023 are summarized as follows:

	Won (millions)	
	2024	2023
Changes in finished goods and work-in-process	₩ 24,082	176,984
Raw materials consumption	43,523,939	43,272,741
Employee benefits	702,311	649,663
Depreciation and amortization	987,502	1,059,851
Bad debt expenses (reversal of allowance for doubtful accounts)	(2,615)	761
Transportation	312,865	264,403
Advertising	45,867	49,584
Subcontractors, material costs and rent	509,000	500,430
Fees and commissions	174,771	169,184
Taxes and dues	52,627	59,671
Utilities	584,979	563,155
Others	150,876	157,327
	₩ 47,066,204	46,923,754

December 31, 2024 and 2023

23. Transactions and Balances with Related Parties and Others

(a) Summary of Related Parties and others

Details of related parties as of December 31, 2024 and 2023 are as follows:

Relationships	2024	2023
Joint control entities	GS Holdings Corp. GS Energy Corporation Chevron (Overseas) Holdings Ltd. Chevron Global Energy Inc.	GS Holdings Corp. GS Energy Corporation Chevron (Overseas) Holdings Ltd. Chevron Global Energy Inc.
Investees with significant influence	Daehan Oil Pipeline Corporation Samnam Petrochemical Co., Ltd. Green Eco Technology Co., Ltd. Eco G&R Co., Ltd. PT AGPA Refinery Complex	Daehan Oil Pipeline Corporation Samnam Petrochemical Co., Ltd. Green Eco Technology Co., Ltd. Eco G&R Co., Ltd. PT AGPA Refinery Complex
Others	Chevron U.S.A. Inc. Chevron Global Marine Products LLC Chevron Products Company, Inc. Chevron Singapore Pte. Ltd. Chevron Oronite Pte Ltd. Chevron Lummus Global LLC Chevron South Korea IP Holdings Ltd. GS E&R Corp. GS Aromatics Pte. Ltd. GS Aromatics (Qingdao) Chemical Co., Ltd. Qingdao Lidong Chemical Co., Ltd. GS Global Singapore Pte Ltd. Korea GS E&P Pte. Ltd. GS Energy Trading Singapore Pte. Ltd. Boryeong LNG Terminal Co., Ltd. GS Global Corp. etc.	Chevron U.S.A. Inc. Chevron Global Marine Products LLC Chevron Products Company, Inc. Chevron Singapore Pte. Ltd. Chevron Oronite Pte Ltd. Chevron Lummus Global LLC Chevron South Korea IP Holdings Ltd. GS E&R Corp. GS Aromatics Pte. Ltd. GS Aromatics (Qingdao) Chemical Co., Ltd. Qingdao Lidong Chemical Co., Ltd. GS Global Singapore Pte Ltd. Korea GS E&P Pte. Ltd. GS Energy Trading Singapore Pte. Ltd. Boryeong LNG Terminal Co., Ltd. GS Global Corp. etc.
Affiliates of large business groups	GS Engineering & Construction Corp. Samyang Int'l Co., Ltd. Chemtech International Co., Ltd. etc.	GS Engineering & Construction Corp. Samyang Int'l Co., Ltd. Chemtech International Co., Ltd. etc.

December 31, 2024 and 2023

23. Transactions and Balances with Related Parties and Others, Continued

(b) Transactions with Related Parties and others

Significant transactions which occurred in the normal course of business with related parties and affiliates of large business groups for the year ended December 31, 2024 are summarized as follows:

		Won (millions)					
Relationships	Related parties	Sales	Purchases of inventories	Purchases of property, plant, equipment and others	Dividends received (paid)	Purchases of shares	Others
Joint control entities	GS Holdings Corp.	41	-	96	-	-	69,617
	GS Energy Corporation	166	-	-	(268,750)	-	2,483
	Chevron (Overseas) Holdings Ltd.	-	-	-	(215,000)	-	-
	Chevron Global Energy Inc.	-	-	-	(53,750)	-	-
Investees with significant influence	Samnam Petrochemical Co., Ltd.	719,287	-	-	3,180	-	16,243
	Daehan Oil Pipeline Corporation	284	-	-	10,915	-	54,669
	Eco G&R Co., Ltd.	4	6,272	-	-	-	2
	PT AGPA Refinery Complex	-	-	-	-	19,409	-
Others	Chevron U.S.A. Inc.	6,297,519	12,940,042	-	-	-	6,534
	Chevron Global Marine Products LLC	54,605	-	-	-	-	-
	Chevron Products Company, Inc.	161,617	296,890	-	-	-	-
	Chevron Singapore Pte. Ltd.	477,966	189,546	-	-	-	869
	Chevron Oronite Pte Ltd.	-	46,227	-	-	-	-
	Chevron South Korea IP Holdings Ltd.	-	-	-	-	-	45,413
	Chevron Australia Pty. Ltd.	-	208,446	-	-	-	-
	Chevron (International) Trading Pte. Ltd.	-	2,954,986	-	-	-	-
	Advanced Refining Technologies LLC	-	41,475	-	-	-	-
	GS Energy Trading Singapore Pte. Ltd.	-	88,601	-			-
	GS E&R Corp.	369,724	-	-	-	-	36
	GS Aromatics Pte. Ltd.	27,204	48,820	-	-	-	-
	GS Global Singapore Pte. Ltd.	182,779	-	-	-	-	-
	Qingdao Lidong Chemical Co., Ltd.	1,403,837	-	-	-	-	-
	GS Global Corp.	102,865	89,213	161	-	-	13
	GS Sports Ltd.	20	-	-	-	-	12,242
	Boryeong LNG Terminal Co., Ltd.	-	31,810	-	-	-	-
	Lotte GS Chemical Corporation	212,017	68,400	-	-	-	-
Affiliates of large business-groups	GS Engineering & Construction Corp.	2	-	30,627	-	-	69
	Samyang Int'l Co., Ltd.	56,415	-	-	-	-	70
	SY Energy Pte. Ltd.	536,050	-	-	-	-	-

December 31, 2024 and 2023

23. Transactions and Balances with Related Parties and Others, Continued

(b) Transactions with Related Parties and others, Continued

Significant transactions which occurred in the normal course of business with related parties and affiliates of large business groups for the year ended December 31, 2023 are summarized as follows:

		Won (millions)					
Relationships	Related parties	Sales	Purchases of inventories	Purchases of property, plant, equipment and others	Dividends received (paid)	Purchases of shares	Others
Joint control entities	GS Holdings Corp.	39	-	-	-	-	69,440
	GS Energy Corporation	213	-	-	(557,850)	-	3,065
	Chevron (Overseas) Holdings Ltd.	-	-	-	(362,610)	-	-
	Chevron Global Energy Inc.	-	-	-	(195,240)	-	-
Investees with significant influence	Samnam Petrochemical Co., Ltd.	734,226	-	-	5,760	-	18,101
	Daehan Oil Pipeline Corporation	2	-	-	10,688	-	50,060
	GS Lubricants (Tianjin) Co., Ltd. (*)	399	7,890	-	-	-	-
	Green Eco Technology Co., Ltd.	-	-	-	-	3,120	2
	Eco G&R Co., Ltd.	4	5,237	-	-	1,500	-
	PT AGPA Refinery Complex	-	-	-	-	28,615	-
Others	Chevron U.S.A. Inc.	6,529,732	12,335,573	-	-	-	8,000
	Chevron Global Marine Products LLC	43,408	-	-	-	-	-
	Chevron Products Company, Inc.	256,854	280,440	-	-	-	-
	Chevron Singapore Pte. Ltd.	540,449	124,646	-	-	-	261
	Chevron Oronite Pte Ltd.	-	44,592	-	-	-	-
	Chevron South Korea IP Holdings Ltd.	-	-	-	-	-	45,893
	Chevron Australia Pty. Ltd.	-	201,216	-	-	-	-
	Chevron Asia Pacific Shipping Pte. Ltd.	11,138	-	-	-	-	-
	Chevron (International) Trading Pte. Ltd.	-	3,938,601	-	-	-	-
	Advanced Refining Technologies LLC	-	34,019	-	-	-	-
	GS E&R Corp.	405,329	-	-	-	-	59
	GS Aromatics Pte. Ltd.	42,500	121,677	-	-	-	-
	GS Global Singapore Pte. Ltd.	94,082	-	-	-	-	-
	Qingdao Lidong Chemical Co., Ltd.	1,329,338	9,366	-	-	-	-
	GS Global Corp.	98,528	84,821	91	-	-	63
	GS Sports Ltd.	19	-	-	-	-	13,925
	Boryeong LNG Terminal Co., Ltd.	-	32,397	-	-	-	-
	Lotte GS Chemical Corporation	203,419	57,420	-	-	-	-
Affiliates of large business-groups	GS Engineering & Construction Corp.	1,247	-	9,481	-		7
	Samyang Int'l Co., Ltd.	70,074	-	-	-		89
	SY Energy Pte. Ltd.	597,372	79,749	-	-	-	-

(*) The Group has disclosed transactions that occurred before the share transfer only.

December 31, 2024 and 2023

23. Transactions and Balances with Related Parties and Others, Continued

(c) Account balances with Related Parties and others

Account balances with related parties and others as of December 31, 2024 are summarized as follows:

		Won (millions)			
		Receivables		Payables	
Relationships	Related parties	Accounts receivable	Other receivables	Accounts payable	Other payables
Joint control entities	GS Holdings Corp.	4	13,640	-	-
	GS Energy Corporation	3	221	-	3
Investees with significant influence	Samnam Petrochemical Co., Ltd.	138,756	174	-	2,190
	Daehan Oil Pipeline Corporation	-	40	-	5,292
Others	Chevron U.S.A. Inc.	520,749	-	1,338,153	-
	Chevron Global Marine Products LLC	10,685	-	-	-
	Chevron Products Company, Inc.	4,678	-	519	-
	Chevron Singapore Pte. Ltd.	33,343	-	46	-
	Chevron Oronite Pte Ltd.	-	-	5,769	-
	Chevron South Korea IP Holdings Ltd.	-	12	-	-
	Advanced Refining Technologies LLC	-	-	6,686	-
	GS E&R Corp.	2	10	-	11,621
	GS Global Singapore Pte Ltd.	17,554	-	-	-
	Qingdao Lidong Chemical Co., Ltd.	223,318	856	-	-
	GS Global Corp.	8,572	-	10,054	-
	GS Sports Ltd.	-	2,402	-	-
	Boryeong LNG Terminal Co., Ltd.	1,634	-	386	-
	Lotte GS Chemical Corporation	24,537	470	4,891	-
Affiliates of large business groups	GS Engineering & Construction Corp.	-	-	-	8,777
	Samyang Int'l Co., Ltd.	9,874	-	-	30
	SY Energy Pte. Ltd.	33,790	-	-	-

December 31, 2024 and 2023

23. Transactions and Balances with Related Parties and Others, Continued

(c) Account balances with Related Parties and others, Continued

Account balances with related parties and others as of December 31, 2023 are summarized as follows:

		Won (millions)			
		Receivables		Payables	
Relationships	Related parties	Accounts receivable	Other receivables	Accounts payable	Other payables
Joint control entities	GS Holdings Corp.	3	13,929	-	-
	GS Energy Corporation	4	231	-	-
Investees with significant influence	Samnam Petrochemical Co., Ltd.	175,297	203	-	-
	Daehan Oil Pipeline Corporation	-	-	-	16
	Eco G&R Co., Ltd.	-	-	76	-
Others	Chevron U.S.A. Inc.	449,637	-	726,295	-
	Chevron Global Marine Products LLC	6,122	-	-	-
	Chevron Products Company, Inc.	8,949	-	5,440	-
	Chevron Singapore Pte. Ltd.	32,280	-	29,925	-
	Chevron Oronite Pte Ltd.	-	-	2,103	-
	Chevron South Korea IP Holdings Ltd.	-	12	-	-
	Chevron Australia Pty. Ltd.	-	-	89	-
	Chevron (International) Trading Pte. Ltd.	-	-	660,557	-
	GS E&R Corp.	2	10	-	13,621
	GS Aromatics Pte. Ltd.	6,209	-	8,327	-
	GS Global Singapore Pte Ltd.	5,638	-	-	-
	Qingdao Lidong Chemical Co., Ltd.	203,092	882	-	-
	GS Global Corp.	9,316	-	7,203	-
	GS Sports Ltd.	-	47	-	550
	Boryeong LNG Terminal Co., Ltd.	2,618	-	-	-
	Lotte GS Chemical Corporation	39,676	-	5,598	-
Affiliates of large business groups	GS Engineering & Construction Corp.	-	1	-	4,573
	Samyang Int'l Co., Ltd.	10,087	-	-	-
	SY Energy Pte. Ltd.	44,461	-	-	-

December 31, 2024 and 2023

23. Transactions and Balances with Related Parties and Others, Continued

(d) Allowance for Doubtful Accounts with Related Parties and others

Allowance for doubtful accounts as of December 31, 2024 and 2023 are summarized as follows:

		Won (millions)			
		2024		2023	
Relationships	Related parties	Allowance for doubtful accounts	Bad debt expenses (reversal of allowance for doubtful accounts)	Allowance for doubtful accounts	Bad debt expenses (reversal of allowance for doubtful accounts)
Investee with significant influence	Samnam Petrochemical Co., Ltd.	4,168	(1,091)	5,259	804
	GS Lubricants (Tianjin) Co., Ltd.	-	-	-	(4)
Others	Chevron U.S.A. Inc.	521	71	450	(182)
	Chevron Global Marine Products LLC	11	5	6	1
	Chevron Products Company, Inc.	5	(4)	9	1
	Chevron Singapore Pte., Ltd.	33	1	32	(15)
	GS Aromatics Pte. Ltd.	-	(6)	6	(3)
	GS Global Singapore Pte Ltd.	18	12	6	(4)
	Qingdao Lidong Chemical Co., Ltd.	224	20	204	(51)
	GS Global Corp.	9	-	9	2
	GS Sports Ltd.	-	-	-	(1)
	Boryeong LNG Terminal Co., Ltd.	2	2	-	(1)
	Lotte GS Chemical Corporation	25	(15)	40	23
Affiliates of large business groups	Samyang Int'l Co., Ltd.	10	-	10	(4)
	SY Energy Pte. Ltd.	34	(10)	44	44

24. Commitments

24.1 GS Caltex Corporation (the "Parent Company")

(a) As of December 31, 2024, 2 blank checks have been provided to the Korea National Oil Corporation as collateral for the Parent Company's payment of petroleum import tax and other transactions.

(b) Seven banks including KEB Hana Bank have provided the Parent Company with credit (overdraft) lines amounting to ₩178,000 million in aggregate as of December 31, 2024. In addition, the Parent Company has ₩170,000 million commercial paper program with Shinhan Bank as of December 31, 2024.

24.2 GS Mbiz Co., Ltd.

(a) GS Mbiz has franchise agreements with 393 stores relating to Auto-Oasis business and receives a portion of the sales from the stores as a franchise fee as stated in the agreement. GS Mbiz recorded sales amounting to ₩8,661 million and ₩8,644 million relating to the agreements for the years ended December 31, 2024 and 2023, respectively.

(b) GS Mbiz entered into secured loan agreement up to ₩15,000 million with the Korea Development Bank, ₩4,000 million with Shinhan Bank, and credit loan agreement up to ₩4,000 million with Shinhan Bank, ₩2,000 million with Woori Bank, ₩4,000 million with Kookmin Bank, and ₩5,000 million with NongHyup Bank.

25. Other Assets and Other Liabilities

(a) Other assets as of December 31, 2024 and 2023 are summarized as follows:

		Won (millions)	
		2024	2023
Advance payments	₩	213,156	267,171
Prepaid expenses		14,243	13,416
Other receivable (*)		808,568	727,470
Total other current assets		**1,035,967**	**1,008,057**
Long-term prepaid expenses		539	399
Membership		24,142	24,529
Total other non-current assets		**24,681**	**24,928**
Total other assets	₩	**1,060,648**	**1,032,985**

(*) Receivables not based on contractual cash flows are included.

(b) Other liabilities as of December 31, 2024 and 2023 are summarized as follows:

		Won (millions)	
		2024	2023
Advances from customers	₩	109,739	107,062
Unearned revenue		2,177	95
Other payable (*)		961,967	877,955
Total other current liabilities		**1,073,883**	**985,112**
Deferred revenue		24,597	28,189
Provisions		39,264	34,149
Others		11,590	9,414
Total other non-current liabilities		**75,451**	**71,752**
Total other liabilities	₩	**1,149,334**	**1,056,864**

(*) Payables not based on contractual cash flows are included.

December 31, 2024 and 2023

26. Risk Management

(a) Risk management principles

The Group is exposed to a variety of financial risks: market risk (including foreign exchange risk, interest rate risk and commodity price risk), credit risk and liquidity risk. The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Group's financial performance.

Risks are generally managed, within the relevant Group divisions. Executives of operational divisions have overall responsibility for the establishment and oversight of risk management framework within the divisions. Finance department is responsible for managing foreign exchange, interest rate, liquidity, and refinancing risks. Credit risk and counterparty risk are managed within credit management department. Crude oil department manages the Group's refining margin, refinery inventory price risk, and various position transactions. The risk management in regards to financial instruments aims to reduce the volatility in earnings, financial position, and cash flows, while securing effective and competitive financing for the Group.

The risk management committee regularly reviews and monitors financial risk management principles, policies, risk tolerance, and other risk management activities.

(b) Credit risk management

Credit risk is the risk of having financial loss to the Group where a counterparty to a financial instrument fails to meet its contractual obligations. In order to reduce the risk from defaults caused by the counterparties for contract, transactions are only made with a customer or counterparty with credit over a certain level and the Group requires sufficient amount of security or collateral from the high-risk counterparties. The Group has established a credit policy under which each new customer is analyzed individually for creditworthiness before the Group's standard payment and delivery terms and conditions are offered. The Group's review incudes external ratings.

Trade and other receivables from customers are widely dispersed across various areas and industries. The Group monitors customer's credit risk regularly, and enters into guarantee insurance contracts if necessary. The Group is not exposed to material credit risks from individuals or legal entities grouped according to their similar characteristics.

Credit risk arises principally from the Group's undiscounted carrying amount of the financial assets.

December 31, 2024 and 2023

26. Risk Management, Continued

(b) Credit risk management, Continued

The maximum exposure to credit risk by geographical area as of December 31, 2024 and 2023 is summarized as follows:

		Won (millions)	
		2024	2023
Korea	₩	2,966,663	2,935,047
China		405,132	363,093
Singapore		1,948,913	2,053,888
Others		297,071	413,173
	₩	5,617,779	5,765,201

Among financial assets measured at amortized cost in the amount of ₩5,359,990 million as of December 31, 2024, ₩129,800 million was past due and the impairment for these receivables by aging is as follows:

		Won (millions)			
		Past due 0 ~ 30 days	Past due 30 ~ 90 days	More than 90 days	Total
Financial assets at amortized cost	₩	67,142	1,535	61,123	129,800
Allowance for doubtful accounts		(10,887)	(107)	(33,954)	(44,948)

26. Risk Management, Continued

(c) Liquidity risk management

Liquidity risk is the risk that the Group will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or other financial assets. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always maintain a diversified maturity profile in its portfolio of liabilities. The Group is provided with extended payment due dates of liabilities that are part of the supplier finance arrangements, 50 days longer in general, compared with the normal terms agreed with other suppliers that are not participating.

The contractual maturity of financial liabilities as of December 31, 2024 is as follows:

		Won (millions)			
		Within 1 year	1 ~ 5 years	After 5 years	Total
Current liabilities:					
Accounts payable-trade	₩	2,998,617	-	-	2,998,617
Short-term financial liabilities		2,576,768	-	-	2,576,768
Current lease liabilities		162,213	-	-	162,213
Total current financial liabilities		5,737,598	-	-	5,737,598
Non-current liabilities:					
Long-term financial liabilities	₩	84,415	2,374,336	314,211	2,772,962
Non-current lease liabilities		-	523,768	198,321	722,089
Total non-current financial liabilities		84,415	2,898,104	512,532	3,495,051
	₩	5,822,013	2,898,104	512,532	9,232,649

The above contractual maturity of financial liabilities includes estimated interest payments.

December 31, 2024 and 2023

26. Risk Management, Continued

(d) Market risk management

The Group uses derivative financial instruments to manage certain exposures to fluctuations in foreign currency exchange rates and interest rates and to manage its margin exposure from changes in oil price.

Oil price risk

The market prices for crude oil and other feed-stocks, as well as refined petroleum products, are subject to significant fluctuations resulting from a variety of factors affecting demand and supply globally. The Group's results of operations in any given period are principally driven by the demand for and prices of refined petroleum products. These factors, combined with the Group's own consumption of crude oil and other feed-stocks and output of refined products, affect operational performance and cash flows in Oil Refining and Petrochemical segments, which are the Group's major business divisions in terms of sales, profits, and net assets.

As the total refining margin is an important determinant of earnings, its fluctuations constitute a significant risk. With the aim of securing a minimum margin per barrel, the Group hedges its refining margin using derivative financial instruments. The level of hedging depends on the forecast for the period in question and management's view of market conditions.

Because of the differences between the qualities of the underlying crude oil and refined petroleum products for which derivative financial instruments can be sold and purchased and the actual quality of the Group's feed-stocks and refined petroleum products in any given period, the business will remain exposed to some degree of basis risk.

Foreign exchange risk

Since the Group reports in Korean won while the pricing currencies used in the contract with major counterparties are U.S. dollar, the Group's business is vulnerable to short and long term currency rate changes.

The objective of foreign exchange risk management in the Group is to limit the uncertainty created by changes in foreign exchange rates on the future value of cash flows and earnings, and the Group's financial position.

The Group borrows money in foreign currency to hedge foreign currency risk of accounts receivable denominated in foreign currency and enters into foreign currency swap contracts to hedge its foreign currency risk of foreign currency bonds.

Interest rate risk

The Group has long-term borrowings at variable interest rates and where appropriate uses interest rate derivatives such as interest rate swaps to manage possible adverse cash flow movements in the future. These derivatives allow the Group to swap floating rate borrowings into fixed rates effectively. As a result of its policy for management of interest rate risk, the Group is effectively hedged against its interest rate risk, which arises from financial instruments.

December 31, 2024 and 2023

26. Risk Management, Continued

(e) Sensitivity analysis

Due to the nature of its operations, the Group's financial performance is sensitive to the market risk described above. Market risk mainly arises from the volatility of foreign exchange rate and oil prices. The Group measures its market risk exposure, arising from financial instruments, using value-at-risk ("VaR") methodology.

VaR is the maximum loss not to be exceeded within a given probability or confidence level over a given period of time and it reflects risk reduction due to diversification.

The Group uses the assumptions in the VaR methodology below to measure market risk:
- a moving average for computing historical volatilities and correlations,
- a one-tailed 99% confidence level,
- minimum ten-day holding period,
- one year as a period of historical volatilities (Updated on a quarterly basis),
- U.S. dollar as a major foreign currency,
- the Dubai crude and Mogas, Naphtha, Kero, Gasoil and HSFO as the benchmark being used (MOPS or MOPJ price),
- no calendar spread, and
- no quality difference.

The VaR as of December 31, 2024 is summarized as follows:

	Won (millions)
Foreign exchange risk	₩ 46,673
Oil price risk	9,519

December 31, 2024 and 2023

27. Bonds and borrowings

(a) Bonds

Bonds as of December 31, 2024 and 2023 are summarized as follows:

Bonds	Annual interest rate	Due date		Won (millions) Book value 2024	2023
Global bonds:					
FY-18 (CHF 100 million)	-	-	₩	-	152,682
FY-19 (USD 300 million)	-	-		-	386,820
FY-19 (USD 100 million)	-	-		-	128,940
FY-20 (USD 300 million)	1.63%	Jul. 27, 2025		441,000	386,820
FY-22 (USD 300 million)	4.50%	Jan. 05, 2026		441,000	386,820
FY-23 (USD 300 million)	5.38%	Aug. 07, 2028		441,000	386,820
Local debentures:					
FY-15 (₩50,000 million)	2.86%	Apr. 28, 2025		50,000	50,000
FY-16 (₩50,000 million)	2.42%	Apr. 08, 2026		50,000	50,000
FY-18 (₩50,000 million)	2.87%	Aug. 17, 2028		50,000	50,000
FY-19 (₩190,000 million)	-	-		-	190,000
FY-19 (₩80,000 million)	2.25%	Jan. 29, 2026		80,000	80,000
FY-19 (₩230,000 million)	2.42%	Jan. 29, 2029		230,000	230,000
FY-19 (₩70,000 million)	1.99%	Oct. 29, 2029		70,000	70,000
FY-20 (₩140,000 million)	1.63%	Feb. 13, 2025		140,000	140,000
FY-20 (₩80,000 million)	1.70%	Feb. 13, 2027		80,000	80,000
FY-20 (₩130,000 million)	1.82%	Feb. 13, 2030		130,000	130,000
FY-21 (₩30,000 million)	-	-		-	30,000
FY-21 (₩260,000 million)	1.70%	Mar. 03, 2026		260,000	260,000
FY-21 (₩60,000 million)	2.14%	Mar. 03, 2031		60,000	60,000
FY-21 (₩50,000 million)	2.26%	Mar. 03, 2036		50,000	50,000
FY-23 (₩80,000 million)	4.07%	Mar. 02, 2025		80,000	80,000
FY-23 (₩70,000 million)	4.25%	Mar. 02, 2028		70,000	70,000
FY-24 (₩150,000 million)	3.41%	Jun. 27, 2027		150,000	-
FY-24 (₩50,000 million)	3.40%	Jun. 27, 2029		50,000	-
Total				2,923,000	3,448,902
Less current portion				(711,000)	(888,442)
Less discounts on bonds				(7,452)	(9,862)
			₩	2,204,548	2,550,598

The terms of the bonds restrict the sale and leaseback transactions by the Group as well as provision of security interest on or pledge of any assets of the Group.

December 31, 2024 and 2023

27. Bonds and borrowings, Continued

(b) Short-term borrowings

Short-term borrowings as of December 31, 2024 and 2023 are summarized as follows:

				Won (millions)	
				Book value	
Financial institution	Short-term borrowings	Annual interest rate		2024	2023
Kookmin Bank	Working funds	4.13%	₩	100,000	-
	Short-term borrowings (foreign currency)	2.75%		6,038	5,425
KEB Hana Bank	Short-term borrowings (foreign currency)	-		-	4,503
	Working funds	1Y LPR - 0.55%		4,428	-
	Working funds	3M Euribor + 0.80%		3,147	-
Korea Development Bank	Working funds	3M Euribor +0.89%		7,644	11,413
	Working funds	1M SOFR + 0.95%		27,930	32,235
	Facility funds	-		-	150,000
	Facility funds	-		-	150,000
	Facility funds	-		-	100,000
	Facility funds	3.63%		100,000	-
	Facility funds	3.44%		50,000	-
Woori Bank	Short-term borrowings (foreign currency)	7.60%		5,157	-
	Proceeds from receivable sales (*)	-		-	2,863
Industrial Bank of Korea (China)	Working funds	-		-	4,883
	Short-term borrowings (foreign currency)	2.60%		2,596	-
Credit Agricole	Short-term borrowings (foreign currency)	-		-	3,460
HDFC Bank	Short-term borrowings (foreign currency)	-		-	3,100
	Short-term borrowings (foreign currency)	8.01%		1,338	662
SMBC	Short-term borrowings (foreign currency)	7.66%		2,579	-
Mizuho Bank	Working funds	1Y LPR – 0.80%		6,038	5,787
Citi Bank (Czech)	Working funds	eSTR + 0.80%		6,093	14,266
Industrial and Commercial Bank of China Limited (ICBC)	Working funds	-		-	5,425
China Construction Bank Corporation	Working funds	1Y LPR - 0.80%		6,038	-
Kookmin Bank and others	Acceptances payable to bank (USD)	4.68%		245,577	289,736
DBS Bank and others	Short-term borrowings (foreign currency)	4.74% ~ 5.06%		539,392	404,654
			₩	1,113,995	1,188,412

27. Bonds and borrowings, Continued

(b) Short-term borrowings, Continued

(*) The Group transferred financial assets through a contract with a bank, but since the counterparty had a right of recourse for the transferred assets, it was accounted for as a short-term borrowing.

(c) Long-term borrowings

Long-term borrowings in local currency as of December 31, 2024 and 2023 are summarized as follows:

			Won (millions)	
			Book value	
Financial institution	Annual interest rate		2024	2023
Korea Development Bank	2.46%	₩	96,428	100,000
	2.42%		57,857	60,000
	2.96%		40,000	40,000
	4.80%		6,000	6,000
	4.55%		7,500	-
	1.93%		11,684	-
Ministry of Trade, Industry and Energy	1.43%		5,500	4,000
Less current portion of long-term borrowings in local currency			(28,846)	(5,715)
		₩	196,123	204,285

Long-term borrowings in foreign currency as of December 31, 2024 and 2023 are summarized as follows:

			Won (millions)	
			Book value	
Financial institution	Annual interest rate		2024	2023
Korea Development Bank	3M SOFR + 1.46%	₩	133,311	158,998
Less current portion of long-term borrowings in foreign currency			(52,920)	(42,066)
		₩	80,391	116,932

December 31, 2024 and 2023

27. Bonds and borrowings, Continued

(d) Change of liabilities in financing activities for the year ended December 31, 2024 is summarized as follows:

	Won (millions)					
	Short-term borrowings	Long-term borrowings	Bonds	Fair value – hedging instrument	Lease liabilities	Total
Balance at January 1, 2024 ₩	**1,188,412**	**368,998**	**3,439,040**	**(102,827)**	**830,722**	**5,724,345**
Cash flows from financing activities, net	(103,452)	(29,621)	(721,447)	126,773	(168,960)	(896,707)
Effects of changes in exchange rates	31,901	18,903	194,023	-	69,955	314,782
Effects of changes in fair values	-	-	-	(216,742)	-	(216,742)
Others	(2,866)	-	3,932	-	47,466	48,532
Balance at December 31, 2024 ₩	**1,113,995**	**358,280**	**2,915,548**	**(192,796)**	**779,183**	**4,974,210**

Change of liabilities in financing activities for the year ended December 31, 2023 is summarized as follows:

	Won (millions)					
	Short-term borrowings	Long-term borrowings	Bonds	Fair value – hedging instrument	Lease liabilities	Total
Balance at January 1, 2023 ₩	**1,729,631**	**442,452**	**3,545,266**	**(151,358)**	**1,226,607**	**6,792,598**
Cash flows from financing activities, net	(520,092)	(65,419)	(154,572)	72,848	(237,754)	(904,989)
Effects of changes in exchange rates	(21,127)	4,085	43,989	-	(32,724)	(5,777)
Effects of changes in fair values	-	-	-	(24,317)	-	(24,317)
Others	-	(12,120)	4,357	-	(125,407)	(133,170)
Balance at December 31, 2023 ₩	**1,188,412**	**368,998**	**3,439,040**	**(102,827)**	**830,722**	**5,724,345**

28. Lease liabilities

(a) The total of lease commitments and present value discounted using the incremental borrowing rate regarding lease liabilities as of December 31, 2024 and 2023 are summarized as follows:

	Won (millions)						
	2024			2023			
	Minimum lease payment	Interest expense	Present value discounted using the incremental borrowing rate	Minimum lease payment	Interest expense	Present value discounted using the incremental borrowing rate
Within 1 year	₩ 162,213	(2,985)	159,228	194,171	(3,297)	190,874
1~5 years	523,768	(54,437)	469,331	438,038	(49,142)	388,896
After 5 years	198,321	(47,697)	150,624	313,235	(62,283)	250,952
	₩ 884,302	(105,119)	779,183	945,444	(114,722)	830,722

(b) The incremental borrowing rates and the contractual maturities of lease liabilities as of December 31, 2024 and 2023 are summarized as follows:

	2024		2023	
	Incremental borrowing rate	Contractual maturities	Incremental borrowing rate	Contractual maturities
Lease liabilities	1.34% ~ 5.35%	2025.01.05 ~ 2034.05.09	1.34% ~ 5.35%	2024.01.01 ~ 2034.05.09

(c) Net cash used in leases as of December 31, 2024 and 2023 are summarized as follows:

	Won (millions)	
	2024	2023
Total cash outflows for leases	₩ 200,376	279,969
Expenses relating to short-term leases	25,228	5,989
Expenses relating to leases of low-value assets	137	24
Net cash outflows for leases	₩ 225,741	285,982

(d) Interest expense, recognized as lease liabilities is ₩31,416 million and ₩42,215 million, respectively, for the years ended December 31, 2024 and 2023.

December 31, 2024 and 2023

29. Emission rights and liabilities

(a) Quantities of emission allowances which are allocated free of charge for the 3rd commitment period (2021~2025) as of December 31, 2024, are as follows (in tCO2-eq):

	tCO2-eq					
	2021	2022	2023	2024	2025	Total
Emission allowances allocated free of charge (*)	8,352,911	9,480,678	9,142,130	8,274,399	8,274,399	43,524,517

(*) It is the amount after the adjustments are made to the initial allowances allocated free of charge.

(b) Changes in the quantity of the emission allowances for the years ended December 31, 2024 are as follows (in tCO2-eq):

	tCO2-eq			
	2023	2024	2025	Total
Beginning	9,870,030	8,794,399	8,804,399	27,468,828
Disposal	(350,007)	-	-	(350,007)
Carried forward from prior year	(1,050,018)	1,050,018	-	-
Emission	(8,485,606)	-	-	(8,485,606)
Others (*)	15,601	373,900	400,000	789,501
Ending	-	10,218,317	9,204,399	19,422,716

(*) Others include additional allocation, revocation and swap.

(c) Changes in the quantity of the emission allowances for the years ended December 31, 2023 are as follows (in tCO2-eq):

	tCO2-eq				
	2022	2023	2024	2025	Total
Beginning	8,487,833	9,223,337	8,795,101	8,804,399	35,310,670
Disposal	(144,566)	-	-	-	(144,566)
Carried forward from prior year	(289,130)	289,130	-	-	-
Emission	(8,823,189)	-	-	-	(8,823,189)
Others (*)	769,052	357,563	(702)	-	1,125,913
Ending	-	9,870,030	8,794,399	8,804,399	27,468,828

(*) Others include additional allocation, revocation and swap.

(d) The estimated emissions for the current compliance year amount to 8,469,791 tons (tCO2-eq). Since this is covered by the emission allowances for the current compliance year, no emission liability has been recognized.

29. Emission rights and liabilities, Continued

(e) Changes in emissions liabilities for the years ended December 31, 2024 and 2023 are as follows:

		Won (millions)	
		2024	2023
Beginning	₩	-	104
Increase		-	-
Surrender		-	(104)
Ending	₩	-	-

30. Assets Held for Sale

The Group's management decided to sell four gas stations held in the petroleum refining segment and entered into a sale agreement for these gas stations in 2024. The transactions are expected to be completed in 2025, resulting in reclassification of related assets to assets held for sale.

(a) Details of assets classified as held for sale are as follows:

		Won (millions)
		2024
Land	₩	13,954
Buildings		348
Structures		293
	₩	14,595

(b) There are no cumulative gains or losses recognized in other comprehensive income related to the assets held for sale.

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Independent Auditors' Report

To the Board of Directors and Shareholders of
GS Caltex Corporation:

Opinion

We have audited the accompanying consolidated financial statements of **GS** Caltex Corporation and its subsidiaries (the "Group"), which comprise the consolidated statements of financial position as of December 31, 2023 and 2022, the consolidated statements of income, comprehensive income, changes in equity and cash flows for the years then ended, and notes, comprising material accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 2023 and 2022 and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with Korean International Financial Reporting Standards ("K-IFRS").

Basis for Opinion

We conducted our audits in accordance with Korean Standards on Auditing. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in the Republic of Korea, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with K-IFRS, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated 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.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. 'Reasonable assurance' is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Korean 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 aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Korean Standards on Auditing, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated 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 our 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 we conclude that a material uncertainty exists, then we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' 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 consolidated financial statements, including the disclosures, and whether the consolidated 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. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We 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 we identify during our audit.

Other Matters

The procedures and practices utilized in the Republic of Korea to audit such consolidated financial statements may differ from those generally accepted and applied in other countries.

Our report is solely for the use of those in connection with the potential offering of US$ notes by GS Caltex Corporation and it is not to be used for any other purpose.

KPMG Samjong Accounting Corp.

Seoul, Korea
February 20, 2024

This report is effective as of February 20, 2024, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying consolidated financial statements and notes thereto. Accordingly, the readers of the audit report should understand that the above audit report has not been updated to reflect the impact of such subsequent events or circumstances, if any.

GS Caltex Corporation and Subsidiaries
Consolidated Statements of Financial Position

As of December 31, 2023 and 2022

(In millions of won)

	Note		2023	2022
Assets:				
Cash and cash equivalents	6,7	₩	1,265,126	1,560,671
Accounts and notes receivable	7,23,27		3,912,727	3,963,661
Short-term financial assets	7,27		297,531	1,805,432
Inventories	8		5,759,005	5,565,660
Prepaid income taxes			1,063	578
Other current assets	26		1,008,057	316,759
Total current assets			**12,243,509**	**13,212,761**
Long-term financial assets	7,27		284,905	315,085
Investments in associates	13		315,338	283,343
Property, plant and equipment	9,23		11,275,272	11,979,648
Investment properties	10		40,592	36,577
Intangible assets	11		70,051	70,186
Defined benefit assets, net	15		64,578	112,743
Deferred income tax assets	17		2,649	3,453
Other non-current assets	26		24,928	24,947
Total non-current assets			**12,078,313**	**12,825,982**
Total assets		₩	**24,321,822**	**26,038,743**

See accompanying notes to the consolidated financial statements.

GS Caltex Corporation and Subsidiaries
Consolidated Statements of Financial Position, Continued

As of December 31, 2023 and 2022

(In millions of won)

	Note		2023	2022
Liabilities:				
Accounts payable-trade	7,23,27	₩	2,831,833	2,661,771
Short-term financial liabilities	7,27,28,29		2,931,689	4,354,002
Income taxes payable	17		294,745	997,199
Other current liabilities	26,30		985,112	76,500
Total current liabilities			**7,043,379**	**8,089,472**
Long-term financial liabilities	7,25,27,28,29		3,557,502	4,260,021
Defined benefit liabilities, net	15		1,591	-
Deferred income tax liabilities	17		148,663	109,597
Other non-current liabilities	14,16,26		71,752	59,505
Total non-current liabilities			**3,779,508**	**4,429,123**
Total liabilities			**10,822,887**	**12,518,595**
Equity:				
Common stock	1,18		260,000	260,000
Capital surplus			68,330	68,330
Capital adjustment	18		(61,189)	(61,189)
Accumulated other comprehensive income	7,18		8,015	28,611
Retained earnings	18		13,223,779	13,224,396
Equity attributable to owners of the Parent Company			**13,498,935**	**13,520,148**
Non-controlling interests			**-**	**-**
Total equity			**13,498,935**	**13,520,148**
Total liabilities and equity		₩	**24,321,822**	**26,038,743**

See accompanying notes to the consolidated financial statements.

GS Caltex Corporation and Subsidiaries
Consolidated Statements of Income

For the years ended December 31, 2023 and 2022

(In millions of won)

	Note		2023	2022
Sales	5,19,23	₩	48,607,546	58,532,071
Cost of sales	15,22,23		(45,757,736)	(53,297,670)
Selling, general and administrative expenses	15,20,22		(1,166,018)	(1,254,883)
Operating profit	5		**1,683,792**	**3,979,518**
Share of profit of equity method accounted investees	13		14,892	17,795
Finance income	7,23		4,026,934	3,467,769
Finance costs	7		(4,234,574)	(3,737,272)
Other income	7,10,21		296,577	469,956
Other expenses	7,10,21		(264,056)	(417,560)
Profit before income taxes			**1,523,565**	**3,780,206**
Income tax expense	17		(370,834)	(990,811)
Profit for the year		₩	**1,152,731**	**2,789,395**
Profit attributable to:				
Owners of the Parent Company		₩	**1,152,731**	**2,789,395**
Non-controlling interests			-	-

See accompanying notes to the consolidated financial statements.

GS Caltex Corporation and Subsidiaries
Consolidated Statements of Comprehensive Income

For the years ended December 31, 2023 and 2022

(In millions of won)

	Note		2023	2022
Profit for the year		₩	**1,152,731**	**2,789,395**
Other comprehensive income (loss), net of tax:				
Items that will not be reclassified to profit or loss:				
Remeasurements of defined benefit liability	15		(36,069)	31,704
Net change in fair value of financial assets at fair value through other comprehensive income			(8,332)	(3,007)
Changes in equity method accounted investee's retained earnings			(1,579)	617
Items that will be reclassified subsequently to profit or loss:				
Changes in equity method accounted investee's capital			(902)	360
Effective portion of changes in unrealized fair value of cash flow hedges	7		(17,021)	(19,464)
Foreign currency translation differences			5,659	8,160
Total other comprehensive income (loss) for the year, net of tax			**(58,244)**	**18,370**
Total comprehensive income for the year		₩	**1,094,487**	**2,807,765**
Total comprehensive income attributable to:				
Owners of the Parent Company		₩	1,094,487	2,807,765
Non-controlling interests			-	-

See accompanying notes to the consolidated financial statements.

GS Caltex Corporation and Subsidiaries
Consolidated Statements of Changes in Equity

For the years ended December 31, 2023 and 2022

(In millions of won)

	Owners of the Parent Company							
	Common stock	Capital surplus	Capital adjustments	Accumulated other comprehensive income (loss)	Retained earnings	Total	Non-controlling interests	Total equity
Balance at January 1, 2023	**₩ 260,000**	**68,330**	**(61,189)**	**28,611**	**13,224,396**	**13,520,148**	**-**	**13,520,148**
Total comprehensive income:								
Profit for the year	-	-	-	-	1,152,731	1,152,731	-	1,152,731
Other comprehensive income (loss), net of tax:								
Net change in fair value of financial assets at fair value through other comprehensive income	-	-	-	(8,332)	-	(8,332)	-	(8,332)
Changes in equity method accounted investee's capital	-	-	-	(902)	-	(902)	-	(902)
Changes in equity method accounted investee's retained earnings	-	-	-	-	(1,579)	(1,579)	-	(1,579)
Effective portion of changes in unrealized fair value of cash flow hedges	-	-	-	(17,021)	-	(17,021)	-	(17,021)
Foreign currency translation differences	-	-	-	5,659	-	5,659	-	5,659
Remeasurements of defined benefit liability	-	-	-	-	(36,069)	(36,069)	-	(36,069)
Total other comprehensive loss	-	-	-	(20,596)	(37,648)	(58,244)	-	(58,244)
Total comprehensive income (loss)	**-**	**-**	**-**	**(20,596)**	**1,115,083**	**1,094,487**	**-**	**1,094,487**
Transactions with owners and other, recorded directly in equity:								
Year-end dividends	-	-	-	-	(836,800)	(836,800)	-	(836,800)
Interim dividends	-	-	-	-	(278,900)	(278,900)	-	(278,900)
Balance at December 31, 2023	**₩ 260,000**	**68,330**	**(61,189)**	**8,015**	**13,223,779**	**13,498,935**	**-**	**13,498,935**

See accompanying notes to the consolidated financial statements.

GS Caltex Corporation and Subsidiaries
Consolidated Statements of Changes in Equity, Continued

For the years ended December 31, 2023 and 2022

(In millions of won)

	Owners of the Parent Company							
	Common stock	Capital surplus	Capital adjustments	Accumulated other comprehensive income (loss)	Retained earnings	Total	Non-controlling interests	Total equity
Balance at January 1, 2022	**₩ 260,000**	**68,330**	**(61,189)**	**42,562**	**10,823,280**	**11,132,983**	**-**	**11,132,983**
Total comprehensive income:								
Profit for the year	-	-	-	-	2,789,395	2,789,395	-	2,789,395
Other comprehensive income (loss), net of tax:								
Net change in fair value of financial assets at fair value through other comprehensive income	-	-	-	(3,007)	-	(3,007)	-	(3,007)
Changes in equity method accounted investee's capital	-	-	-	360	-	360	-	360
Changes in equity method accounted investee's retained earnings	-	-	-	-	617	617	-	617
Effective portion of changes in unrealized fair value of cash flow hedges	-	-	-	(19,464)	-	(19,464)	-	(19,464)
Foreign currency translation differences	-	-	-	8,160	-	8,160	-	8,160
Remeasurements of defined benefit liability	-	-	-	-	31,704	31,704	-	31,704
Total other comprehensive income(loss)	-	-	-	(13,951)	32,321	18,370	-	18,370
Total comprehensive income (loss)	**-**	**-**	**-**	**(13,951)**	**2,821,716**	**2,807,765**	**-**	**2,807,765**
Transactions with owners and other, recorded directly in equity:								
Year-end dividends	-	-	-	-	(420,600)	(420,600)	-	(420,600)
Balance at December 31, 2022	**₩ 260,000**	**68,330**	**(61,189)**	**28,611**	**13,224,396**	**13,520,148**	**-**	**13,520,148**

See accompanying notes to the consolidated financial statements.

GS Caltex Corporation and Subsidiaries
Consolidated Statements of Cash Flows

For the years ended December 31, 2023 and 2022

(In millions of won)

		2023	2022
Cash flows from operating activities			
Profit for the year	₩	1,152,731	2,789,395
Adjustments for:			
Retirement benefits		29,430	56,151
Bad debt expense (reversal of allowance for doubtful accounts)		761	(6,307)
(Reversal of) Impairment loses on valuation of inventories		(125,657)	121,009
Depreciation		1,035,523	1,037,308
Amortization		24,328	23,566
Interest expense		262,377	207,463
Foreign currency transaction loss, net		12,311	32,748
Foreign currency translation loss, net		16,509	117,429
Gain on valuation of derivative instruments, net		(47,440)	(78,669)
Gain on transaction of derivative instruments, net		(40,014)	(51,887)
Gain on disposal of property, plant and equipment, net		(19,339)	(129,627)
Income tax expense		370,834	990,811
Interest income		(56,122)	(32,796)
Dividends income		(1,538)	(2,445)
Share of profit of equity method accounted investees, net		(14,892)	(17,795)
Gain on exemption of debts		(10,872)	-
Others, net		(18,489)	7,257
Changes in assets and liabilities:			
Accounts and notes receivable		46,561	(671,270)
Short-term financial assets		623,814	(802,563)
Inventories		(59,046)	(850,500)
Other current assets		34,490	292,809
Other non-current assets		393	180
Accounts payable-trade		244,892	(572,255)
Short-term financial liabilities		(260,441)	(664,252)
Other current liabilities		38,954	18,559
Long-term financial liabilities		(299)	1,368
Other non-current liabilities		(2,469)	4,712
Payment of retirement and severance benefits		(6,204)	(1,338)
Contributions to plan assets		(21,910)	(101,884)
Interest received		84,382	28,087
Interest paid		(247,453)	(165,309)
Dividends received		17,986	10,850
Income tax paid		(1,013,685)	(132,110)
Net cash provided by operating activities	₩	**2,050,406**	**1,458,695**

See accompanying notes to the consolidated financial statements.

GS Caltex Corporation and Subsidiaries
Consolidated Statements of Cash Flows, Continued

For the years ended December 31, 2023 and 2022

(In millions of won)

		2023	2022
Cash flows from investing activities			
Decrease in short-term financial assets	₩	208,893	72,940
Decrease in long-term financial assets		7,310	16,884
Proceeds from sale of property, plant and equipment		68,769	181,847
Proceeds from intangible assets		91	248
Proceeds from sale of investment property		1,531	-
Proceeds from memberships		-	3,904
Receipt subsidies for property, plant and equipment		6,293	-
Increase in short-term financial assets		(45,483)	(200,810)
Increase in long-term financial assets		(11,148)	(18,610)
Acquisition of investments in associates		(33,235)	-
Purchases of property, plant and equipment		(534,026)	(526,716)
Purchases of intangible assets		(474)	(5,225)
Purchases of memberships		(1,022)	(715)
Others, net		1,091	344
Net cash used in investing activities		**(331,410)**	**(475,909)**
Cash flows from financing activities			
Proceeds from short-term financial liabilities		6,717,198	13,136,028
Proceeds from long-term financial liabilities		546,568	386,035
Settlement of derivative instruments, net		72,848	58,765
Payment of lease liabilities		(237,754)	(229,340)
Repayment of short-term financial liabilities		(8,001,072)	(13,433,649)
Repayment of long-term financial liabilities		(2,777)	(3,215)
Dividends paid		(1,115,700)	(420,600)
Others, net		1,817	(1,211)
Net cash used in financing activities		**(2,018,872)**	**(507,187)**
Net increase (decrease) in cash and cash equivalents		**(299,876)**	**475,599**
Cash and cash equivalents at beginning of year		1,560,671	1,079,192
Effect of movements in exchange rates on cash held		4,331	5,880
Cash and cash equivalents at end of year	₩	**1,265,126**	**1,560,671**

See accompanying notes to the consolidated financial statements.

December 31, 2023 and 2022

1. General Information

1.1 The Parent Company

GS Caltex Corporation ("**GS** Caltex" or the "Parent Company") was incorporated under a joint venture agreement between Caltex Petroleum Corporation and Lucky Limited in 1966 and incorporated as Honam Oil Refinery Co., Ltd. in 1967 under the laws of the Republic of Korea. The Parent Company's principal business activities consist of petroleum refining and marketing, production of petrochemicals, including paraxylene, benzene, toluene and polypropylene, and blending of lubricant oils. Such activities (with the exception of lubricant oil blending, which takes place at facilities located in Incheon) are carried out at the Parent Company's Yeosu refinery complex located in southern Korea, and the headquarters of the Parent Company is located at 508, Nonhyun-ro, Gangnam-gu in Seoul.

On July 1, 2004, LG Corp. (which had owned 50% of the Parent Company's shares as of June 30, 2004) was split into two separate holding companies, LG Corp. and **GS** Holdings Corporation. As a result, the Parent Company became a subsidiary of **GS** Holdings Corporation. On March 31, 2005, the Parent Company changed its name from LG-Caltex Oil Corporation to **GS** Caltex Corporation. On January 1, 2013, **GS** Energy Corporation was established through the spin-off of the energy holding business unit of **GS** Holdings Corporation, in which 50% of the shares in the Parent Company were transferred to the newly-established company. As of December 31, 2023, the ownership of the Parent Company is as follows:

Shareholders	Number of common shares held	Percentage of ownership
Chevron Corporation:		
Chevron (Overseas) Holdings Ltd.	10,400,000	40%
Chevron Global Energy Inc.	2,600,000	10%
GS Energy Corporation	13,000,000	50%
	26,000,000	100%

Certain agreements with Chevron Global Energy Inc. (the "CGEI") provide that CGEI is to supply a portion of the Parent Company's crude oil and other feed-stock as well as technical assistance in the manufacturing of petroleum products. The Parent Company is registered under the Foreign Capital Inducement Law of the Republic of Korea. Under this registration, profits attributable to Chevron (Overseas) Holdings Ltd. and CGEI are fully remittable. Further, repatriation of capital is guaranteed after satisfying certain conditions.

December 31, 2023 and 2022

1. General Information, Continued

1.2 Subsidiaries

(a) Details of subsidiaries as of December 31, 2023 and 2022 are as follows:

Subsidiaries	Location	Ownership 2023	Ownership 2022	Main Business
GS Mbiz Co., Ltd.	Seoul, Korea	100.00%	100.00%	Electronic commerce and sale of petroleum products
GS Caltex Singapore Pte., Ltd.	Singapore	100.00%	100.00%	International trading
GS Caltex (Langfang) Plastics Co., Ltd.	China	100.00%	100.00%	Production and sale of compound polypropylene
InnoPolytech Co., Ltd.	Jinju, Korea	100.00%	100.00%	Toll manufacturing and production of plastic products
GS Caltex India Pvt. Ltd.	India	100.00%	100.00%	Sale of lubricant oil
Sangji Shipping Co., Ltd.	Yeosu, Korea	100.00%	100.00%	Shipping
GS Bio Co., Ltd.	Yeosu, Korea	100.00%	100.00%	Petroleum substitute fuel manufacturing
GS EcoMetal Co., Ltd.	Ulsan, Korea	100.00%	100.00%	Recycling and restoration of disposed catalysts
GS Caltex (Suzhou) Plastics Co., Ltd.	China	100.00%	100.00%	Production and sale of compound polypropylene
GS Caltex Czech, s.r.o.	Czech	100.00%	100.00%	Production and sale of compound polypropylene
GS Caltex China Co., Ltd.	China	100.00%	100.00%	Sale of lubricant oil
GS Caltex Mexico S.de R.L.de C.V.	Mexico	100.00%	100.00%	Production and sale of compound polypropylene
Pancotec Co., Ltd.	Yeosu, Korea	100.00%	100.00%	Facilities maintenance service
Hanul Love Co., Ltd.	Yeosu, Korea	100.00%	100.00%	Convenience business and commercial food service
Suzhou **GS** Caltex Trading Co., Ltd.	China	100.00%	100.00%	Sale of compound polypropylene

(b) Condensed financial information of main subsidiaries

Condensed financial information of main subsidiaries as of and for the year ended December 31, 2023 is as follows:

Subsidiaries	Won (millions) Assets	Liabilities	Sales	Net profit
GS Mbiz Co., Ltd.	₩ 163,415	74,043	231,815	10,023
GS Caltex Singapore Pte., Ltd.	1,974,762	1,701,017	25,909,636	41,959
GS Caltex (Langfang) Plastics Co., Ltd.	72,063	7,599	116,796	3,356
InnoPolytech Co., Ltd.	20,674	11,076	106,547	1,671
GS Caltex India Pvt. Ltd.	26,576	17,208	88,975	510
GS Bio Co., Ltd.	106,489	22,959	189,264	14,599
GS EcoMetal Co., Ltd.	83,828	20,145	60,824	8,303
GS Caltex (Suzhou) Plastics Co., Ltd.	77,816	27,897	116,634	4,960
GS Caltex Czech, s.r.o.	86,959	43,074	159,837	65

2. Basis of Preparation

(a) Statement of Compliance

The consolidated financial statements have been prepared in accordance with Korean International Financial Reporting Standards ("K-IFRS") as prescribed in the Act on External Audit of Stock Companies of the Republic of Korea.

The consolidated financial statements were authorized for issue by management on January 30, 2024, and are expected to be submitted to shareholders' meeting for approval on February 28, 2024.

(b) Basis of Measurement

The consolidated financial statements have been prepared on the historical cost basis, except for the following material items in the statement of financial position:

- ✓ derivative financial instruments measured at fair value;
- ✓ financial instruments measured at fair value; and
- ✓ liabilities for defined benefit plans recognized at the net of the total present value of defined benefit obligations less the fair value of plan assets.

(c) Functional and Presentation Currencies

These consolidated financial statements are presented in Korean won, which is the Parent Company's functional currency and the currency of the primary economic environment in which the Parent Company operates. All financial information presented in Korean won has been rounded to the nearest million.

(d) Use of Estimates and Judgments

The preparation of the consolidated financial statements in conformity with K-IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

December 31, 2023 and 2022

2. Basis of Preparation, Continued

(d) Use of Estimates and Judgments, Continued

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment within the next financial year are included in the following note:

Note 15 – Retirement Benefits
Note 17 – Income taxes

Fair Value Measurement

A number of the Group's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities.

When measuring the fair value of an asset or a liability, the Group uses market observable data as far as possible. Fair values are categorized into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

- ✓ Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;
- ✓ Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- ✓ Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

If the inputs used to measure the fair value of an asset or a liability are categorized into different levels of the fair value hierarchy, then the fair value measurement is categorized in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

The Group recognizes transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

Further information about the assumptions made in measuring fair values is included in the following note:

Note 7 – Financial Instruments

3. Changes in Accounting Policies

(a) Deferred tax related to assets and liabilities arising from a single transaction (Amendments to K-I FRS No.1012, 'Income Taxes')

The Group has adopted *Deferred Tax related to Assets and Liabilities arising from a Single Transaction* – Amendments to K-IFRS No.1012 *'Income Taxes'* from January 1, 2023. The amendments narrow the scope of the initial recognition exemption to exclude transactions that give rise to equal and offsetting temporary differences – e.g. leases and decommissioning liabilities. The Group has consistently recognized a separate deferred tax asset in relation to its lease liabilities and a deferred tax liability in relation to its right-of-use assets, resulting in a similar outcome to the amendments, regardless of whether the deferred tax asset or liability is recognized on a net basis or gross basis. Following the amendments, there was no impact on the statement of financial position because the balances qualify for offset under paragraph 74 of K-IFRS No.1012.

(b) Information of Material Accounting Policies

The Group also adopted *Disclosure of Accounting Policies* – Amendments to K-IFRS No. 1001 *'Presentation of Financial Statements'* starting from January 1, 2023. Although the amendments did not result in any changes to the accounting policies themselves, they impacted the accounting policy information disclosed in the financial statements.

The amendments require the disclosure of 'material', rather than 'significant' accounting policies. The amendments also provide guidance on the application of materiality to disclosure of accounting policies, assisting entities to provide useful, entity-specific accounting policy information that users need to understand other information in the financial statements.

Management reviewed the accounting policies and made updates to the information disclosed in Note 4 Material accounting policies (2022: Significant accounting policies) in certain instances in line with the amendments.

4. Material Accounting Policies

The material accounting policies applied by the Group in the preparation of its consolidated financial statements are included below. The accounting policies set out below have been applied consistently to all periods presented in these consolidated financial statements.

(a) Operating Segments

An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses that relate to transactions with the Group's other components. All operating segments' operating results are reviewed regularly by the Group's chief operating decision maker in deciding how to allocate resources in assessing its performance, and for which discrete financial information is available. The prices agreed among the Group companies for intra-group transactions are based on normal commercial practices which would apply between independent businesses.

(b) Basis of Consolidation

Subsidiaries
Subsidiaries are entities controlled by the Group. The Group controls an entity when it 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. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control commences until the date that on which control ceases.

Transactions eliminated on consolidation
Intra-group balances and transactions, and any unrealized income and expenses arising from intra-group transactions, are eliminated. Unrealized gains arising from transactions with equity accounted investees are eliminated against the investment to the extent of the Group's interest in the investee. Unrealized losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment.

Changes in the Parent Company's ownership
Changes in the Parent Company's ownership interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions with owners in their capacity as owners.

Interests in equity-accounted investees
The Group's interests in equity-accounted investees comprise interests in associates.

Associates are those entities in which the Group has significant influence, but not control or joint control, over the financial and operating policies. A joint venture is an arrangement in which the Group has joint control, whereby the Group has rights to the net assets of the arrangement, rather than rights to its assets and obligations for its liabilities.

Interests in associates and the joint venture are accounted for using the equity method. They are recognized initially at cost, which includes transaction costs. Subsequent to initial recognition, the consolidated financial statements include the Group's share of the profit or loss and OCI (Other Comprehensive Income) of equity-accounted investees, until the date on which significant influence or joint control ceases.

4. Material Accounting Policies, Continued

(b) Basis of Consolidation, Continued

Business combinations under common control
Business combinations under common control are accounted for in the consolidated accounts prospectively from the date the Group obtains the ownership interest. Assets and liabilities are recognized upon consolidation at their carrying amount in the consolidated financial statements of the ultimate parent entity. Any difference between the fair value of the consideration paid and the amounts at which the assets and liabilities are recorded is recognized directly in equity in the business combinations under common control reserve.

(c) Cash and Cash Equivalents

Cash and cash equivalents comprise cash balances and call deposits with maturities of three months or less from the acquisition date that are subject to an insignificant risk of changes in their fair value, and are used by the Group in the management of its short-term commitments. Equity investments are excluded from cash equivalents unless they are, in substance, cash equivalents, such as preferred shares when it has a short maturity with a specified redemption date.

(d) Inventories

The Group determines its cost of inventories using the 'monthly gross average' method for raw materials, work-in-process, products and merchandise, 'moving average' method for all supplies, the 'specific identification' method for goods in transit and the 'weighted average' method for the other inventories. Its cost of inventories includes expenditure incurred in acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing location and condition. In the case of manufactured inventories and work in process, cost includes an appropriate share of production overheads based on normal operating capacity.

The carrying amount of inventory is recognized as cost of goods sold when revenue from the sale of the inventory is recognized. Inventories are measured 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 of completion and selling expenses. The amount of any write-down of inventories to net realizable value and all losses of inventories are recognized as an expense during the period the write-down or loss occurs and included in cost of sales. The amount of any reversal of write-down of inventories, arising from an increase in net realizable value, are recognized as a reduction in the amount of inventories recognized as an expense in the period in which the reversal occurs and included in cost of sales.

4. Material Accounting Policies, Continued

(e) Non-derivative Financial Assets

Recognition and initial measurement
The Group recognizes accounts receivable and debt securities initially when they are originated and subsequently measures them at amortized cost. The Group recognizes other financial assets when the Group becomes a party to the contractual provisions of the instrument.

A financial asset (other than a trade receivable without a significant financing component that is initially measured at the transaction price) is initially measured at fair value and, for an item not at FVTPL, transaction costs that is directly attributable to its acquisition. An account receivable without a significant financing component is measured at its transaction price.

Classification and subsequent measurement
On initial recognition, a financial asset is classified as amortized cost, FVOCI-debt investment, FVOCI-equity investment or FVTPL. A financial asset is not reclassified without a change of the business model in which a financial asset is managed and its contractual cash flow characteristics. A financial asset which changes its business model is reclassified on a first day of the first reporting period after its change.

A financial asset is measured at amortized cost if it meets both of the following conditions and is not designated as at FVTPL.

- It is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- Its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

A debt investment is measured at FVOCI if it meets both of the following conditions and is not designated as at FVTPL.

- It is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- Its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding

On initial recognition of an equity investment that is not held for trading, the Group may irrevocably elect to present subsequent changes in the investment's fair value in OCI. This election is made on an investment-by-investment basis.

All financial assets not classified as measured at amortized cost or FVOCI as described above are measured at FVTPL. This includes all derivative financial assets. On initial recognition, the Group may irrevocably designate a financial asset that otherwise meets the requirements to be measured at amortized cost or at FVOCI as at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

A financial portfolio which satisfies the definition of short-term trading or is evaluated its performance based on the fair value is measured at FVTPL.

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4. Material Accounting Policies, Continued

(e) Non-derivative Financial Assets, Continued

The following accounting policies apply to the subsequent measurement of financial assets.

	Subsequent measurement
Financial assets at FVTPL	These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognized in profit or loss.
Financial assets at amortized cost	These assets are subsequently measured at amortized cost using the effective interest method. The amortized cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognized in profit or loss. Any gain or loss on derecognition is recognized in profit or loss.
Debt investments at FVOCI	These assets are subsequently measured at fair value. Interest income calculated using the effective interest method, foreign exchange gains and losses and impairment are recognized in profit or loss. Other net gains and losses are recognized in OCI. On derecognition, gains and losses accumulated in OCI are reclassified to profit or loss.
Equity investments at FVOCI	These assets are subsequently measured at fair value. Dividends are recognized as income in profit or loss unless the dividend clearly represents a recovery of part of the cost of the investment. Other net gains and losses are recognized in OCI and are never reclassified to profit or loss.

Derecognition of financial assets

The Group derecognizes a financial asset when the contractual rights to the cash flows from the asset expires, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. If the Group neither transfers nor retains substantially all the risks and rewards of ownership of the financial assets, the Group determines whether it has retained control of the financial asset. If the Group has not retained control, it derecognizes the financial asset and if the Group has retained control, it continues to recognize the financial asset to the extent of its continuing involvement in the financial asset.

If the Group retains substantially all the risks and rewards of ownership of the transferred financial assets, the Group continues to recognize the transferred financial assets and recognizes financial liabilities for the consideration received.

Offsetting between financial assets and financial liabilities

Financial assets and financial liabilities are offset and the net amount is presented in the consolidated statement of financial position only when the Group currently has a legally enforceable right to offset the recognized amounts, and there is the intention to settle on a net basis or to realize the asset and settle the liability simultaneously.

4. Material Accounting Policies, Continued

(f) Derivative Financial Instruments, Including Hedge Accounting

Derivatives are initially recognized at fair value. Subsequent to initial recognition, derivatives are measured at fair value, and changes therein are accounted for as described below.

Hedge accounting
The Group holds forward exchange contracts, interest rate swaps, currency swaps and other derivative contracts to manage interest rate risk and foreign exchange risk.

The Group designates derivatives as hedging instruments to hedge the risk of changes in the fair value of assets, liabilities or firm commitments (a fair value hedge) and foreign currency risk of highly probable forecasted transactions or firm commitments (a cash flow hedge).

On initial designation of the hedge, the Group formally documents the relationship between the hedging instruments and hedged items, including the risk management objectives and strategy in undertaking the hedge transaction, together with the methods that will be used to assess the effectiveness of the hedging relationship.

Cash flow hedge
When a derivative is designated to hedge the variability in cash flows attributable to a particular risk associated with a recognized asset or liability or a highly probable forecasted transaction that could affect profit or loss, the effective portion of changes in the fair value of the derivative is recognized in other comprehensive income, net of tax, and presented in the hedging reserve in equity. Any ineffective portion of changes in the fair value of the derivative is recognized immediately in profit or loss.

If the hedging instrument no longer meets the criteria for hedge accounting, expires, is sold, terminated, exercised, or the designation is revoked, then hedge accounting is discontinued prospectively. The cumulative gain or loss on the hedging instrument that has been recognized in other comprehensive income is reclassified to profit or loss in the periods during which the forecasted transaction occurs. If the forecasted transaction is no longer expected to occur, then the balance in other comprehensive income is recognized immediately in profit or loss.

Other derivative financial instruments
Changes in the fair value of other derivative financial instrument not designated as a hedging instrument are recognized immediately in profit or loss.

(g) Impairment of Financial Assets

Financial instruments and contract assets
The Group measures loss allowances for the following financial assets at an amount equal to ECLs:
- financial assets at amortized cost; and
- contract assets recognized in accordance with K-IFRS No.1115

The Group measures loss allowances at an amount equal to lifetime ECLs, except for the following, which are measured as 12-month ECLs:
- debt securities that are determined to have low credit risk at the reporting date; and
- other debt securities and bank balances for which credit risk (i.e. the risk of default occurring over the expected life of the financial instrument) has not increased significantly since initial recognition.

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4. Material Accounting Policies, Continued

(g) Impairment of Financial Assets, Continued

The Group has elected to measure loss allowances for trade receivables and contract assets at an amount equal to lifetime ECLs.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Group's historical experience and informed credit assessment and including forward-looking information.

Measurement of ECLs
ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the entity in accordance with the contract and the cash flows that the Group expects to receive). ECLs are discounted at the effective interest rate of the financial asset.

Credit-impaired financial assets
At each reporting date, the Group assesses whether financial assets carried at amortized cost and debt securities at FVOCI are credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Evidence that a financial asset is credit-impaired includes the following observable data:
- significant financial difficulty of the borrower or issuer;
- a breach of contract such as a default or being more than 90 days past due;
- the restructuring of a loan or advance by the Group on terms that the Group would not consider otherwise;
- it is probable that the borrower will enter bankruptcy or other financial reorganization; or
- the disappearance of an active market for a security because of financial difficulties.

Presentation of allowance for ECL in the statement of financial position
Loss allowances for financial assets measured at amortized cost are deducted from the gross carrying amount of the assets.

Write-off
The gross carrying amount of a financial asset is written off when the Group has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof. The Group individually makes an assessment with respect to the timing and amount of write-off based on whether there is a reasonable expectation of recovery. The Group expects no significant recovery from the amount written off. However, financial assets that are written off could be still subject to enforcement activities in order to comply with the Group's procedures for recovery of amounts due.

4. Material Accounting Policies, Continued

(h) Property, Plant and Equipment

Property, plant and equipment are initially measured at cost and after initial recognition, are carried at cost less accumulated depreciation and accumulated impairment losses. The cost of property, plant and equipment includes expenditures arising directly from the construction or acquisition of the asset, any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management and the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

Subsequent costs are recognized in the carrying amount of property, plant and equipment at cost or, if appropriate, as separate items if it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. The costs of the day-to-day servicing are recognized in profit or loss as incurred.

Property, plant and equipment, except for land, are depreciated over estimated useful lives that appropriately reflect the pattern in which the asset's future economic benefits are expected to be consumed on a straight-line basis.

The estimated useful lives for the current and comparative periods are as follows:

	Useful lives (years)
Buildings	10 ~ 45
Structures	5 ~ 40
Machinery	4 ~ 33
Others	3 ~ 25

A component that is significant compared to the total cost of property, plant and equipment is depreciated over its separate useful life.

Depreciation methods, useful lives and residual values are reviewed at the end of each reporting date and adjusted, if appropriate. The change is accounted for as a change in an accounting estimate.

(i) Borrowing costs

The Group capitalizes borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset. Other borrowing costs are recognized in expense as incurred.

To the extent that the Group borrows funds specifically for the purpose of obtaining a qualifying asset, the Group determines the amount of borrowing costs eligible for capitalization as the actual borrowing costs incurred on that borrowing during the period less any investment income on the temporary investment of those borrowings. To the extent that the Group borrows funds generally and uses them for the purpose of obtaining a qualifying asset, the Group determines the amount of borrowing costs eligible for capitalization by applying a capitalization rate to the expenditures on that asset. The capitalization rate is the weighted average of the borrowing costs applicable to the borrowings of the Group that are outstanding during the period, other than borrowings made specifically for the purpose of obtaining a qualifying asset. The amount of borrowing costs that the Group capitalizes during a period does not exceed the amount of borrowing costs incurred during that period.

4. Material Accounting Policies, Continued

(j) Leases

At inception of a 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. To assess whether a contract conveys the right to control the use of an identified asset, the Group uses the definition of a lease in K-IFRS No.1116.

i. As a lessee

The Group had elected the practical expedient not to separate non-lease components and account for the lease and non-lease components as a single lease component for the leases of property. Effective January 1, 2023, for the leases of vessels, the Group has applied to allocate the consideration in the contract to each lease component on the basis of its relative stand-alone prices at commencement or on modification of a contract that contains a lease component. The Group did not apply this change retrospectively and presented the impact in the 2023 statement of profit or loss as the impact is immaterial.

The Group recognizes a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred 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.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlying asset to the Group by the end of the lease term or the cost of the right-of-use asset reflects that the Group will exercise a purchase option. In that case the right-of-use asset will be depreciated over the useful life of the underlying asset, which is determined on the same basis as those of property and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group's incremental borrowing rate. Generally, the Group uses its incremental borrowing rate as the discount rate.

The Group determines its incremental borrowing rate by obtaining interest rates from various external financing sources and makes certain adjustments to reflect the terms of the lease and type of the asset leased.

4. Material Accounting Policies, Continued

(j) Leases, continued

Lease payments included in the measurement of the lease liability comprise the following:

- fixed payments, including in-substance fixed payments;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable under a residual value guarantee; and
- the exercise price under a purchase option that the Group is reasonably certain to exercise, lease payments in an optional renewal period if the Group is reasonably certain to exercise an extension option, and penalties for early termination of a lease unless the Group is reasonably certain not to terminate early.

The lease liability is measured at amortized cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, if the Group changes its assessment of whether it will exercise a purchase, extension or termination option or if there is a revised in-substance fixed lease payment.

When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

The Group presents right-of-use assets that do not meet the definition of investment property in 'property, plant and equipment' and lease liabilities in 'loans and borrowings' in the statement of financial position.

Short-term leases and leases of low-value assets

The Group has elected not to recognize right-of-use assets and lease liabilities for leases of low-value assets and short-term leases, such as IT equipment. The Group recognizes the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

ii. As a lessor

At inception or on modification of a contract that contains a lease component, the Group allocates the consideration in the contract to each lease component on the basis of their relative standalone prices.

When the Group acts as a lessor, it determines at lease inception whether each lease is a finance lease or an operating lease.

To classify each lease, the Group makes an overall assessment of whether the lease transfers substantially all of the risks and rewards incidental to ownership of the underlying asset. If this is the case, then the lease is a finance lease; if not, then it is an operating lease. As part of this assessment, the Group considers certain indicators such as whether the lease is for a major part of the economic life of the asset.

When the Group is an intermediate lessor, it accounts for its interests in the head lease and the sub-lease separately. It assesses the lease classification of a sub-lease with reference to the right-of-use asset arising from the head lease, not with reference to the underlying asset. If a head lease is a short-term lease to which the Group applies the exemption described above, then it classifies the sub-lease as an operating lease.

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4. Material Accounting Policies, Continued

(j) Leases, continued

If an arrangement contains lease and non-lease components, then the Group applies K-IFRS No.1115 to allocate the consideration in the contract.

The Group applies the derecognition and impairment requirements in K-IFRS No.1109 to the net investment in the lease. The Group further regularly reviews estimated unguaranteed residual values used in calculating the gross investment in the lease.

The Group recognizes lease payments received under operating leases as income on a straight-line basis over the lease term as part of 'revenue by rendering of services and others'.

(k) Intangible assets

Intangible assets are measured initially at cost and, subsequently, are carried at cost less accumulated amortization and accumulated impairment losses.

Amortization of intangible assets is calculated on a straight-line basis over the estimated useful lives of intangible assets from the date that they are available for use. The residual value of intangible assets is zero.

The estimated useful lives are as follows:

	Useful lives (years)
Software	4 ~ 5
Other intangible assets	4 ~ 40

Amortization periods and the amortization methods for intangible assets with finite useful lives are reviewed at the end of each reporting period. If it is appropriate to change, such a change is accounted for as a change in an accounting estimate.

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognized in profit or loss as incurred.

(l) Government Grants

Government grants are recognized initially as deferred revenue at fair value only when there is reasonable assurance that they will be received and the Group will comply with the conditions associated with the grant. Grants that compensate the Group for expenses are recognized in profit or loss as other income on a systematic basis over the useful life of the asset.

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4. Material Accounting Policies, Continued

(m) Investment Property

Property held for the purpose of earning rentals or benefiting from capital appreciation is classified as investment property. Investment property is initially measured at its cost. Transaction costs are included in the initial measurement. Subsequently, investment property is carried at depreciated cost less any accumulated impairment losses.

Subsequent costs are recognized in the carrying amount of investment property at cost or, if appropriate, as separate items if it is probable that future economic benefits associated with the items will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. The costs of the day-to-day servicing are recognized in profit or loss as incurred.

Investment property, except for land, is depreciated on a straight-line basis over respective estimated useful lives of 10 ~ 45 years.

Depreciation methods, useful lives and residual values are reviewed at the end of each reporting date and adjusted, if appropriate. The change is accounted for as a change in an accounting estimate.

(n) Impairment of Non-financial Assets

The carrying amounts of the Group's non-financial assets, other than assets arising from retirement benefits, inventories, deferred tax assets and non-current assets held for sale, are reviewed at the end of the reporting period to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. Goodwill, irrespective of whether there is any indication of impairment, are tested for impairment annually by comparing their recoverable amount to their carrying amount.

The Group estimates the recoverable amount of an individual asset. However, if it is impossible to measure the individual recoverable amount of an asset, then the Group estimates the recoverable amount of each cash-generating unit ("CGU"). A CGU is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or group of assets. The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. Value in use is based on the estimated future cash flows, discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU.

An impairment loss is recognized if the carrying amount of an asset or a CGU exceeds its recoverable amount. Impairment losses are recognized in profit or loss.

Goodwill arising from a business combination is allocated to CGUs or groups of CGUs that are expected to benefit from the synergies of the combination. Impairment losses in respect of CGU are allocated first to reduce the carrying amount of any goodwill allocated to the CGU, and then to reduce the carrying amounts of the other assets in the CGU on a pro rata basis.

Except for impairment losses in respect of goodwill which are never reversed, an impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

4. Material Accounting Policies, Continued

(o) Non-derivative Financial Liabilities

The Group classifies non-derivative financial liabilities into financial liabilities at fair value through profit or loss or financial liabilities at amortized cost in accordance with the substance of the contractual arrangement and the definitions of financial liabilities. The Group recognizes financial liabilities in the consolidated statement of financial position when the Group becomes a party to the contractual provisions of the financial liability.

Financial liabilities at fair value through profit or loss
Financial liabilities at fair value through profit or loss include financial liabilities held for trading or designated as such upon initial recognition. Subsequent to initial recognition, financial liabilities at fair value through profit or loss are measured at fair value, and changes therein are recognized in profit or loss. The amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of that liability shall be presented in other comprehensive income. Upon initial recognition, transaction costs that are directly attributable to the acquisition are recognized in profit or loss as incurred.

Financial liabilities at amortized cost
Non-derivative financial liabilities other than financial liabilities at fair value through profit or loss are classified as financial liabilities at amortized cost. At the date of initial recognition, financial liabilities at amortized cost are measured at fair value minus transaction costs that are directly attributable to the issuance. Subsequent to initial recognition, financial liabilities at amortized cost are measured at amortized cost using the effective interest method.

Derecognition of financial liabilities
The Group removes a financial liability from its statement of financial position only when the obligation specified in the contract is discharged or cancelled or expires. If the contractual term is changed and the cash flow becomes substantially changed, the Group extinguishes the original financial liability and recognizes a new financial liability. The difference between the carrying amount of a financial liability extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognized in profit or loss.

4. Material Accounting Policies, Continued

(p) Employee Benefits

Short-term employee benefits
Short-term employee benefits are employee benefits that are due to be settled within 12 months after the end of the period in which the employees render the related service. When an employee has rendered service to the Group during an accounting period, the Group recognizes the undiscounted amount of short-term employee benefits expected to be paid in exchange for that service as profit or loss.

Retirement benefits: defined contribution plans
When an employee has rendered service to the Group during a period, the Group recognizes the contribution payable to a defined contribution plan in exchange for that service as a liability (accrued expense), after deducting any contribution already paid. If the contribution already paid exceeds the contribution due for service before the end of the reporting period, the Group recognizes that excess as an asset (prepaid expense) to the extent that the prepayment will lead to a reduction in future payments or a cash refund.

Retirement benefits: defined benefit plans
The Group's net obligation in respect of defined benefit plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in the current and prior periods, discounting that amount and deducting the fair value of any plan assets.

The calculation of defined benefit obligations is performed annually by a qualified actuary using the projected unit credit method. When the calculation results in a potential asset for the Group, the recognized asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan. To calculate the present value of economic benefits, consideration is given to any applicable minimum funding requirements.

Remeasurements of the net defined benefit liability, which comprise actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest), are recognized immediately in other comprehensive income and retained earnings. The Group determines the net interest expense (income) on the net defined benefit liability (asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the then-net defined benefit liability (asset), taking into account any changes in the defined benefit liability (asset) during the period as a result of contributions and benefit payments. Net interest expense and other expenses related to defined benefit plans are recognized in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailments is recognized immediately in profit or loss. The Group recognizes gains and losses on the settlement of a defined benefit plan when the settlement occurs.

4. Material Accounting Policies, Continued

(q) Provisions

Provisions are recognized when the Group has a present legal or constructive 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.

The risks and uncertainties that inevitably surround many events and circumstances are taken into account in reaching the best estimate of a provision. Where the effect of the time value of money is material, provisions are determined at the present value of the expected future cash flows.

When some or all of the expenditures required to settle a provision are expected to be reimbursed by another party, the reimbursement is recognized when, and only when, it is virtually certain that reimbursement will be received if the entity settles the obligation. The reimbursement is treated as a separate asset.

Provisions are reviewed at the end of each reporting period and adjusted to reflect the current best estimates. If it is no longer probable that an outflow of resources embodying economic benefits will be required to settle the obligation, the provision is reversed.

The provision is used only for expenditures related to initial recognition.

(r) Emission Rights

Greenhouse gases emission right
Greenhouse Gases Emission Right consists of emission allowances which are allocated from the government free of charge or purchased from the market. The cost includes any directly attributable costs incurred during the normal course of business.

Emission rights held for the purpose of performing the obligation are classified as intangible asset and are initially measured at cost and subsequent to initial recognition, are carried at cost less accumulated impairment losses. Emission rights held for short-swing profits are classified as current asset and are measured at fair value with any changes in fair value recognized as profit or loss in the respective reporting period.

The Group derecognizes an emission right asset when the emission allowance is unusable, disposed or submitted to government in which the future economic benefits are no longer expected to be probable.

Emission liability
Emission liability is a present obligation of submitting emission rights to the government with regard to emission of greenhouse gas. Emission liability is recognized when there is a probable outflow of resources in performing the obligation and the costs required to perform the obligation are reliably estimable. The emission liability is measured based on the expected quantity of emission for the performing period in excess of emission allowance in possession, and the unit price for such emission rights in the market as of the end of the reporting period. The Group derecognizes emission liability when emission rights are submitted to the government.

4. Material Accounting Policies, Continued

(s) Foreign Currencies

Foreign currency transactions
Transactions in foreign currencies are translated to the respective functional currencies of Group entities at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are retranslated to the functional currency using the reporting date's exchange rate. Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined.

Foreign exchange differences from translation of monetary items are recognized in profit or loss, except for a financial liability designated as a hedge of the net investment in a foreign operation, or qualifying cash flow hedges, which are recognized in other comprehensive income. When gains or losses on non-monetary items are recognized in other comprehensive income, exchange components of those gains or losses are recognized in other comprehensive income. Conversely, when gains or losses on non-monetary items are recognized in profit or loss, exchange components of those gains or losses are recognized in profit or loss.

Foreign operations
If the presentation currency of the Group is different from a foreign operation's functional currency, the financial statements of the foreign operation are translated into the presentation currency using the following methods:

The assets and liabilities of foreign operations, whose functional currency is not the currency of a hyperinflationary economy, are translated to presentation currency at exchange rates at the reporting date. The income and expenses of foreign operations are translated to functional currency at exchange rates at the dates of the transactions. Foreign currency differences are recognized in other comprehensive income.

When a foreign operation is disposed of, the relevant amount in the translation is transferred to profit or loss as part of the profit or loss on disposal. On the partial disposal of a subsidiary that includes a foreign operation, the relevant proportion of such cumulative amount is reattributed to non-controlling interest. In any other partial disposal of a foreign operation, the relevant proportion is reclassified to profit or loss.

4. Material Accounting Policies, Continued

(t) Equity Capital

Common shares are classified as equity. Incremental costs directly attributable to the issuance of common shares and share options are recognized as a deduction from equity, net of any tax effects.

(u) Revenue from Contracts with Customers

Revenue from the sale of goods, rendering of services or use of the Group assets is measured at the fair value of the consideration received or receivable, net of returns, trade discounts and volume rebates. There are five steps to recognize revenue from every contract: 1) identifying the contract, 2) identifying performance obligations, 3) determining the transaction price, 4) allocating the transaction price to performance obligations, and 5) recognizing revenue when the performance obligation is satisfied.

Sales of petroleum and petrochemical products
The Group produces and sells petroleum, petrochemical and lubricants products by refining crude oil, naphtha, etc. Revenue is recognized when customers obtain control of the products which is generally when the products are delivered.

For certain sales transactions for which the customer bears the shipping costs, the customer obtains control of the goods upon shipment, and the Group only arranges for the goods to be delivered to the customer. In such cases, the Group is acting as an agent for the shipping activities and, hence, the revenue related to the shipping activities is recognized on a net basis.

Customer loyalty program
For sales of goods and services under the **GS** & Point Program, the consideration received or receivable is allocated between award credits ("**GS** & Points") and other revenue based on the relative stand-alone selling prices of the sale. The amount allocated to the loyalty program is deferred, and is recognized as revenue when loyalty points are redeemed or the likelihood of the customer redeeming the loyalty points becomes remote.

(v) Finance Income and Finance Costs

Finance income comprises interest income, dividend income, gains on disposal of financial assets, changes in fair value of financial assets at FVTPL, and gains on hedging instruments that are recognized in profit or loss. Interest income is recognized as it accrues in profit or loss, using the effective interest method. Dividend income is recognized in profit or loss on the date that the Group's right to receive dividend is established.

Finance costs comprises interest expense on borrowings, unwinding of the discount on provisions, loss on disposal of financial assets, changes in fair value of financial assets at FVTPL, impairment losses recognized on financial assets, and losses on hedging instruments that are recognized in profit or loss. Borrowing costs that are not directly attributable to the acquisition, construction or production of a qualifying asset are recognized in profit or loss using the effective interest method.

December 31, 2023 and 2022

4. Material Accounting Policies, Continued

(w) Income Taxes

Income tax expense comprises current and deferred tax. Current tax and deferred tax are recognized in profit or loss except to the extent that it relates to a business combination, or items recognized directly in equity or in other comprehensive income.

Current tax
Current tax is the expected tax payable or receivable on the taxable profit or loss for the year, using tax rates enacted or substantively enacted at the end of the reporting period and any adjustment to tax payable in respect of previous years. The taxable profit is different from the accounting profit (loss) for the period since the taxable profit is calculated excluding the temporary differences, which will be taxable or deductible in determining taxable profit (tax loss) of future periods, and non-taxable or non-deductible items from the accounting profit (loss).

Deferred tax
Deferred tax is recognized, using the asset-liability method, in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The Group recognizes a deferred tax liability for all taxable temporary differences associated with investments in subsidiaries, associates, and interests in joint ventures, except to the extent that the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. The Group recognizes a deferred tax asset for all deductible temporary differences arising from investments in subsidiaries and associates, to the extent that it is probable that the temporary difference will reverse in the foreseeable future and taxable profit will be available against which the temporary difference can be utilized.

The carrying amount of a deferred tax asset is reviewed at the end of each reporting period and the Group reduces the carrying amount to the extent that it is no longer probable that sufficient taxable profit will be available to allow the benefit of part or all of that deferred tax asset to be utilized.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and deferred tax assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset only if there is a legally enforceable right to offset the related current tax liabilities and assets, and they relate to income taxes levied by the same tax authority and they intend to settle current tax liabilities and assets on a net basis. Income tax applicable to dividend payments is recognized when the dividend payable is recognized.

Global Minimum top-up tax
The Organization for Economic Co-operation and Development's legislative framework for the global minimum top-up tax (Pillar Two model rules) applies to multinational enterprise groups with total consolidated group revenue of EUR 750 million or more in at least two of the four preceding years with the average effective tax rate of below 15%, although jurisdictions may introduce a lower threshold.

However, since the newly enacted tax legislation is effective from January 1, 2024, there is no current tax impact for the year ended December 31, 2023.

December 31, 2023 and 2022

4. Material Accounting Policies, Continued

(x) New Standards or Amendments Not Yet Adopted

A number of new standards are effective for annual periods beginning after January 1, 2023 and earlier application is permitted; however, the Group has not early adopted the new or amended standards in preparing these consolidated financial statements.

The following amended standards and interpretations are not expected to have a significant impact on the Group's consolidated financial statements;

- Classification of liabilities as current or non-current and borrowing agreements for non-current liabilities (Amendments to K-IFRS No.1001, '*Presentation of Financial Statements'*)
- Supplier finance arrangements (Amendments to K-IFRS No.1007, *'Statements of Cash Flows' and* K-IFRS No.1107, *'Financial Instruments : Presentation')*
- Global minimum top-up tax following amendments to Pillar 2 model rules (Amendments to K-IFRS No.1012, *'Income Taxes'*)

December 31, 2023 and 2022

5. Operating Segments, Customer and Geographic Information

(a) The Group has three reportable segments – Petroleum refining, Lubricants, and Petrochemicals. The Petroleum refining segment produces petroleum products and raw materials of petrochemicals which are essential to human living. Based on naphtha, gas oil or natural gas is produced from refinery complexes. The Lubricants segment produces lubricants and base oils which are raw materials of lubricants. The Petrochemicals segment produces olefin products and aromatic products through high temperature decomposition or catalytic reaction processes and uses such products to produce synthetic rubber, synthetic fiber raw materials, synthetic detergents and chemicals.

(b) Segment results for the year ended December 31, 2023 are as follows:

	Won (million)			
	Petroleum refining	Lubricants	Petrochemicals	Total
Total sales	₩ 63,090,691	2,153,336	7,870,884	73,114,911
Inter-segment sales	(24,193,771)	(102,577)	(211,017)	(24,507,365)
Sales from external customers	₩ 38,896,920	2,050,759	7,659,867	48,607,546
Depreciation and amortization	771,542	35,369	252,940	1,059,851
Operating profit	₩ 880,275	465,013	338,504	1,683,792

Segment results for the year ended December 31, 2022 are as follows:

	Won (million)			
	Petroleum refining	Lubricants	Petrochemicals	Total
Total sales	₩ 75,175,087	2,134,072	8,854,804	86,163,963
Inter-segment sales	(27,418,306)	(98,161)	(115,425)	(27,631,892)
Sales from external customers	₩ 47,756,781	2,035,911	8,739,379	58,532,071
Depreciation and amortization	771,628	37,311	251,935	1,060,874
Operating profit	₩ 3,435,424	454,687	89,407	3,979,518

December 31, 2023 and 2022

5. Operating Segments, Customer and Geographic Information, Continued

(c) Measurement

The accounting policies applied for segment information are the same as the material accounting policies described in notes 4. The Group's chief operating decision maker evaluates segment results based on operating profit determined under K-IFRS.

Segment assets and liabilities are not reported to the chief operating decision maker, and therefore are not disclosed.

(d) Geographical and customer information

The Group mainly operates in three geographical areas, the Republic of Korea (where the Parent Company domiciles), Singapore and China. The geographical information of sales is presented based on the geographical locations of the selling entities.

Details by geographical sales for the years ended December 31, 2023 and 2022 are summarized as follows:

		Won (millions)	
District		2023	2022
Korea	₩	34,782,887	42,673,254
Singapore		13,274,627	15,303,604
China		245,909	243,718
Others		304,123	311,495
	₩	48,607,546	58,532,071

Details by geographical non-current assets (*) as of December 31, 2023 and 2022 are summarized as follows:

		Won (millions)	
District		2023	2022
Korea	₩	11,411,697	12,160,782
Singapore		1,014	873
China		17,963	18,949
Others		44,747	43,497
	₩	11,475,421	12,224,101

(*) For the purpose of geographic information reporting, financial instruments, investments in associates, and deferred income tax assets are excluded.

(e) Except for the related parties described in note 23, there is no customer that accounts for more than 10% of the Group's sales for each of the years ended December 31, 2023 and 2022.

December 31, 2023 and 2022

6. Cash and Cash Equivalents

Cash and cash equivalents as of December 31, 2023 and 2022 are summarized as follows:

		Won (millions)	
		2023	2022
Cash on hand	₩	47	56
Deposits and others		1,265,079	1,560,615
	₩	1,265,126	1,560,671

7. Financial Instruments

7.1 Financial Assets

Details of financial assets as of December 31, 2023 are summarized as follows:

		Won (millions)			
		Financial assets at FVTPL	Financial assets at amortized cost	Financial assets at FVOCI	Fair value-hedging instrument
Cash and cash equivalents	₩	-	1,265,126	-	-
Accounts and notes receivable		-	3,938,638	-	-
Allowance for doubtful accounts		-	(25,911)	-	-
Short-term financial assets		18,638	188,850	-	92,504
Allowance for doubtful accounts		-	(544)	-	-
Present value discounts		-	(1,917)	-	-
Total current financial assets		18,638	5,364,242	-	92,504
Long-term financial assets		31,205	180,606	68,481	36,091
Allowance for doubtful accounts (Impairment of long-term financial assets)		-	(28,436)	-	-
Present value discounts		-	(3,042)	-	-
Total non-current financial assets		31,205	149,128	68,481	36,091
	₩	49,843	5,513,370	68,481	128,595

The book value of financial assets measured at amortized cost approximates their fair value.

December 31, 2023 and 2022

7. Financial Instruments, Continued

7.1 Financial Assets, Continued

Details of financial assets as of December 31, 2022 are summarized as follows:

	Won (millions)			
	Financial assets at FVTPL	Financial assets at amortized cost	Financial assets at FVOCI	Fair value-hedging instrument
Cash and cash equivalents	₩ -	1,560,671	-	-
Accounts and notes receivable	-	3,989,187	-	-
Allowance for doubtful accounts	-	(25,526)	-	-
Short-term financial assets	14,129	1,732,526	-	59,693
Allowance for doubtful accounts	-	(732)	-	-
Present value discounts	-	(184)	-	-
Total current financial assets	14,129	7,255,942	-	59,693
Long-term financial assets	31,205	127,447	83,996	104,054
Allowance for doubtful accounts (Impairment of long-term financial assets)	-	(28,440)	-	-
Present value discounts	-	(3,177)	-	-
Total non-current financial assets	31,205	95,830	83,996	104,054
	₩ 45,334	7,351,772	83,996	163,747

The book value of financial assets measured at amortized cost approximates their fair value.

December 31, 2023 and 2022

7. Financial Instruments, Continued

7.1 Financial Assets, Continued

Details of financial assets which are restricted in use mainly due to being provided as collateral for borrowings as of December 31, 2023 are summarized as follows:

Accounts	Financial instruments	Bank	Restriction	Won (millions) Amount
Long-term financial assets	Deposit for opening checking accounts	Shinhan Bank and 7 others	Restriction on cash withdrawals	₩ 26

7.2 Financial Liabilities

Details of financial liabilities as of December 31, 2023 are summarized as follows:

	Won (millions)		
	Financial liabilities at FVTPL	Financial liabilities at amortized cost	Fair value-hedging instrument
Accounts payable-trade	₩ -	2,831,833	-
Short-term financial liabilities	7,096	2,927,634	591
Present value discounts	-	(3,632)	-
Total current financial liabilities	7,096	5,755,835	591
Long-term financial liabilities	-	3,653,266	25,186
Present value discounts	-	(120,950)	-
Total non-current financial liabilities	-	3,532,316	25,186
	₩ 7,096	9,288,151	25,777

The book value of financial liabilities measured at amortized cost approximates their fair value.

December 31, 2023 and 2022

7. Financial Instruments, Continued

7.2 Financial Liabilities, Continued

Details of financial liabilities as of December 31, 2022 are summarized as follows:

		Won (millions)		
		Financial liabilities at FVTPL	Financial liabilities at amortized cost	Fair value-hedging instrument
Accounts payable-trade	₩	-	2,661,771	-
Short-term financial liabilities		30,737	4,326,981	1,087
Present value discounts		-	(4,803)	-
Total current financial liabilities		30,737	6,983,949	1,087
Long-term financial liabilities		-	4,427,633	12,041
Present value discounts		-	(179,653)	-
Total non-current financial liabilities		-	4,247,980	12,041
	₩	30,737	11,231,929	13,128

The book value of financial liabilities measured at amortized cost approximates their fair value.

7.3 Finance Income

Details of finance income for the years ended December 31, 2023 and 2022 are summarized as follows:

		Won (millions)	
		2023	2022
Interest income (*)	₩	56,122	32,796
Dividends income		1,538	2,445
Gain on disposal of financial assets at FVTPL		59	27
Gain on valuation of derivative instruments		52,424	114,820
Gain on transaction of derivative instruments		132,332	423,717
Foreign currency transaction gain		3,695,412	2,729,094
Foreign currency translation gain		89,047	164,870
	₩	4,026,934	3,467,769

(*) Interest income recognized as a result of present value adjustment using the effective interest method on financial assets is ₩3,174 million and ₩3,178 million, respectively, for the years ended December 31, 2023 and 2022.

December 31, 2023 and 2022

7. Financial Instruments, Continued

7.4 Finance Costs

Details of finance costs for the years ended December 31, 2023 and 2022 are summarized as follows:

		Won (millions)	
		2023	2022
Interest expense (*)	₩	262,377	207,463
Loss on valuation of derivative instruments		7,951	9,990
Loss on transaction of derivative instruments		114,598	103,170
Foreign currency transaction loss		3,743,255	3,132,448
Foreign currency translation loss		105,556	282,299
Others		837	1,902
	₩	4,234,574	3,737,272

(*) Interest expense recognized as a result of present value adjustment using the effective interest method on financial liabilities is ₩46,777 million and ₩39,592 million, respectively, for the years ended December 31, 2023 and 2022.

7.5 Income and Loss by Financial Instrument Category

Details of income and loss by financial instrument category for the year ended December 31, 2023 are as follows:

		Won (millions)								
		Financial assets					Financial liabilities			
		Financial assets at FVTPL	Financial assets at amortized cost	Financial assets at FVOCI	Fair value-hedging instrument	Total	Financial liabilities at FVTPL	Financial liabilities at amortized cost	Fair value-hedging instrument	Total
Interest income (expense)	₩	-	56,122	-	-	56,122	-	(262,377)	-	(262,377)
Dividends income		-	-	1,538	-	1,538	-	-	-	-
Foreign currency translation gain (loss), net		-	(27,793)	-	-	(27,793)	(280)	11,564	-	11,284
Gain (loss) on valuation of derivative instruments, net		12,204	-	-	40,220	52,424	(3,601)	-	(4,350)	(7,951)

Details of income and loss by financial instrument category for the year ended December 31, 2022 are as follows:

		Won (millions)								
		Financial assets					Financial liabilities			
		Financial assets at FVTPL	Financial assets at amortized cost	Financial assets at FVOCI	Fair value-hedging instrument	Total	Financial liabilities at FVTPL	Financial liabilities at amortized cost	Fair value-hedging instrument	Total
Interest income (expense)	₩	-	32,796	-	-	32,796	-	(207,463)	-	(207,463)
Dividends income		2,021	-	420	-	2,441	-	-	-	-
Foreign currency translation loss, net		-	(65,581)	-	-	(65,581)	(1,313)	(50,535)	-	(51,848)
Gain (loss) on valuation of derivative instruments, net		10,613	-	-	104,207	114,820	-	-	(9,990)	(9,990)

December 31, 2023 and 2022

7. Financial Instruments, Continued

7.6 Derivative Instruments and Hedge Accounting

(a) Details of the valuation gain (loss) and other comprehensive income (loss) of derivative instruments for the year ended December 31, 2023 are summarized as follows:

		Won (millions)			
		Book value	Other comprehensive income (loss) (*)	Finance income, net	Other costs, net
Held for trading	Commodity derivatives	₩ 2,940	-	-	2,940
	Foreign exchange swap	8,602	-	8,602	-
Cash flow hedge	Currency swap	102,827	(17,563)	35,871	-
	Currency forward	(9)	542	-	-

(*) The effective portion of changes in the fair value of currency swaps and currency forwards, net of tax, is recognized as accumulated other comprehensive income (loss). The Group recognized ₩17,021 million as other comprehensive loss for the year ended December 31, 2023.

December 31, 2023 and 2022

7. Financial Instruments, Continued

7.6 Derivative Instruments and Hedge Accounting, Continued

(b) Currency swaps

The Group entered into currency swap contracts to hedge against foreign exchange risks of foreign currency denominated bonds and long-term borrowings. Details of the contracts as of December 31, 2023 are as follows:

Derivatives	Contractor	Effective date	Expiration date	Contract amount: Buy (thousand USD, CHF)	Contract amount: Sell (million Won)
Currency Swaps	Standard Chartered Bank	May 02, 2018	Jan. 31, 2024 CHF	50,000	₩ 55,325
	and 1 other bank	May 02, 2018	Jan. 31, 2024	50,000	55,325
	Kookmin Bank	Jun. 04, 2019	Jun. 04, 2024 USD	200,000	231,600
		Jun. 04, 2019	Jun. 04, 2024	100,000	119,390
	Korea Development Bank	Jul. 16, 2019	Jul. 16, 2026	13,750	16,225
		Nov. 29, 2019	Jul. 16, 2026	11,000	12,925
		Mar. 03, 2020	Mar. 04, 2027	28,438	34,134
		Sep. 03, 2020	Sep. 03, 2027	43,125	51,155
		Jun. 28, 2021	Jun. 28, 2028	27,000	30,478
	Citi Bank	Aug. 28, 2019	Aug. 28, 2024	60,000	71,010
	and 1 other bank	Aug. 28, 2019	Aug. 28, 2024	40,000	47,340
	Kookmin Bank	Jul. 27, 2020	Jul. 27, 2025	100,000	120,370
	and 2 other banks	Jul. 27, 2020	Jul. 28, 2025	100,000	120,370
		Jul. 27, 2020	Jul. 28, 2025	100,000	119,810
	Kookmin Bank	Jul. 11, 2022	Jan. 05, 2026	300,000	390,180
	Korea Development Bank	Aug. 07, 2023	Aug. 07, 2028	100,000	133,800
	And 2 other banks	Aug. 07, 2023	Aug. 07, 2028	100,000	133,800
		Aug. 07, 2023	Aug. 07, 2028	100,000	133,800

Valuation gains and losses from the above currency swap contracts are recognized in other comprehensive income (loss) as permitted under cash flow hedge accounting.

The Group also entered into foreign exchange swap contracts to hedge against foreign exchange risks of USD denominated short-term borrowings and acceptances payable to banks. As of December 31, 2023, the Group has 3 foreign exchange swap contract outstanding to buy USD 65 million and 12 foreign exchange swap contracts outstanding to sell USD 820 million. The Group does not apply hedge accounting to the swaps and, accordingly, changes in the fair value of these contracts are reflected in the consolidated statement of income.

(c) Commodity derivatives

The Group entered into forward contracts such as differential swaps to hedge against fluctuations in crude oil and petroleum product prices. As of December 31, 2023 the Group has 84 commodity swap contracts outstanding to buy 1,840,000 barrels of oil, 120 commodity swap contracts outstanding to sell 2,030,000 barrels of oil. The Group does not apply hedge accounting to the swaps and, accordingly, changes in the fair value of these contracts are reflected in the consolidated statements of income.

December 31, 2023 and 2022

7. Financial Instruments, Continued

7.7 Fair Value

(a) Assumptions used for determining fair value of financial assets and liabilities

Fair value of financial instruments traded in an active market with standardized transaction terms and conditions is determined by the listed market price.

When estimating fair value of financial instruments which are not traded in an active market, the Group uses valuation techniques commonly used by market participants and entity-specific inputs for pricing.

The fair value of financial instruments is determined based on the following assumptions:

The fair value of derivatives is based on their listed market price, if available. If a listed market price is not available, then fair value is estimated by discounted cash flows using a yield curve.

The fair value of financial assets measured at amortized cost is determined by the present value of future cash flows, which is discounted according to either the internal rate of return, the weighted average borrowing rate, or the national bond rate at the reporting date depending on the characteristics of transaction. The book value of current financial assets measured at amortized cost approximates their fair value.

(b) Interest rate used for determining fair value

Interest rates used to discounting estimated cash flows as of December 31, 2023 and 2022 are summarized as follows:

	December 31, 2023	December 31, 2022
Long-term loans	2.14% ~ 6.51%	2.37% ~ 6.51%
Deposits	0.84% ~ 2.65%	0.84% ~ 1.84%

December 31, 2023 and 2022

7. Financial Instruments, Continued

7.7 Fair Value, Continued

(c) The fair value measurements classified by fair value hierarchy as of December 31, 2023 are as follows:

	Won (millions)				
	Fair value (*)			Book value
	Level 1	Level 2	Level 3	
Financial assets:				
Financial assets at FVTPL	₩ -	18,638	31,205	49,843
Financial assets at FVOCI	16,040	-	52,441	68,481
Fair value-hedging instrument	-	128,595	-	128,595
Financial liabilities:				
Financial liabilities at FVTPL	₩ -	7,096	-	7,096
Fair value-hedging instrument	-	25,777	-	25,777

The fair value measurements classified by fair value hierarchy as of December 31, 2022 are as follows:

	Won (millions)				
	Fair value (*)			Book value
	Level 1	Level 2	Level 3	
Financial assets:				
Financial assets at FVTPL	₩ -	14,129	31,205	45,334
Financial assets at FVOCI	10,793	-	73,203	83,996
Fair value-hedging instrument	-	163,747	-	163,747
Financial liabilities:				
Financial liabilities at FVTPL	₩ -	30,737	-	30,737
Fair value-hedging instrument	-	13,128	-	13,128

(*) Financial assets and liabilities carried at fair value by each hierarchy based on the inputs used in the valuation techniques are defined as follows:

— Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities
— Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices)
— Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs)

December 31, 2023 and 2022

8. Inventories

(a) Inventories as of December 31, 2023 and 2022 are summarized as follows:

		Won (millions)	
		2023	2022
Merchandise goods	₩	71,147	86,182
Finished goods		1,507,092	1,785,354
Work-in-process		615,913	619,839
Raw materials		1,233,222	1,184,066
Supplies		111,842	110,571
Goods in transit		2,226,663	1,912,235
Others		543	487
		5,766,422	5,698,734
Provision for losses on valuation of inventories		(7,417)	(133,074)
	₩	5,759,005	5,565,660

(b) ₩125,657 of a decrease in provision for losses on valuation of inventories was credited to profit or loss for the year ended December 31, 2023 and ₩121,009 million of increase in provision for losses on valuation of inventories was charged to profit or loss for the year ended December 31, 2022.

December 31, 2023 and 2022

9. Property, Plant and Equipment (PP&E)

(a) Changes in property, plant and equipment for the year ended December 31, 2023 are summarized as follows:

	Won (millions)							
	Land	Buildings	Structures	Machinery	Others	Right-of-use assets	Construction-in-progress	Total
Cost:								
Balance at January 1, 2023	**₩ 2,498,521**	**904,239**	**3,336,623**	**10,217,344**	**826,000**	**1,761,553**	**331,535**	**19,875,815**
Additions	-	25	830	2,285	14,479	-	517,804	535,423
Disposals and other	(34,767)	(13,110)	(18,352)	(156,732)	(31,737)	-	-	(254,698)
Others	(4,530)	9,458	31,234	272,033	40,936	(251,282)	(376,403)	(278,554)
Balance at December 31, 2023	**₩ 2,459,224**	**900,612**	**3,350,335**	**10,334,930**	**849,678**	**1,510,271**	**472,936**	**19,877,986**
Accumulated depreciation:								
Balance at January 1, 2023	**₩ -**	**353,616**	**1,709,968**	**4,558,010**	**623,719**	**650,854**	**-**	**7,896,167**
Depreciation	-	24,401	129,914	572,077	61,460	247,671	-	1,035,523
Disposals and other	-	(8,132)	(14,510)	(149,761)	(31,344)	-	-	(203,747)
Others	-	185	-	385	76	(125,875)	-	(125,229)
Balance at December 31, 2023	**₩ -**	**370,070**	**1,825,372**	**4,980,711**	**653,911**	**772,650**	**-**	**8,602,714**
Carrying amount:								
Balance at January 1, 2023	**₩ 2,498,521**	**550,623**	**1,626,655**	**5,659,334**	**202,281**	**1,110,699**	**331,535**	**11,979,648**
Balance at December 31, 2023	**₩ 2,459,224**	**530,542**	**1,524,963**	**5,354,219**	**195,767**	**737,621**	**472,936**	**11,275,272**

December 31, 2023 and 2022

9. Property, Plant and Equipment (PP&E), Continued

(b) Changes in property, plant and equipment for the year ended December 31, 2022 are summarized as follows:

	Won (millions)							
	Land	Buildings	Structures	Machinery	Others	Right-of-use assets	Construction-in-progress	Total
Cost:								
Balance at January 1, 2022	**₩ 2,563,759**	**897,623**	**3,284,274**	**10,096,451**	**817,068**	**1,553,884**	**332,296**	**19,545,355**
Additions	-	19	1,065	1,299	14,493	-	442,631	459,507
Disposals and other	(67,865)	(7,109)	(25,195)	(168,962)	(39,106)	-	-	(308,237)
Others	2,627	13,706	76,479	288,556	33,545	207,669	(443,392)	179,190
Balance at December 31, 2022	**₩ 2,498,521**	**904,239**	**3,336,623**	**10,217,344**	**826,000**	**1,761,553**	**331,535**	**19,875,815**
Accumulated depreciation:								
Balance at January 1, 2022	**₩ -**	**334,418**	**1,594,696**	**4,157,120**	**604,266**	**501,888**	**-**	**7,192,388**
Depreciation	-	24,879	136,627	569,823	58,018	247,961	-	1,037,308
Disposals and other	-	(4,924)	(21,355)	(168,495)	(38,542)	-	-	(233,316)
Others	-	(757)	-	(438)	(23)	(98,995)	-	(100,213)
Balance at December 31, 2022	**₩ -**	**353,616**	**1,709,968**	**4,558,010**	**623,719**	**650,854**	**-**	**7,896,167**
Carrying amount:								
Balance at January 1, 2022	**₩ 2,563,759**	**563,205**	**1,689,578**	**5,939,331**	**212,802**	**1,051,996**	**332,296**	**12,352,967**
Balance at December 31, 2022	**₩ 2,498,521**	**550,623**	**1,626,655**	**5,659,334**	**202,281**	**1,110,699**	**331,535**	**11,979,648**

(c) The following assets are pledged as collateral for the Group's borrowings as of December 31, 2023:

			Won (millions)		
Asset	Collateral provider		Book value	Pledged amount	Lender
Land and buildings	GS Mbiz Co., Ltd.	₩	19,193	6,000	Shinhan Bank
			5,855	18,000	Korea Development Bank
Land and buildings	GS Ecometal Co., Ltd.		5,149	18,000	Korea Development Bank
Land and buildings	GS Caltex (Suzhou) Plastics Co., Ltd.		6,269	13,133	Industrial and Commercial Bank of China Limited (ICBC)

December 31, 2023 and 2022

9. Property, Plant and Equipment (PP&E), Continued

(d) Changes in Right-of-use assets for the year ended December 31, 2023 are summarized as follows:

	Won (millions)				
	Gas stations	Buildings	Vessels (*)	Others	Total
Cost:					
Balance at January 1, 2023 ₩	**189,502**	**70,207**	**1,480,224**	**21,620**	**1,761,553**
Addition to right-of-use assets	15,203	1,290	22,098	8,867	47,458
Derecognition of right-of-use assets	(16,539)	(29,912)	(67,112)	(8,755)	(122,318)
Others	-	66	(172,836)	(3,652)	(176,422)
Balance at December 31, 2023 ₩	**188,166**	**41,651**	**1,262,374**	**18,080**	**1,510,271**
Accumulated depreciation:					
Balance at January 1, 2023 ₩	**76,444**	**38,533**	**523,786**	**12,091**	**650,854**
Depreciation	30,298	16,041	191,435	9,897	247,671
Derecognition of right-of-use assets	(16,304)	(29,912)	(67,143)	(8,334)	(121,693)
Others	-	112	-	(4,294)	(4,182)
Balance at December 31, 2023 ₩	**90,438**	**24,774**	**648,078**	**9,360**	**772,650**
Carrying amount:					
Balance at January 1, 2023 ₩	**113,058**	**31,674**	**956,438**	**9,529**	**1,110,699**
Balance at December 31, 2023 ₩	**97,728**	**16,877**	**614,296**	**8,720**	**737,621**

(*) The adjustment for separation of non-lease components from the leases of vessels is included in others.

(e) Changes in Right-of-use assets for the year ended December 31, 2022 are summarized as follows:

	Won (millions)				
	Gas stations	Buildings	Vessels	Others	Total
Cost:					
Balance at January 1, 2022 ₩	**207,677**	**36,846**	**1,284,180**	**25,181**	**1,553,884**
Addition to right-of-use assets	15,209	34,455	256,012	6,426	312,102
Derecognition of right-of-use assets	(33,396)	(740)	(57,321)	(8,032)	(99,489)
Others	12	(354)	(2,647)	(1,955)	(4,944)
Balance at December 31, 2022 ₩	**189,502**	**70,207**	**1,480,224**	**21,620**	**1,761,553**
Accumulated depreciation:					
Balance at January 1, 2022 ₩	**78,643**	**23,985**	**386,557**	**12,703**	**501,888**
Depreciation	31,048	15,790	188,674	12,449	247,961
Derecognition of right-of-use assets	(33,247)	(740)	(51,445)	(7,619)	(93,051)
Others	-	(502)	-	(5,442)	(5,944)
Balance at December 31, 2022 ₩	**76,444**	**38,533**	**523,786**	**12,091**	**650,854**
Carrying amount:					
Balance at January 1, 2022 ₩	**129,034**	**12,861**	**897,623**	**12,478**	**1,051,996**
Balance at December 31, 2022 ₩	**113,058**	**31,674**	**956,438**	**9,529**	**1,110,699**

December 31, 2023 and 2022

10. Investment Properties

(a) Changes in investment property for the year ended December 31, 2023 are summarized as follows:

		Won (millions)		
		Land	Buildings	Total
Cost:				
Balance at January 1, 2023	₩	**26,097**	**14,023**	**40,120**
Disposals and retirement		(1,078)	-	(1,078)
Replacement (*)		5,349	241	5,590
Balance at December 31, 2023	₩	**30,368**	**14,264**	**44,632**
Accumulated depreciation:				
Balance at January 1, 2023	₩	**-**	**3,543**	**3,543**
Depreciation		-	334	334
Replacement		-	163	163
Balance at December 31, 2023	₩	**-**	**4,040**	**4,040**
Carrying amount:				
Balance at January 1, 2023	₩	**26,097**	**10,480**	**36,577**
Balance at December 31, 2023	₩	**30,368**	**10,224**	**40,592**

(*) Tangible assets were reclassified to investment properties during the year.

(b) Changes in investment property for the year ended December 31, 2022 are summarized as follows:

		Won (millions)		
		Land	Buildings	Total
Cost:				
Balance at January 1, 2022	₩	**25,091**	**12,537**	**37,628**
Disposals and retirement		-	(104)	(104)
Others		1,006	1,590	2,596
Balance at December 31, 2022	₩	**26,097**	**14,023**	**40,120**
Accumulated depreciation:				
Balance at January 1, 2022	₩	**-**	**2,609**	**2,609**
Depreciation		-	315	315
Disposals and retirement		-	(98)	(98)
Others		-	717	717
Balance at December 31, 2022	₩	**-**	**3,543**	**3,543**
Carrying amount:				
Balance at January 1, 2022	₩	**25,091**	**9,928**	**35,019**
Balance at December 31, 2022	₩	**26,097**	**10,480**	**36,577**

December 31, 2023 and 2022

10. Investment Properties, Continued

(c) The amounts recognized in profit or loss from investment property for the years ended December 31, 2023 and 2022 are summarized as follows:

		Won (millions)	
		2023	2022
Rental income	₩	3,191	2,587
Operating expense		(1,029)	(1,029)
Gain on disposal of investment properties		453	-
Loss on retirement of investment properties		-	(6)
	₩	2,615	1,552

(d) The carrying amount and the fair value of investment property as of December 31, 2023 and 2022 are summarized as follows:

		Won (millions)	
		2023	2022
Carrying amount	₩	40,592	36,577
Fair value		54,288	50,049

11. Intangible Assets

(a) Changes in intangible assets for the year ended December 31, 2023 are summarized as follows:

		Won (millions)				
		Goodwill	Software	Contributed assets	Other intangible assets	Total
Cost:						
Balance at January 1, 2023	₩	**107**	**259,719**	**26,103**	**65,752**	**351,681**
Additions		-	213	-	80	293
Disposals and retirement		-	(8,691)	(716)	(1,226)	(10,633)
Others		-	20,678	-	3,348	24,026
Balance at December 31, 2023	₩	**107**	**271,919**	**25,387**	**67,954**	**365,367**
Accumulated amortization:						
Balance at January 1, 2023	₩	**-**	**221,182**	**18,653**	**41,660**	**281,495**
Amortization		-	19,475	1,144	3,709	24,328
Disposals and retirement		-	(8,601)	(713)	(1,226)	(10,540)
Others		-	35	-	(2)	33
Balance at December 31, 2023	₩	**-**	**232,091**	**19,084**	**44,141**	**295,316**
Carrying amount:						
Balance at January 1, 2023	₩	**107**	**38,537**	**7,450**	**24,092**	**70,186**
Balance at December 31, 2023	₩	**107**	**39,828**	**6,303**	**23,813**	**70,051**

December 31, 2023 and 2022

11. Intangible Assets, Continued

(b) Changes in intangible assets for the year ended December 31, 2022 are summarized as follows:

	Won (millions)				
	Goodwill	Software	Contributed assets	Other intangible assets	Total
Cost:					
Balance at January 1, 2022 ₩	**107**	**244,514**	**27,528**	**60,275**	**332,424**
Additions	-	366	-	221	587
Disposals and retirement	-	(6,125)	(2,224)	(603)	(8,952)
Others	-	20,964	799	5,859	27,622
Balance at December 31, 2022 ₩	**107**	**259,719**	**26,103**	**65,752**	**351,681**
Accumulated amortization:					
Balance at January 1, 2022 ₩	**-**	**208,719**	**19,679**	**38,265**	**266,663**
Amortization	-	18,598	1,193	3,775	23,566
Disposals and retirement	-	(6,114)	(2,219)	(362)	(8,695)
Others	-	(21)	-	(18)	(39)
Balance at December 31, 2022 ₩	**-**	**221,182**	**18,653**	**41,660**	**281,495**
Carrying amount:					
Balance at January 1, 2022 ₩	**107**	**35,795**	**7,849**	**22,010**	**65,761**
Balance at December 31, 2022 ₩	**107**	**38,537**	**7,450**	**24,092**	**70,186**

(c) Research & Development expenses

For the years ended December 31, 2023 and 2022, the Group recognized ₩77,226 million and ₩72,284 million, respectively, as research & development expenses in cost of sales and selling, general and administrative expenses in the consolidated statements of income.

12. Joint Operation

Details of joint operation as of December 31, 2023 and 2022 are summarized as follows:

		Ownership (%)	
Joint operation	Headquarters	2023	2022
Flagship store joint development(*)	Seoul, Korea	40.90%	40.90%

(*) The Group agreed to participate and co-operate in the lease of the Group's facility space and accounted for the arrangement as a joint operation.

December 31, 2023 and 2022

13. Investments in Associates

(a) Details of the balance of investments in associates accounted for using the equity method as of December 31, 2023 are summarized as follows:

Company	Location	Principal operation	Ownership (%)		Won (millions)
Daehan Oil Pipeline Corp.	Seongnam, Korea	Operation of petroleum energy distribution system	28.62%	₩	237,912
Samnam Petrochemical Co., Ltd.	Seoul, Korea	Manufacture of petrochemical product	20.00%		44,338
GS Lubricants (Tianjin) Co., Ltd. (*1)	China	Production and sale of lubricant oil	-		-
Green Eco Technology Co., Ltd. (*2)	Japan	Manufacture of recycled plastic materials	15.00%		3,186
Eco G&R Co., Ltd.	Hwaseong, Korea	Manufacture of mechanically recycled plastic (ELV materials)	40.00%		1,287
PT AGPA Refinery Complex	Indonesia	Manufacture of refined edible and processed oils	40.00%	₩	28,615
				₩	315,338

(*1) The Group does not hold any ownership interests in **GS** Lubricants (Tianjin) Co., Ltd. as of December 31, 2023 as a result of share transfer to the other existing shareholder according to the share transfer agreement. In 2022, the Group's share of losses of the investee was fully recognized up to the carrying amount of its equity interest. As a result,, the Group has not absorbed any further losses of the investee before its share transfer during 2023.

(*2) During 2023, the Group newly acquired 15.0% of the shares in Green Eco Technology Co., Ltd. held by Sinko Trading Co., Ltd. The Group owns less than 20% of the equity interests but has determined that it has significant influence over the investee.

(b) Details of the balance of investments in associates accounted for using the equity method as of December 31, 2022 are summarized as follows:

Company	Location	Principal operation	Ownership (%)		Won (millions)
Daehan Oil Pipeline Corp.	Seongnam, Korea	Operation of petroleum energy distribution system	28.62%	₩	236,443
Samnam Petrochemical Co., Ltd.	Seoul, Korea	Manufacture of petrochemical product	20.00%		46,900
GS Lubricants (Tianjin) Co., Ltd.	China	Production and sale of lubricant oil	47.35%		-
				₩	283,343

December 31, 2023 and 2022

13. Investments in Associates, Continued

(c) Changes in investments in associates for the year ended December 31, 2023 are summarized as follows:

Company		Won (millions)					
		Balance at January 1, 2023	Additions	Share of profit (loss) of equity method accounted investees	Dividends	Others	Balance at December 31, 2023
Daehan Oil Pipeline Corp.	₩	236,443	-	12,364	(10,688)	(207)	237,912
Samnam Petrochemical Co., Ltd.		46,900	-	2,655	(5,760)	543	44,338
GS Lubricants (Tianjin) Co., Ltd.		-	-	-	-	-	-
Green Eco Technology Co., Ltd.		-	3,120	70	-	(4)	3,186
Eco G&R Co., Ltd.		-	1,500	(197)	-	(16)	1,287
PT AGPA Refinery Complex		-	28,615	-	-	-	28,615
	₩	283,343	33,235	14,892	(16,448)	316	315,338

(d) Changes in investments in associates for the year ended December 31, 2022 are summarized as follows:

Company		Won (millions)				
		Balance at January 1, 2022	Share of profit (loss) of equity method accounted investees	Dividends	Others	Balance at December 31, 2022
Daehan Oil Pipeline Corp.	₩	228,523	13,684	(6,804)	1,040	236,443
Samnam Petrochemical Co., Ltd.		43,369	4,913	(1,600)	218	46,900
GS Lubricants (Tianjin) Co., Ltd.		746	(802)	-	56	-
	₩	272,638	17,795	(8,404)	1,314	283,343

(e) Condensed financial information of associates as of and for the year ended December 31, 2023 is summarized as follows:

Company		Won (millions)			
		Assets	Liabilities	Sales	Net profit (loss)
Daehan Oil Pipeline Corp.	₩	1,071,362	307,869	199,961	42,022
Samnam Petrochemical Co., Ltd.		458,200	231,372	1,141,252	15,985
Green Eco Technology Co., Ltd.		11,501	9,620	5,573	426
Eco G&R Co., Ltd.		3,197	2,683	5,874	(870)
PT AGPA Refinery Complex		70,371	484	-	(799)

13. Investments in Associates, Continued

(f) Reconciliation of the Investees' net assets to the carrying amount of the Group's associates for the year ended December 31, 2022 is summarized as follows:

	Won (millions)					
Company	Net assets at December 31, 2023	Ownership (%)	Group's share of net assets	Goodwill	Unrealized profit or loss	Balance at December 31, 2023
Daehan Oil Pipeline Corp.	₩ 763,493	28.62%	218,512	20,105	(705)	237,912
Samnam Petrochemical Co., Ltd.	226,828	20.00%	45,366	-	(1,028)	44,338
Green Eco Technology Co., Ltd.	1,881	15.00%	282	2,904	-	3,186
Eco G&R Co., Ltd.	514	40.00%	206	1,081	-	1,287
PT AGPA Refinery Complex	69,887	40.00%	27,955	660	-	28,615

14. Provisions

(a) Changes in provisions for the years ended December 31, 2023 and 2022 are summarized as follows:

	Won(millions)			
	2023		2022	
	Provision for restoration	Provision for loyalty points	Provision for restoration	Provision for loyalty points
Beginning Balance	**31,712**	**1,719**	**28,882**	**1,532**
Increase	8,477	916	7,321	1,350
Decrease	(7,149)	(1,526)	(4,491)	(1,163)
Ending Balance	**33,040**	**1,109**	**31,712**	**1,719**

(b) Provision for Restoration

On December 26, 2002, the Group entered into a voluntary agreement with the Ministry of Environment and adopted a plan to detect and restore any contaminations at the Group's manufacturing facilities, service stations and oil depots. The environmental remediation liabilities recorded as provision in the consolidated statements of financial position are ₩33,040 million and ₩31,712 million as of December 31, 2023 and 2022, respectively.

(c) Provision for Loyalty Points

The Group's marketing efforts include providing free **GS** & Point Program to the rewards-card holders without any condition to purchase the Group's products or services. As of December 31, 2023 and 2022, the Group recorded a provision for the estimated amount to be redeemed by customers in the future as non-current liabilities amounting to ₩1,109 million and ₩1,719 million, respectively.

December 31, 2023 and 2022

15. Retirement Benefits

The Group sponsors both defined benefit and defined contribution plans. In connection with the retirement benefit obligations, when an employee reaches the retirement age of 58~60, the employee is entitled to the rights to receive retirement benefits as specified in the Group's human resource policies. The most recent valuation of the Group's obligation and plan assets in regard to its defined benefit plan was performed by Willis Towers Watson & Co. as of December 31, 2023 using the projected unit credit method.

(a) The principal actuarial assumptions used as of December 31, 2023 and 2022 are summarized as follows:

	2023	2022
Discount rate (*)	4.00% ~ 5.00%	5.25% ~ 6.00%
Rate of future salary increases	3.00% ~ 5.00%	3.00% ~ 5.25%

(*) For the purpose of calculating present value of the defined benefit obligations, the Group uses the discount rate determined by reference to market yields at the end of the reporting period on high quality corporate bonds (average of AA0) consistent with the currency and estimated terms of the defined benefit obligations.

(b) Details of defined benefit assets as of December 31, 2023 and 2022 are summarized as follows:

	Won (millions)	
	2023	2022
Present value of defined benefit obligations	₩ (443,001)	(397,211)
Fair value of plan assets	505,988	509,954
Defined benefit assets, net (*)	₩ 62,987	112,743

(*) The amount of Defined benefit liabilities is included.

(c) Changes in the present value of defined benefit obligations for the year ended December 31, 2023 are summarized as follows:

	Won (millions)
Balance at January 1, 2023	₩ 397,211
Payments	(58,899)
Current service costs	34,420
Interest costs	20,008
Remeasurements	50,383
Others	(122)
Balance at December 31, 2023	₩ 443,001

Changes in the present value of defined benefit obligations for the year ended December 31, 2022 are summarized as follows:

	Won (millions)
Balance at January 1, 2022	₩ 404,483
Payments	(27,242)
Current service costs	35,611
Interest costs	10,871
Remeasurements	(45,084)
Change of plan (Past service costs)	20,321
Others	(1,749)
Balance at December 31, 2022	₩ 397,211

December 31, 2023 and 2022

15. Retirement Benefits, Continued

(d) Changes in the fair value of plan assets for the year ended December 31, 2023 are summarized as follows:

		Won (millions)
Fair value at January 1, 2023	₩	509,954
Contribution to plan assets		21,910
Benefits paid by the plan		(52,695)
Interest income on plan assets		24,998
Remeasurements		1,933
Others		(112)
Fair value at December 31, 2023	₩	505,988

Changes in the fair value of plan assets for the year ended December 31, 2022 are summarized as follows:

		Won (millions)
Fair value at January 1, 2022	₩	426,042
Contribution to plan assets		101,884
Benefits paid by the plan		(25,904)
Interest income on plan assets		10,652
Remeasurements		(1,044)
Others		(1,676)
Fair value at December 31, 2022	₩	509,954

(e) The components of plan assets as of December 31, 2023 and 2022 are summarized as follows:

		Won (millions)	
		2023	2022
Cash and cash equivalents	₩	188	170
Fixed deposits		44,696	39,761
Beneficiary certificates		461,104	470,023
	₩	505,988	509,954

(f) The components of retirement benefit costs for the years ended December 31, 2023 and 2022 are summarized as follows:

		Won (millions)	
		2023	2022
Defined benefit plan:			
Current service costs	₩	34,420	35,611
Interest costs, net		(4,990)	219
Change of plan (Past service costs)		-	20,321
Defined contribution plan:			
Payment for the defined contribution plan		6,906	4,754
	₩	36,336	60,905

December 31, 2023 and 2022

15. Retirement Benefits, Continued

(g) For the years ended December 31, 2023 and 2022 in relation to the retirement benefit obligations, the following amounts are recognized in the respective accounts.

		Won (millions)	
		2023	2022
Cost of sales	₩	21,200	23,195
Selling, general and administrative expenses		15,136	37,710
	₩	36,336	60,905

(h) The cumulative amounts of remeasurements of defined benefit liability before income tax in the accumulated other comprehensive loss for the years ended December 31, 2023 and 2022 are summarized as follows:

		Won (millions)	
		2023	2022
Beginning	₩	(51,283)	(95,323)
Remeasurements of defined benefit liability before tax		(48,450)	44,040
Ending	₩	(99,733)	(51,283)

(i) Reasonably possible changes of 100 basis points at the reporting date to one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligation by the amounts shown below.

		Won (millions)	
		1%p increase	1%p decrease
Discount rate	₩	(25,788)	29,007
Rate of future salary increases		30,767	(27,857)

The sensitivity analysis does not take into account all expected cash flows under the plan, but provides an approximation of the sensitivity of the assumptions used.

December 31, 2023 and 2022

16. Deferred Revenue

(a) Customer Loyalty Program

For the **GS** & Point program, the fair value of the considerations received or receivable in respect of the initial sale is allocated between the award credits ("**GS** & points") and the other components of the sale. Such amount allocated to the **GS** & Points is deferred and revenue is recognized only when the **GS** & Points are redeemed and the Group has fulfilled its obligations to supply products and services. The Group recorded ₩11,570 million and ₩12,418 million as deferred revenue as of December 31, 2023 and 2022, respectively.

(b) Government Grants

Development agreement between the Group and DUCKYANG INDUSTRY CO., LTD. has been made to carry out national R&D project concerning collaboration on the development of eco-friendly mobility interior CMF design for carbon neutrality. The project started from April 1, 2022 and will be completed by December 31, 2025. If the project is successful, the Group is obligated to repay 32% of the subsidy amount as fixed technical fees. ₩14,508 million and ₩11,804 million were recognized as deferred revenue as of December 31, 2023 and December 31, 2022, respectively.

December 31, 2023 and 2022

17. Income Taxes

(a) The components of income tax expense for the years ended December 31, 2023 and 2022 are summarized as follows:

		Won (millions)	
		2023	2022
Current tax	₩	319,902	1,039,635
Adjustments on prior year tax		2,841	14,499
Changes in deferred tax assets/liabilities		48,091	(63,323)
Income tax expense	₩	370,834	990,811

(b) Details of tax expense recorded in equity for the years ended December 31, 2023 and 2022 are summarized as follows:

		Won (millions)	
		2023	2022
Current tax	₩	12,381	(12,336)
Deferred tax		8,221	8,384
	₩	20,602	(3,952)

(c) The expected income taxes calculated using the statutory tax rates differ from the actual income taxes amounts for the years ended December 31, 2023 and 2022 for the following reasons:

		Won (millions)	
		2023	2022
Profit before income taxes	₩	1,523,565	3,780,206
Calculated income tax expense at statutory tax rate		378,390	1,015,544
Adjustment:			
Tax effects of permanent differences		2,272	2,130
Tax credits		(10,680)	(9,119)
Adjustments on prior year tax		439	7,899
Tax effect of subsidiaries		(1,331)	333
Effects of changes in tax rate		(401)	(3,556)
Others		2,145	(22,420)
Income tax expense	₩	370,834	990,811
Effective tax rate		24.34%	26.21%

December 31, 2023 and 2022

17. Income Taxes, Continued

(d) Changes in deferred tax assets and liabilities for the year ended December 31, 2023 are summarized as follows:

	Won (millions)			
	Beginning balance	Credited (charged) to profit (loss)	Credited to other comprehensive income (loss)	Ending balance
Accrued expenses	₩ 74,688	(42,672)	-	32,016
Allowance for doubtful accounts	293	782	-	1,075
Other investment	9,017	(37)	-	8,980
Foreign currency translation gain (loss)	32,075	(9,631)	37	22,481
Accumulated depreciation	(192,945)	76,243	(80)	(116,782)
Lease liabilities	326,019	(104,599)	-	221,420
Deemed dividend	38,027	13,823	-	51,850
Equity-method investments	(9,355)	(308)	(39)	(9,702)
Accrued income / prepaid expenses	(590)	256	-	(334)
Accrued expenses/ unearned revenue	715	(212)	6	509
Other provision	15	3	-	18
Gain (Loss) on valuation of financial assets at FVOCI	(77)	-	3,005	2,928
Present value of defined benefit obligation	(23,953)	13,712	-	(10,241)
Provision for restoration	2,760	1,485	-	4,245
Gain (Loss) on valuation of derivatives	(1,284)	-	6,112	4,828
Asset revaluation surplus	(279,595)	1,802	5	(277,788)
Revaluation reserve	(35,895)	494	-	(35,401)
Derivatives	(32,328)	53	-	(32,275)
Inventories	1,547	(172)	-	1,375
Others	(18,670)	1,517	(876)	(18,029)
Accumulated deficit	2,658	(760)	51	1,949
Deduction of accumulated deficit	734	130	-	864
	₩ (106,144)	(48,091)	8,221	(146,014)

December 31, 2023 and 2022

17. Income Taxes, Continued

(e) Changes in deferred tax assets and liabilities for the year ended December 31, 2022 are summarized as follows:

	Won (millions)			
	Beginning balance	Credited (charged) to profit (loss)	Credited to other comprehensive income (loss)	Ending balance
Accrued expenses	₩ 42,248	32,440	-	74,688
Allowance for doubtful accounts	7,140	(6,854)	7	293
Other investment	9,357	(340)	-	9,017
Foreign currency translation gain	18,671	13,404	-	32,075
Accumulated depreciation	(196,280)	3,344	(9)	(192,945)
Lease liabilities	306,912	19,107	-	326,019
Deemed dividend	31,088	6,939	-	38,027
Equity-method investments	(31,231)	22,211	(335)	(9,355)
Accrued income / prepaid expenses	(103)	(487)	-	(590)
Accrued expenses/ unearned revenue	136	581	(2)	715
Other provision	11	6	(2)	15
Gain (Loss) on valuation of financial assets at FVOCI	(1,199)	-	1,122	(77)
Present value of defined benefit obligation	(11,361)	(12,592)	-	(23,953)
Provision for restoration	1,681	1,079	-	2,760
Gain (Loss) on valuation of derivatives	(8,734)	-	7,450	(1,284)
Asset revaluation surplus	(300,559)	20,934	30	(279,595)
Revaluation reserve	(37,320)	1,425	-	(35,895)
Derivatives	(28,090)	(4,238)	-	(32,328)
Inventories	1,724	(177)	-	1,547
Others	(18,944)	275	(1)	(18,670)
Accumulated deficit	36,094	(33,560)	124	2,658
Deduction of accumulated deficit	908	(174)	-	734
	₩ (177,851)	63,323	8,384	(106,144)

December 31, 2023 and 2022

18. Equity

18.1 Common Stock

The number of shares authorized to issue, the number of shares issued and the par value of a share of the Parent Company's common stock are 27,000,000 shares, 26,000,000 shares and ₩10,000 as of December 31, 2023 and 2022, respectively.

18.2 Accumulated Other Comprehensive Income

Accumulated other comprehensive income, net of tax, as of December 31, 2023 and 2022 are summarized as follows:

	Won (millions)	
	2023	2022
Unrealized gain on valuation of FVOCI financial assets	₩ (7,734)	3,603
Changes in equity method accounted investee's capital	217	1,080
Effective portion of changes in unrealized fair value of cash flow hedges	(18,277)	4,856
Foreign currency translation difference	26,780	21,121
Accumulated other comprehensive loss before income tax	986	30,660
Income tax effect	7,029	(2,049)
	₩ 8,015	28,611

18.3 Capital Adjustments

Capital adjustments is recorded for the excess of deficit resulted from the difference between the considerations paid for additional acquisition of subsidiary shares from non-controlling interests and subsidiary's related net book value over the amount of the group's capital surplus on the acquisition date.

December 31, 2023 and 2022

18. Equity, Continued

18.4 Statements of Appropriation of Retained Earnings of the Parent Company

Statements of appropriation of retained earnings of the Parent Company for the years ended December 31, 2023 and 2022 are as follows:

Expected Date of Appropriation for 2023: Feburary 28, 2024
Date of Appropriation for 2022: March 16, 2023

	Won (millions)	
	2023	2022
Unappropriated retained earnings		
Balance at beginning of year	₩ 11,601,441	9,738,869
Remeasurements of defined benefit liability	(33,739)	29,419
Interim dividends	(278,900)	-
Net income	1,053,996	2,669,953
Balance at end of year before appropriation	12,342,798	12,438,241
Appropriation of retained earnings		
Dividends	(461,000)	(836,800)
Unappropriated retained earnings to be carried over to subsequent year	₩ 11,881,798	11,601,441

December 31, 2023 and 2022

18. Equity, Continued

18.5 Dividends

(a) Details of interim dividends of the Parent Company for the years ended December 31, 2023 and 2022 are as follows:

		Won	
		2023	2022
Number of shares		26,000,000	26,000,000
Par value per share	₩	10,000	10,000
Dividends as a percentage of par value		107.27%	-
Interim cash dividends	₩	278,900,000,000	-
Dividend per share	₩	10,727	-

(b) Details of annual dividends of the Parent Company for the years ended December 31, 2023 and 2022 are as follows:

		Won	
		2023	2022
Number of shares		26,000,000	26,000,000
Par value per share	₩	10,000	10,000
Dividends as a percentage of par value		177.31%	321.85%
Annual cash dividends	₩	461,000,000,000	836,800,000,000
Dividend per share	₩	17,731	32,185

(c) Details of dividend payout ratio of the Parent Company for the years ended December 31, 2023 and 2022 are as follows:

		Won (millions)	
		2023	2022
Dividends	₩	739,900	836,800
Net income		1,053,996	2,669,953
Dividend payout ratio		70.20%	31.34%

December 31, 2023 and 2022

19. Sales

Details of sales for the years ended December 31, 2023 and 2022 are summarized as follows:

		Won (millions)	
		2023	2022
Types of revenue:			
Sales of goods	₩	48,355,827	58,347,465
Rendering of services and others		251,719	184,606
		48,607,546	58,532,071
Geographic area:			
Domestic		13,099,301	16,040,814
Foreign		35,508,245	42,491,257
	₩	48,607,546	58,532,071

20. Selling, General and Administrative Expenses

Details of selling, general and administrative expenses for the years ended December 31, 2023 and 2022 are summarized as follows:

		Won (millions)	
		2023	2022
Salaries	₩	270,232	350,831
Retirement benefits		15,136	37,710
Other employee benefits		83,874	74,895
Subcontractors		105,547	96,243
Rent		22,029	17,156
Transportation		183,245	176,996
Advertising		48,224	46,749
Depreciation		155,743	153,225
Fees		154,144	182,852
Amortization		14,168	12,829
Travel		15,119	13,567
Taxes and dues		20,721	22,301
Insurance		3,848	3,852
Bad debt expenses (reversal of allowance for doubtful accounts)		761	(6,307)
Others		73,227	71,984
	₩	1,166,018	1,254,883

December 31, 2023 and 2022

21. Other Income and Other Expense

(a) Details of other income for the years ended December 31, 2023 and 2022 are summarized as follows:

		Won (millions)	
		2023	2022
Gain on valuation and transactions of commodity derivatives	₩	137,570	171,347
Gain on disposal of property, plant and equipment		33,673	134,741
Gain on disposal of investment property		453	-
Rental income		3,191	2,587
Government grants		3,543	3,429
Others (*)		118,147	157,852
	₩	296,577	469,956

(*) Others primarily consist of brokerage income.

(b) Details of other expense for the years ended December 31, 2023 and 2022 are summarized as follows:

		Won (millions)	
		2023	2022
Loss on valuation and transactions of commodity derivatives	₩	146,822	232,309
Loss on disposal of property, plant and equipment		14,334	5,114
Expenses related to investment property		1,029	1,029
Others (*)		101,871	179,108
	₩	264,056	417,560

(*) Others primarily consist of brokerage fee.

December 31, 2023 and 2022

22. Classification of Expenses by Nature

Details of expenses by nature for the years ended December 31, 2023 and 2022 are summarized as follows:

		Won (millions)	
		2023	2022
Changes in finished goods and work-in-process	₩	176,984	(532,625)
Raw materials consumption		43,272,741	51,317,058
Employee benefits		649,663	912,149
Depreciation and amortization		1,059,851	1,060,874
Bad debt expenses (reversal of allowance for doubtful accounts)		761	(6,307)
Transportation		264,403	259,837
Advertising		49,584	48,089
Subcontractors, material costs and rent		500,430	479,673
Fees and commissions		169,184	199,408
Taxes and dues		59,671	56,155
Utilities		563,155	543,061
Others		157,327	215,181
	₩	46,923,754	54,552,553

December 31, 2023 and 2022

23. Transactions and Balances with Related Parties and Others

(a) Summary of Related Parties and others

Details of related parties as of December 31, 2023 and 2022 are as follows:

Relationships	2023	2022
Joint control entities	**GS** Holdings Corp. **GS** Energy Corporation Chevron (Overseas) Holdings Ltd. Chevron Global Energy Inc.	**GS** Holdings Corp. **GS** Energy Corporation Chevron (Overseas) Holdings Ltd. Chevron Global Energy Inc.
Investees with significant influence	Daehan Oil Pipeline Corporation Samnam Petrochemical Co., Ltd. - (*1) Green Eco Technology Co., Ltd. (*2) Eco G&R Co., Ltd. (*2) PT AGPA Refinery Complex (*2)	Daehan Oil Pipeline Corporation Samnam Petrochemical Co., Ltd. **GS** Lubricants (Tianjin) Co., Ltd. - - -
Others	Chevron U.S.A. Inc. Chevron Global Marine Products LLC Chevron Products Company, Inc. Chevron Singapore Pte. Ltd. Chevron Oronite Pte Ltd. Chevron Lummus Global LLC Chevron South Korea IP Holdings Ltd. **GS** E&R Corp. **GS** Aromatics Pte. Ltd. **GS** Aromatics (Qingdao) Chemical Co., Ltd. Qingdao Lidong Chemical Co., Ltd. **GS** Global Singapore Pte Ltd. Korea **GS** E&P Pte. Ltd. **GS** Energy Trading Singapore Pte. Ltd. **GS** Global Corp. and others	Chevron U.S.A. Inc. Chevron Global Marine Products LLC Chevron Products Company, Inc. Chevron Singapore Pte. Ltd. Chevron Oronite Pte Ltd. Chevron Lummus Global LLC Chevron South Korea IP Holdings Ltd. **GS** E&R Corp. **GS** Aromatics Pte. Ltd. **GS** Aromatics (Qingdao) Chemical Co., Ltd. Qingdao Lidong Chemical Co., Ltd. **GS** Global Singapore Pte Ltd. Korea **GS** E&P Pte. Ltd. **GS** Energy Trading Singapore Pte. Ltd. **GS** Global Corp. and others
Affiliates of large business groups	**GS** Engineering & Construction Corp. Samyang Int'l Co., Ltd. Chemtech International Co., Ltd. etc.	**GS** Engineering & Construction Corp. Samyang Int'l Co., Ltd. Chemtech International Co., Ltd. etc.

(*1) As result that the Parent Company transferred all of its holding interest to the other existing shareholder of the investee in accordance with the terms of share transfer agreement in 2023, the entity is no longer presented pursuant to the K-IFRS No. 1024 *'Related Party Disclosures'*.

(*2) The Group newly acquired the shares of the investee for the year ended December 31, 2023.

December 31, 2023 and 2022

23. Transactions and Balances with Related Parties and Others, Continued

(b) Transactions with Related Parties and others

Significant transactions which occurred in the normal course of business with related parties and affiliates of large business groups for the year ended December 31, 2023 are summarized as follows:

		Won (millions)					
Relationships	Related parties	Sales	Purchases of inventories	Purchases of property, plant, equipment and others	Dividends received (paid)	Purchase of shares	Others
Joint control entities	**GS** Holdings Corp.	39	-	-	-	-	69,440
	GS Energy Corporation	213	-	-	(557,850)	-	3,065
	Chevron (Overseas) Holdings Ltd.	-	-	-	(362,610)	-	-
	Chevron Global Energy Inc.	-	-	-	(195,240)	-	-
Investees with significant influence	Samnam Petrochemical Co., Ltd.	734,226	-	-	5,760	-	18,101
	Daehan Oil Pipeline Corporation	2	-	-	10,688	-	50,060
	GS Lubricants (Tianjin) Co., Ltd. (*)	399	7,890	-	-	-	-
	Green Eco Technology Co., Ltd.	-	-	-	-	3,120	2
	Eco G&R Co., Ltd.	4	5,237	-	-	1,500	-
	PT AGPA Refinery Complex	-	-	-	-	28,615	-
Others	Chevron U.S.A. Inc.	6,529,732	12,335,573	-	-	-	8,000
	Chevron Global Marine Products LLC	43,408	-	-	-	-	-
	Chevron Products Company, Inc.	256,854	280,440	-	-	-	-
	Chevron Singapore Pte. Ltd.	540,449	124,646	-	-	-	261
	Chevron Oronite Pte Ltd.	-	44,592	-	-	-	-
	Chevron South Korea IP Holdings Ltd.	-	-	-	-	-	45,893
	Chevron Australia Pty. Ltd.	-	201,216	-	-	-	-
	Chevron Asia Pacific Shipping Pte. Ltd.	11,138	-	-	-	-	-
	Chevron (International) Trading Pte. Ltd.	-	3,938,601	-	-	-	-
	Advanced Refining Technologies LLC	-	34,019	-	-	-	-
	GS E&R Corp.	405,329	-	-	-	-	59
	GS Aromatics Pte. Ltd.	42,500	121,677	-	-	-	-
	GS Global Singapore Pte Ltd	94,082	-	-	-	-	-
	Qingdao Lidong Chemical Co., Ltd.	1,329,338	9,366	-	-	-	-
	GS Global Corp.	98,528	84,821	91	-	-	63
	GS Sports Ltd.	19	-	-	-	-	13,925
	Boryeong LNG Terminal Co., Ltd.	-	32,397	-	-	-	-
	Lotte **GS** Chemical Corporation	203,419	57,420	-	-	-	-
Affiliates of large business-groups	**GS** Engineering & Construction Corp.	1,247	-	9,481	-		7
	Samyang Int'l Co., Ltd.	70,074	-	-	-		89
	SY Energy Pte. Ltd.	597,372	79,749	-	-	-	-

(*) The Group has disclosed transactions that occurred before the share transfer. In accordance with terms of the share transfer agreement, the Parent Company exercised the payment guarantee to repay a borrowing of ₩7,130 million from **GS** Lubricants (Tianjin) Co., Ltd. and recorded as other expenses.

December 31, 2023 and 2022

23. Transactions and Balances with Related Parties and Others, Continued

(b) Transactions with Related Parties and others, Continued

Significant transactions which occurred in the normal course of business with related parties and affiliates of large business groups for the year ended December 31, 2022 are summarized as follows:

		Won (millions)				
Relationships	Related parties	Sales	Purchases of inventories	Purchases of property, plant, equipment and others	Dividends received (paid)	Others
Joint control entities	**GS** Holdings Corp.	33	-	-	-	80,138
	GS Energy Corporation	47	-	-	(210,300)	3,124
	Chevron (Overseas) Holdings Ltd.	-	-	-	(168,240)	-
	Chevron Global Energy Inc.	-	-	-	(42,060)	-
Investees with significant influence	Samnam Petrochemical Co., Ltd.	732,331	-	-	1,600	17,696
	Daehan Oil Pipeline Corporation	25	-	-	6,804	47,421
	GS Lubricants (Tianjin) Co., Ltd.	15,235	29,284	-	-	-
Others	Chevron U.S.A. Inc.	7,985,463	17,294,828	-	-	3,171
	Chevron Global Marine Products LLC	50,582	-	-	-	-
	Chevron Products Company, Inc.	355,987	224,985	-	-	-
	Chevron Singapore Pte. Ltd.	714,202	1,806	-	-	437
	Chevron Oronite Pte Ltd.	-	49,951	-	-	-
	Chevron South Korea IP Holdings Ltd.	-	-	-	-	57,210
	Chevron Australia Pty. Ltd.	-	202,638	-	-	-
	Chevron (International) Trading Pte. Ltd.	-	1,682,435	-	-	-
	Chevron (TAPL) Pty. Ltd.	-	52,471	-	-	-
	Advanced Refining Technologies LLC	-	29,269	149	-	-
	GS E&R Corp.	493,378	-	-	-	54
	GS Aromatics Pte. Ltd.	76,255	126,139	-	-	2,419
	GS Global Singapore Pte Ltd.	223,894	-	-	-	-
	Qingdao Lidong Chemical Co., Ltd.	1,389,205	131,604	-	-	-
	GS Global Corp.	124,521	119,735	-	-	37
	GS Sports Ltd.	9	-	-	-	12,617
	Boryeong LNG Terminal Co., Ltd.	-	39,271	-	-	-
	Lotte **GS** Chemical Corporation	130,464	51,997	-	-	-
Affiliates of large business-groups	**GS** Engineering & Construction Corp.	1,776	-	5,312	-	957
	Samyang Int'l Co., Ltd.	73,846	-	-	-	3

December 31, 2023 and 2022

23. Transactions and Balances with Related Parties and Others, Continued

(c) Account balances with Related Parties and others

Account balances with related parties and others as of December 31, 2023 are summarized as follows:

		Won (millions)			
		Receivables		Payables	
Relationships	Related parties	Accounts receivable	Other receivables	Accounts payable	Other payables
Joint control entities	**GS** Holdings Corp.	3	13,929	-	-
	GS Energy Corporation	4	231	-	-
Investees with significant influence	Samnam Petrochemical Co., Ltd.	175,297	203	-	-
	Daehan Oil Pipeline Corporation	-	-	-	16
	Eco G&R Co., Ltd.	-	-	76	-
Others	Chevron U.S.A. Inc.	449,637	-	726,295	-
	Chevron Global Marine Products LLC	6,122	-	-	-
	Chevron Products Company, Inc.	8,949	-	5,440	-
	Chevron Singapore Pte. Ltd.	32,280	-	29,925	-
	Chevron Oronite Pte Ltd.	-	-	2,103	-
	Chevron South Korea IP Holdings Ltd.	-	12	-	-
	Chevron Australia Pty. Ltd.	-	-	89	-
	Chevron (International) Trading Pte. Ltd.	-	-	660,557	-
	GS E&R Corp.	2	10	-	13,621
	GS Aromatics Pte. Ltd.	6,209	-	8,327	-
	GS Global Singapore Pte Ltd.	5,638	-	-	-
	Qingdao Lidong Chemical Co., Ltd.	203,092	882	-	-
	GS Global Corp.	9,316	-	7,203	-
	GS Sports Ltd.	-	47	-	550
	Boryeong LNG Terminal Co., Ltd.	2,618	-	-	-
	Lotte **GS** Chemical Corporation	39,676	-	5,598	-
Affiliates of large business groups	**GS** Engineering & Construction Corp.	-	1	-	4,573
	Samyang Int'l Co., Ltd.	10,087	-	-	-
	SY Energy Pte. Ltd.	44,461	-	-	-

December 31, 2023 and 2022

23. Transactions and Balances with Related Parties and Others, Continued

(c) Account balances with Related Parties and others, Continued

Account balances with related parties and others as of December 31, 2022 are summarized as follows:

		Won (millions)			
		Receivables		Payables	
Relationships	Related parties	Accounts receivable	Other receivables	Accounts payable	Other payables
Joint control entities	**GS** Holdings Corp.	3	13,459	-	-
	GS Energy Corporation	2	35	-	-
Investees with significant influence	Samnam Petrochemical Co., Ltd.	148,327	184	-	-
	Daehan Oil Pipeline Corporation	-	-	-	17
	GS Lubricants (Tianjin) Co., Ltd.	4,381	-	-	-
Others	Chevron U.S.A. Inc.	632,033	-	502,118	-
	Chevron Global Marine Products LLC	4,550	-	-	-
	Chevron Products Company, Inc.	8,372	-	-	-
	Chevron Singapore Pte. Ltd.	46,857	-	120	-
	Chevron Oronite Pte Ltd.	-	-	5,480	-
	Chevron South Korea IP Holdings Ltd.	-	12	-	-
	GS E&R Corp.	1	-	-	10,560
	GS Aromatics Pte. Ltd.	8,721	262	6,323	-
	GS Global Singapore Pte Ltd.	10,277	-	-	-
	Qingdao Lidong Chemical Co., Ltd.	253,798	952	-	-
	GS Global Corp.	6,560	-	8,901	-
	GS Sports Ltd.	760	-	-	761
	Boryeong LNG Terminal Co., Ltd.	-	677	6	-
	Lotte **GS** Chemical Corporation	16,938	-	14,783	-
Affiliates of large business groups	**GS** Engineering & Construction Corp.	113	-	-	1,124
	Samyang Int'l Co., Ltd.	13,677	-	-	-

December 31, 2023 and 2022

23. Transactions and Balances with Related Parties and Others, Continued

(d) Allowance for doubtful accounts as of December 31, 2023 and 2022 are summarized as follows:

		Won (millions)			
		2023		2022	
Relationships	Related parties	Allowance for doubtful accounts	Bad debt expenses (reversal of allowance for doubtful accounts)	Allowance for doubtful accounts	Bad debt expenses (reversal of allowance for doubtful accounts)
Investee with significant influence	Samnam Petrochemical Co., Ltd.	5,259	804	4,455	288
	GS Lubricants (Tianjin) Co., Ltd.	-	(4)	4	2
Others	Chevron U.S.A. Inc.	450	(182)	632	270
	Chevron Global Marine Products LLC	6	1	5	1
	Chevron Products Company, Inc.	9	1	8	3
	Chevron Singapore Pte., Ltd.	32	(15)	47	15
	GS Aromatics Pte. Ltd.	6	(3)	9	3
	GS Global Singapore Pte Ltd.	6	(4)	10	(1)
	Qingdao Lidong Chemical Co., Ltd.	204	(51)	255	(8)
	GS Global Corp.	9	2	7	(2)
	GS Sports Ltd.	-	(1)	1	1
	Boryeong LNG Terminal Co., Ltd.	-	(1)	1	1
	Lotte **GS** Chemical Corporation	40	23	17	17
Affiliates of large business groups	Samyang Int'l Co., Ltd.	10	(4)	14	2
	SY Energy Pte. Ltd.	44	44	-	-

December 31, 2023 and 2022

24. Commitments

24.1 GS Caltex Corporation (the "Parent Company")

(a) As of December 31, 2023, 5 blank notes have been provided to the Korea Energy Agency and 2 blank checks have been provided to the Korea National Oil Corporation as collateral for the Parent Company's long-term borrowings and other transactions.

(b) Eight banks including KEB Hana Bank have provided the Parent Company with credit (overdraft) lines amounting to ₩188,000 million in aggregate as of December 31, 2023. In addition, the Parent Company has ₩190,000 million commercial paper program with banks including Shinhan Bank as of December 31, 2023.

(c) The Parent Company transferred its entire ownership interest in GS Lubricants (Tianjin) Co., Ltd. to the existing party of the investment according to the share transfer agreement during 2023. In accordance with the terms, the Parent Company is obliged to pay the entire guarantee amount corresponding to its ownership interest(47.35%) of debts, and therefore made a payment of ₩7,130 million which is recognized as other expenses.

24.2 GS Mbiz Co., Ltd.

(a) GS Mbiz has franchise agreements with 432 stores relating to Auto-Oasis business and receives a portion of the sales from the stores as a franchise fee as stated in the agreement. GS Mbiz recorded sales amounting to ₩8,644 million and ₩9,364 million relating to the agreements for the years ended December 31, 2023 and 2022, respectively.

(b) GS Mbiz entered into secured loan agreement up to ₩15,000 million with the Korea Development Bank, ₩4,000 million with Shinhan Bank, and credit loan agreement up to ₩4,000 million with Shinhan Bank, ₩2,000 million with Woori Bank, ₩4,000 million with Kookmin Bank, and ₩5,000 million with NongHyup Bank.

25. Oil and Natural Gas Exploration

The Group recorded the following liabilities in relation to the exploration and evaluation of petroleum and gas as of December 31, 2023 and 2022:

	Won (millions)	
	2023	2022
Liabilities:		
Long-term borrowings (foreign currency)	₩ -	12,120

December 31, 2023 and 2022

26. Other Assets and Other Liabilities

(a) Other assets as of December 31, 2023 and 2022 are summarized as follows:

		Won (millions)	
		2023	2022
Advance payments	₩	267,171	301,483
Prepaid expenses		13,416	15,276
Other receivable (*)		727,470	-
Total other current assets		1,008,057	316,759
Long-term prepaid expenses		399	362
Membership		24,529	24,585
Total other non-current assets		24,928	24,947
Total other assets	₩	1,032,985	341,706

(*) Receivables not based on contractual cash flows were reclassified from financial assets to other current assets as of December 31, 2023.

(b) Other liabilities as of December 31, 2023 and 2022 are summarized as follows:

		Won (millions)	
		2023	2022
Advances from customers	₩	107,062	76,023
Unearned revenue		95	373
Emission liability		-	104
Other payable (*)		877,955	-
Total other current liabilities		985,112	76,500
Deferred revenue		28,189	26,074
Provisions		34,149	33,431
Others		9,414	-
Total other non-current liabilities		71,752	59,505
Total other liabilities	₩	1,056,864	136,005

(*) Payables not based on contractual cash flows were reclassified from financial liabilities to other current liabilities as of December 31, 2023

December 31, 2023 and 2022

27. Risk Management

(a) Risk management principles

The Group is exposed to a variety of financial risks: market risk (including foreign exchange risk, interest rate risk and commodity price risk), credit risk and liquidity risk. The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Group's financial performance.

Risks are generally managed, within the relevant Group divisions. Executives of operational divisions have overall responsibility for the establishment and oversight of risk management framework within the divisions. Finance department is responsible for managing foreign exchange, interest rate, liquidity, and refinancing risks. Credit risk and counterparty risk are managed within credit management department. Crude oil department manages the Group's refining margin, refinery inventory price risk, and various position transactions. The risk management in regards to financial instruments aims to reduce the volatility in earnings, financial position, and cash flows, while securing effective and competitive financing for the Group.

The risk management committee regularly reviews and monitors financial risk management principles, policies, risk tolerance, and other risk management activities.

(b) Credit risk management

Credit risk is the risk of having financial loss to the Group where a counterparty to a financial instrument fails to meet its contractual obligations. In order to reduce the risk from defaults caused by the counterparties for contract, transactions are only made with a customer or counterparty with credit over a certain level and the Group requires sufficient amount of security or collateral from the high-risk counterparties. The Group has established a credit policy under which each new customer is analyzed individually for creditworthiness before the Group's standard payment and delivery terms and conditions are offered. The Group's review incudes external ratings.

Trade and other receivables from customers are widely dispersed across various areas and industries. The Group monitors customer's credit risk regularly, and enters into guarantee insurance contracts if necessary. The Group is not exposed to material credit risks from individuals or legal entities grouped according to their similar characteristics.

Credit risk arises principally from the Group's undiscounted carrying amount of the financial assets.

December 31, 2023 and 2022

27. Risk Management, Continued

(b) Credit risk management, Continued

The maximum exposure to credit risk by geographical area as of December 31, 2023 and 2022 is summarized as follows:

		Won (millions)	
		2023	2022
Korea	₩	2,935,047	4,601,221
China		363,093	438,441
Singapore		2,053,888	2,214,192
Others		413,173	394,300
	₩	5,765,201	7,648,154

Among financial assets measured at amortized cost in the amount of ₩5,573,220 million as of December 31, 2023, ₩145,400 million was past due and the impairment for these receivables by aging is as follows:

		Won (millions)			
		Past due 0 ~ 30 days	Past due 30 ~ 90 days	More than 90 days	Total
Financial assets at amortized cost	₩	67,861	2,554	74,985	145,400
Allowance for doubtful accounts		(12,687)	(46)	(40,656)	(53,389)

27. Risk Management, Continued

(c) Liquidity risk management

Liquidity risk is the risk that the Group will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or other financial assets. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always maintain a diversified maturity profile in its portfolio of liabilities. The contractual maturity of financial liabilities as of December 31, 2023 is as follows:

		Won (millions)			
		Within 1 year	1 ~ 5 years	After 5 years	Total
Current liabilities:					
Accounts payable-trade	₩	2,831,833	-	-	2,831,833
Short-term financial liabilities		2,788,078	-	-	2,788,078
Current lease liabilities		194,171	-	-	194,171
Total current financial liabilities		5,814,082	-	-	5,814,082
Non-current liabilities:					
Long-term financial liabilities	₩	90,110	2,534,528	643,133	3,267,771
Non-current lease liabilities		-	438,038	313,235	751,273
Total non-current financial liabilities		90,110	2,972,566	956,368	4,019,044
	₩	5,904,192	2,972,566	956,368	9,833,126

The above contractual maturity of financial liabilities includes estimated interest payments.

(d) Market risk management

The Group uses derivative financial instruments to manage certain exposures to fluctuations in foreign currency exchange rates and interest rates and to manage its margin exposure from changes in oil price.

Oil price risk

The market prices for crude oil and other feed-stocks, as well as refined petroleum products, are subject to significant fluctuations resulting from a variety of factors affecting demand and supply globally. The Group's results of operations in any given period are principally driven by the demand for and prices of refined petroleum products. These factors, combined with the Group's own consumption of crude oil and other feed-stocks and output of refined products, affect operational performance and cash flows in Oil Refining and Petrochemical segments, which are the Group's major business divisions in terms of sales, profits, and net assets.

As the total refining margin is an important determinant of earnings, its fluctuations constitute a significant risk. With the aim of securing a minimum margin per barrel, the Group hedges its refining margin using derivative financial instruments. The level of hedging depends on the forecast for the period in question and management's view of market conditions.

Because of the differences between the qualities of the underlying crude oil and refined petroleum products for which derivative financial instruments can be sold and purchased and the actual quality of the Group's feed-stocks and refined petroleum products in any given period, the business will remain exposed to some degree of basis risk.

December 31, 2023 and 2022

27. Risk Management, Continued

(d) Market risk management, Continued

Foreign exchange risk
Since the Group reports in Korean won while the pricing currencies used in the contract with major counterparties are U.S. dollar, the Group's business is vulnerable to short and long term currency rate changes.

The objective of foreign exchange risk management in the Group is to limit the uncertainty created by changes in foreign exchange rates on the future value of cash flows and earnings, and the Group's financial position.

The Group borrows money in foreign currency to hedge foreign currency risk of accounts receivable denominated in foreign currency and enters into foreign currency swap contracts to hedge its foreign currency risk of foreign currency bonds.

Interest rate risk
The Group has long-term borrowings at variable interest rates and where appropriate uses interest rate derivatives such as interest rate swaps to manage possible adverse cash flow movements in the future. These derivatives allow the Group to swap floating rate borrowings into fixed rates effectively. As a result of its policy for management of interest risk, the Group is not exposed to its interest risk, which arises from financial instruments.

(e) Sensitivity analysis

Due to the nature of its operations, the Group's financial performance is sensitive to the market risk described above. Market risk mainly arises from the volatility of foreign exchange rate and oil prices. The Group measures its market risk exposure, arising from financial instruments, using value-at-risk ("VaR") methodology.

VaR is the maximum loss not to be exceeded within a given probability or confidence level over a given period of time and it reflects risk reduction due to diversification.

The Group uses the assumptions in the VaR methodology below to measure market risk:
- a moving average for computing historical volatilities and correlations,
- a one-tailed 99% confidence level,
- minimum ten-day holding period,
- one year as a period of historical volatilities (Updated on a quarterly basis),
- U.S. dollar as a major foreign currency,
- the Dubai crude and Mogas, Naphtha, Kero, Gasoil and HSFO as the benchmark being used (MOPS or MOPJ price),
- no calendar spread, and
- no quality difference.

The VaR as of December 31, 2023 is summarized as follows:

		Won (millions)
Foreign exchange risk	₩	58,629
Oil price risk		1,550

December 31, 2023 and 2022

28. Borrowings

(a) Short-term Borrowings

Short-term borrowings as of December 31, 2023 and 2022 are summarized as follows:

				Won (millions)	
				Book value	
Financial institution	Short-term borrowings	Annual interest rate		2023	2022
Kookmin Bank	Working funds	-	₩	-	5,806
	Short-term borrowings (foreign currency)	2.80%		5,425	-
KEB Hana Bank	Short-term borrowings (foreign currency)	2.90%		4,503	6,804
Korea Development Bank	Working funds	-		-	13,105
	Working funds	3M EUR Libor+0.95%		11,413	13,512
	Working funds	1M SOFR + 0.91%		32,235	26,613
	Facility funds	-		-	100,000
	Facility funds	4.28%		150,000	150,000
	Facility funds	-		-	150,000
	Facility funds	-		-	100,000
	Facility funds	4.36%		150,000	-
	Facility funds	3M CD + 0.64%		100,000	-
Woori Bank	Short-term borrowings (foreign currency)	-		-	5,443
	Proceeds from receivable sales (*)	-		2,863	-
Industrial Bank of Korea (China)	Working funds	1Y LPR – 0.53%		4,883	5,443
Credit Agricole	Short-term borrowings (foreign currency)	MCLR + 1.7%		3,460	3,911
HDFC Bank	Short-term borrowings (foreign currency)	7.51%		3,100	3,828
	Short-term borrowings (foreign currency)	8.01%		662	-
SMBC	Short-term borrowings (foreign currency)	-		-	3,828
Mizuho Bank	Working funds	1Y LPR – 0.5%		5,787	2,722
Citi Bank (Czech)	Working funds	3M EUR Libor + 1.0%		14,266	13,512
Industrial and Commercial Bank of China Limited (ICBC)	Working funds	1Y LPR – 0.85%		5,425	-
KEB Hana Bank and others	Acceptances payable to bank (USD)	5.70% ~ 5.78%		289,736	752,952
United Overseas Bank and others	Short-term borrowings (foreign currency)	5.83% ~ 6.22%		404,654	372,152
			₩	1,188,412	1,729,631

(*) The group transferred financial assets through a contract with a bank, but since the counterparty had a right of recourse for the transferred assets, it was accounted for as a short-term borrowing.

December 31, 2023 and 2022

28. Borrowings, Continued

(b) Bonds

Bonds as of December 31, 2023 and 2022 are summarized as follows:

Bonds	Annual interest rate	Due date	Won (millions) Book value 2023	2022
Global bonds:				
FY-18 (USD 300 million)	-	-	-	380,190
FY-18 (CHF 100 million)	0.63%	Jan. 31, 2024	152,682	137,287
FY-19 (USD 300 million)	3.00%	Jun. 04, 2024	386,820	380,190
FY-19 (USD 100 million)	Daily Compounded SOFR + 1.11%	Aug. 28, 2024	128,940	126,730
FY-20 (USD 300 million)	1.63%	Jul. 27, 2025	386,820	380,190
FY-22 (USD 300 million)	4.50%	Jan. 05, 2026	386,820	380,190
FY-23 (USD 300 million)	5.38%	Aug. 07, 2028	386,820	-
Local debentures:				
FY-13 (₩200,000 million)	3.18%	-	-	200,000
FY-15 (₩50,000 million)	2.86%	Apr. 28, 2025	50,000	50,000
FY-16 (₩50,000 million)	-	-	-	50,000
FY-16 (₩50,000 million)	2.42%	Apr. 08, 2026	50,000	50,000
FY-18 (₩50,000 million)	2.87%	Aug. 17, 2028	50,000	50,000
FY-19 (₩190,000 million)	2.12%	Jan. 29, 2024	190,000	190,000
FY-19 (₩80,000 million)	2.25%	Jan. 29, 2026	80,000	80,000
FY-19 (₩230,000 million)	2.42%	Jan. 29, 2029	230,000	230,000
FY-19 (₩70,000 million)	1.99%	Oct. 29, 2029	70,000	70,000
FY-20 (₩50,000 million)	-	-	-	50,000
FY-20 (₩140,000 million)	1.63%	Feb. 13, 2025	140,000	140,000
FY-20 (₩80,000 million)	1.70%	Feb. 13, 2027	80,000	80,000
FY-20 (₩130,000 million)	1.82%	Feb. 13, 2030	130,000	130,000
FY-21 (₩30,000 million)	1.21%	Mar. 03, 2024	30,000	30,000
FY-21 (₩260,000 million)	1.70%	Mar. 03, 2026	260,000	260,000
FY-21 (₩60,000 million)	2.14%	Mar. 03, 2031	60,000	60,000
FY-21 (₩50,000 million)	2.26%	Mar. 03, 2036	50,000	50,000
FY-23 (₩80,000 million)	4.07%	Mar. 02, 2025	80,000	-
FY-23 (₩70,000 million)	4.25%	Mar. 02, 2028	70,000	-
Total			3,448,902	3,554,777
Less current portion			(888,442)	(680,190)
Less discounts on bonds			(9,862)	(9,511)
			₩ 2,550,598	2,865,076

The terms of the bonds restrict the sale and leaseback transactions by the Group as well as provision of security interest on or pledge of any assets of the Group.

December 31, 2023 and 2022

28. Borrowings, Continued

(c) Long-term borrowings

Long-term borrowings in local currency as of December 31, 2023 and 2022 are summarized as follows:

			Won (millions)	
			Book value	
Financial institution	Annual interest rate		2023	2022
Korea Development Bank	2.46%	₩	100,000	100,000
	2.42%		60,000	60,000
	2.96%		40,000	40,000
	4.80%		6,000	-
Ministry of Trade, Industry and Energy	1.33%		4,000	-
Less current portion of long-term borrowings			(5,715)	-
		₩	204,285	200,000

Long-term borrowings in foreign currency as of December 31, 2023 and 2022 are summarized as follows:

			Won (millions)	
			Book value	
Financial institution	Annual interest rate		2023	2022
Korea Energy Agency	-	₩	-	12,120
Credit Agricole	-		-	50,692
Korea Development Bank	3M SOFR + 1.46%		158,998	179,640
Less current portion of long-term borrowings in foreign currency			(42,066)	(50,692)
		₩	116,932	191,760

December 31, 2023 and 2022

28. Borrowings, Continued

(d) Change of liabilities in financing activities for the year ended December 31, 2023 is summarized as follows:

	Won (millions)					
	Short-term borrowings	Long-term borrowings	Bonds	Fair value – hedging instrument	Lease liabilities	Total
Balance at January 1, 2023 ₩	1,729,631	442,452	3,545,266	151,358	1,226,607	7,095,314
Cash flows from financing activities, net	(520,092)	(65,419)	(154,572)	72,848	(237,754)	(904,989)
Effects of changes in exchange rates	(21,127)	4,085	43,989	-	(32,724)	(5,777)
Effects of changes in fair values	-	-	-	(121,379)	-	(121,379)
Others	-	(12,120)	4,357	-	(125,407)	(133,170)
Balance at December 31, 2023 ₩	1,188,412	368,998	3,439,040	102,827	830,722	5,929,999

Change of liabilities in financing activities for the year ended December 31, 2022 is summarized as follows:

	Won (millions)					
	Short-term borrowings	Long-term borrowings	Bonds	Fair value – hedging instrument	Lease liabilities	Total
Balance at January 1, 2022 ₩	1,390,291	434,470	3,729,181	109,383	1,110,936	6,774,261
Cash flows from financing activities, net	393,779	(8,215)	(300,365)	58,765	(229,340)	(85,376)
Effects of changes in exchange rates	(54,439)	16,197	111,958	-	39,025	112,741
Effects of changes in fair values	-	-	-	(16,790)	-	(16,790)
Others	-	-	4,492	-	305,986	310,478
Balance at December 31, 2022 ₩	1,729,631	442,452	3,545,266	151,358	1,226,607	7,095,314

December 31, 2023 and 2022

29. Lease liabilities

(a) The total of lease commitments and present value discounted using the incremental borrowing rate regarding lease liabilities as of December 31, 2023 and 2022 are summarized as follows:

	Won (millions)						
	2023			2022			
	Minimum lease payment	Interest expense	Present value discounted using the incremental borrowing rate	Minimum lease payment	Interest expense	Present value discounted using the incremental borrowing rate
Within 1 year	₩ 194,171	(3,297)	190,874	262,252	(4,276)	257,976
1~5 years	438,038	(49,142)	388,896	666,383	(60,486)	605,897
After 5 years	313,235	(62,283)	250,952	472,917	(110,183)	362,734
	₩ 945,444	(114,722)	830,722	1,401,552	(174,945)	1,226,607

(b) The incremental borrowing rates and the contractual maturities of lease liabilities as of December 31, 2023 and 2022 are summarized as follows:

	2023		2022	
	Incremental borrowing rate	Contractual maturities	Incremental borrowing rate	Contractual maturities
Lease liabilities	1.34% ~ 5.35%	2024.01.01 ~ 2034.05.09	1.34% ~ 6.96%	2023.01.01 ~ 2034.05.09

(c) Net cash used in leases as of December 31, 2023 and 2022 are summarized as follows:

	Won (millions)	
	2023	2022
Total cash outflows for leases	₩ 279,969	263,872
Expenses relating to short-term leases	5,989	74
Expenses relating to leases of low-value assets	24	50
Net cash outflows for leases	₩ 285,982	263,996

(d) Interest expense, recognized as lease liabilities is ₩42,215 million and ₩34,797 million, respectively, for the years ended December 31, 2023 and 2022.

December 31, 2023 and 2022

30. Emission rights and liabilities

(a) The quantity of emission allowances the government allocated free of charge for the three years from 2023 to 2025 as of December 31, 2023 is as follows (in tCO2-eq):

	tCO2-eq		
	2023	2024	2025
Emission allowances allocated free of charge (*)	8,352,629	8,274,399	8,274,399

(*) It is the amount after the adjustments are made to the initial allowances allocated free of charge.

(b) Changes in the quantity of the emission allowances for the years ended December 31, 2023 and 2022 are as follows (in tCO2-eq):

	tCO2-eq	
	2023	2022
Beginning (*1)	8,350,718	8,350,718
Disposal	-	(46,430)
Emission (*2)	(8,680,090)	(8,823,189)
Carried forward from prior year	289,130	(289,130)
Borrowing	-	(94,950)
Others (*3)	1,570,825	902,981
Ending	1,530,583	-

(*1) The quantity of emission allowances the government allocated free of charge is included.
(*2) The quantity of the emission during current period are estimates and differ from the confirmed emission quantity.
(*3) The quantity of emission trading and KOC(Korean offset Credits) is included.

(c) There are no expected liabilities because the estimated quantity of the emission allowances during current year is less than that emission allowances allocated free of charge.

(d) Changes in emissions liabilities for the years ended December 31, 2023 and 2022 are as follows:

		Won (millions)	
		2023	2022
Beginning	₩	104	-
Increase		-	104
Reversal		(104)	-
Ending	₩	-	104

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