IMPORTANT NOTICE

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

IMPORTANT: You must read the following before continuing. The following applies to the offering circular (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 the Issuer (as defined in the Offering Circular) as a result of such access.

NOTHING IN THIS ELECTRONIC TRANSMISSION CONSTITUTES AN OFFER OF NOTES FOR SALE IN THE UNITED STATES OR ANY OTHER JURISDICTION WHERE IT IS UNLAWFUL TO DO SO. THE NOTES AND THE GUARANTEE (EACH AS DEFINED IN THE OFFERING CIRCULAR) HAVE NOT BEEN, AND WILL NOT BE, REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR WITH ANY SECURITIES REGULATORY AUTHORITY OF ANY STATE OR OTHER JURISDICTION OF THE UNITED STATES AND MAY NOT BE OFFERED, SOLD OR DELIVERED WITHIN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS (AS DEFINED IN REGULATION S UNDER THE SECURITIES ACT), EXCEPT PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND APPLICABLE STATE 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, AND IN PARTICULAR, MAY NOT BE FORWARDED TO ANY U.S. ADDRESS. 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 NOTES.

Notification under Section 309B(1)(c) of the Securities and Futures Act 2001 of Singapore (the "SFA") — The Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A(1) of the SFA), that the Notes are prescribed capital markets products (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018 of Singapore) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

Confirmation of your representation: In order to be eligible to view the Offering Circular or make an investment decision with respect to the Notes, 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) purchasing the Notes while located outside of the United States in an offshore transaction in reliance on Regulation S under the Securities Act. The Offering Circular is being sent at your request and by accepting the e-mail and accessing the Offering Circular, you shall be deemed to have represented to the Issuer that (1) you and any customers you represent are either (a) QIBs or (b) non-U.S. persons located outside of the United States and (2) you consent to delivery of the Offering Circular and any amendments and supplements thereto by electronic transmission.

You are reminded that the Offering Circular has been delivered to you on the basis that you are a person into whose possession the Offering Circular may be lawfully delivered in accordance with the laws of the jurisdiction in which you are located and you may not, nor are you authorized to, deliver the Offering Circular to any other person.

The materials relating to the offering do not constitute, and may not be used in connection with, an offer or solicitation in any place where offers or solicitations are not permitted by law. If a jurisdiction requires that the offering be made by a licensed broker or dealer and any of Crédit Agricole Corporate and Investment Bank, J.P. Morgan Securities LLC, The Korea Development Bank and Standard Chartered Bank (collectively, the "Joint Lead Managers") or any affiliate of the Joint Lead Managers is a licensed broker or dealer in that jurisdiction, the offering shall be deemed to be made by such Joint Lead Manager or such affiliate on behalf of the Issuer in such jurisdiction.

The 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 neither the Joint Lead Managers (as defined in the Offering Circular) nor any person who controls any of the Joint Lead Managers or any director, officer, employee or agent of it 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 Lead Managers.

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

Hanwha Energy USA Holdings Corporation
(DBA 174 Power Global)

(a corporation incorporated under the laws of Delaware, United States)

US$300,000,000 4.125% Guaranteed Senior Unsecured Green Notes due 2025
Unconditionally and Irrevocably Guaranteed by

The Export-Import Bank of Korea

(a statutory juridical entity established under
The Export-Import Bank of Korea Act of 1969, as amended, in the Republic of Korea)

Issue Price: 99.688%

Hanwha Energy USA Holdings Corporation (the "Issuer") is offering US$300,000,000 in aggregate principal amount of its 4.125% Guaranteed Senior Unsecured Green Notes due 2025 (the "Notes") which will be unconditionally and irrevocably guaranteed by The Export-Import Bank of Korea (the "Bank" or the "Guarantor," and such guarantee, the "Guarantee"). Interest on the Notes will be payable semi-annually in arrears on January 5 and July 5 of each year, commencing on January 5, 2023 until redemption or maturity.

Unless previously redeemed, or purchased and cancelled, the Notes will mature on July 5, 2025 at their principal amount. The Notes are subject to redemption in whole, but not in part, at their principal amount, together with accrued interest, at the option of the Issuer at any time in the event of certain changes affecting taxes of the Relevant Jurisdiction (as defined herein). See "*Terms and Conditions of the Notes—Redemption and Purchase—Redemption for Taxation Reasons*." Each Noteholder (as defined herein) will have the right, at its option, to require the Issuer to redeem all, but not some only, of such Noteholder's Notes, at their principal amount, together with accrued interest, upon the occurrence of a Change of Control (as defined herein). See "*Terms and Conditions of the Notes—Redemption and Purchase—Change of Control Redemption*." Payments on the Notes will be made without deduction for or on account of taxes of the Relevant Jurisdiction to the extent described under "*Terms and Conditions of the Notes—Taxation*."

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 constitute direct, general and unconditional obligations of the Issuer which will at all times rank *pari passu* among themselves and at least *pari passu* with all other present and future unsecured obligations of the Issuer. The obligations under the Guarantee constitute direct, general and unconditional obligations of the Guarantor which will at all times rank at least *pari passu* with all other present and future unsecured obligations of the Guarantor. See "*Terms and Conditions of the Notes*."

Application will be made to 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 herein. Approval in-principle from, admission to the Official List of, and listing and quotation of the Notes on, the SGX-ST are not to be taken as an indication of the merits of the Notes, the Issuer or the Guarantor. There is currently no public market for the Notes. 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.

The Notes are expected to be rated "Aa2" by Moody's Investors Service, Inc. ("Moody's") and "AA" by Standard & Poor's Rating Services, a division of The McGraw-Hill Companies, Inc. ("S&P"). A rating does not constitute a recommendation to buy, sell or hold the Notes and may be subject to revision or withdrawal at any time by such rating organization.

The Notes are expected to be delivered in book-entry form only through the facilities of The Depository Trust Company ("DTC") for the accounts of its participants, including Euroclear Bank NV/SA ("Euroclear") and Clearstream Banking SA ("Clearstream") on or about July 5, 2022.

Neither the Notes nor the Guarantee has been, or will be, registered under the U.S. Securities Act of 1933, as amended (the "Securities Act"), or any state securities laws of the United States, and they may not be offered or sold directly or indirectly within the United States or to or for the account or benefit of a U.S. person (as defined in Regulation S ("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. Accordingly, the Notes are being offered and sold (i) in the United States only to qualified institutional buyers (as defined in Rule 144A ("Rule 144A") under the Securities Act) in reliance on Rule 144A and (ii) outside the United States to non-U.S. persons in reliance on Regulation S, in each case, in compliance with applicable laws, regulations and directives. Prospective investors are hereby notified that the seller of the Notes may be relying on the exemption from the provisions of Section 5 of the Securities Act provided by Rule 144A. The Notes are not transferable except in accordance with the restrictions described under "*Notice to Investors.*"

Joint Lead Managers and Bookrunners

Crédit Agricole CIB	**J.P. Morgan**
The Korea Development Bank	**Standard Chartered Bank**

The date of this Offering Circular is June 21, 2022.

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You should rely only on the information contained in this Offering Circular when making an investment decision. None of the Issuer, the Guarantor or any of the Joint Lead Managers (as defined in "*Subscription and Sale*") has authorized anyone to provide you with information that is different or make any representation other than as contained in this Offering Circular in connection with the offering of the Notes. If anyone provides you with different or inconsistent information, you should not rely on it when making an investment decision.

You should assume the information in this Offering Circular is accurate only as of the date of this Offering Circular. The business, financial condition, results of operations and prospects of the Issuer or the Guarantor may have changed since that date. Neither the delivery of this Offering Circular nor any sale of the Notes made in connection with this Offering Circular will, under any circumstances, constitute a representation or create any implication that the information in this Offering Circular is correct as of any date subsequent to the date of this Offering Circular or that there have been no changes in the affairs of the Issuer or the Guarantor since the date of this Offering Circular. Statements contained in this Offering Circular as to the contents of any contract or other documents referred to in this Offering Circular may not set forth all of the terms and conditions of such contracts or other documents.

In making an investment decision, prospective investors must rely on their own examination of the Issuer and the Guarantor and the terms of the Notes and the Guarantee, including the merits and risks involved. Neither the Issuer nor the Guarantor is 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. This Offering Circular should not be considered as a recommendation or constituting an invitation or offer by the Issuer or the Guarantor that any recipient of this Offering Circular should purchase the Notes. You should not construe the contents of this Offering Circular as legal, business, accounting or tax advice. You should consult your own attorney, business adviser and tax adviser for legal, business and tax advice regarding an investment in the Notes.

The Issuer and the Guarantor have furnished the information contained in this Offering Circular, which has not been separately verified by the Joint Lead Managers. No representation, undertaking or warranty, express or implied, is made by the Joint Lead Managers or any of their respective affiliates or advisers as to the accuracy or completeness of the information contained in this Offering Circular, and nothing contained in this Offering Circular is, or shall be relied upon as, a promise or representation by the Joint Lead Managers or any of their respective affiliates or advisers. The Joint Lead Managers assume no responsibility for the accuracy or completeness of any of the information contained in this Offering Circular or any other information (financial, legal or otherwise) provided by the Issuer or the Guarantor in connection with the issue of the Notes or their distribution. Each person receiving this Offering Circular acknowledges that such person has not relied on the Joint Lead Managers or any of their respective affiliates or advisers in connection with investigation of the accuracy of such information or such person's investment decisions. To the fullest extent permitted by law, none of the Joint Lead Managers accepts any responsibility for the contents of this Offering Circular or for any other statement, made or purported to be made by any Joint Lead Manager or on its behalf in connection with the Issuer, the Guarantor, the Guarantee or the issue and offering of the Notes. The Joint Lead Managers accordingly disclaim any and all liability whether arising in tort or contract or otherwise (save as referred to above) which it might otherwise have in respect of this Offering Circular or any such statement.

Prospective investors should refer to the section entitled "Use of Proceeds" in this Offering Circular for information regarding the intended use of proceeds from the offering of the Notes and the Issuer's Green Financing Framework. The Joint Lead Managers make no assurances as to (i) whether the Notes will meet investor criteria and expectations with regard to environmental impact and sustainability performance for any investors, (ii) whether the use of the net proceeds from this offering will be used for Eligible Green Projects or (iii) the characteristics of the Eligible Green Projects, including their environmental and sustainability criteria. None of the Joint Lead Managers makes any representation as to the suitability of the Notes to fulfill environmental and sustainability criteria required by prospective investors. See "*Risk Factors—Risk Relating to the Notes—The Notes may not be a suitable investment for all investors seeking exposure to green assets*." The Joint Lead Managers have not undertaken, nor are responsible for, any assessment of the eligibility of the Green Financing Framework or Eligible Green

Projects (each as defined in "Use of Proceeds" in this Offering Circular), or the monitoring of the use of proceeds from the offering of the Notes.

This Offering Circular may only be used where it is legal to sell the Notes. None of the Issuer, the Guarantor or the Joint Lead Managers is making an offer to sell the Notes in any jurisdiction where the offer or sale is not permitted. This Offering Circular may not be used for, or in connection with, any offer to, or solicitation by, anyone in any jurisdiction in which it is unlawful to make such an offer 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 must inform themselves about and observe these relevant restrictions. No action is being taken in any jurisdiction to permit an offering to the general public of the Notes or the distribution of this Offering Circular in any jurisdiction where action would be required for those purposes.

The Notes are subject to restrictions on transferability and may not be transferred or resold except as permitted under applicable U.S. federal and state securities laws pursuant to a registration statement or an exemption from registration. Any investor who purchases the Notes will be deemed to have made acknowledgements, representations, warranties and agreements intended to restrict the resale or other transfer of the Notes, as set forth under "*Notice to Investors*" in this Offering Circular. As a prospective investor, you should be aware that you may be required to bear the financial risks of this investment for an indefinite period of time. See "*Subscription and Sale*" and "*Notice to Investors*."

In connection with this offering, each of the Joint Lead Managers (each a "Stabilization Manager") or any of its affiliates (or any person acting on behalf of any of them) may over-allot Notes 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(s) (or persons acting on behalf of a Stabilization Manager) will undertake stabilization action. Any stabilization action may begin on or after the date on which adequate public disclosure of the terms of the offer of the relevant Tranche of 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 relevant Tranche of Notes and 60 days after the date of the allotment of the relevant Tranche of Notes. Any stabilization action or over-allotment must be conducted by the relevant Stabilization Manager(s) (or person(s) acting on behalf of Stabilization Manager(s)) in accordance with all applicable laws and rules. For a description of these activities, see "*Subscription and Sale*."

NOTICE TO PROSPECTIVE INVESTORS IN THE UNITED STATES

THE NOTES HAVE NOT BEEN RECOMMENDED BY ANY U.S. FEDERAL OR STATE OR FOREIGN SECURITIES COMMISSION OR REGULATORY AUTHORITY. FURTHERMORE, THE FOREGOING AUTHORITIES HAVE NOT REVIEWED OR PASSED ON THE ACCURACY OR ADEQUACY OF THIS OFFERING CIRCULAR. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

ENFORCEABILITY OF CIVIL LIABILITIES

The Guarantor is a statutory juridical entity established in Korea pursuant to The Export-Import Bank of Korea Act of 1969, as amended (the "KEXIM Act"). All of the Guarantor's directors and officers reside in Korea, and all or a significant portion of the assets of the directors and officers and a substantial part of the Guarantor's assets are located in Korea.

As a result, it may not be possible for you to effect service of process within the United States upon such persons or to enforce against them or against the Guarantor in U.S. courts judgments predicated upon the civil liability provisions of the federal securities laws of the United States. There is doubt as to the enforceability in Korea, either in original actions or in actions for enforcement of judgments of U.S. courts, of civil liabilities predicated on the U.S. federal securities laws.

AVAILABLE INFORMATION

To permit compliance with Rule 144A under the Securities Act in connection with sales of the Notes, the Issuer will be required under the terms of the Notes and the Agency Agreement (as defined in this Offering Circular) to furnish upon request of a Noteholder, to such Noteholder and any prospective investor designated by such Noteholder, the information required to be delivered under Rule 144A(d)(4) under the Securities Act unless at the time of the request the Issuer is a reporting company under Section 13 or Section 15(d) of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act"), or is exempt from the registration requirements of Section 12(g) of the Exchange Act (and therefore is required to publish on its website, in English, certain information pursuant to Rule 12g3-2(b) under the Exchange Act). In accordance with the Notes and the Agency Agreement, the Fiscal Agent (as defined in this Offering Circular) also will make available for inspection by Noteholders or, in certain cases, arrange for the mailing to such Noteholders, certain documents or communications received from the Issuer.

CERTAIN DEFINED TERMS AND CONVENTIONS

In this Offering Circular, all references to the "Issuer" are to Hanwha Energy USA Holdings Corporation and, unless otherwise specified or the context otherwise requires, its consolidated subsidiaries.

All references to the "Bank" or the "Guarantor" are to The Export-Import Bank of Korea. All references to "Korea" or the "Republic" are to The Republic of Korea. All references to the "Government" are to the government of Korea.

Unless otherwise indicated, all references to "Won" or "₩" contained in this Offering Circular are to the currency of Korea, references to "U.S. dollars" or "US$" are to the currency of the United States of America, references to "Canadian Dollar" or "CAD" are to the currency of Canada, references to "Euro" or "EUR" are to the currency of the European Union, references to "Chinese Yuan" or "CNY" are to the currency of the People's Republic of China, references to "Singapore Dollar", "S$" or "SGD" are to the currency of Singapore, references to "Swiss Franc" or "CHF" are to the currency of Switzerland, references to "British Pound" or "GBP" are to the currency of the United Kingdom, references to "Hong Kong Dollar" or "HKD" are to the currency of Hong Kong, S.A.R., references to "New Zealand Dollar" or "NZD" are to the currency of New Zealand, references to "Thai Baht" or "THB" are to the currency of Thailand, references to "Australian Dollar" or "AUD" are to the currency of Australia, references to "Indonesian Rupiah" or "IDR" are to the currency of Indonesia, references to "Indian Rupee" or "INR" are to the currency of India, references to "South African Rand" or "ZAR" are to the currency of South Africa, references to "Norwegian Krone" or "NOK" are to the currency of Norway, references to "Swedish Krona" or "SEK" are to the currency of Sweden, references to "Brazilian Real" or "BRL" are to the currency of the Federative Republic of Brazil, references to "Mexican Peso" or "MXN" are to the currency of the United Mexican States, references to "Czech Koruna" or "CZK" are to the currency of the Czech Republic, references to "Polish Zloty" or "PLN" are to the currency of Poland and references to "Peruvian Sol" or "PEN" are to the currency of Peru.

In this Offering Circular, where information has been prepared in thousands, millions or billions of units, amounts may have been rounded up or down. Accordingly, actual numbers may differ from those contained herein due to rounding. All discrepancies in any table between totals and the sums of the amounts listed are due to rounding.

PRESENTATION OF FINANCIAL INFORMATION

The Issuer's consolidated financial statements and information as of and for the years ended December 31, 2021 and 2020 included in this Offering Circular have been prepared in accordance with generally accepted accounting principles in the United States.

During the fiscal year ended December 31, 2021, the Issuer (i) implemented a change in accounting policy with regard to accounting for certain equity investments, which has been applied retrospectively; and (ii) identified certain errors in the previously issued financial statements resulting from an omission of land leases related to certain project assets. The Issuer applied the change in accounting policy retroactively and corrected such errors in the Issuer's consolidated financial statements as of and for the year ended December 31, 2021, but did not restate its consolidated financial statements as of and for the year ended December 31, 2020. For more information on the prior year adjustments, see Note 19 of the notes to the Issuer's consolidated financial statements as of and for the year ended December 31, 2021 included elsewhere in this Offering Circular.

The Guarantor's separate financial statements and information as of and for the years ended December 31, 2021 and 2020 included in this Offering Circular have been prepared in accordance with Korean IFRS. References in this Offering Circular to "separate" financial statements and information are to financial statements and information prepared on a non-consolidated basis. Unless specified otherwise, the Guarantor's financial and other information included in this Offering Circular is presented on a separate basis in accordance with Korean IFRS and does not include such information with respect to its subsidiaries.

FORWARD-LOOKING STATEMENTS

This Offering Circular includes future expectations, projections or "forward-looking statements", as defined in Section 27A of the Securities Act and Section 21E of the Exchange Act. The words "believe", "expect", "anticipate", "estimate", "project" and similar words identify forward-looking statements. In addition, all statements other than statements of historical facts included in this Offering Circular are forward-looking statements. Although the Issuer and the Guarantor believe that the expectations reflected in the forward-looking statements are reasonable, no assurance can be given that such expectations will prove correct. This Offering Circular discloses important factors that could cause actual results to differ materially from the Issuer's or the Guarantor's expectations, including factors that could adversely affect the future performance of the Korean economy, as described below (collectively, the "Cautionary Statements"). All subsequent written and oral forward-looking statements attributable to the Issuer or the Guarantor or persons acting on behalf of either of them are expressly qualified in their entirety by the Cautionary Statements.

Factors that could adversely affect the future performance of the Korean economy include:

- the occurrence of severe public health crises and epidemics, such as the ongoing COVID-19 pandemic;
- continued volatility or deterioration in Korea's credit and capital markets;
- declines in consumer confidence and a slowdown in consumer spending in the Korean or global economy;
- adverse conditions 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 economic and trade tensions between

the United States and China and uncertain implications of the United Kingdom's exit from the European Union;

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

- 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, in particular the ongoing trade disputes with Japan;

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

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

- a 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;

- social and labor unrest;

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

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

- a decrease in tax revenue and a substantial increase in the Government's expenditures for fiscal stimulus measures, COVID-19 relief measures, unemployment compensation and other economic and social programs that, together, would lead to an increased Government budget deficit;

- 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 at 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;

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

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

- political uncertainty or increasing strife among or within political parties in Korea;

- hostilities or political or social tensions involving oil producing countries in the Middle East and North Africa and any material disruption in the global supply of oil or sudden increase in the price of oil;

- hostilities, political or social tensions involving Russia (including the invasion of Ukraine by Russia and ensuing actions that the United States and other countries have taken or may take in the future) and the resulting adverse effects on the global supply of oil and other natural resources and the global financial markets; and

- an increase in the level of tensions or an outbreak of hostilities between North Korea and Korea or the United States (see "*Republic of Korea—Government and Politics—Relations with North Korea*").

SUMMARY OF THE OFFERING

The following is a brief summary of certain terms of the Notes and the Guarantee, which are more fully described in "Terms and Conditions of the Notes." The "Terms and Conditions of the Notes" prevail to the extent of any inconsistency with the summary description set out in this section. Terms used and not otherwise defined in this summary have the meaning given to them in "Terms and Conditions of the Notes." Any decision to invest in the Notes should be based on a consideration of this Offering Circular as a whole.

Issuer..	Hanwha Energy USA Holdings Corporation (Legal Entity Identifier: 549300VVIE7XDIYNIT55)
Guarantor	The Export-Import Bank of Korea (Legal Entity Identifier: 549300APVP4R32PI3Y06)
Offering..	The US$300,000,000 4.125% Guaranteed Senior Unsecured Green Notes due 2025 (the "Notes") are being offered (i) in the United States to qualified institutional buyers ("QIBs") in reliance on Rule 144A and (ii) outside of the United States to non-U.S. persons in reliance on Regulation S. See "*Subscription and Sale*" and "*Notice to Investors*."
Guarantee	The payment of the principal and interest in respect of the Notes has been unconditionally and irrevocably guaranteed by the Guarantor.
Ranking	The Notes constitute direct, general and unconditional obligations of the Issuer which will at all times rank *pari passu* among themselves and at least *pari passu* with all other present and future unsecured obligations of the Issuer, save for such obligations as may be preferred by provisions of law that are both mandatory and of general application. The obligations of the Guarantor under the Guarantee constitute direct, general and unconditional obligations of the Guarantor which will at all times rank at least *pari passu* with all other present and future unsecured obligations of the Guarantor, save for such obligations as may be preferred by provisions of law that are both mandatory and of general application.
Offering Price	99.688% of the principal amount of the Notes, plus accrued interest, if any, from July 5, 2022 (the "Issue Date").
Size of Offering..	The aggregate principal amount of the Notes to be issued in this offering is US$300,000,000.

Denomination	The Notes will be issued in minimum denominations of US$200,000 and integral multiples of US$1,000 in excess thereof.
Interest	The Notes will bear interest at the rate of 4.125% per annum from the Issue Date to (but excluding) the due date for redemption of the Notes, payable semi-annually in arrear on January 5 and July 5 in each year (each an "Interest Payment Date"). The first Interest Payment Date will be January 5, 2023 in respect of the period from (and including) July 5, 2022 to (but excluding) January 5, 2023.
Withholding Tax and Additional Amounts	All payments in respect of the Notes by or on behalf of the Issuer or, as the case may be, the Guarantor shall be made without withholding or deduction for, or on account of, Taxes imposed or levied by or on behalf of the Relevant Jurisdiction unless the withholding or deduction of Taxes is required by law. In that event, the Issuer or, as the case may be, the Guarantor may be required to pay certain additional amounts. See "*Terms and Conditions—Taxation—Payment without Withholding*."
Redemption	Unless previously redeemed or purchased and cancelled as provided in the Terms and Conditions of the Notes, the Issuer will redeem the Notes at their principal amount on July 5, 2025.
Redemption for Taxation Reasons	The Notes may be redeemed at the option of the Issuer in whole, but not in part, at any time in the event of certain changes affecting Taxes of the Relevant Jurisdiction. See "*Terms and Conditions—Redemption and Purchase—Redemption for Taxation Reasons*."
Change of Control Redemption	Each Noteholder will have the right, at its option, to require the Issuer to redeem all, but not some only, of such Noteholder's Notes, upon the occurrence of a Change of Control. See "*Terms and Conditions—Redemption—Change of Control Redemption*."
Negative Pledge	The terms of the Notes contain a negative pledge provision with respect to the Guarantor. See "*Terms and Conditions—Negative Pledge.*"
Form of the Notes	The Notes will be in registered form. The Notes sold in offshore transactions in reliance on Regulation S will be represented by one or more global note certificates (the "Unrestricted Global Note Certificates") issued to the DTC and registered in the name of Cede & Co. as nominee of DTC, and held in New York, New York for the accounts of DTC participants, including Euroclear and Clearstream.

	Notes sold in reliance on Rule 144A will be represented by one or more global note certificates (the "Restricted Global Note Certificates" and together with the Unrestricted Global Note Certificates, the "Global Note Certificates") issued to DTC and registered in the name of a nominee of DTC. See "*The Global Note Certificates*."
Fiscal Agent...	Citicorp International Limited will act as the fiscal agent (the "Fiscal Agent") under the Agency Agreement for the Notes to be dated July 5, 2022 (the "Agency Agreement").
Registrar, Paying Agent and Transfer Agent...	Citibank, N.A., London Branch will act as the Registrar, the Paying Agent and the Transfer Agent under the Agency Agreement.
Governing Law	The Notes and the related Deed of Covenant, the Guarantee and the Agency Agreement will be governed by English law.
Listing	Application will be made to 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.
Use of Proceeds...	The Issuer intends to use the net proceeds from this offering ("Green Bond Proceeds") to refinance, in whole or in part, the existing renewable energy projects related to renewable energy ("Eligible Green Projects") in accordance with the Issuer's Green Financing Framework, which is in alignment with the Green Bond Principles 2021 published by the International Capital Markets Association ("ICMA Green Bond Principles").
Security Codes	Rule 144A ISIN: US41135WAB72 Regulation S ISIN: USU3821WAC11 Regulation S Temporary ISIN: USU3821WAD93 Rule 144A CUSIP: 41135WAB7 Regulation S CUSIP: U3821WAC1 Regulation S Temporary CUSIP: U3821WAD9 Rule 144A Common Code: 249236586 Regulation S Common Code: 249236543 Regulation S Temporary Common Code: 249402729

RISK FACTORS

The Notes may not be a suitable investment for all investors seeking exposure to green assets.

There is currently no clear definition of, nor market consensus as to what constitutes, a "green" or an equivalently-labelled project or as to what precise attributes are required for a particular project or series of notes to be defined as "green" or such other equivalent label, nor can any assurance be given that such a clear definition or consensus will develop over time. Therefore, no representation or assurance can be provided that the use of proceeds of the Notes will satisfy any present or future investor expectations or requirements as regards any investment criteria or guidelines with which such investor or its investments are required to comply, whether by any present or future applicable laws or regulations or by its own by-laws or other governing rules or investment portfolio mandates, in particular with regard to any direct or indirect environmental impact of any project. Although Eligible Green Projects will be selected in accordance with the Green Financing Framework, and will be developed in accordance with relevant legislation and standards, there can be no guarantee that the projects will deliver the environmental benefits as anticipated, or that adverse environmental and/or social impacts will not occur during the design, construction, commissioning and operation of the projects. In addition, where any negative impacts are insufficiently mitigated, the projects may become controversial, and/or may be criticized by activist groups or other stakeholders.

The Second Party Opinion (as defined in "Use of Proceeds" in this Offering Circular) may not reflect the potential impact of all risks related to the structure, marketability, trading price, or liquidity and other factors that may affect the value of the Notes. The Second Party Opinion is not a recommendation to buy, sell or hold any Notes and is only current as of the date that the Second Party Opinion was initially issued and is subject to certain disclaimers set out therein, and may be updated, suspended or withdrawn at any time. The Second Party Opinion is for information purposes only and none of the Issuer or the Joint Lead Managers accepts any form of liability for the substance of the Second Party Opinion and/or any liability for loss arising from the use of the Second Party Opinion and/or information provided therein.

Currently, the providers of second party opinions and providers of similar opinions, certifications and validations are not subject to any specific regulatory or other regime or oversight. Any such opinion, certification or validation is not, nor should be deemed to be, a recommendation by the Issuer or the Joint Lead Managers, any second-party opinion provider or any other person to buy, sell or hold the Notes. Noteholders have no recourse against the Issuer or any of the Joint Lead Managers or the provider of any such opinion, certification or validation for the contents of any such opinion, certification or validation, which is only current as at the date it was initially issued. Prospective investors must determine for themselves the relevance of any such opinion, certification or validation and/or the information contained therein and/or the provider of such opinion, certification or validation for the purpose of any investment in the Notes. Any withdrawal of any such opinion, certification or validation or any such opinion, certification or validation attesting that the Issuer is not complying in whole or in part with any matters for which such opinion, certification or validation is opining on or certifying on may have a material adverse effect on the value of the Notes and/or result in adverse consequences for certain investors with portfolio mandates to invest in securities to be used for a particular purpose.

In addition, although the Issuer has agreed to certain reporting and use of proceeds obligations in connection with certain environmental criteria, the Issuer's failure to comply with such obligations does not constitute a breach or an event of default under the Notes. A withdrawal of the Second Party Opinion or any failure by the Issuer to use the proceeds of the Notes on Eligible Green Projects or to meet or continue to meet the investment requirements of certain environmentally-focused investors with respect to such Notes does not constitute a breach or an Event of Default under the Notes and may have an adverse effect on the value of the Notes and/or may have adverse consequences for certain investors with portfolio mandates to invest in green assets. In the event that the Notes are included in any dedicated "green", "environmental", "social", "sustainable" or other equivalently-labelled index, no representation or assurance is given by the Issuer or any other person that such listing or admission, or inclusion in such index, satisfies any present or future investor expectations or requirements as regards to any investment criteria or guidelines with which such investor or its investments are required to comply, whether by any present or future applicable law or regulations or by its own constitutive documents or other governing rules or investment portfolio mandates.

No assurance can be provided with respect to the suitability or reliability of the Second Party Opinion or that the Notes will fulfill the environmental criteria to qualify as green bonds. The Joint Lead Managers have not undertaken, nor are responsible for, any assessment of the eligibility of the Green Financing Framework, or Eligible Green Projects, or the monitoring of the use of proceeds from the offering of the Notes. Each potential purchaser of the Notes should determine for itself the relevance of the information contained in this Offering Circular regarding the use of proceeds and its purchase of the Notes should be based upon such investigation as it deems necessary. Therefore, the Notes may not be a suitable investment for all investors seeking exposure to green assets. The examples of Eligible Green Projects in the section entitled "Use of Proceeds" in this Offering Circular are for illustrative purposes only and subject to change, and no assurance can be provided that disbursements for projects with these specific characteristics will be made by the Issuer during the term of the Notes. The Green Financing Framework and the Second Party Opinion are not incorporated into, and do not form a part of, this Offering Circular.

Payments under the Guarantee may be restricted under certain circumstances.

Under the Foreign Exchange Transactions Act, if the Government deems that (i) it is inevitable due to certain emergency circumstances, such as natural calamities, war or grave and sudden changes in economic situations in or outside Korea or (ii) a serious difficulty in international balances of payments and international finance, or serious obstacles in implementing currency policies, exchange rate policies or other macroeconomic policies due to capital movements in and out of Korea have occurred or are likely to occur, the Ministry of Economy and Finance may impose any necessary restrictions on the remittance of payments out of Korea, such as temporary suspension, in whole or in part of payments or imposition of obligations to deposit of means of payments in or to the Bank of Korea, the foreign exchange equalization fund or financial companies, etc. In addition, the Ministry of Economy and Finance may require any Korean resident who intends to make payment from Korea to a foreign country or to any non-Korean resident to obtain prior approval in case where it is inevitable for the faithful fulfilment of treaties executed by Korea and of generally recognized international laws and regulations or where it is necessary for especially contributing to international endeavor for the maintenance of international peace and security.

If the Guarantor is subject to the above mentioned restrictions of payment or is required to but cannot obtain prior approval from the Ministry of Economy and Finance under the above mentioned circumstances, the Guarantor may not be able to make any payments under the Guarantee.

The Notes and the Guarantee are subject to transfer restrictions.

The Notes and the Guarantee will not be registered under the Securities Act or any state securities laws and may not be offered or sold within the United States except to QIBs in reliance on the exemption provided by Rule 144A, to certain persons in offshore transactions in reliance on Regulation S, or, if available, pursuant to another exemption from, or in another transaction not subject to, the registration requirements of the Securities Act and, in each case, in accordance with applicable state securities laws. In addition, subject to the conditions set forth in the 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 "*Notice to Investors*."

The Notes may be redeemed or purchased under certain circumstances.

The Noteholders should be aware that the Notes may be redeemed at the option of the Issuer (in whole but not in part) at any time at their principal amount (together with interest accrued to but excluding the date of redemption) in case of certain tax reasons as further described in Condition 8.2 (Redemption for Taxation Reasons) of the Terms and Conditions of the Notes. In addition, the Issuer, the Guarantor or any of their respective subsidiaries may at any time purchase the Notes in the open market or otherwise and at any price as further described in Condition 8.4 (Purchases) of the Terms and Conditions of the Notes.

The date on which the Notes are redeemed or purchased may not accord with the preference of individual Noteholders. This may be disadvantageous to the Noteholders in light of market conditions or the individual circumstances of the Noteholders. In addition, an investor may not be able to reinvest the redemption or sale proceeds in comparable securities at an effective interest rate at the same level as that of the Notes.

The ratings assigned to the Notes may be suspended, lowered or withdrawn in the future.

The Notes are expected to be rated "Aa2" by Moody's and "AA" by S&P. The ratings assigned to the Notes will be based primarily on the Guarantee to be issued by the Guarantor with respect to the Notes. Pursuant to the Guarantee, the Guarantor will unconditionally and irrevocably guarantee the due and punctual payment of all sums from time to time payable by the Issuer in respect of the Notes as and when such sums become due (the "Guaranteed Amounts"). The payment of the Guaranteed Amounts will, therefore, depend on the Guarantor performing its obligations under the Guarantee, and the likelihood of payment of the Guaranteed Amounts will depend on the creditworthiness of the Guarantor. Consequently, investors are relying on the creditworthiness of the Guarantor to perform its obligations under the Guarantee. A significant deterioration in the financial condition of the Guarantor could adversely affect the likelihood of investors receiving Guaranteed Amounts under the Guarantee and could result in a downgrade or withdrawal of the rating of the Notes.

A rating is not a recommendation to buy, sell or hold the Notes and may be subject to revision, suspension or withdrawal at any time. There can be no assurance that a rating will remain the same for any given period of time or that a rating will not be lowered, suspended or withdrawn entirely by the relevant rating agency if in its judgment circumstances in the future so warrant. Neither the Issuer nor the Guarantor has an obligation to inform Noteholders of any such revision, downgrade or withdrawal. A reduction, suspension, or withdrawal at any time of the rating assigned to the Notes may adversely affect the market price of the Notes or a Noteholder's ability to dispose of the Notes.

The liquidity and price of the Notes may be volatile.

The price and trading volume of the Notes may be highly volatile. Factors such as the general economic conditions in Korea or internationally could cause the price of the Notes to fluctuate. Any such developments may result in large and sudden adverse changes in the trading volume and price of the Notes. There can be no assurance that these developments will not occur in the future.

An active trading market for the Notes may not develop.

The Notes are a new issue of securities for which there is currently no trading market. No assurance can be given that the Issuer will obtain or be able to maintain a listing of the Notes on the SGX-ST or that an active trading market for the Notes will develop or as to the liquidity or sustainability of any such market, the ability of Noteholders to sell their Notes or the price at which Noteholders will be able to sell their Notes. The Joint Lead Managers are not obliged to make a market in the Notes and any such market making, if commenced, may be discontinued at any time at the sole discretion of the Joint Lead Managers.

The Notes contain provisions regarding meetings, modification, waivers and substitution which may affect the rights of Noteholders.

The Terms and Conditions of the Notes and the Agency Agreement contain provisions for calling meetings of Noteholders to consider matters affecting their interests generally. These provisions permit defined majorities to bind all Noteholders including Noteholders who did not attend and vote at the relevant meeting and Noteholders who voted in a manner contrary to the requisite majority.

The Terms and Conditions of the Notes also provide that the Fiscal Agent may agree, without the consent of Noteholders, to any modification of any of the Terms and Conditions or any of the provisions of the Agency Agreement either (i) for the purpose of curing any ambiguity or of curing, correcting or supplementing any manifest or proven error or any other defective provision contained therein or (ii) in any other manner which is, in the opinion of the Issuer and the Guarantor, not materially prejudicial to the interests of the Noteholders. Any such modifications will be binding on all current and future Noteholders.

TERMS AND CONDITIONS OF THE NOTES

The following is the text of the Terms and Conditions of the Notes (the "Conditions") which (subject to modification and except for the paragraphs in italics) will be endorsed on the Note Certificates issued in respect of the Notes:

The US$300,000,000 4.125% Guaranteed Senior Unsecured Green Notes due 2025 (the "Notes," which expression shall in these Conditions, unless the context otherwise requires, include any further notes issued pursuant to Condition 15 (*Further Issue*) and forming a single series with the Notes) are being issued by Hanwha Energy USA Holdings Corporation (the "Issuer"), and will be unconditionally and irrevocably guaranteed by The Export-Import Bank of Korea (the "Guarantor"), subject to and with the benefit of an agency agreement dated July 5, 2022 (such agreement as amended and/or supplemented and/or restated from time to time, the "Agency Agreement") made among the Issuer, the Guarantor, Citicorp International Limited as fiscal agent (the "Fiscal Agent") and Citibank, N.A., London Branch as registrar (the "Registrar"), paying agent (together with any other paying agents appointed from time to time, the "Paying Agents") and transfer agent (the "Transfer Agent" and, together with the Fiscal Agent, Registrar and Paying Agents, the "Agents," and each an "Agent").

The statements in these Conditions include summaries of, and are subject to, the detailed provisions of and definitions in the Agency Agreement. Copies of the Agency Agreement are available for inspection during normal business hours by the holders of the Notes (the "Noteholders") appertaining to the Notes at the specified office of each of the Paying Agents. The Noteholders are entitled to the benefit of, are bound by, and are deemed to have notice of, all the provisions of the Agency Agreement applicable to them. References in these Conditions to the Fiscal Agent, the Registrar, the Paying Agents, the Transfer Agent and the Agents shall include any successor appointed under the Agency Agreement.

The owners shown in the records of the Depository Trust Company ("DTC"), Euroclear Bank SA/NV ("Euroclear") and Clearstream Banking S.A. ("Clearstream"), as applicable, of book-entry interests in Notes are entitled to the benefit of, are bound by, and are deemed to have notice of, all the provisions of the Agency Agreement applicable to them.

1. FORM, DENOMINATION AND TITLE

1.1. Form and Denomination

The Notes are issued in registered form in amounts of US$200,000 and integral multiples of US$1,000 in excess thereof (referred to as the "principal amount" of a Note). A note certificate (each a "Note Certificate") will be issued to each Noteholder in respect of its registered holding of Notes. Each Note Certificate will be numbered serially with an identifying number which will be recorded on the relevant Note Certificate and in the register of Noteholders which the Issuer will procure to be kept by the Registrar.

The Notes are not issuable in bearer form.

1.2. Title

Title to the Notes passes only by registration in the register of Noteholders. The holder of any Note will (except as otherwise required by law) be treated as its absolute owner for all purposes (whether or not it is overdue and regardless of any notice of ownership, trust or any interest or any writing on, or the theft or loss of, the Note Certificate issued in respect of it) and no person will be liable for so treating the holder. In these Conditions "Noteholder" and (in relation to a Note) "holder" means the person in whose name a Note is registered in the register of Noteholders.

2. TRANSFERS OF NOTES AND ISSUE OF NOTE CERTIFICATES

2.1. Transfers

A Note may be transferred by depositing the Note Certificate issued in respect of that Note, with the form of transfer on the back duly completed and signed, at the specified office of the Registrar or the Transfer Agent.

2.2. Delivery of new Note Certificates

Each new Note Certificate to be issued upon transfer of Notes will, within five business days of receipt by the Registrar or the Transfer Agent of the duly completed form of transfer endorsed on the relevant Note Certificate, be mailed by uninsured mail at the risk of the holder entitled to the Note to the address specified in the form of transfer. For the purposes of this Condition, "business day" shall mean a day on which commercial banks are open for business (including dealings in foreign currencies) in the city in which the specified office of the Transfer Agent with whom a Note Certificate is deposited in connection with a transfer is located.

Upon issue the Notes will be represented by one or more Global Note Certificates. Except in the limited circumstances described in the Agency Agreement, owners of interests in the Notes represented by Global Note Certificates will not be entitled to receive physical delivery of individual Note Certificates.

Where some but not all of the Notes in respect of which a Note Certificate is issued are to be transferred a new Note Certificate in respect of the Notes not so transferred will, within five business days of receipt by the Registrar or the Transfer Agent of the original Note Certificate, be mailed by uninsured mail at the risk of the holder of the Notes not so transferred to the address of such holder appearing on the register of Noteholders or as specified in the form of transfer.

2.3. Formalities free of charge

Registration of transfer of Notes will be effected without charge by or on behalf of the Issuer or any Agent but upon payment (or the giving of such indemnity and/or security and/or pre-funded to its satisfaction as the Issuer or the Transfer Agent may require) in respect of any tax or other governmental charges which may be imposed in relation to such transfer.

2.4. Closed Periods

No Noteholder may require the transfer of a Note to be registered during the period of 15 days ending on the due date for any payment of principal or interest on that Note.

2.5. Regulations

All transfers of Notes and entries on the register of Noteholders will be made subject to the detailed regulations concerning transfer and registration of Notes scheduled to the Agency Agreement. The regulations may be changed by the Issuer with the prior written approval of the Registrar. A copy of the current regulations will be mailed (free of charge) by the Registrar to any Noteholder who requests one.

3. STATUS OF THE NOTES

The Notes constitute direct, general and unconditional obligations of the Issuer which will at all times rank *pari passu* among themselves and at least *pari passu* with all other present and future unsecured obligations of the Issuer, save for such obligations as may be preferred by provisions of law that are both mandatory and of general application.

4. GUARANTEE

4.1. Guarantee

The payment of the principal and interest in respect of the Notes has been unconditionally and irrevocably guaranteed by the Guarantor under a deed of guarantee (the "Guarantee") dated July 5, 2022 executed by the Guarantor.

4.2. Status of the Guarantee

The obligations of the Guarantor under the Guarantee constitute direct, general and unconditional obligations of the Guarantor which will at all times rank at least *pari passu* with all other present and future unsecured obligations of the Guarantor, save for such obligations as may be preferred by provisions of law that are both mandatory and of general application. The original of the Guarantee is held by the Fiscal Agent on behalf of, and copies are available for inspection by, the Noteholders at its specified office.

5. NEGATIVE PLEDGE

5.1. Negative Pledge

So long as any of the Notes remains outstanding, the Guarantor will not create or permit to subsist any Encumbrance upon the whole or any part of its assets, present or future, to secure any indebtedness, or to secure any guarantee of indebtedness, unless the Guarantee is secured equally and ratably therewith, except that the Guarantor may create or permit to arise or subsist:

(a) any Encumbrance over promissory notes or other commercial paper discounted or otherwise provided as security to or issued by the Guarantor where such Encumbrance is created in favor of The Bank of Korea in the normal operation of its discount facilities or its facilities for the funding of loans by the Guarantor to customers of the Guarantor; or

(b) any Encumbrance over or affecting any asset of the Guarantor which has been created or granted in relation to any of the Guarantor's transactions with the Bank of Korea; or

(c) any Encumbrance over any immovable property owned by the Guarantor as security for the repayment by the Guarantor to a tenant of that property of any security deposit paid by such tenant to the Guarantor upon taking a tenancy or lease of that property; or

(d) any Encumbrance or any other agreement or arrangement having a similar effect arising in connection with a sale and repurchase transaction entered under TBMA/ISMA Global Master Repurchase Agreement or any other substantially similar repurchase agreement or arrangement of such kind entered into, or created, or arising in the ordinary course of business of the Guarantor, provided that the amount of such transaction (when aggregated with the amount of any other such transactions) does not exceed 15% of the borrowing liabilities of the Guarantor as set out in the latest audited separate balance sheet of the Guarantor; or

(e) any Encumbrance over any loan or other indebtedness (the "Loan Asset") denominated in one currency (the "Denominated Currency") owed by a party (together with its subsidiaries, and related entities, the "Secured Counterparty") to the Guarantor, which is granted in favor of the Secured Counterparty in connection with (a) a loan or other indebtedness denominated in a currency other than the Denominated Currency of the Guarantor or any of its subsidiaries or related entities owed to the Secured Counterparty (the "Reciprocal Loan") and (b) the Guarantor or any of its subsidiaries or related entities having been granted the benefit of an Encumbrance over the Reciprocal Loan by the Secured Counterparty, and which transaction or arrangement described herein is commonly regarded as a parallel loan or back-to-back loan, provided that such transaction or arrangement is entered into in the ordinary course of business of the Guarantor and the aggregate outstanding principal amount of the Loan Assets of the Guarantor which are subject to such Encumbrance does not exceed 5% of the borrowing liabilities of the Guarantor as set out in the latest audited separate balance sheet of the Guarantor; or

(f) any statutory liens arising in the ordinary course of the Guarantor's business; or

(g) any Encumbrance arising or preference given under the law of the Republic of Korea ("Korea"), applicable generally to corporations established under the law of Korea, by virtue of a failure by the Guarantor to meet an obligation, provided that such Encumbrance does not subsist for more than 30 days; or

(h) any Encumbrance over any asset purchased by the Guarantor (or documents of title thereto) or arising in connection with improvements to any asset of the Guarantor as security for the unpaid balance of the purchase price thereof or costs of improvement thereto; or

(i) any Encumbrance constituted by any netting or set-off arrangement entered into by the Guarantor in the ordinary course of its banking arrangements for the purpose of netting debit and credit balances; or

(j) any Encumbrance constituted in respect of any payment or close out netting or set-off arrangement pursuant to any hedging transaction entered into by the Guarantor for the purpose of:

   (i) hedging any risk to which the Guarantor is exposed in its ordinary course of trading; or

   (ii) its interest rate or currency management operations which are carried out in the ordinary course of business and for non-speculative purposes only, excluding, in any case, any Encumbrance under a credit support arrangement in relation to a hedging transaction; or

(k) any Encumbrance securing indebtedness the principal amount of which (when aggregated with the principal amount of any other indebtedness which has the benefit of an Encumbrance given by the Guarantor other than any permitted under paragraphs (a) to (g) above) does not exceed 1% of the net capital of the Guarantor based on the then most recent annual separate financial statements of the Guarantor.

5.2. Interpretation

For the purposes of these Conditions, "Encumbrance" means any mortgage, charge, encumbrance, pledge or other security interest.

6. INTEREST

6.1. Interest Rate and Interest Payment Dates

The Notes bear interest at the rate of 4.125% per annum from (and including) July 5, 2022 ("Issue Date") to (but excluding) the due date for redemption of the Notes, payable semi-annually in arrear on January 5 and July 5 in each year (each an "Interest Payment Date"). The first Interest Payment Date will be January 5, 2023 in respect of the period from (and including) July 5, 2022 to (but excluding) January 5, 2023.

6.2. Interest Accrual

Each Note will cease to bear interest from (and including) its due date for redemption unless, upon due presentation, payment of the principal in respect of the Note is improperly withheld or refused or unless default is otherwise made in respect of payment. In such event, interest will continue to accrue until whichever is the earlier of:

(a) the date on which all amounts due in respect of such Note have been paid; and

(b) five days after the date on which the full amount of the moneys payable in respect of such Notes has been received by the Fiscal Agent or the Registrar, as the case may be, and notice to that effect has been given to the Noteholders in accordance with Condition 13 (*Notices*).

6.3. Calculation of Interest

The amount of interest payable on each Interest Payment Date shall be US$20.625 in respect of each Note of US$1,000 denomination. If interest is required to be paid in respect of a Note on any other date, it shall be calculated on the basis of a 360-day year consisting of 12 months of 30 days each and, in the case of an incomplete month, the number of days elapsed on the basis of a month of 30 days.

7. PAYMENTS

7.1. Payments in respect of Notes

Payment of principal and interest will be made by transfer to the registered account of the Noteholder. Payments of principal and payments of interest due otherwise than on an Interest Payment Date will only be made against surrender of the relevant Note Certificate at the specified office of any of the Agents. Interest on Notes due on an Interest Payment Date will be paid to the holder shown on the register of Noteholders at the close of business on the date (the "record date") being the fifteenth day before the due date for the payment of interest.

For the purposes of this Condition, a Noteholder's registered account means the U.S. Dollar account maintained by or on behalf of it with a bank that processes payments in New York City, details of which appear on the register of Noteholders at the close of business, in the case of principal on the second Business Day (as defined below) before the due date for payment and, in the case of interest, on the relevant record date, and a Noteholder's registered address means its address appearing on the register of Noteholders at that time.

Notwithstanding the foregoing, so long as the Global Note Certificate is held on behalf of DTC, Euroclear or any other clearing system, each payment in respect of the Global Note Certificate will be made to the person shown as the holder in the register at the close of business of the relevant clearing system on the Clearing System Business Day before the due date for such payments, where "Clearing System Business Day" means a day on which each clearing system for which the Global Note Certificate is being held is open for business.

7.2. Payments subject to Applicable Laws

Payments in respect of principal and interest on Notes are subject in all cases to any fiscal or other laws and regulations applicable in the place of payment, but without prejudice to the provisions of Condition 9 (*Taxation*).

7.3. No commissions

No commissions or expenses shall be charged to the Noteholders in respect of any payments made in accordance with this Condition.

7.4. Payment on Business Days

Where payment is to be made by transfer to a registered account, payment instructions (for value the due date or, if that is not a Business Day (as defined below), for value the first following day which is a Business Day) will be initiated on the Business Day preceding the due date for payment or, in the case of a payment of principal or a payment of interest due otherwise than on an Interest Payment Date, if later, on the Business Day on which the relevant Note Certificate is surrendered at the specified office of an Agent.

Noteholders will not be entitled to any interest or other payment for any delay after the due date in receiving the amount due if the due date is not a Business Day, if the Noteholder is late in surrendering its Note Certificate (if required to do so).

In this Condition, "Business Day" means a day (other than a Saturday or Sunday) on which commercial banks are open for business in London, New York City, Seoul and, in the case of presentation of a Note Certificate, in the place in which the Note Certificate is presented.

7.5. Partial Payments

If the amount of principal or interest which is due on the Notes is not paid in full, the Registrar will annotate the register of Noteholders with a record of the amount of principal or interest in fact paid.

7.6. Agents

The names of the initial Agents and their initial specified offices are set out at the end of these Conditions. The Issuer and the Guarantor reserve the right at any time to vary or terminate the appointment of any Agent and to appoint additional or other Agents provided that there will at all times be:

(a) a Fiscal Agent;

(b) an Agent having a specified office in Singapore, so long as the Notes are listed on the Singapore Exchange Securities Trading Limited ("SGX-ST") and the rules of SGX-ST so require;

(c) such other agents as may be required by the rules of any stock exchange on which the Notes are listed, if any other than the SGX-ST; and

(d) a Registrar.

Notice of any termination or appointment and of any changes in specified offices will be given to the Noteholders promptly by the Issuer in accordance with Condition 13 (*Notices*).

8. REDEMPTION AND PURCHASE

8.1. Redemption at Maturity

Unless previously redeemed or purchased and cancelled as provided below, the Issuer will redeem the Notes at their principal amount on July 5, 2025.

8.2. Redemption for Taxation Reasons

If:

(a) as a result of any change in, or amendment to, the laws or regulations of a Relevant Jurisdiction (as defined in Condition 9 (*Taxation*)), or any change in the application or official interpretation of the laws or regulations of a Relevant Jurisdiction, which change or amendment becomes effective after June 21, 2022, on the next Interest Payment Date either the Issuer or, if a demand was made under the Guarantee, the Guarantor would be required to pay additional amounts as provided or referred to in Condition 9 (*Taxation*); and

(b) the requirement cannot be avoided by the Issuer or, as the case may be, the Guarantor taking reasonable measures available to it,

the Issuer may at its option, having given not less than 30 nor more than 60 days' notice to the Noteholders in accordance with Condition 13 (*Notices*) (which notice shall be irrevocable), redeem all the Notes, but not some only, at any time at their principal amount together with interest accrued to but excluding the date of redemption. Prior to the publication of any notice of redemption pursuant to this paragraph, the Issuer or, as the case may be, the Guarantor shall deliver to the Fiscal Agent a certificate signed by two of its directors stating that the requirement referred to in (a) above will apply on the next Interest Payment Date and cannot be avoided by the Issuer or, as the case may be, the Guarantor taking reasonable measures available to it and an opinion of independent legal advisers of recognized standing to the effect that the Issuer or, as the case may be, the Guarantor has or will become obliged to pay such additional amounts as a result of the change or amendment.

8.3. Change of Control Redemption

Upon the occurrence of a Change of Control, each Noteholder will have the right, at such holder's option, to require the Issuer to redeem all, but not some only, of such holder's Notes on the Change of Control Put Date at their principal amount, together with accrued interest up to, but excluding the Change of Control Put Date. To exercise such right, the holder of the relevant Note must deposit at the specified office of any Paying Agent a duly completed and signed notice of redemption, in the form for the time being current, obtainable from the specified office of any Paying Agent (a "Change of Control Put Exercise Notice"), together with the Note Certificate evidencing the Notes to be redeemed by not later than 60 days following a Change of Control, or, if later, 60 days following the date upon which notice thereof is given to Noteholders by the Issuer in accordance with Condition 13 (*Notices*). The "Change of Control Put Date" shall be the fourteenth day after the expiry of such period of 60 days as referred to above.

A Change of Control Put Exercise Notice, once delivered, shall be irrevocable and the Issuer shall redeem the Notes the subject of Change of Control Put Exercise Notices delivered as aforesaid on the Change of Control Put Date. The Guarantor shall give notice to the Issuer by not later than seven days following the first day on which it becomes aware of the occurrence of a Change of Control. The Issuer shall give notice to Noteholders and the Fiscal Agent in accordance with Condition 13 (*Notices*) by not later than seven days following the date of receipt of such notice from the Guarantor of the occurrence of a Change of Control, which notice shall specify the procedure for exercise by holders of their rights to require redemption of the Notes pursuant to this Condition 8.3 (*Change of Control Redemption*).

The Agents shall not be required to monitor or to take any steps to ascertain whether Change of Control or any event which could lead to the occurrence of Change of Control has occurred and shall not be liable to Noteholders or any other person for not doing so.

In these Conditions:

(a) a "Change of Control" occurs when Korea ceases to control (directly or indirectly) the Guarantor or fails to provide financial support for the Guarantor as required under Article 37 of The Export-Import Bank of Korea Act of 1969, as amended as of the Issue Date; and

(b) "control" means the acquisition or control of a majority of the Guarantor's voting share capital or the right to appoint and/or remove all or the majority of the members of the Guarantor's board of directors or other governing body, whether obtained directly or indirectly, and whether obtained by ownership of share capital, the possession of voting rights, contract or otherwise.

8.4. Purchases

The Issuer, the Guarantor or any of their respective Subsidiaries (as defined in Condition 11 (*Events of Default*)) may at any time purchase Notes in any manner and at any price.

8.5. Cancellations

All Notes which are (a) redeemed or (b) purchased by or on behalf of the Issuer, the Guarantor or any of their respective Subsidiaries will forthwith be cancelled, and accordingly may not be reissued or resold.

8.6. Notices Final

Upon the expiry of any notice as is referred to in paragraph 8.2 (*Redemption for Taxation Reasons*) or 8.3 (*Change of Control Redemption*) above the Issuer shall be bound to redeem the Notes to which the notice refers in accordance with the terms of such paragraph.

9. TAXATION

9.1. Payment without Withholding

All payments in respect of the Notes by or on behalf of the Issuer or, as the case may be, the Guarantor shall be made without withholding or deduction for, or on account of, any present or future taxes, duties, assessments or governmental charges of whatever nature ("Taxes") imposed or levied by or on behalf of the Relevant Jurisdiction, unless the withholding or deduction of Taxes is required by law. In that event, the Issuer or, as the case may be, the Guarantor will pay such additional amounts as may be necessary in order that the net amounts received by the Noteholders after such withholding or deduction shall equal the respective amounts which would have been receivable in respect of the Notes in the absence of such withholding or deduction; except that no additional amounts shall be payable in relation to any payment in respect of any Note:

(a) held by, or by a third party on behalf of, a holder which is liable to Taxes in respect of the Note by reason of its (or a fiduciary, settlor, member or shareholder, beneficiary of, or possessor of a power over, such holder, if such holder is an estate, trust, partnership or corporation) having some present or former connection with the Relevant Jurisdiction (including being or having been a citizen or resident of the Relevant Jurisdiction or being or having been engaged in trade or business or present therein or having had a permanent establishment therein) other than the mere holding of the Note; or

(b) by or on behalf of a holder who would not be liable for or subject to such withholding or deduction by making a declaration of non-residence or other similar claim for exemption to the relevant tax authority or by providing any certification or documentation that would reduce or eliminate such withholding or deduction if, after having been requested to make such a declaration or claim, or provide such certification or documentation, such holder fails to do so; or

(c) in respect of which the Note Certificate representing it is presented for payment more than 30 days after the Relevant Date (as defined below) except to the extent that a holder would have been entitled to additional amounts on presenting the same for payment on the last day of the period of 30 days assuming that day to have been a Business Day (as defined in Condition 7 (*Payments*)); or

(d) if such tax is an estate, inheritance, gift, sales, transfer or personal property tax or any similar tax, assessment, or governmental charge; or

(e) to or on behalf of a holder who would be able to avoid such withholding or deduction by presenting the Note to a paying agent outside of Korea; or

(f) by or on behalf of a holder who does not qualify for the portfolio interest exemption under Sections 871(h) or 881(c) of the U.S. Internal Revenue Code of 1986, as amended (the "Code") or any successor provisions (including by failing to deliver appropriate U.S. Internal Revenue Service forms to the relevant withholding agent); or

(g) where such withholding or deduction is imposed pursuant to Sections 1471 through 1474 of the Code ("FATCA"), U.S. Treasury regulations or administrative guidance promulgated thereunder or any law implementing an intergovernmental approach thereto; nor shall additional amounts be paid to a holder that is a fiduciary or partnership or other than the sole beneficial owner of such payment to the extent that a beneficiary or settlor of such fiduciary or partnership or beneficial owner would not have been entitled to such additional amounts had such beneficiary, settlor or beneficial owner had been the holder of the Note; or

(h) any combination of (a) through (g) above.

The obligation of the Issuer to pay additional amounts in respect of Taxes shall not apply to (a) any Tax which is payable otherwise than by deduction or withholding from payments in respect of the Notes or (b) a payment in respect of a Note to a holder that is a fiduciary, limited liability company, or partnership or holder other than the beneficial owner, to the extent a beneficiary or settlor with respect to such fiduciary or a member of such partnership or limited liability company or a beneficial owner would not have been entitled to the additional amounts had such beneficiary, settlor, member or beneficial owner been the holder of such Note.

9.2. Interpretation

In these Conditions:

(a) "Relevant Date" means the date on which the payment first becomes due but, if the full amount of the money payable has not been received by the Fiscal Agent on or before the due date, it means the date on which, the full amount of the money having been so received, notice to that effect has been duly given to the Noteholders by the Issuer in accordance with Condition 13 (*Notices*); and

(b) "Relevant Jurisdiction" means the United States (in the case of the Issuer) or Korea (in the case of the Guarantor) or any political subdivision or any authority thereof or therein having power to tax or any other jurisdiction or any political subdivision or any authority thereof or therein having power to tax to which the Issuer or the Guarantor, as the case may be, becomes subject in respect of payments made by it of principal and interest on the Notes.

9.3. Additional Amounts

Any reference in these Conditions to any amounts in respect of the Notes shall be deemed also to refer to any additional amounts which may be payable under this Condition.

10. PRESCRIPTION

Claims in respect of principal and interest will become prescribed unless made within 10 years (in the case of principal) and five years (in the case of interest) from the Relevant Date, as defined in Condition 9 (*Taxation*).

11. EVENTS OF DEFAULT

11.1. Events of Default

The holder of any Note may give notice to the Issuer and the Guarantor that the Note is, and it shall accordingly forthwith become, immediately due and repayable at its principal amount, together with interest accrued to the date of repayment, if any of the following events ("Events of Default") shall have occurred and be continuing:

(a) default in the payment of the principal of, or any interest on, any of the Notes when due and such failure continues for a period of fourteen (14) days (in the case of principal) or twenty-one (21) days (in the case of interest); or

(b) default in the performance of any other covenant, condition or provision contained in the Notes or the Guarantee and such default continues for thirty (30) days or more after written notice thereof shall have been given to the Fiscal Agent or the Registrar, as the case may be, by the holder of any Note; or

the Issuer's Events of Default:

(c) the validity of the Notes is contested by the Issuer or the Issuer shall deny any of the Issuer's obligations under the Notes or it is or will become unlawful for the Issuer to perform or comply with any of its obligations under or in respect of the Notes, the Deed of Covenant or the Agency Agreement or any of such obligations shall be or become unenforceable or invalid; or

(d) a distress, attachment, execution or other legal process is levied, enforced or sued out on or against any part of the property, assets or revenues of the Issuer or any of its Major Subsidiaries which exceeds US$20,000,000, except where such distress, attachment, execution or other legal process is being contested in good faith or stayed within sixty (60) days of having been so levied, enforced or sued out; or

(e) the Issuer or its Major Subsidiaries is (or is, or could be, deemed by law or a court to be) insolvent or bankrupt or unable to pay its debts, stops, suspends or threatens to stop or suspend payment of all or a material part of (or of a particular type of) its debts, proposes or makes a general assignment or an arrangement or composition with or for the benefit of the relevant creditors in respect of any of such debts or a moratorium is agreed or declared in respect of or affecting all or any part of (or of a particular type of) the debts of the Issuer or any of its Major Subsidiaries; or

(f) an order is made or an effective resolution passed for the winding-up or dissolution of the Issuer or any of its Major Subsidiaries, or the Issuer ceases or threatens to cease to carry on all or substantially all of its respective business or operations, except for the purpose of and followed by a reconstruction, amalgamation, reorganization, merger or consolidation (i) on terms approved by an Extraordinary Resolution of the Noteholders or (ii) whereby the undertaking and assets of the Major Subsidiary are transferred to or otherwise vested in the Issuer or another of its Major Subsidiaries; or

(g) any event occurs which under the laws of any relevant jurisdiction has an analogous effect to any of the events referred to in paragraphs of above, (d) to (f);

the Guarantor's Events of Default:

(h) the Guarantee ceases to be in full force and effect; or

(i) the validity of the Guarantee is contested by the Guarantor or the Guarantor shall deny any of the Guarantor's obligations under the Guarantee or it is or will become unlawful for the Guarantor to perform or comply with any of its obligations under or in respect of the Guarantee, the Deed of Guarantee or the Agency Agreement or any of such obligations shall be or become unenforceable or invalid; or any External Indebtedness (as defined below) of the Guarantor in an aggregate principal amount of US$10,000,000 or more either (i) becomes due and payable prior to the due date for payment thereof by reason of default by the Guarantor or (ii) is not repaid at maturity as extended by the period of grace, if any, applicable thereto, or any guarantee given by the Guarantor in respect of External Indebtedness of any other person in an aggregate principal amount of US$10,000,000 or more is not honored when due and called; or

(j) Korea declares a moratorium on the payment of any External Indebtedness (including obligations arising under guarantees) of Korea or Korea becomes liable to repay prematurely any sums in respect of such External Indebtedness (including obligations arising under guarantees) as a result of a default under, or breach of the terms applicable to, such External Indebtedness or such obligations, or the international monetary reserves of Korea become subject to any Encumbrance (as defined in Condition 5.2) or any segregation or other preferential arrangement (whether or not constituting an Encumbrance) for the benefit of any creditor or class of creditors; or

(k) the Guarantor is adjudicated or found bankrupt or insolvent or any order is made by a competent court or administrative agency or any resolution is passed by the Guarantor to apply for judicial composition proceedings with its creditors or for the appointment of a receiver or trustee or other similar official in insolvency proceedings in relation to the Guarantor or a substantial part of its assets or the Guarantor is wound up or dissolved or the Guarantor ceases to carry on the whole or substantially the whole of its business.

11.2. Interpretation

For the purposes of this Condition:

(a) "External Indebtedness" means any obligation for the payment or repayment of money borrowed which is denominated in a currency other than the currency of Korea.

(b) "Major Subsidiary" means at any relevant time a Subsidiary of the Issuer:

(i) whose total assets or gross revenues (or, where the Subsidiary in question itself has Subsidiaries, whose total consolidated assets or gross consolidated revenues, as the case may be) attributable to the Issuer represent not less than 20% of the total consolidated assets or the gross consolidated revenues of the Issuer, all as calculated by reference to the then latest audited accounts of such Subsidiary and of any other entity which is a Subsidiary of that Subsidiary and which would, if the latter Subsidiary produced consolidated accounts, be included in such consolidated accounts and the then latest consolidated accounts of the Issuer; or

(ii) to which all or substantially all the assets and undertakings of a Subsidiary, which immediately prior to such transfer is a Major Subsidiary, are transferred.

(c) "Subsidiary" means, any company or other business entity of which one person owns or controls (either directly or indirectly or through one or more other Subsidiaries) more than 50% of the issued share capital or other ownership interest having ordinary voting power to elect directors, managers or trustees of such company or other business entity or any company or other business entity which at any time has its accounts consolidated with those of that person or which, under the law, regulations or generally accepted accounting principles of the jurisdiction of incorporation of such person from time to time, should have its accounts consolidated with those of that person.

12. REPLACEMENT OF NOTE CERTIFICATES

If any Note Certificate is lost, stolen, mutilated, defaced or destroyed it may be replaced at the specified office of the Registrar upon payment by the claimant of the expenses incurred in connection with the replacement and on such terms as to evidence and indemnity as the Issuer may reasonably require. Mutilated or defaced Note Certificates must be surrendered before replacements will be issued.

13. NOTICES

13.1. Notices to the Noteholders

All notices to the Noteholders will be valid if mailed to them at their respective addresses in the register of Noteholders maintained by the Registrar and, in addition, for so long as any notes are listed on a stock exchange and the rules of that exchange so require, such notice will be published in a daily newspaper of general circulation in the place or places required by the rules of that stock exchange and/or on the website of that stock exchange if permitted by such stock exchange. Any notice shall be deemed to have been given on the second day after being so mailed or on the date of publication or, if so published more than once or on different dates, on the date of the first publication.

So long as the Notes are represented by the Global Note Certificate and the Global Note Certificate is held on behalf of DTC or Euroclear or Clearstream or an alternative clearing system appointed in accordance with the terms of the Notes and the Agency Agreement, notices to Noteholders may be given by delivery of the relevant notice to the clearing systems in accordance with the applicable rules and procedures of the clearing systems for communication by them to entitled accountholders. Any such notice shall be deemed validly given on the day after it has been delivered to DTC, Euroclear, Clearstream or an alternative clearing system as aforesaid.

13.2. Notices from the Noteholders

Notices to be given by any Noteholder to the Issuer and/or the Guarantor shall be in writing and given by lodging the same, together with the relative Note Certificate, with the Fiscal Agent or, if the Note Certificates are held in a clearing system, may be given through the clearing system in accordance with its standard rules and procedures.

14. MEETINGS OF NOTEHOLDERS AND MODIFICATION

14.1. Meetings of Noteholders

The Agency Agreement contains provisions for convening meetings of the Noteholders to consider any matter affecting their interests, including the modification by Extraordinary Resolution of any of these Conditions or the Guarantee or any of the provisions of the Agency Agreement. The quorum at any meeting for passing an Extraordinary Resolution will be one or more persons present holding or representing more than 50% in principal amount of the Notes for the time being outstanding, or at any adjourned meeting one or more persons present whatever the principal amount of the Notes held or represented by him or them, except that at any meeting the business of which includes the modification of certain of these Conditions the necessary quorum for passing an Extraordinary Resolution will be one or more persons present holding or representing not less than two-thirds, or at any adjourned meeting not less than one-third, of the principal amount of the Notes for the time being outstanding. An Extraordinary Resolution passed at any meeting of the Noteholders will be binding on all Noteholders, whether or not they are present at the meeting.

14.2. Modification

The Fiscal Agent may agree, without the consent of the Noteholders, to any modification of any of these Conditions or any of the provisions of the Agency Agreement either (i) for the purpose of curing any ambiguity or of curing, correcting or supplementing any manifest or proven error or any other defective provision contained herein or therein or, (ii) in any other manner which is, in the opinion of the Issuer and the Guarantor, not materially prejudicial to the interests of the Noteholders. Any determination as to material prejudice applying to the interests of the Noteholders pursuant to these Conditions (including this Condition 14.2 (*Modification*)) shall be made by the Issuer and the Guarantor and none of the Agents shall have any responsibility or liability whatsoever with respect to such determination. Any modification shall be binding on the Noteholders and, unless the Fiscal Agent agrees otherwise, any modification shall be notified by the Issuer to the Noteholders as soon as practicable thereafter in accordance with Condition 13 (*Notices*).

15. FURTHER ISSUE

The Issuer may from time to time without the consent of the Noteholders create and issue further notes, having terms and conditions the same as those of the Notes, or the same except for the amount and date of the first payment of interest, which may be consolidated and form a single series with the outstanding Notes, provided, however, that any such issuance of notes shall be subject to the prior written consent of the Guarantor.

16. GOVERNING LAW AND SUBMISSION TO JURISDICTION

16.1. Governing Law

The Agency Agreement, the Guarantee and the Notes, and any non-contractual obligations arising out of or in connection with them, are governed by, and will be construed in accordance with, English law.

16.2. Jurisdiction of English courts

(a) Subject to Condition 16.2(b) below, the Issuer and the Guarantor irrevocably agree for the benefit of the Noteholders that the courts of England are to have exclusive jurisdiction to settle any dispute (including a dispute relating to any non-contractual obligations arising out of or in connection with the Notes and the Guarantee) which may arise out of or in connection with the Notes and accordingly any legal action or proceedings arising out of or in connection with any Notes ("Proceedings") may be brought in such courts and each of the Issuer and the Guarantor irrevocably submits to the exclusive jurisdiction of the English courts. The Issuer and the Guarantor have waived any objection to the courts of England on the grounds of venue or that they are an inconvenient or inappropriate forum.

(b) The Noteholders may take any Proceeding arising out of or in connection with the Notes (including any Proceedings relating to any non-contractual obligations arising out of or in connection with the Notes and the Guarantee) against the Issuer or the Guarantor in any other court of competent jurisdiction and concurrent Proceedings in any number of jurisdictions.

16.3. Appointment of Process Agent

Each of the Issuer and the Guarantor hereby irrevocably and unconditionally appoints KEXIM BANK (UK) Limited at its registered office for the time being at 3rd Floor, Moorgate Hall, 155 Moorgate, London EC2M 6XB, United Kingdom as its agent for service of process in England in respect of any Proceedings and undertakes that in the event of such agent ceasing so to act it will appoint another person as its agent for that purpose. Nothing herein shall affect the right to serve process in any other manner permitted by law.

16.4. Sovereign Immunity

To the fullest extent permitted by law, the Guarantor irrevocably and unconditionally:

(a) waives and agrees not to claim any sovereign or other immunity from jurisdiction of the English courts in relation to any Proceedings (including to the extent that such immunity may be attributed to it), and agrees to ensure that no such claim is made on its behalf;

(b) submits to the jurisdiction of the English courts and the courts of any other jurisdiction in relation to the recognition of any order or judgment of the English courts or courts of any other jurisdiction in relation to any Proceedings and waives and agrees not to claim any sovereign or other immunity from the jurisdiction of the English courts or the courts of any other jurisdiction in relation to the recognition of any such judgment or court order and agrees to ensure that no such claim is made on its behalf; and

(c) consents to the enforcement of any order or judgment made or given in connection with any Proceedings and the giving of any relief in the English courts and the courts of any other jurisdiction whether before or after final judgment including, without limitation: (i) relief by way of interim or final injunction or order for specific performance or recovery of any property; (ii) attachment of its assets; and (iii) enforcement or execution against any property, revenues or other assets whatsoever (irrespective of their use or intended use) and waives and agrees not to claim any sovereign or other immunity from the jurisdiction of the English courts or the courts of any other jurisdiction in relation to such enforcement and the giving of such relief (including to the extent that such immunity may be attributed to it), and agrees to ensure that no such claim is made on its behalf.

16.5. Other Documents

Each of the Issuer and the Guarantor has in the Agency Agreement and the Guarantee submitted to the jurisdiction of the English courts and appointed an agent in England for service of process, in terms substantially similar to those set out above. In addition, the Guarantor has, in such documents, waived any rights to sovereign immunity and other similar defenses which it may have.

17. RIGHTS OF THIRD PARTIES

No rights are conferred on any person under the Contracts (Rights of Third Parties) Act 1999 to enforce any term or Condition of this Note, but this does not affect any right or remedy of any person which exists or is available apart from that Act.

THE GLOBAL NOTE CERTIFICATES

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 the Global Note Certificates in registered form. The Global Note Certificates will be deposited with or on behalf of DTC and registered in the name of a nominee of DTC. A Global Note Certificate 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.

Notes that are offered and sold outside the United States to non-U.S. persons in reliance on Regulation S will initially be represented by a temporary unrestricted Global Note Certificate (the "Temporary Unrestricted Global Note Certificate"). On and after the date (the "Exchange Date") which is the later of (i) 40 days after the date on which any Temporary Unrestricted Global Note Certificate is issued and (ii) 40 days after the completion of the distribution of the relevant tranche, interests in such Temporary Unrestricted Global Note Certificate will be exchangeable (free of charge), in whole or in part, upon a request as described therein either for interests in a permanent unrestricted Global Note Certificate (the "Unrestricted Global Notes Certificate") against certification of beneficial ownership as described above and applicable U.S. securities laws in accordance with the terms of the Temporary Unrestricted Global Note Certificate. In no event shall the Temporary Unrestricted Global Note Certificate be exchanged by the Issuer for unrestricted individual note certificate prior to (i) the Exchange Date and (ii) the receipt by the Fiscal Agent of the certificate with respect to the beneficial interests in the Temporary Unrestricted Global Note Certificate.

Upon the issuance of the Global Note Certificates, DTC will credit, on its book-entry registration and transfer system, the respective principal amounts of the Notes represented by such Global Note Certificates 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 Joint Lead Managers participating in the initial offer and sale of the Notes. Ownership of beneficial interests in the Global Note Certificates will be limited to participants or persons that may hold interests through participants. Ownership of beneficial interests in such Global Note Certificates will be shown on, and the transfer of that ownership will be effected only through, records maintained by DTC for such Global Note Certificates (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 Noteholder of the Global Note Certificates will be considered the sole owner or Noteholder represented by each Global Note Certificate for all purposes under the Notes and the Agency Agreement.

Principal and interest payments on Notes represented by the Global Note Certificates 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 Note Certificates. None of the Issuer, the Guarantor, 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 Note Certificates or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

The Issuer 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 Note Certificates as shown on the records of DTC. The Issuer also expects that payments by participants to owners of beneficial interests in such Global Note Certificates 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.

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 Certificate is exchanged for individual Note Certificates, the Issuer 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 Certificate is exchanged for individual Note Certificates, an announcement of such exchange will be made by or on behalf of the Issuer through the SGX-ST and such announcement will include all material information with respect to the delivery of the individual Note Certificates, including details of the paying agent in Singapore.

USE OF PROCEEDS

The aggregate gross proceeds from the offering of the Notes (before deducting a combined management and underwriting commission and estimated expenses related to the offering) is US$299,064,000.

Eligible Green Projects

The Issuer intends to use the net proceeds from this offering ("Green Bond Proceeds") to refinance, in whole or in part, the existing green projects which meet the eligibility criteria of the eligible green project categories ("Eligible Green Projects") in accordance with the Issuer's Green Financing Framework, which is in alignment with the Green Bond Principles 2021 published by the International Capital Markets Association ("ICMA Green Bond Principles"). Examples of Eligible Green Projects include the (i) development, construction, installation, operation, maintenance and procurement of components and parts of solar energy production units, (ii) research and development, construction, manufacturing, installation, operation, maintenance and augmentation of energy storage systems and facilities, (iii) installation and operation of utility-scale batteries, (iv) production of green hydrogen using 100% renewable energy and (v) research and development, manufacturing, operation and maintenance of hydrogen charging systems to facilitate the development of hydrogen-fuelled mobility solutions.

Project Evaluation and Selection Process

Eligible Green Projects will be selected, evaluated and approved by an investment committee (the "Investment Committee") led by Issuer's business planning and strategy team and composed of representatives from the Issuer's development, engineering, operations & maintenance, legal and project financing teams. The Investment Committee shall utilize the following three-step approval process involving the following committees:

- The Pre-Deal Request Committee will evaluate the economic feasibility and environmental impacts of potential Eligible Green Projects.
- The Deal Review Committee will review and approve the main contractual arrangements of potential Eligible Green Projects, such as the interconnection and power purchase agreements.
- The Global Investment Committee will conduct the final reviews of Eligible Green Projects in conjunction with the Issuer's parent company, Hanwha Energy.

The Issuer's business planning and strategy team will coordinate with the development team to monitor projects that have been selected and approved as Eligible Green Projects.

Management of Proceeds

The allocation of Green Bond Proceeds will be recorded in a dedicated ledger (the "Ledger"), which shall contain details of the Notes issued for the purposes of funding Eligible Green Projects, allocation of Green Bond Proceeds to Eligible Green Projects and amount of unallocated Green Bond Proceeds. The Issuer's business planning and strategy team shall manage the Ledger.

Any proceeds temporarily unallocated will be placed in short-term liquid money instruments such as cash and market securities according to the Issuer's investment guidelines.

Reporting

On an annual basis until full allocation of proceeds to Eligible Green Projects and on a timely basis in case of material changes, the Issuer will provide allocation and impact reporting. When feasible, allocation reporting will include the amount and percentage of Green Bond Proceeds allocated to each Eligible Green Project and descriptive examples of the Eligible Green Projects, and impact reporting will include the environmental benefits of the Eligible Green Projects with certain impact indicators.

Sustainalytics, an external consultant, issued an opinion dated May 31, 2022 regarding the alignment of the Issuer's Green Financing Framework with the ICMA Green Bond Principles (the "Second Party Opinion"). The Second Party Opinion and the Issuer's Green Financing Framework are publicly available on the Issuer's website: https://174powerglobal.com/company/#green-bond, but are not incorporated into, and do not form a part of, this Offering Circular.

THE ISSUER

The Issuer is a leading developer of solar power projects and an independent power producer ("IPP") of solar power primarily in North America, with major project locations in Nevada, Texas, Arizona, Utah, Colorado, Hawaii, Oregon and California. The Issuer is wholly owned by Hanwha Energy Corporation, an IPP in Korea and a member company of the Hanwha Group, which is one of the largest conglomerates in Korea. The Issuer, together with other affiliate companies in the Hanwha Group, is able to provide a fully integrated photovoltaic value chain to its customers. The Issuer acts as a key platform through which the Hanwha Group implements its global initiative to transition to safe, clean and renewable energy businesses. As of the date of this Offering Circular, the total installed capacity of solar power projects developed and sold by the Issuer is approximately 940 MWdc and the total installed capacity of solar power projects currently being developed is approximately 6,650 MWdc.

The Issuer was incorporated as Hanwha Energy Corporation America in the State of Delaware in the United States in December 2013. In August 2016, the Issuer changed its name to 174 Power Global Corporation, and in December 2018, the Issuer changed its name to Hanwha Energy USA Holding Corporation. However, the Issuer still maintains "174 Power Global" as its trade name.

The Issuer's registered address is 1209 Orange Street, Corporation Trust Center, Wilmington, Delaware 19801, United States, and its business address is 300 Spectrum Center Drive, Suite 1020, Irvine, California 92618, United States.

Business

The Issuer's current business primarily consists of developing, project financing, constructing, selling (or owning, depending on the market conditions) and operating utility-scale solar projects. This entails securing land and financing for the solar projects, negotiating and entering into an offtake purchase power agreement with a local utility company and constructing the solar project and installing the solar modules. The solar project is typically financed with, or sold to investors, after the offtake purchase power agreement is in place with a local utility company or a national corporate business and before the construction on the solar project has commenced. Solar projects may also include energy storage systems ("ESS"), which allows the solar project to store excess electricity for sale to the utility company when there is greater demand. For certain projects that have been sold and have commenced commercial operations, the Issuer provides operation and maintenance services. The Issuer possesses in-house expertise in the solar development value chain across greenfield development, engineering, procurement, operation and maintenance (O&M), and asset management services.

The following table sets forth certain details of the solar projects that the Issuer has developed and sold.

Projects	Region	Installed Capacity of Solar Modules (*MWdc*)	Installed Capacity of ESS (*MWh*)	Commencement of Commercial Operations
Minnesota 1	MN	9	—	December 2017
Wyoming 1	WY	100	—	December 2018
Texas A	TX	236	—	December 2018
Nevada A	NV	134	—	December 2018
Nevada B	NV	263	—	June 2019
South Dakota 1	SD	25	—	Pending
South Dakota 2	SD	40	—	Pending
Nevada C	NV	33	—	December 2020
Nevada D	NV	32	—	December 2020
Nevada E	NV	65	—	December 2020

The following table sets forth certain details of the solar projects that the Issuer has developed and are in operation but not sold.

Projects	Region	Installed Capacity of Solar Modules (*MWdc*)	Installed Capacity of ESS (*MWh*)	Commencement of Commercial Operations
Laguna Solar	MX	125	—	July 2019
Imeson Solar	FL	11	4	November 2019
Oberon 1B	TX	36	—	June 2020

The following table sets forth certain details of the solar projects that the Issuer is currently developing.

Project	Region	Installed Capacity of Solar Modules (*MWdc*)	Installed Capacity of ESS (*MWh*)	Commencement of Commercial Operations
Aries – Arizona 1	AZ	625	—	December 2024
Arizona 2	AZ	128	—	December 2024
Arizona 3	AZ	252	—	December 2024
Arizona 4	AZ	375	600	December 2024
Arizona 7	AZ	—	2,128	December 2024
Arizona X	AZ	500	800	June 2024
California 1	CA	532	800	December 2025
California 2	CA	266	800	December 2026
Colorado 1	CO	183	—	December 2024
Colorado 2	CO	125	100	July 2025
Colorado 3	CO	234	440	December 2025
Colorado 4	CO	247	—	December 2024
Guam 1	GU	90	67	December 2023
Hawaii 1	HI	83	208	August 2023
Hawaii 2	HI	167	240	December 2024
Mexico 1	NM	200	200	July 2024
Nevada 3	NV	164	232	December 2023
New York 1	NY	—	400	December 2023
New York 2	NY	—	320	December 2024
Oregon 1	OR	62.5	58	December 2025
Texas	TX	127	—	December 2025
Utah 2	UT	250	200	December 2025
Utah 1	UT	360	—	December 2024
Utah 2	UT	106	—	December 2025
Virginia 1	VA	175	210	March 2027
Wyoming 1	WY	248	—	December 2024

The following is a description of the principal projects that have been or are currently being developed by the Issuer:

- **Laguna (In Operation)**. The Issuer completed construction of a solar project located outside the city of Torreón in Coahuila, Mexico in June 2019 comprised of approximately 364,000 solar modules with an aggregate installed capacity of approximately 125 MWdc/100 MWac. The project has a 15-year Power Purchase Agreement ("PPA") with Comisión Federal de Electricidad, the national power company of Mexico. The project is expected to generate energy for 700,000 residents in Coahuila, Mexico.

- **Oberon 1B (In Operation)**. The Issuer completed construction of a solar project near Ector County, Texas comprised of approximately 3.4 million solar modules with an aggregate installed capacity of approximately 36 MWdc/30 MWac. Construction on the project started in December 2019 and commercial operation commenced in July 2020. The PPA for the project sells power at a fixed price to the Issuer's retail business.

- **Arizona 1-7 (Under Development)**. The Issuer is developing solar and energy storage projects in La Paz County, Arizona comprised of approximately 755 MWdc of photovoltaic ("PV") and 2,728 MWh of Battery Energy Storage System ("BESS"). Construction on the project is expected to commence by August 2022 and commercial operation by December 2025. Although the project is located in Arizona, the project will deliver power to the larger California market via the Ten West Link transmission line.

- **Nevada 1 (Under Development)**. The Issuer is developing a 128 MWac solar project in Boulder City, Nevada. The third stage of the project will supply power to 36,000 households in Nevada and, together with the construction of ESS, will contribute to stable operation of the power system in Nevada.

- **Hawaii 1 (Under Development)**. The Issuer is developing a solar and energy storage project in Oahu, Hawaii with an aggregate installed capacity of approximately 83 MWdc/52 MWac. The power generated by this solar farm will be sold to Hawaiian Electric Company, Inc. under a 20-year PPA. Commercial operation of the project is expected by August 2023.

- **Guam 1 (Under Development)**. The Issuer is developing a solar farm in Inarajan, Guam with an aggregate installed capacity of approximately 90 MWdc/60 MWac and additional 65 MWh for battery. The power generated by this solar farm will be sold to Guam Power Authority under a 25-year PPA. Commercial operation of the project is expected by 2024.

- **Colorado 1 (Under Development)**. The Issuer is developing a solar farm in Weld County, Colorado with an aggregate installed capacity of approximately 183 MWdc/150 MWac. The power generated by this solar farm will be sold to Platte River Power Authority under a 15-year PPA. Commercial operation of the project is expected by 2024.

- **Colorado 4 (Under Development)**. The Issuer is developing a 247 MWdc/200 MWac solar project in Pueblo County, Colorado. The project will support Black Hills Colorado Electric's Renewable Advantage program. We were awarded the contract in 2020 under a 15-year PPA.

- **New York 1 (Under Development)**. The Issuer is developing a battery storage facility in Astoria-Queens, New York with an aggregate installed capacity of approximately 400 MWh. The size of the storage facility together with the interconnection easement amounts to approximately 121,118 square feet. The project is under contract and currently being amended to adjust the commercial operating date, has completed the System Impact Study and entered into the 2021 NYISO Class Year study. It has completed part 1 of the Facility Study and is expected to complete part 2 of the Facility Study by September 2022.

In January 2021, the Issuer entered into a 50:50 joint venture ("JV") agreement with Total H Solar, LLC whereby the Issuer sold 100% of its interests in certain solar and ESS projects to the JV, which is subsequently developing such projects.

The following table sets forth certain details of these projects that the Issuer jointly owns with Total H Solar, LLC through the JV.

Project	Region	Installed Capacity of Solar Modules (*MWdc*)	Installed Capacity of ESS (*MWh*)	Commencement of Commercial Operations
JV Nevada 1	NV	—	240	August 2023

Project	Region	Installed Capacity of Solar Modules (*MWdc*)	Installed Capacity of ESS (*MWh*)	Commencement of Commercial Operations
JV Nevada 2	NV	10	876	August 2023
Oregon 1	OR	68	—	February 2023
*Oberon IA - JV Texas 1A	TX	194	—	June 2020
JV Texas 1	TX	146	—	July 2022
JV Texas 2	TX	35	—	July 2022
JV Texas 3	TX	60	—	August 2022
JV Texas 4	TX	98	—	September 2022
JV Texas 5	TX	141	—	December 2024
JV Texas 6	TX	250	—	December 2025
JV Virginia 1	VA	75	—	March 2027
JV Virginia 2	VA	75	—	March 2027

*In Operation

- **JV Texas 1A (In Operation)**. The JV is developing a solar farm near Ector County, Texas with an aggregate installed capacity of approximately 194 MWdc/150 MWac. The power generated by this solar farm will be sold to JPMorgan Chase & Co. under a 7-year PPA. Commercial operation commenced in June 2020.

- **JV Texas 4 (Under Development)**. The JV is developing a solar farm in Ellis County, Texas with an aggregate installed capacity of approximately 98 MWdc/80 MWac. The power generated by this solar farm will be sold to Chaparral Steel Midlothian, LP under a 20-year PPA. Construction began in the third quarter of 2021 and commercial operation of the project is expected by the third quarter of 2023.

- **JV Oregon 1 (Under Development)**. The JV is developing a solar farm in Klamath County, Oregon with an aggregate installed solar module capacity of approximately 68 MWdc/55 MWac. The power generated by this solar farm will be sold to PacifiCorp under a PPA that terminates in August 2043. Commercial operation of the project is expected by February 2023.

- **JV Virginia 1 (Under Development)**. The JV is developing a solar farm in Campbell County, Virginia with an aggregate installed capacity of approximately 75 MWdc/60 MWac. The power generated by this solar farm will be sold to Microsoft Corporation under a 15-year PPA. Commercial operation of the project is expected by the third quarter of 2025.

- **JV Virginia 2 (Under Development)**. The JV is developing a solar farm in Pittsylvania, Virginia with an aggregate installed capacity of approximately 75 MWdc/60 MWac. The power generated by this solar farm will be sold to Microsoft Corporation under a 15-year PPA. Commercial operation of the project is expected by the third quarter of 2025.

Subject to market conditions, Issuer's plan in the medium- to long-term future is to develop, own and operate solar projects as an IPP and sell energy in the retail market in North America.

In addition to the utility-scale solar business, the Issuer engages in the following other businesses:

- **Energy Storage Systems**: The Issuer has been actively pursuing integration of ESS as a standalone business as well as complementary business to its solar energy solutions. ESS, when combined with solar, is eligible for federal investment tax credit incentives and, as a bundled system, can capture more value through flexible revenue streams. For short- to mid-term storage duration time, ESS is based on mature Li-ion technology, and the Issuer is currently engaged in active partnerships with several top tier Li-ion battery suppliers. Alternative technologies, such as hydrogen generation from solar energy, are being reviewed to support longer storage duration time. The Issuer contracted the largest ESS project in New York City, and additional large-scale ESS projects are also under development or contract in Nevada and Arizona as well as in Hawaii and Guam. The Issuer believes the ESS will continue to play a vital and growing role to meet the goal of decarbonization by increasing the penetration of solar energy to the US grid network.

- **Green Hydrogen Generation:** As an early adopter of green hydrogen generation, the Issuer plans to partner with various stakeholders to build solar facilities and provide clean power for the generation of green hydrogen. Green hydrogen is poised for significant growth and is expected to become a critical building block for full decarbonization of the economy. Green hydrogen is the most promising carbon-free energy source that can service various industrial sectors, such as long-haul transportation and shipping, which require more energy sources than is currently available from clean electricity only, and can also be used as industrial hydrogen feedstock for the production of steel and fertilizer and thermal energy source for heating of building and residential homes. At the center of the growth of green hydrogen is the need for affordable green energy, namely the solar, to power the generation of clean hydrogen molecules by water electrolysis. Leveraging its strong foundation in solar energy business, the Issuer is uniquely positioned to take a leading position in the green hydrogen market with its strategic advantage in integration of solar energy with green hydrogen generation. The Issuer is currently developing a pilot green hydrogen generation project in Arizona.

For financial information of the Issuer, see the Issuer's audited consolidated financial statements as of and for the years ended December 31, 2021 and 2020 included in this Offering Circular.

Management

The Issuer's management includes the following:

- Henry Yun has served as Chief Executive Officer and President of the Issuer since 2016. Mr. Yun received a bachelor's degree in Material Science from University of Washington, a Master's degree in Business Administration from the Kellogg School of Management at Northwestern University and a Doctorate degree in Materials Science and Engineering from the University of Washington. Mr. Yun has worked for several Hanwha entities for over 10 years, and prior to joining the Issuer, Mr. Yun served on the board of directors of a number of solar power companies and held various management and technical positions within Intel Corporation.

- David Kim has served as Chief Financial Officer and Chief Strategy Officer of the Issuer since 2021. Mr. Kim received a bachelor's degree in Chemical Engineering and Economics from Rice University and an MBA from the Wharton School with a focus in Finance. Prior to joining the Issuer, Mr. Kim served as West Region Leader for EY's Operational Transaction Services and also held a number of executive roles at HP Inc. and LG Electronics. Mr. Kim was previously a partner at McKinsey & Company with a focus on energy and technology.

- Carolyn Byun has served as Chief Operating Officer and General Counsel since 2016. Ms. Byun received a bachelor's degree in Political Science from Stanford University, a Master's degree in Sociology from Stanford University and a Juris Doctor degree from Cornell Law School. Ms. Byun has worked for various Hanwha entities for over 10 years in corporate development, M&A, EPC, solar development and project finance. Prior to joining the Issuer, Ms. Byun worked as a litigation associate for Thornton Taylor. Ms. Byun is admitted to practice law in California.

- IP (Ik Pyo) Kim has served as Chief Commercial Officer of the Issuer since 2021. Mr. Kim received a bachelor's degree in Applied Animal Science from Korea University. Mr. Kim has held a number of executive roles within the Hanwha Group with experiences in IPP development, power retail business, downstream solar, real estate development and investments. Prior to joining the Issuer, Mr. Kim served as the General Manager of Overseas Real Estate Development Division at Hanwha Engineering & Construction Corporation and led numerous asset development and investment projects involving Social Overhead Capital and residential and commercial real estates in the United States and Korea.

Parent Company

The Issuer is wholly owned by Hanwha Energy Corporation, an IPP in Korea and a member company of the Hanwha Group. The Hanwha Group is the seventh largest business group in Korea (excluding government-owned entities) by total assets according to the report by the Korea Fair Trade Commission published in May 2022.

The Issuer purchases most of the solar modules for its solar projects from Hanwha Q Cells, an affiliate of the Issuer and a member company of the Hanwha Group, on an arm's-length basis.

Legal Proceedings

As of the date of this Offering Circular, there are no material investigations, charges, litigation or other pending or, to its knowledge, threatened proceedings in connection with the Issuer the adverse outcome of which may have a material adverse effect on the financial condition or results of operation of the Issuer.

THE GUARANTOR

Overview

The Bank was established in 1976 as a special governmental financial institution pursuant to the Export-Import Bank of Korea Act, as amended, or the KEXIM Act. Since its establishment, the Bank has been promoting the export and competitiveness of Korean goods and services in international markets. To this end, the Bank has introduced financing facilities and implemented lending policies that are responsive to the needs of Korean exporters.

The Bank's primary purpose, as stated in the KEXIM Act, is to "promote the sound development of the national economy and economic cooperation with foreign countries by extending the financial aid required for export and import transactions, overseas investment and the development of natural resources abroad." Over the years, the Bank has developed various financing facilities and lending policies that are consistent with the Government's overall economic policies. In the latter part of the 1980s, as a result of changing trade conditions and the increased internationalization of the Korean economy, overseas investment credits and import credits were promoted and began to constitute an important portion of the Bank's business. In recent years, the Bank has focused on the development of new financing facilities, including structured financing for ships and project financing for the construction of industrial plants and the development of natural resources abroad.

As of December 31, 2021, the Bank had ₩79,995 billion of outstanding loans, including ₩38,638 billion of outstanding export credits, ₩32,830 billion of outstanding overseas investment credits and ₩6,122 billion of outstanding import credits, as compared to ₩76,288 billion of outstanding loans, including ₩38,487 billion of outstanding export credits, ₩28,617 billion of outstanding overseas investment credits and ₩5,332 billion of outstanding import credits as of December 31, 2020.

Although the Bank's management has control of its day-to-day operations, the Bank's operations are subject to the close supervision of the Government. The Government's determination each fiscal year regarding the amount of financial support to extend to the Bank, in the form of contributions to capital or transfers of its income to reserves, plays an important role in determining the Bank's lending capacity. The Government has the power to appoint or dismiss the Bank's President, Deputy President, Senior Executive Directors and Auditor.

The Government supports the Bank's operations pursuant to Article 37 of the KEXIM Act. Article 37 of the KEXIM Act provides that "the annual net losses of the Export-Import Bank of Korea shall be offset each year by the reserve, and if the reserve be insufficient, the Government shall provide funds to cover the deficit." As a result of the KEXIM Act, the Government is generally responsible for the Bank's operations and is legally obligated to replenish any deficit that arises if the Bank's reserves, consisting of the Bank's surplus and capital surplus items, are insufficient to cover any of its annual net losses. In light of the above, if the Bank has insufficient funds to make any payment under any of its obligations, including the debt securities covered by this Offering Circular, the Government would take appropriate steps, such as by making a capital contribution, by allocating funds or by taking other action, to enable the Bank to make such payment when due. The provisions of Article 37 do not, however, constitute a direct guarantee by the Government of the Bank's obligations, and the provisions of the KEXIM Act, including Article 37, may be amended at any time by action of the National Assembly.

In January 2014, the Government amended the KEXIM Act to:

- increase the Bank's authorized capital from ₩8,000 billion to ₩15,000 billion;
- expand the Bank's operation scope that enables the Bank, among other things, to invest in (i) funds intended to support export and import transactions by small and medium-sized enterprises and (ii) special purpose companies that carry out value added overseas development projects in a flexible way; and

- reduce restrictions on the Bank's financing and investment activities by providing additional flexibility to the Bank to cope with changes in market conditions.

In March 2016, the Government amended the KEXIM Act to strengthen its enforcement powers by allowing:

- the Minister of Economy and Finance to impose any necessary sanctions against the officers of the Bank; and

- the Financial Services Commission to request the Minister of Economy and Finance to apply sanctions against the employees of the Bank.

Capitalization

As of December 31, 2021, the Bank's authorized capital was ₩15,000 billion and capitalization was as follows:

		December 31, 2021[1]
		(billions of Won)
Long-Term Debt [2][3][4][5][6]:		
Borrowings in Korean Won	₩	—
Borrowings in Foreign Currencies		1,500
Export-Import Financing Debentures		63,281
Total Long-Term Debt	₩	64,781
Capital and Reserves:		
Capital Stock[7]	₩	12,748
Additional Paid-in-Capital		—
Capital Adjustments		(134)
Retained Earnings		1,856
Legal Reserve[8]		446
Voluntary Reserve[8]		713
Regulatory Reserve for Loan Losses[9]		149
Unappropriated Retained Earnings		548
Other Components of Equity[10]		883
Total Capital and Reserve	₩	15,353
Total Capitalization	₩	80,134

(1) Except as described in this Offering Circular, there has been no material adverse change in the Bank's capitalization since December 31, 2021.
(2) Consists of borrowings and debentures with maturities of more than a year remaining.
(3) The Bank has translated borrowings in foreign currencies as of December 31, 2021 into Won at the rate of ₩1,185.50 to US$1.00, which was the market average exchange rate as announced by the Seoul Money Brokerage Services Ltd., on December 31, 2021.
(4) As of December 31, 2021, the Bank had contingent liabilities totaling ₩40,231 billion, which consisted of ₩30,069 billion under outstanding guarantees and acceptances and ₩10,163 billion under contingent guarantees and acceptances issued on behalf of the Bank's clients. For further information relating to the Bank's contingent liabilities under outstanding guarantees as of December 31, 2021, see "—Financial Statements and the Auditors—Notes to Separate Financial Statements as of and for the years ended December 31, 2021 and 2020—Note 36."
(5) As of December 31, 2021, the Bank had entered into 342 interest rate related derivative contracts with a notional amount of ₩47,235 billion and 509 currency related derivative contracts with a notional amount of ₩31,984 billion in accordance with the Bank's policy to hedge interest rate and currency risks. See "—Financial Statements and the Auditors—Notes to Separate Financial Statements as of and for the years ended December 31, 2021 and 2020—Note 20."
(6) See "—Description of Assets and Liabilities—Sources of Funding" for an explanation of these sources of funds. All of the Bank's borrowings, whether domestic or international, are unsecured and unguaranteed.
(7) As of December 31, 2021, the Bank's authorized ordinary share capital was ₩15,000 billion and issued fully-paid capital stock was ₩12,748 billion. See "—Business—Government Support and Supervision."
(8) See "—Business—Government Support and Supervision" for a description of the manner in which annual net income is transferred to the legal reserve and may be transferred to the voluntary reserve.
(9) If the estimated allowance for credit loss determined by K-IFRS for the accounting purposes is lower than that for regulatory purposes as required by Regulation of Supervision of Banking Business, the Bank reserves such difference

as the regulatory reserve for loan losses. See "—Financial Statements and the Auditors—Notes to Separate Financial Statements as of and for the years ended December 31, 2021 and 2020—Note 23."

(10) See "—Financial Statements and the Auditors—Notes to Separate Financial Statements as of and for the years ended December 31, 2021 and 2020—Note 22."

Business

Purpose and Authority

The Bank was established in 1976 as a special governmental financial institution pursuant to the KEXIM Act. The KEXIM Act, the Enforcement Decree of the KEXIM Act, or the KEXIM Decree, and the Bank's Articles of Incorporation, or the By-laws, define and regulate its powers and authority. The Bank is treated as a special juridical entity under Korean law and is not subject to certain of the laws regulating activities of commercial banks.

The Bank was established, as stated in the KEXIM Act, to "promote the sound development of the national economy and economic cooperation with foreign countries by extending the financial aid required for export and import transactions, overseas investment and the development of natural resources abroad." As an instrument in serving the Government's public policy objectives, the Bank does not seek to maximize its profits. The Bank does, however, strive to maintain an adequate level of profitability to strengthen its equity base in order to support the growth in the volume of its business.

The Bank's primary purpose has been the provision of loans and guarantees to facilitate Korean companies' exports and overseas investments and projects. Most of the Bank's activities have been carried out pursuant to this authority.

The Bank has the authority to undertake a range of financial activities. These fall into four principal categories:

- export credits;
- overseas investment credits;
- import credits; and
- guarantee facilities.

Export credits include loans to facilitate Korean exports of capital and non-capital goods and technical and non-technical services. Overseas investment credits consist of loans to finance Korean overseas investments and projects. Import credits include the extension of loans to finance Korean imports of essential materials and natural resources. Guarantee facilities are made available to support the obligations of Korean exporters and importers.

The Bank also has the authority to administer, on behalf of the Government, the Government's Economic Development Cooperation Fund and the Inter-Korea Cooperation Fund, formerly known as South and North Korea Co-operation Fund.

The Bank may also undertake other business activities incidental to the foregoing, including currency and interest rate swap transactions.

Government Support and Supervision

The Government's determination each fiscal year, regarding the amount of financial support to extend to the Bank, plays an important role in determining the Bank's lending capacity. Such support has included contributions to capital, loans and transfers of the Bank's income to reserves.

The Bank's authorized capital was ₩30 billion when the Government enacted the KEXIM Act in 1969. The National Assembly amended the KEXIM Act and increased the Bank's authorized capital to

₩150 billion in 1974, ₩500 billion in 1977, ₩1,000 billion in 1986, ₩2,000 billion in January 1998, ₩4,000 billion in September 1998 and ₩8,000 billion in January 2009. In January 2014, the Government further increased the Bank's authorized capital to ₩15,000 billion.

As of December 31, 1996, the capital contribution from the Government was approximately ₩686 billion, all in cash. Since 1997, the Government has made capital contributions not only in cash but also in the form of shares of common stock of Government-affiliated entities. Recent examples include the Government's contributions to the Bank's capital of (i) ₩10 billion, ₩935 billion, ₩10 billion, ₩65 billion, ₩26 billion, ₩30 billion, ₩578 billion, ₩110 billion, ₩29 billion and ₩160 billion in cash in July 2016, September 2016, October 2016, November 2016, May 2019, August 2019, July 2020, March 2021, April 2021 and June 2021, respectively, and (ii) ₩500 billion in the form of shares of Korea Aerospace Industries Ltd. in June 2016, ₩125 billion in the form of shares of Yeosu Gwangyang Port Authority in May 2017, ₩125 billion in the form of shares of Incheon Port Authority in May 2017 and ₩1,167 billion in the form of shares of Korea Aerospace Industries Ltd. in June 2017, in order to enhance the Bank's capacity to finance projects, including large-scale overseas development projects. Taking into account these capital contributions, the Bank's total capital stock was ₩12,748 billion as of December 31, 2021.

Pursuant to the KEXIM Act, only the Government, The Korea Development Bank, The Bank of Korea, certain designated domestic banking institutions, exporters' associations and international financial organizations may contribute to the Bank's capital stock. As of December 31, 2021, the Government directly owned 69% of the Bank's capital stock and indirectly owned, through The Bank of Korea and The Korea Development Bank, 9% and 22%, respectively, of the Bank's capital stock. See "—Financial Statements and the Auditors—Notes to Separate Financial Statements as of and for the years ended December 31, 2021 and 2020—Note 1."

In addition to contributions to the Bank's capital, the Government provides funding for the Bank's financing activities. The Government has made loans available to the Bank for its lending activities. See "—Description of Assets and Liabilities—Sources of Funding."

The Government also supports the Bank's operation pursuant to Articles 36 and 37 of the KEXIM Act. Article 36 of the KEXIM Act and the By-laws provide that the Bank shall apply its net income earned during each fiscal year, after deduction of depreciation expense for such fiscal year, in the following manner and in order of priority:

- first, at least 10% of such net income is transferred to the Bank's legal reserve until the total amount of the Bank's legal reserve equals the total amount of the Bank's capital stock;

- second, if the Minister of Economy and Finance approves such distribution, the balance of any such net income, after such transfer to the legal reserve, is distributed to the institutions, other than the Government, that have contributed to the Bank's capital (up to a maximum 15% annual dividend rate); and

- third, the remaining balance of any such net income is distributed in whatever manner the Bank's Operations Committee determines and the Minister of Economy and Finance approves, such as additions to the Bank's voluntary reserve.

Article 37 of the KEXIM Act provides that "the annual net losses of the Export-Import Bank of Korea shall be offset each year by the reserve, and if the reserve be insufficient, the Government shall provide funds to cover the deficit." As a result of the KEXIM Act, the Government is generally responsible for the Bank's operations and is legally obligated to replenish any deficit that arises if the Bank's reserves are insufficient to cover any of its annual net losses. In light of this provision, if the Bank has insufficient funds to make any payment under any of its obligations, the Government would take appropriate steps by making a capital contribution, by allocating funds or by taking other action to enable the Bank to make such payment when due. The provisions of Article 37 do not, however, constitute a direct guarantee by the Government of the Bank's obligations, and the provisions of the KEXIM Act, including Article 37, may be amended at any time by action of the National Assembly.

The Government closely supervises the Bank's operations including in the following ways:

- the President of the Republic appoints the Bank's President upon the recommendation of the Minister of Economy and Finance;
- the Minister of Economy and Finance appoints the Bank's Deputy President and Senior Executive Directors upon the recommendation of the Bank's President;
- the Minister of Economy and Finance appoints the Bank's Auditor;
- one month prior to the beginning of each fiscal year, the Bank must submit its proposed program of operations and budget for the fiscal year to the Minister of Economy and Finance for his approval and immediately after the approval of the Minister of Economy and Finance, the Bank must report such program to the National Assembly;
- the Minister of Economy and Finance must approve the Bank's operating manual, which sets out guidelines for all principal operating matters, including the range of permitted financings;
- the Board of Audit and Inspection, a Government department, examines the Bank's settlement of accounts annually;
- each of the Minister of Economy and Finance and the Financial Services Commission has broad authority to require reports from the Bank on any matter and to examine the Bank's books, records and other documents. On the basis of the reports and examinations, the Minister of Economy and Finance may issue any orders it deems necessary to enforce the KEXIM Act or delegate examinations to the Financial Services Commission;
- the Financial Services Commission may supervise the Bank's operations to ensure managerial soundness based upon the KEXIM Decree and the Supervisory Regulations of Banking Business legislated by the Financial Services Commission and may issue orders deemed necessary for such supervision;
- the Bank must submit its annual report to the Ministry of Economy and Finance within three months following the end of each fiscal year and, upon request from the National Assembly during its annual audit period, to the National Assembly within ten days from the date of the request from the National Assembly, outlining the Bank's operations and analyzing the Bank's activities during the relevant fiscal year; and
- the Bank may amend its By-laws and operating manual only with the approval of the Minister of Economy and Finance.

Selected Financial Statement Data

Except where expressly indicated otherwise in this Offering Circular, loans in Won and loans in foreign currencies (each before deducting allowance for loan losses) are collectively referred to as the "Loans"; bills bought, foreign exchange bought, advances for customers, call loans and interbank loans in foreign currencies (each before deducting allowance for loan losses) are collectively referred to as the "Other Loans"; Loans and Other Loans are collectively referred to as the "Loan Credits"; confirmed guarantees and acceptances are collectively referred to as the "Guarantees"; and Loan Credits and Guarantees are collectively referred to as the "Credit Exposure."

You should read the following selected financial statement data together with the Bank's separate financial statements and notes included in this Offering Circular.

	Year Ended December 31,		
	2019	2020	2021
	(billions of Won)		
Income Statement Data			
Total Interest Income	₩ 3,095	₩ 2,289	₩ 1,746
Total Interest Expense	2,217	1,408	841
Net Interest Income	879	881	904
Operating Income	896	271	743
Income before Income Tax	470	140	746
Income Tax Expense	169	38	199
Net Income	302	102	548

	As of December 31,	
	2020	2021
	(billions of Won)	
Balance Sheet Data		
Total Loan Credits[1]	₩ 76,288	₩ 79,995
Total Borrowings[2]	78,718	82,063
Total Assets	97,590	101,452
Total Liabilities	83,121	86,099
Total Shareholders' Equity	14,469	15,353

(1) Gross amount, including domestic usance bills, foreign currency bills bought, advance payments on acceptances and guarantees, call loans, interbank loans in foreign currency, private placement corporate bonds in local currency and others and before deducting allowance for loan losses and net deferred loan origination fees and costs. See "—Financial Statements and the Auditors—Notes to Separate Financial Statements as of and for the years ended December 31, 2021 and 2020—Note 10."
(2) Includes debentures.

2021

The Bank had net income of ₩548 billion in 2021 compared to net income of ₩102 billion in 2020. The principal factors for the increase in net income included:

- a 56% decrease in impairment loss on credit to ₩368 billion in 2021 from ₩838 billion in 2020, primarily reflecting a general improvement in asset quality of the Bank's loan portfolios as well as the Bank's preemptive measures to account for a potential increase in expected impairment loss that could result from a deterioration in the overall asset quality of the Bank's loan portfolio due to the COVID-19 pandemic in 2020, which was not repeated in 2021; and

- a change in net gain (loss) on investments in associates and subsidiaries to a net gain of ₩11 billion in 2021 from a net loss of ₩125 billion in 2020, primarily as a result of impairment losses recognized in connection with the Bank's investments in Korea Aerospace Industries in 2020, which was not repeated in 2021.

These factors were partially offset by a more than four-fold increase in income tax expense to ₩199 billion in 2021 from ₩38 billion in 2020, primarily due to an increase in profit before income tax to ₩746 billion in 2021 from ₩140 billion in 2020.

As of December 31, 2021, the Bank's total assets increased by 4% to ₩101,452 billion from ₩97,590 billion as of December 31, 2020, primarily due to a 6% increase in loans at amortized cost to ₩77,458 billion as of December 31, 2021 from ₩73,407 billion as of December 31, 2020 and a 15% increase in financial investments to ₩12,745 billion as of December 31, 2021 from ₩11,042 billion as of December 31, 2020, the effects of which were offset in part by a 63% decrease in hedging derivative assets to ₩562 billion as of December 31, 2021 from ₩1,500 billion as of December 31, 2020 and a 25% decrease in financial assets at fair value through profit or loss to ₩2,598 billion as of December 31, 2021 from ₩3,478 billion as of December 31, 2020.

As of December 31, 2021, the Bank's total liabilities increased by 4% to ₩86,099 billion from ₩83,121 billion as of December 31, 2020, primarily due to a 5% increase in debentures to ₩76,486 billion as of December 31, 2021 from ₩72,642 billion as of December 31, 2020, the effect of which was offset in part by a 24% decrease in other assets to ₩1,985 billion as of December 31, 2021 from ₩2,603 billion as of December 31, 2020 and an 8% decrease in borrowings to ₩5,577 billion as of December 31, 2021 from ₩6,077 billion as of December 31, 2020.

As of December 31, 2021, the Bank's total shareholders' equity increased by 6% to ₩15,353 billion from ₩14,469 billion as of December 31, 2020, primarily due to increases in retained earnings and capital stock.

2020

The Bank had net income of ₩102 billion in 2020 compared to net income of ₩302 billion in 2019. The principal factors for the decrease in net income was a 134% increase in net loss on foreign exchange transaction to ₩1,069 billion in 2020 from ₩456 billion in 2019, mainly as a result of increased exchange rate volatility caused by the COVID-19 pandemic, and a 160% increase in impairment loss on credit to ₩838 billion in 2020 from ₩323 billion in 2019, mainly as a result of an increase in loan credits provided to borrowers in need of financing in light of the COVID-19 pandemic. These factors were partially offset by a 28% increase in net gain on hedging derivative assets to ₩1,794 billion in 2020 from ₩1,406 billion in 2019, primarily due to increased volatility in exchange rates and interest rates, a 70% decrease in net loss on investments in associates and subsidiaries to ₩125 billion in 2020 from ₩415 billion in 2019, mainly as a result of a decrease in the Bank's impairment loss recognized in connection with the Bank's investments in Korea Aerospace Industries, and a 17% decrease in other net operating loss to ₩798 billion in 2020 from ₩956 billion in 2019, primarily due to a decrease in net loss on fair value hedged items relating to increased volatility in exchange rates and interest rates.

As of December 31, 2020, the Bank's total assets increased by 6% to ₩97,590 billion from ₩92,254 billion as of December 31, 2019, primarily due to a 3% increase in loans at amortized cost to ₩73,407 billion as of December 31, 2020 from ₩71,577 billion as of December 31, 2019, a 19% increase in financial investments to ₩11,042 billion as of December 31, 2020 from ₩9,314 billion as of December 31, 2019 and a 90% increase in financial assets at fair value through profit or loss to ₩3,478 billion as of December 31, 2020 from ₩1,834 billion as of December 31, 2019.

As of December 31, 2020, the Bank's total liabilities increased by 6% to ₩83,121 billion from ₩78,562 billion as of December 31, 2019, primarily due to an 8% increase in debentures to ₩72,642 billion as of December 31, 2020 from ₩67,138 billion as of December 31, 2019.

As of December 31, 2020, the Bank's total shareholders' equity increased by 6% to ₩14,469 billion from ₩13,692 billion as of December 31, 2019, primarily due to an increase in capital stock resulting from the Government's ₩578 billion contribution in cash in July 2020.

Operations

Loan Operations

The Bank's primary objective since its establishment has been to promote the export and competitiveness of Korean goods and services in international markets. To this end, the Bank has introduced various financing facilities and implemented lending policies that are responsive to the needs of Korean exporters and foreign importers. Over the years, the Bank has also developed financing facilities and lending policies that are consistent with the Government's overall economic policies. In the latter part of the 1980s, as a result of changing trade conditions and the increased internationalization of the Korean economy, overseas investment credits and import credits were promoted and began to constitute an important portion of the Bank's business. The Bank's lending programs include (1) export credits to Korean exporters or foreign buyers of Korean goods and services, (2) overseas investment credits to Korean firms and (3) import credits to Korean importers.

Before approving a credit, the Bank considers:

- economic benefits to the Republic;
- the industry's rank in the order of priorities established by the Government's export-import policy;
- credit risk associated with the loans to be extended; and
- the goal of diversifying the Bank's lending activities.

The KEXIM Act and the By-laws provide that the Bank may extend credit only where repayment "is considered probable." Accordingly, the Bank carefully investigates the financial position of each prospective borrower and the technical and financial aspects of the project to be financed, and a loan is made only if the Bank believes there is reasonable assurance of repayment. See "—Credit Policies, Credit Approval and Risk Management—Credit Approval."

In 2021, the Bank provided Loans of ₩60,413 billion, a decrease of 5% from the previous year, and the Bank's commitments of Loans amounted to ₩60,359 billion, a decrease of 8% from the previous year. The decreases in disbursements and commitments for Loans were primarily attributable to decreased demand from the industrial plant-related industries.

The following table sets out the total amounts of the Bank's outstanding Loan Credits, categorized by type of credit:

	As of December 31,		As % of
	2020	2021	2021 Total
	(billions of Won)		
Export Credits			
Industrial Plants	₩ 14,270	₩ 13,480	17%
Shipbuilding	8,475	6,517	8%
Ferrous & nonferrous metal products	2,210	2,492	3%
Petrochemical products	1,981	2,732	3%
Automobiles	2,560	2,568	3%
Electronic machineries	2,688	3,218	4%
Others[(1)]	6,302	7,631	10%
Sub-total	38,487	38,638	48%
Overseas Investment Credits	28,617	32,830	41%
Import Credits	5,332	6,122	8%
Others[(2)]	3,845	2,399	3%
Present Value Premium/Discount	7	6	0%
Total Loan Credits	₩ 76,288	₩ 79,995	100%

(1) Includes general machinery, service sector, etc.
(2) Includes call loans, loans for inter-bank loans in foreign currency, advances for customers, etc.
Source: Internal accounting records

The following table sets out the Bank's new loan commitments, categorized by type of credit:

New Loan Credit Commitments by Type of Credit

	As of December 31,		As % of
	2020	2021	2021 Total
	(billions of Won)		
Export Credits			
Industrial Plants	₩ 4,406	₩ 576	1%

Shipbuilding	6,094	3,960	7%
Ferrous & nonferrous metal products	2,826	2,427	4%
Petrochemical products	5,490	4,941	8%
Automobiles	5,066	3,449	6%
Electronic machineries	4,125	4,959	8%
Others(1)	9,540	9,775	16%
Sub-total	37,547	30,088	50%
Overseas Investment Credits	18,837	18,003	30%
Import Credits	9,043	12,198	20%
Others	—	70	0%
Total	₩ 65,427	₩ 60,359	100%

(1) Includes general machinery, service sector, etc.
Source: Internal accounting records

Export Credits

The Bank offers export credits to either domestic suppliers or foreign buyers to finance export transactions.

Export Credits to domestic suppliers include:

- export loans to Korean exporters that export capital goods such as ships, industrial plants and machinery;
- pre-shipment credit to Korean exporters or manufacturers producing export products;
- technical service credit to Korean companies that export technical services abroad, including overseas construction projects;
- short-term trade financing to Korean exporters that manufacture export goods under short-term export contracts;
- small business export credit to small- and medium-sized enterprises that manufacture export goods or supply materials needed by their primary exporters;
- rediscount on trade bills to domestic commercial banks for exporters;
- forfaiting to Korean exporters by discounting trade bills under the usance line of credit from export transactions on a non-recourse basis; and
- export factoring to Korean exporters by discounting trade receivables that occurs from open account export transactions on credit on a non-recourse basis.

Export credits to foreign buyers include:

- direct loans to foreign buyers that purchase Korean goods and services;
- project finance to foreign companies that intend to import industrial plants, facilities and technical services from Korea for large-scale projects, of which the cash flows from such projects are the main source for repayment;
- structured finance to foreign shipping companies that purchase ships from Korean shipyards, of which the repayment usually depends on the cash flows generated by the operation of ships; and
- interbank export loans to creditworthy banks in foreign countries to help foreign buyers obtain credit for the purchase of goods and services of Korean origin.

As of December 31, 2021, export credits in the amount of ₩38,638 billion represented 48% of the Bank's total outstanding Loan Credits. The Bank's disbursements of export credits in 2021 amounted to ₩33,224 billion, a decrease of 12% from the previous year, primarily due to decreased demand from the industrial plant-related industries. The Bank's commitments of export credits in 2021 amounted to ₩30,088 billion, a decrease of 20% from the previous year.

The Bank offers export credits to Korean companies in order to provide them with the funds required for the manufacture or construction of capital and non-capital goods and readying of technical services designated in the Bank's operating manual for export. Capital goods eligible for export credit financings currently include ships, industrial plants, industrial machinery and overseas construction projects. With respect to eligible items supported by the Bank's export credits, ships as well as industrial plants have traditionally had some of the largest shares of the Bank's export credit operations.

The Bank offers export loans and technical service credits to domestic suppliers at fixed (no less than the Commercial Interest Reference Rate under the OECD Arrangement (as defined below)) or floating rates of interest with maturities of up to 12 years for ships and maturities of varying terms, from two to 18 years, for financings of other eligible items. The Bank typically requires a minimum down payment of 20% of the contract amount for ship export financings and a minimum down payment of 15% for financings of other eligible items. When the credit rating of a prospective borrower does not meet the Bank's internal rating criteria, these export credits are secured by promissory notes issued in connection with the relevant transaction, or letters of guarantees or letters of credit issued or confirmed by a creditworthy international bank or the importer's government or central bank. Other terms and conditions under such export credit facilities must be in accordance with the Arrangement on Guidelines for Officially Supported Export Credits by the Organization for Economic Cooperation and Development, or the OECD Arrangement. The Bank offers direct loans to foreign buyers, project finance to project companies and structured finance for ships to foreign shipping companies under similar terms and conditions as export credit financings to domestic suppliers. The Bank offers interbank export loans to overseas banks to facilitate imports by foreign importers of Korean manufactured goods. Interbank export loans are offered at fixed or floating rates of interest with maturities of up to ten years.

Overseas Investment Credits

The Bank extends overseas investment credits to either Korean companies or foreign companies in which a Korean company has an equity share, to finance investments in eligible overseas businesses and projects. Such financing programs include:

- overseas investment credit to Korean companies that invest abroad in the form of capital subscription, acquisition of stocks and long-term credit;
- overseas project credit to Korean companies or their overseas subsidiaries engaging in businesses outside Korea;
- major resources development credit to Korean companies for development of natural resources and acquisition of mining rights abroad; and
- overseas business credit to foreign companies in which Korean companies have an equity stake, in the form of funds for purchasing equipment or working capital.

As of December 31, 2021, overseas investment credits amounted to ₩32,830 billion, representing 41% of the Bank's total outstanding Loan Credits. The Bank's commitments of overseas investment credits in 2021 amounted to ₩18,003 billion, a decrease of 4% from the previous year. The Bank's disbursements of overseas investment credits in 2021 amounted to ₩16,799 billion, a decrease of 3% from the previous year. The decreases in new commitments and disbursements for overseas investment credits were primarily due to decreased demand in overseas investment and project credits.

Proposals for overseas investment credits to finance the acquisition of important materials or the development of natural resources for the Korean economy, as determined by the Government, are given priority, together with projects that promote the export of Korean goods and services. As a result, projects financed by the Bank's overseas investment credit program have been mainly in the fields of manufacturing or development of natural resources.

The Bank offers overseas investment credits at either fixed or floating rates of interest with maturities up to 30 years. Such facilities may require security in the form of a bank guarantee, pledge or mortgage on the borrower's local assets. Depending upon the size of the borrower, the Bank will provide up to 100% of the financing required for the overseas investment project.

Import Credits

The Bank offers import credits to Korean companies that directly import essential materials, natural resources and high-technology materials whose stable and timely supply is required for the national economy, or to Korean companies that import such items after developing them overseas. Import credits are extended for importation of eligible items, including nuclear fuels, aircraft, mineral ores, crude oil, lumber, wood pulp, grains, cotton, sugar, and equipment and machinery for research and development, and for use in advanced technological industries.

As of December 31, 2021, import credits in the amount of ₩6,122 billion represented 8% of the Bank's total outstanding Loan Credits. Disbursements and new commitments of import credits amounted to ₩10,390 billion and ₩12,198 billion, respectively, in 2021, an increase of 17% and 35%, respectively, from the previous year, primarily due to an increase in demand for financing for raw materials used for export and domestic consumption.

The Bank offers import credits at either fixed or floating rates of interest with maturities up to ten years for equipment and machinery and shorter maturities of up to two years for other items, which may require security in the form of a bank guarantee, pledge or mortgage on the borrower's local assets. The Bank generally provides up to 80% of the import contract amount, but provides up to 90% of the import contract amount in the case of small and medium-sized enterprises and up to 100% for transactions with a letter of credit opened by a bank.

Guarantee Operations

The Bank provides guarantees in favor of Korean commercial banks and foreign banks or foreign importers in respect of the obligations of Korean exporters in order to facilitate export and import financings. Such guarantee programs for Korean exporters and importers include (1) financial guarantees to co-financing banks that provide loans for transactions that satisfy the Bank's eligibility requirements and (2) project-related guarantees to foreign importers for the performance of Korean exporters on eligible projects in the form of bid bonds, advance payment bonds, performance bonds and retention bonds. Guarantee commitments as of December 31, 2021 increased to ₩40,231 billion from ₩34,703 billion as of December 31, 2020. Guarantees the Bank had confirmed as of December 31, 2021 increased to ₩30,069 billion from ₩27,961 billion as of December 31, 2020.

The Bank mainly issues project-related guarantees, which include:

- advance payment guarantees that are issued to overseas importers of Korean goods and services to support obligations to refund down payments made to Korean exporters in the event of a failure to deliver the goods to be exported; and

- performance guarantees that are issued to foreign importers to support the performance by Korean exporters of their contractual obligations.

In 2021, the Bank issued project-related confirmed guarantees in the amount of ₩8,314 billion, an increase of 49% from the previous year.

The Bank also issues letters of credit to foreign exporters to assist in the financing of projects approved in connection with import credit loans, and to Korean exporters to assist in the financing of projects approved in connection with export credit loans.

For further information regarding the Bank's guarantee and letter of credit operations, see "—Financial Statements and the Auditors—Notes to Separate Financial Statements as of and for the years ended December 31, 2021 and 2020—Note 36."

Government Account Operations

Economic Development Cooperation Fund

In 1987, the Government established the Economic Development Cooperation Fund, or the EDCF, to provide loans, at concessional interest rates, to governments or agencies of developing countries for projects that contribute to industrial development or economic stabilization of such countries. The Bank administers the EDCF on behalf of the Government and are responsible for project appraisal, documentation and administrative work relating to the EDCF Loans. The EDCF business accounts are maintained separately from the Bank's own account on behalf of the Government, and the Bank derives no separate income or expenditures from its operation of the EDCF business. Government contributions constitute the primary funding source of the EDCF. Loan disbursements by the EDCF in 2021 amounted to ₩1,227 billion for 102 projects in 34 countries, an increase of 36% from the previous year. As of December 31, 2021, the total outstanding loans extended by the EDCF was ₩9,760 billion, an increase of 13% from the previous year.

Inter-Korea Cooperation Fund

In 1991, the Government established the Inter-Korea Cooperation Fund, or the IKCF, to promote mutual exchanges and cooperation between the Republic and North Korea by engaging in funding and financing activities to support family reunions, cultural events, academic seminars, trade and economic cooperation between the two countries. The Bank administers the IKCF under the initiative and policy coordination of the Ministry of Unification. The IKCF accounts are maintained separately from the Bank's own account on behalf of the Government. Government contributions are the major funding source of the IKCF. The IKCF disbursements during 2021 amounted to ₩31 billion for 43 projects, and cumulative total disbursements as of December 31, 2021 were ₩7,107 billion, an increase of 0.4% from ₩7,076 billion as of December 31, 2020.

Other Operations

The Bank engages in various other activities related to its financing activities.

Activities in which the Bank currently engages include:

- country information services performed by the Overseas Economic Research Institute, which conducts country studies and country risk evaluation to assist in the efficient utilization of the Bank's financial resources;

- export credit advisory services, which are aimed at bringing about a larger share of overseas bidding by giving Korean exporters a wide range of knowledge on the country, industry, market and financial situation of the importing country in the early stage of the tendering process or contract negotiations;

- consulting services by in-house professionals including lawyers, accountants and regional experts who consult on international transactions; and

- management of Korea's foreign direct investment database.

Description of Assets and Liabilities

Total Credit Exposure

The Bank extends credits to support export and import transactions, overseas investment projects and other relevant products in various forms including loans and guarantees.

The following table sets out the Bank's Credit Exposure as of December 31, 2020 and 2021, categorized by type of exposure extended:

		As of December 31,			
		2020		2021	
		(billions of Won, except for percentages)			
A	Loans in Won	₩ 23,643	23%	₩ 24,238	22%
B	Loans in Foreign Currencies	46,840	46%	51,613	48%
C	**Loans (A+B)**	70,483	69%	75,851	70%
D	Other Loans	5,805	6%	4,144	4%
E	**Loan Credits (C+D)**	76,288	75%	79,995	74%
F	Allowances for Loan Losses	(2,501)	(2)%	(2,166)	(2)%
G	**Loan Credits including allowance for loan losses (E-F).**	73,787	73%	77,829	72%
H	Guarantees	27,961	27%	30,069	28%
I	**Credit Exposure (G+H)**	101,748	100%	107,898	100%

Loan Credits by Geographic Area

The following table sets out the total amount of the Bank's outstanding Loan Credits as of December 31, 2020 and 2021, categorized by geographic area [(1)]:

	As of December 31,[(1)]		As % of
	2020	2021	2021 Total
	(billions of Won)		
Asia[(2)]	₩ 60,933	₩ 61,373	77%
Europe	6,606	9,625	12%
America	6,648	7,288	9%
Africa	2,101	1,708	2%
Total	₩ 76,288	₩ 79,995	100%

(1) For purposes of this table, export credits have been allocated to the geographic areas in which the foreign buyers of Korean exports are located; overseas investment credits have been allocated to the geographic areas in which the overseas investments being financed are located; and import credits have been allocated to the geographic areas in which the sellers of the imported goods are located.

(2) Includes Australia.

Source: Internal accounting records

Economic Sanctions

The U.S. government, including the U.S. Department of the Treasury's Office of Foreign Assets Control, or 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, Iran currently is and has been subject to comprehensive U.S. sanctions. In addition, 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 Iran and 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 Bank's business and reputation could be adversely affected, for example, if the U.S. government were to determine that the Bank's 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 Bank or certain of its dealings may be subject to.

Furthermore, the Bank is aware, through press reports and other means, of initiatives by certain governmental entities and institutions in the United States, such as universities and pension funds, to adopt laws, regulations or policies prohibiting transactions with or investment in, or requiring divestment from, entities doing business with certain sanctioned countries, including Iran. For the reasons discussed below, it is possible that such initiatives may result in the Bank's being unable to gain or retain entities subject to such prohibitions as customers or as investors in the Bank's debt securities. In addition, the Bank's reputation may suffer due to the Bank's association with Iran and Russia. Such a result could have significant adverse effects on the Bank's business or the price of the Bank's debt securities.

The Bank's business previously included activities related to Iran consisting solely of the extension of credit and financing provided in connection with the export of Korean goods and services to Iran and the disbursement of Iran-related credits directly to Korean suppliers or exporters. Such activities involved export-related credits to finance the export contracts of Korean exporters supplying goods and services to Iranian companies and Iranian financial institutions that may be subject to U.S. sanctions, including as a result of being indirectly owned or controlled by the Iranian government. None of these transactions involved U.S. persons, were conducted in U.S. dollars or involved U.S.-origin goods or services or any other U.S. jurisdictional nexus, and such transactions were subject to policies and procedures designed to ensure compliance with applicable Korean laws and regulations. The Bank currently has no active dealings related to Iran. The Bank did not have any credit and financing arrangements related to Iran as of December 31, 2019, 2020 and 2021 and did not derive any operating revenue from transactions with, involving, or related to Iran in 2019, 2020 and 2021.

The Bank engaged in business related to Russia, including limited dealings with the government of the Russian Federation and the extension of credit to two Russian financial institutions that have been recently designated for U.S. (but not Singaporean) sanctions (one of which has been designated for U.S. blocking sanctions and one of which has been designated for U.S. non-blocking sanctions). The Bank does not have any other dealings with the government of the Russian Federation or any Russian Federation government stated-owned entities, VTB Bank Public Joint Stock Company, The Corporation

Bank for Development and Foreign Economic Affairs Vnesheconombank, Promsvyazbank Public Joint Stock Company or Bank Rossiya.

As of December 31, 2021, the government of the Russian Federation owed the Bank approximately ₩50 billion pursuant to an existing loan arrangement. This is a legacy arrangement resulting from a commodity loan the Bank extended to Vnesheconombank, formerly the Bank for Foreign Economic Affairs of the former Soviet Union and now the Russian Federation state development corporation, in the early 1990s. The loan was initially guaranteed by the government of the Soviet Union; the guarantee was subsequently assumed by the government of the Russian Federation. To date, the Russian Federation has paid back 85.9% of the loan amount. The Bank's dealings are formally with the Ministry of Finance of the Russian Federation, which has been sanctioned by various sanctions authorities, including the United States. The loan is classified as precautionary in terms of asset quality (based on previous repayment activity) and the Bank established a 0.2% provisioning level for that credit exposure. These dealings with the government of the Russian Federation have historically included transactions conducted in U.S. dollars through U.S. financial institutions. The Bank's transactions with the government of the Russian Federation have been conducted at all times in full compliance with applicable sanctions. In light of recent developments, the Bank has paused all dealings with the government of the Russian Federation, meaning the Bank has not engaged in any additional transactions with the government of the Russian Federation since February 2022. The Bank is continuing to evaluate its arrangements with the government of the Russian Federation in light of recent developments and will only engage in additional transactions with the government of the Russian Federation that are fully compliant with applicable sanctions.

The Bank's arrangements with two Russian financial institutions, which involve the extension of credit and have historically included transactions conducted in U.S. dollars through U.S. financial institutions, were all in place prior to the recent Russia-related sanctions developments. As of December 31, 2021, the two Russian financial institutions owed the Bank approximately US$200 million. The Bank's transactions with the Russian financial institutions have been conducted at all times in full compliance with applicable sanctions. In light of recent developments, the Bank has paused all dealings with the Russian financial institutions, meaning the Bank has not engaged in any additional transactions with the Russian financial institutions since February 2022 (even if the contemplated transactions would not have been prohibited or restricted by applicable sanctions). The Bank is continuing to evaluate its arrangements with the Russian financial institutions in light of recent developments and will only engage in additional transactions with the Russian financial institutions that are fully compliant with applicable sanctions.

Individual Exposure

The KEXIM Decree imposes limits on the Bank's aggregate credits extended to a single person or business group, with which requirements the Bank is in compliance with as of the date hereof. However, the Bank's large exposure to various business groups in Korea means that the Bank is also exposed to financial difficulties experienced by the Bank's borrowers as a result of, among other things, adverse economic conditions in Korea and globally. For example, the ongoing COVID-19 pandemic on the Korean economy, and the invasion of Ukraine by Russia and ensuing actions taken by the United States and other countries have had, and may continue to have, an adverse impact on the business, activities and operations of many of the Bank's borrowers, including large business groups, which in turn could have an adverse impact on the ability of the Bank's borrowers to meet existing payment or other obligations to the Bank. See "The Republic of Korea—The Economy—Worldwide Economic and Financial Difficulties." A continued deterioration in the financial condition of the Bank's borrowers could result in a deterioration in the quality of its loan portfolio, which in turn could result in an increase in delinquency ratios, increased charge-offs and higher provisioning, as well as an increase in impairment losses on such loans, which could have a material adverse impact on the Bank's business, financial condition or results of operations.

As of December 31, 2021, the Bank's largest Credit Exposure was to Daewoo Shipbuilding & Marine Engineering Co., Ltd., or DSME, in the amount of ₩3,379 billion. As of December 31, 2021, the Bank's second largest and third largest Credit Exposures, respectively, were to Samsung Heavy

Industries Co., Ltd. in the amount of ₩2,268 billion and to Hyundai Heavy Industries Co., Ltd., or HHI, in the amount of ₩2,054 billion.

The following table sets out the Bank's five largest Credit Exposures as of December 31, 2021[(1)]:

Rank	Name of Borrower	Loan Credits	Guarantees	Total
			(billions of Won)	
1	Daewoo Shipbuilding & Marine Engineering Co., Ltd.	₩ 557	₩ 2,822	₩ 3,379
2	Samsung Heavy Industries Co., Ltd.	355	1,913	2,268
3	Hyundai Heavy Industries Co., Ltd.	91	1,963	2,054
4	SK Hynix Inc.	1,845	0	1,845
5	GS Engineering & Construction Corp.	719	797	1,516

(1) Excludes loans and guarantees extended to affiliates.
Source: Internal accounting records.

In recent years, DSME, one of the largest shipbuilding and offshore construction companies in Korea, suffered from financial difficulties primarily due to significant losses incurred in connection with the construction of offshore plants resulting from a prolonged slowdown in the global shipbuilding industry. In October 2015, the Bank announced that the Bank, along with The Korea Development Bank, plans to provide financial support to DSME, including provision of liquidity support of up to ₩4.2 trillion. In December 2016, in a bid to improve DSME's capital structure, the Bank exchanged a term loan in the amount of ₩1 trillion provided by the Bank to DSME for perpetual bonds newly issued by DSME, while The Korea Development Bank engaged in debt-for-equity swaps amounting to ₩1.8 trillion. In March 2017, the Bank and The Korea Development Bank announced a second joint plan to provide an additional ₩2.9 trillion in financial support to DSME, which was approved by the other creditors in April 2017. Based on such plan, the Bank exchanged a term loan in the amount of ₩1.28 trillion provided by the Bank to DSME for perpetual bonds issued by DSME and The Korea Development Bank provided additional debt-to-equity swaps of ₩0.3 trillion in June 2017. Other creditors also provided debt-to-equity swaps for up to 80% of their debt with DSME and rescheduled the maturities of the remainder. In March 2019, as part of a plan by HHI to acquire DSME, The Korea Development Bank entered into an agreement to transfer all of its shares in DSME to Korea Shipbuilding & Engineering Co., Ltd., or KSOE, a newly established sub-holding company spun off from HHI to control its shipbuilding companies, in return for an equity stake in KSOE. In January 2022, however, the European Commission announced that it would not grant approval for such acquisition due to anti-competition concerns for LNG carriers, which decision HHI has since appealed, and the transfer agreement was terminated in March 2022.

Asset Quality

The Supervisory Regulation of Banking Business, or the Supervisory Regulation, legislated by the Financial Services Commission requires banks, including the Bank, to analyze and classify their credits into one of five categories as normal, precautionary, substandard, doubtful or estimated loss by taking into account borrowers' repayment capacity as well as a number of other factors including the financial position, profitability, transaction history of the relevant borrower and the value of any collateral or guarantee taken as security for the extension of credit. Categorizations are applied to all loans except call loans and interbank loans, which are classified as normal. Credit categorizations are as follows:

Normal............. Credits extended to customers which, in consideration of their business and operations, financial conditions and future cash flows, do not raise concerns regarding their ability to repay the credits.

Precautionary .. Credits extended to customers (1) which, in consideration of their business and operations, financial conditions and future cash flows, are judged to have potential risks with respect to their ability to repay the credits in the future, although there have not occurred any immediate risks of default in repayment; or (2) which are in arrears for one month or more but less than three months.

Substandard	(1) Credits extended to customers, which in consideration of their business and operations, financial conditions and future cash flows, are judged to have incurred considerable risks for default in repayment as the customers' ability to repay has deteriorated; or (2) that portion which is expected to be collected of total credits (a) extended to customers which have been in arrears for three months or more, (b) extended to customers which are judged to have incurred serious risks due to the occurrence of final refusal to pay their promissory notes, liquidation or bankruptcy proceedings, or closure of their businesses or (c) of "Doubtful Customers" or "Estimated-loss Customers" (each as defined below).
Doubtful	That portion of credits in excess of the amount expected to be collected of total credits extended to (1) customers, or Doubtful Customers, which, in consideration of their business and operations, financial conditions and future cash flows, are judged to have incurred serious risks of default in repayment due to noticeable deterioration in their ability to repay; or (2) customers which have been in arrears for three months or more but less than twelve months.
Estimated Loss	That portion of credits in excess of the amount expected to be collected of total credits extended to (1) customers, or Estimated-loss Customers, which, in consideration of their business and operations, financial conditions and future cash flows, are judged to have to be accounted as a loss as the inability to repay became certain due to serious deterioration in their ability to repay; (2) customers which have been in arrears for twelve months or more; or (3) customers which are judged to have incurred serious risks of default in repayment due to the occurrence of final refusal to pay their promissory notes, liquidation or bankruptcy proceedings, or closure of their businesses.

Under K-IFRS, the Bank establishes provisions for credit losses with respect to loans using either a case-by-case or collective approach. The Bank assesses individually significant loans on a case-by-case basis and other loans on a collective basis. In addition, if the Bank determines that no objective evidence of impairment exists for a loan, it includes such loan in a group of loans with similar credit risk characteristics and assesses them collectively for impairment regardless of whether such loan is significant. If there is objective evidence that an impairment loss has been incurred for individually significant loans, the amount of the loss is measured as the difference between the financial asset's carrying amount and the present value of the estimated future cash flows discounted at such asset's original effective interest rate. Future cash flows are estimated through a case-by-case analysis of individually assessed assets, which takes into account the benefit of any guarantee or other collateral held. The value and timing of future cash flow receipts are based on available estimates in conjunction with facts available at the time of review and reassessed on a periodic basis as new information becomes available. For collectively assessed loans, the Bank bases the level of provisions for credit losses on a portfolio basis in light of the homogenous nature of the assets included in each portfolio. The provisions are determined based on a quantitative review of the relevant portfolio, taking into account such factors as the level of arrears, the value of any security, and historical and projected cash recovery trends over the recovery period. For more detailed information regarding the Bank's loan loss provisioning policy, see "—Financial Statements and the Auditors—Notes to Separate Financial Statements as of and for the years ended December 31, 2021 and 2020—Note 3(7)."

Asset Classifications

The following table provides information on the Bank's loan loss reserves:

	As of December 31, 2020		As of December 31, 2021	
	Loan Amount[1]	Loan Loss Reserve[2][3]	Loan Amount[1]	Loan Loss Reserve[2][3]
	(billions of Won)			
Normal	₩ 122,165	₩ 1,006	₩ 138,298	₩ 779
Precautionary	9,367	1,270	9,667	797
Sub-standard	102	58	263	140
Doubtful	1,099	920	1,074	855
Estimated Loss	429	313	621	579
Total	₩ 133,162	₩ 3,568	₩ 149,923	₩ 3,151

(1) These figures include loans (excluding interbank loans and call loans), domestic usance bills, bills bought, notes bought, advances for customers, confirmed and unconfirmed acceptances and guarantees and unused loan commitments, among others.
(2) Consists of (i) allowance for loan losses, (ii) provisions for confirmed and unconfirmed acceptances and guarantees and (iii) certain financial guarantee contract liabilities.
(3) These figures include present value discount.

Reserves for Credit Losses

Non-performing assets, or NPAs, are defined as assets that are classified as substandard or below.

The following table sets out the Bank's 10 largest non-performing assets as of December 31, 2021:

Borrower	Loans	Guarantees	Total
	(billions of Won)		
EGYPTIAN REFINING COMPANY S.A.E.	₩ 652	₩ 193	₩ 846
Acwa Guc Elektrik Isletme Ve Yonetim Sanayi Ve Ticaret Anonim Sirketi	104	49	153
SEADRILL JUPITER LTD.	120	—	120
SEADRILL SATURN LTD.	120	—	120
SEADRILL NEPTUNE HUNGARY KFT.	120	—	120
SEADRILL TELLUS LTD.	89	—	89
DYNATEC MADAGASCAR S.A.	—	88	88
GAZIANTEP HASTANE SAGLIK HIZMETLERI ISLETME YATIRIM A.S.	45	43	87
RECAUDO BOGOTA S.A.S.	30	—	30
ELK Corporation	15	—	15
Total	₩ 1,295	₩ 373	₩ 1,668

The Bank cannot provide any assurance that its current level of exposure to non-performing assets will continue in the future or that any of the Bank's borrowers (including the Bank's largest borrowers as described above) is not currently facing, or in the future will not face, material financial difficulties.

As of December 31, 2021, the amount of the Bank's non-performing assets was ₩1,958 billion, an increase of 20% from ₩1,631 billion as of December 31, 2020. As of December 31, 2021, the Bank's non-performing asset ratio was 1.3%, compared to 1.2% as of December 31, 2020.

The following table sets forth the Bank's reserves for possible credit losses as of December 31, 2020 and 2021:

	As of December 31,	
	2020	2021
	(billions of Won, except for percentages)	
Loan Loss Reserve (A)[1]	₩ 3,568	₩ 3,151

	As of December 31,	
	2020	2021
NPA (B)[(2)]	1,631	1,958
Total Shareholders' Equity (C)	14,469	15,353
Reserve to NPA (A/B)	219%	161%
Equity at Risk (B-A)/C	—	—

(1) Consists of allowance for loan losses and provisions for confirmed acceptances and guarantees, excluding the regulatory reserve for loans and guarantees.
(2) Non-performing assets, which are defined as assets that are classified as substandard or below.
Source: Internal accounting records

The following table sets forth the Bank's actual loan loss reserve ratios as of December 31, 2020 and 2021:

Classification of Loans	Actual Reserve Coverage (as of December 31, 2020)	Actual Reserve Coverage (as of December 31, 2021)
Normal	0.8%	0.6%
Precautionary	13.6%	8.2%
Substandard	57.2%	53.3%
Doubtful	83.7%	79.6%
Estimated Loss	73.0%	93.2%

Investments

Under the KEXIM Decree, the Bank is not allowed to hold stocks or securities of more than three years' maturity in excess of 60% of the Bank's equity capital. However, investment in the following securities is not subject to this restriction:

- Government bonds;
- BOK currency stabilization bonds;
- securities acquired via contributions by the Government; and
- securities acquired through investment approved by the Minister of Economy and Finance, for research related to the Bank's operations, for the Bank's financing or pursuant to Korean statutes.

As of December 31, 2021, the Bank's total investment in securities amounted to ₩14,310 billion, representing 14% of the Bank's total assets. The Bank's securities portfolio consists primarily of financial assets at fair value through other comprehensive income, or FVOCI. Financial assets at FVOCI mainly consist of marketable securities (including equity securities in Industrial Bank of Korea which was recapitalized by the Government through us) and non-marketable securities (including equity securities in Korea Expressway Corporation and Korea Land & Housing Corporation). From 2019 to 2021, the Bank sold its holdings of common stock in KG Dongbu Steel Co., Ltd. (formerly, Dongbu Steel Co., Ltd.), which amounted to an aggregate of 2,363,685 shares of common stock, for a total of ₩32 billion.

The following table sets out the composition of the Bank's securities as of December 31, 2020 and 2021:

Type of Investment Securities	As of December 31, 2020		As of December 31, 2021	
	Amount	%	Amount	%
	(billions of Won, except for percentages)			
Financial Assets at FVOCI	₩ 10,537	81%	₩ 11,814	83%
Financial Assets at Amortized Cost	506	4	931	7
Investments in Associates and Subsidiaries	1,919	15	1,565	11

Type of Investment Securities	As of December 31, 2020 Amount	%	As of December 31, 2021 Amount	%
	(billions of Won, except for percentages)			
Total	₩ 12,962	100%	₩ 14,310	100%

For further information relating to the classification guidelines and methods of valuation of the Bank's financial instruments (including securities), see "—Financial Statements and the Auditors—Notes to separate financial statements and of and for the years ended December 31, 2021 and 2020—Notes 3 and 5."

Guarantees and Acceptances and Contingent Liabilities

The Bank has credit risk factors that are not reflected on the balance sheet, which include risks associated with guarantees and acceptances. Guarantees and acceptances do not appear on the balance sheet, but rather are recorded as an off-balance sheet item in the notes to the financial statements. Guarantees and acceptances include financial guarantees, project-related guarantees, such as bid bond, advance payment bond, performance bond or retention bond, and acceptances and advances relating to trade financings such as letters of credit or import freight. Contingent liabilities, for which the guaranteed amounts were not finalized, appear as unconfirmed guarantees and acceptance items in the notes to the financial statements as off-balance sheet items.

As of December 31, 2021, the Bank had issued a total amount of ₩30,069 billion in confirmed guarantees and acceptances, of which ₩26,696 billion, representing 89% of the total amount, was classified as normal, ₩2,983 billion, representing 10% of the total amount, was classified as precautionary, and ₩390 billion, representing 1% of the total amount, was classified as substandard or below.

Derivatives

The objective in the Bank's strategy and policies on derivatives is to actively manage and minimize the Bank's foreign exchange and interest rate risks. It is the Bank's policy to hedge all currency and interest rate risks wherever possible (taking into consideration the cost of hedging). The Bank uses various hedging instruments, including foreign exchange forwards and options, interest rate swaps, and cross currency swaps.

Under the Bank's internal trading rules that have been submitted to the Financial Supervisory Service, the Bank's policy is to engage in derivative transactions mainly for hedging its own position. As part of the Bank's total exposure management system, the Bank monitors its exposure to derivatives and may make real-time inquiries, which enables the Bank's Risk Management Department to check the Bank's exposure on a regular basis. Under the guidelines set by the Financial Supervisory Service, the Bank is required to submit reports on its derivatives exposure to the Financial Supervisory Service on a quarterly basis. As a measure to reduce the risk of intentional manipulation or error, the Bank has separated responsibility for different functions such as initiation, authorization, approval, recording, monitoring and reporting to the Financial Supervisory Service. The Risk Management Department conducts regular reviews of derivative transactions to monitor any breach of compliance with the relevant regulatory requirements.

As of December 31, 2021, the Bank's outstanding loans made at floating rates of interest totaled ₩53,308 billion, whereas the Bank's outstanding borrowings made at floating rates of interest totaled ₩56,752 billion, including those raised in Australian Dollar, Euro, British Pound, and Brazil Real and swapped into U.S. dollar floating rate borrowings. As a result, the Bank is exposed to possible interest rate risks to the extent that the amount of the Bank's borrowings made at floating rates of interest exceeds the amount of the Bank's loans made at floating rates of interest. Foreign exchange risk arises because a majority of the Bank's assets and liabilities are denominated in non-Won currencies. In order to match the Bank's currency and interest rate structure, the Bank generally enters into swap transactions.

The following table shows the unsettled notional amounts and estimated fair values of derivatives the Bank held as of the dates indicated.

	As of December 31,					
	2020			2021		
	Unsettled Notional Amount	Fair Value of Assets	Fair Value of Liabilities	Unsettled Notional Amount	Fair Value of Assets	Fair Value of Liabilities
	(billions of Won)					
Currency forwards	₩ 5,111	₩ 96	₩ 157	₩ 5,872	₩ 58	₩ 41
Currency swaps	27,596	1,249	722	26,113	604	873
Interest rate swaps	39,330	1,166	291	47,235	854	514
Total....................................	₩ 72,037	₩ 2,511	₩ 1,170	₩ 79,220	₩ 1,516	₩ 1,428

As of December 31, 2021, the Bank had entered into 509 currency related derivative contracts with a notional amount of ₩31,984 billion and had entered into 342 interest rate related derivative contracts with a notional amount of ₩47,235 billion. See "—Financial Statements and the Auditors—Notes to Separate Financial Statements as of and for the years ended December 31, 2021 and 2020—Note 20."

Sources of Funding

The Bank obtains funds primarily through borrowings from the issuance of bonds in both domestic and international capital markets, borrowings from domestic and foreign financial institutions, capital contributions and internally generated funds. Internally generated funds result from various activities the Bank carries on and include principal and interest payments on the Bank's loans, fees from guarantee operations and other services, and income from marketable securities the Bank holds.

The Bank raised a net total of ₩67,611 billion (new borrowings plus loan repayments by the Bank's clients less repayment of the Bank's existing debt) during 2021, an 8% decrease compared with the previous year's ₩73,168 billion. The total loan repayments, including prepayments by the Bank's clients, during 2021 amounted to ₩59,912 billion, an increase of 0.4% from ₩59,649 billion during 2020.

Since the Bank's establishment, the Government has, from time to time, provided the Bank with loans to support the Bank's lending to Korean exporters and provide liquidity to the Bank. As of December 31, 2021, the Bank's outstanding borrowings from the Government amounted to ₩947 billion. The Bank also issued Won-denominated domestic bonds in the aggregate amounts of ₩11,310 billion, ₩22,370 billion and ₩17,170 billion during 2019, 2020 and 2021, respectively.

The Bank has diversified its funding sources by borrowing from various overseas sources and issuing long-term floating-rate notes and fixed-rate debentures in the international capital markets. These issues were in foreign currencies, including the U.S. dollar, Thai Baht, Australian Dollar, Euro, Hong Kong Dollar, Singapore Dollar, Swiss Franc, Brazilian Real, Mexican Peso, Peruvian Sol, Indian Rupee, Indonesian Rupiah, Chinese Yuan, New Zealand Dollar, Philippine Peso, South African Rand, Danish Krone, Swedish Krona, Czech Koruna, Norwegian Krone, British Pound, Canadian Dollar and Polish Zloty and have original maturities ranging from one to thirty years.

During 2021, the Bank issued Eurobonds in the aggregate principal amount of US$5,280 million in various types of currencies under the Bank's existing medium term notes program, a 15% increase from US$4,574 million in 2020. These bond issues consisted of offerings of US$2,930 million, HKD 3,745 million, BRL 3,796 million, CNY 2,611 million, AUD 180 million and ZAR 715 million. In addition, the Bank issued global bonds during 2021 in the aggregate amount of US$3,500 million under the Bank's U.S. shelf registration statement, or the U.S. Shelf Program, compared with EUR 500 million and US$1,400 million in 2020. As of December 31, 2021, the outstanding amounts of the Bank's notes and debentures were US$30,463 million, HKD 7,538 million, BRL 3,907 million, EUR 4,739 million, THB 7,880 million, CHF 1,250 million, AUD 3,776 million, INR 37,604 million, CNY 6,373 million, IDR 10,733,000 million, NZD 574 million, ZAR 2,615 million, NOK 2,250 million, GBP 35 million, CAD 65 million, SEK 250 million, MXN 12,000 million, SGD 200 million, CZK 3,420 million and PLN 194 million.

The Bank also borrows from foreign financial institutions in the form of loans that are principally made by syndicates of commercial banks at floating or fixed interest rates and in foreign currencies, with original maturities ranging from one to five years. As of December 31, 2021, the outstanding amount of such borrowings from foreign financial institutions was US$400 million.

The Bank's capital stock has increased from time to time since the Bank's establishment. From January 1998 to December 2021, the Government contributed ₩11,878 billion to the Bank's capital. As of December 31, 2021, the Bank's total capital stock amounted to ₩12,748 billion, and the Government, The Bank of Korea and The Korea Development Bank owned 69%, 9% and 22%, respectively, of the Bank's capital stock.

In connection with the Bank's fund-raising activities, the Bank has from time to time sold third parties promissory notes, including related guarantees, acquired as collateral in connection with export credit financings.

The KEXIM Act provides that the aggregate outstanding principal amount of all of the Bank's borrowings, including the total outstanding export-import financing debentures the Bank issued in accordance with the KEXIM Decree, may not exceed an amount equal to thirty times the sum of the Bank's capital stock plus its reserves. As of December 31, 2021, the aggregate outstanding principal amount of the Bank's borrowings (including export-import financing debentures), which was ₩80,694 billion, was equal to 20.4% of the authorized amount of ₩394,980 billion.

The Bank is not permitted to accept demand or time deposits.

Each year the Bank must submit to the Government for its approval an operating plan which includes the Bank's target levels for different types of funding. The following table is the part of the operating plan dealing with fund-raising for 2022:

Sources of Fund	**(billions of Won)**
Capital Contribution	—
Borrowings	31,015
Net Collection of Loans	24,985
Collection of Loans	54,382
Repayment of Debts	(29,397)
Others	—
Total	₩ 56,000

Debt

Debt Repayment Schedule

The following table sets out the principal repayment schedule for the Bank's outstanding debt (consisting of borrowings and debentures) as of December 31, 2021:

Debt Principal Repayment Schedule

	Maturing on or before December 31,				
Currency(1)	**2019**	**2020**	**2021**	**2022**	**Thereafter**
			(billions of Won)		
Won	₩ 18,010	₩ 7,500	₩ 1,780	₩ 320	₩ 1,610
Foreign(2)	16,366	10,084	10,473	7,381	14,840
Total Won Equivalent	₩ 34,376	₩ 17,584	₩ 12,253	₩ 7,701	₩ 16,450

(1) Borrowings and debentures in foreign currency have been translated into Won at the market average exchange rates on December 31, 2021, as announced by the Seoul Money Brokerage Services Ltd.
(2) This figure includes debentures, bank loans, commercial papers and repurchase agreements.

Normally the Bank determines the level of its foreign currency reserves based upon an estimate, at any given time, of aggregate loan disbursements to be made over the next two to three months. The Bank's average foreign currency reserves in 2020 and 2021 were approximately US$5,434 million and US$3,882 million, respectively.

Although the Bank currently believes that such reserves, together with additional borrowings available under the Bank's uncommitted short-term backup credit facilities and commercial paper programs, will be sufficient to repay the Bank's outstanding debt as it becomes due, there can be no assurance that the Bank will continue to be able to borrow under such credit facilities, or that the devaluation of the Won will not adversely affect the Bank's ability to access funds sufficient to repay its foreign currency denominated indebtedness in the future. In addition to maintaining sufficient foreign currency reserves, the Bank monitors the maturity profile of its foreign currency assets and liabilities to ensure that there are sufficient maturing assets to meet the Bank's liabilities as they become due.

As of December 31, 2021, the Bank's foreign currency assets maturing within three months, six months and one year exceeded the Bank's foreign currency liabilities coming due within such periods by US$2,751 million, US$3,317 million and US$3,042 million, respectively. As of December 31, 2021, the Bank's total foreign currency liabilities exceeded its total foreign currency assets by US$271 million.

Internal and External Debt of the Bank

The following table summarizes, as of December 31 of the years indicated, the outstanding internal debt of the Bank:

Internal Debt of the Bank

		(billions of Won)
2017	₩	14,120
2018		14,665
2019		15,405
2020		22,805
2021		22,910

The following table sets out, by currency and the equivalent amount in U.S. Dollars, the outstanding external debt of the Bank as of December 31, 2021:

External Debt of the Bank

	Amount in Original Currency		Equivalent Amount in U.S. Dollars[1]	
	(billions)			
US$	US$	34.0	US$	34.0
Euro (EUR)	EUR	4.8		5.4
Brazilian Real (BRL)	BRL	4.3		0.8
Australian Dollar (AUD)	AUD	3.8		2.7
British Pound (GBP)	GBP	0.0		0.0
Thai Baht (THB)	THB	7.9		0.2
Hong Kong Dollar (HKD)	HKD	7.5		1.0
Swiss Franc (CHF)	CHF	1.3		1.4
Swedish Krona (SEK)	SEK	0.3		0.0
Indonesian Rupiah (IDR)	IDR	10,733.0		0.8
Chinese Yuan (CNY)	CNY	6.4		1.0

	Amount in Original Currency		Equivalent Amount in U.S. Dollars(1)	
	(billions)			
Norwegian Krone (NOK)	NOK	2.3		0.3
Mexican Peso (MXN)	MXN	12.0		0.6
New Zealand Dollar (NZD)	NZD	0.6		0.4
Indian Rupee (INR)	INR	37.6		0.5
South African Rand (ZAR)	ZAR	2.6		0.2
Peruvian Sol (PEN)	PEN	0.5		0.1
Canadian Dollar (CAD)	CAD	0.1		0.1
Singapore Dollar (SGD)	SGD	0.2		0.2
Czech Koruna (CZK)	CZK	3.4		0.2
Polish Zloty (PLN)	PLN	0.2		0.0
			US$	49.8

(1) Amounts expressed in currencies other than U.S. dollar are converted to U.S. dollar at the exchange rate announced by the Seoul Money Brokerage Services, Ltd. in effect on December 31, 2021 or the prevailing market rate on December 31, 2021.

The following table summarizes, as of December 31 of the years indicated, the outstanding external debt of the Bank:

External Debt of the Bank

		(billions of Won)
2017	₩	52,710
2018		56,594
2019		57,899
2020		54,677
2021		59,144

For further information on the outstanding indebtedness of the Bank, see "—Tables and Supplementary Information."

Debt Record

The Bank has never defaulted in the payment of principal of, or interest on, any of its obligations.

Credit Policies, Credit Approval and Risk Management

Credit Policies

The Credit Policy Department functions as the Bank's centralized policy-making and planning division with respect to its lending activities. The Credit Policy Department formulates and revises the Bank's internal regulations on loan programs, sets basic lending guidelines on a country basis and gathers data from the Bank's various operating groups and produces various internal and external reports.

Credit Approval

The Bank has multiple levels of loan approval authority, depending on the loan amount and other factors such as the nature of the credit, the conditions of the transaction, and whether the loan is secured. The Bank's Board of Directors can approve loans of any amount. The Chief Executive Credit Committee, Credit Committee, Loan Officer Committee, Director Generals and Directors each have authority to approve loans up to a specified amount. The amount differs depending on the type of loan and certain other factors, for example, whether a loan is collateralized or guaranteed.

At each level of authority, loan applications are reviewed on the basis of the feasibility of the project from a technical, financial and economic point of view in addition to evaluating the probability of recovery. In conducting such a review, the following factors are considered:

- eligibility of the transaction under the Bank's financing criteria;
- country risk of the country of the borrower and the country in which the related project is located;
- credit risk of the borrower;
- a supplier's ability to perform under the related supply contract;
- legal disputes over the related project and supply contract; and
- availability of collateral.

When the credit rating of a prospective borrower does not meet the Bank's internal rating criteria, the Bank's policy is to ensure that the loans are either guaranteed or made on a partially or fully secured basis. As of December 31, 2021, approximately 8% of the Bank's total outstanding loans were guaranteed or made on a partially or fully secured basis.

Risk Management

The Bank's overall risk management policy is set by the Risk Management Committee, which meets on a quarterly basis and from time to time to establish tolerance limits for various exposures, whereas the overall risk management is overseen by the Risk Management Department, which is responsible for monitoring risk exposure.

The Risk Management Department reports the Bank's loan portfolio to the Financial Supervisory Service on a quarterly basis. The Risk Management Department also monitors the Bank's operating groups' compliance with internal guidelines and procedures. To manage liquidity risk, the Bank reviews the strategy for the sources and uses of funds, with each division submitting projected sources and uses to the Treasury Group. The Risk Management Department and the Treasury Group continually monitor the Bank's overall liquidity and the Treasury Group prepares both weekly and monthly cash flow forecasts. The Bank's policy is to maintain a liquidity level, which can cover loan disbursements for a period of two to three months going forward. The Bank protects itself from potential liquidity squeezes by maintaining sufficient amount of liquid assets with additional back-up of short-term credit lines.

The Bank's core lending activities expose the Bank to market risk, mostly in the form of interest rate and foreign currency risks. The Risk Management Department reports interest rate and foreign exchange gap positions to the Risk Management Committee on a quarterly basis. The Bank also monitors changes in, and matches of, foreign currency assets and liabilities in order to reduce exposure to currency fluctuations. Recently, in light of the ongoing COVID-19 pandemic as well as the conflict involving Ukraine and Russia and the related economic and trade sanctions and restrictions adopted by the United States, the European Union, the United Kingdom, Korea, Singapore and other major jurisdictions, the Bank has closely monitored foreign currency risks that could result from the depreciation of the Won against major foreign currencies (including the U.S. dollar), which in turn may increase the Bank's cost in servicing its foreign currency denominated debt and result in foreign exchange losses.

The Risk Management Department monitors various market indicators related to foreign currency liquidity on a regular basis and has been cooperating with other departments including the Treasury Group to effectively address any potential liquidity risk which may be associated with the conflict involving Ukraine and Russia.

One of the key components of the Bank's risk management policy, which also affects its fund-raising efforts, is to monitor matches of asset maturities and liability maturities. The average maturity as of

December 31, 2021 for the Bank's Won- and foreign currency-denominated loans was 18 months and 47 months, respectively, and for Won- and foreign currency-denominated liabilities was 12 months and 34 months, respectively.

The Bank's Risk Management Department also monitors and manages various operational risks that the Bank faces from time to time. For example, in light of the ongoing COVID-19 pandemic, the Bank is currently focused on monitoring and managing risks associated with disruption in the normal course of the Bank's business resulting from the potential contraction of the COVID-19 infection by the Bank's employees, which may necessitate its employees to be quarantined and/or its offices to be temporarily shut down, or 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.

In managing its risks, the Bank follows an overall risk management process where the Bank:

- determines the risk management objectives;
- identifies key exposures;
- measures key risks; and
- monitors risk management results.

The Bank's risk management system is a continuous system that is frequently evaluated and updated on an ongoing basis.

Capital Adequacy

Under the Financial Supervisory Service's guidelines on risk-adjusted capital which were introduced in consideration of the standards set by the Bank for International Settlements, all banks in Korea, including the Bank, are required to maintain a capital adequacy ratio (Tier I and Tier II) of at least 8% on a consolidated basis. To the extent that the Bank fails to maintain this ratio, the Korean regulatory authorities may require corrective measures ranging from management improvement recommendations to emergency measures such as disposal of assets.

The current capital adequacy requirements of the Financial Services Commission are derived from a new set of bank capital measures, referred to as Basel III, which the Basel Committee on Banking Supervision initially introduced in 2009 and began phasing in starting from 2013. Commencing in July 2013, the Financial Services Commission promulgated a series of amended regulations implementing Basel III, pursuant to which Korean banks, including the Bank, were required to maintain a minimum ratio of Tier I common equity capital (which principally includes equity capital, capital surplus and retained earnings less reserve for credit losses) to risk-weighted assets of 3.5% and Tier I capital to risk-weighted assets of 4.5% from December 1, 2013, which minimum ratios were increased to 4.0% and 5.5%, respectively, from January 1, 2014 and increased further to 4.5% and 6.0%, respectively, from January 1, 2015. Such requirements are in addition to the pre-existing requirement for a minimum ratio of Tier I and Tier II capital (less any capital deductions) to risk-weighted assets of 8.0%, which remains unchanged. The amended regulations also require an additional capital conservation buffer of 2.5% in 2021 and 2022, as well as a potential counter-cyclical capital buffer of up to 2.5%, which is determined on a quarterly basis by the Financial Services Commission. Presently, the Financial Services Commission has set the counter-cyclical capital buffer at 0%. As of December 31, 2021, the Bank's capital adequacy ratio, on a consolidated basis, was 14.8%, a decrease from 15.1% as of December 31, 2020, which was primarily due to an increase in credit risk-weighted assets.

The following table sets forth the Bank's capital base and capital adequacy ratios (on a consolidated basis) reported as of December 31, 2020 and 2021:

	As of December 31,	
	2020	2021
	(billions of Won, except for percentages)	
Tier I	₩ 14,482	₩ 15,185
Capital stock (including capital surplus and capital adjustments)	12,317	12,615
Retained Earnings(1)	1,472	1,919
Accumulated other comprehensive income	760	878
Others	2	2
Deductions from Tier I Capital	(69)	(229)
Capital Adjustments	—	—
Deferred Tax Asset	—	—
Others	(69)	(229)
Tier II (General Loan Loss Reserves)	1,821	1,788
Total Capital	16,303	16,973
Risk Adjusted Assets	108,052	114,401
Capital Adequacy Ratios		
Tier I common equity	13.4%	13.3%
Tier I	13.4%	13.3%
Tier I and Tier II	15.1%	14.8%

(1) Net amount after deducting regulatory reserve for loan losses.
Source: Internal accounting records

Overseas Operations

The Bank maintains an international presence through 24 overseas representative offices, which are located in New York City, Tokyo, Beijing, São Paolo, Paris, Washington D.C., Shanghai, New Delhi, Dubai, Moscow, Mexico City, Tashkent, Hanoi, Manila, Jakarta, Yangon, Bogota, Istanbul, Dar es Salaam, Dhaka, Accra, Phnom Penh, Addis Ababa and Colombo.

The Bank also has three wholly-owned subsidiaries: KEXIM Bank (UK) Ltd. in London, KEXIM (Asia) Ltd. in Hong Kong and KEXIM Vietnam Leasing Co., Ltd. in Ho Chi Minh City. These subsidiaries are engaged in the merchant banking and lease financing businesses, and assist the Bank in raising overseas financing. The Bank also owns 85% of P.T. Koexim Mandiri Finance, a subsidiary in Jakarta, which is primarily engaged in the business of lease financing.

The table below sets forth brief details of the Bank's subsidiaries as of December 31, 2021:

	Principal Place of Business	Type of Business	Book Value	Bank's Holding
			(billions of Won)	(%)
Kexim Bank (UK) Ltd.	United Kingdom	Commercial Banking	₩ 138	100%
KEXIM (Asia) Ltd.	Hong Kong	Commercial Banking	168	100
P.T. Koexim Mandiri Finance	Indonesia	Leasing and Factoring	25	85
Kexim Vietnam Leasing Co., Ltd.	Vietnam	Leasing and Lending	58	100

Property

The Bank's head office is located at 38 Eunhaeng-ro, Yeongdeungpo-gu, Seoul 07242, Korea, a 45,715 square meter building on a site of 9,110 square meters and owned by the Bank. In addition to the head office, the Bank owns a staff training center located near Seoul on a site of 47,881 square meters and a marine finance center, a 4,423 square meter building, located in Busan on a site of 556 square meters. The Bank also maintains 13 branches in Busan, Gwangju, Daegu, Changwon, Daejeon, Suwon, Incheon, Ulsan, Cheongju, Jeonju, Gumi, Yeosu and Wonju. The Bank's domestic branch offices and overseas representative offices are located in facilities held under long-term leases.

Management and Employees

Management

The Bank's governance and management is the responsibility of its Board of Directors, which has authority to decide important matters relating to its business. The Board of Directors is chaired by the Bank's President and is comprised of seven members: the Chairman and President, the Vice Chairman and Chief Operating Officer, the Executive Director and four Non-standing Executive Directors. The Auditor may attend and state his/her opinion at the meetings of the Board of Directors. The President of Korea appoints the Bank's President upon the recommendation of the Minister of Economy and Finance. The Minister of Economy and Finance appoints the Vice Chairman and all Executive Directors upon the recommendation of the Bank's President. The Minister of Economy and Finance appoints the Auditor. All Board members and the Auditor serve for three years and are eligible for re-appointment for successive terms of office.

The members of the Board of Directors are currently as follows:

Name	Board Member Since	Position
Moon-kyu Bang	October 30, 2019	Chairman and President
Woo-seog Kwon	May 15, 2021	Vice Chairman and Chief Operating Officer
Tae-soo Kim	May 15, 2021	Executive Director
Bok-hwan Yu	January 6, 2020	Non-standing Executive Director
Tammy Chung	January 6, 2020	Non-standing Executive Director
Jaimin Lee	September 18, 2021	Non-standing Executive Director
Tae-ho Yun	September 18, 2021	Non-standing Executive Director

The Bank's basic policy guidelines for activities are established by the Operations Committee. According to the By-laws, the Operations Committee is composed of officials nominated as follows:

- President of KEXIM;
- official of the Ministry of Economy and Finance, nominated by the Minister of Economy and Finance;
- official of the Ministry of Foreign Affairs, nominated by the Minister of Foreign Affairs;
- official of the Ministry of Trade, Industry & Energy, nominated by the Minister of Trade, Industry & Energy;
- official of the Ministry of Land, Infrastructure and Transport, nominated by the Minister of Land, Infrastructure and Transport;
- official of the Ministry of Oceans and Fisheries, nominated by the Minister of Oceans and Fisheries;
- official of the Financial Services Commission, nominated by the Chairman of the Financial Services Commission;
- executive director of The Bank of Korea, nominated by the Governor of The Bank of Korea;
- executive director of the Korea Federation of Banks, nominated by the Chairman of the Korea Federation of Banks;
- representative of an exporters' association (Korea International Trade Association), nominated by the Minister of Economy and Finance after consultation with the Minister of Trade, Industry & Energy;

- executive director of the Korea Trade Insurance Corporation established under the Trade Insurance Act, nominated by the Chairman and President of the Korea Trade Insurance Corporation; and
- up to two persons who have extensive knowledge and experience in international economic cooperation work, recommended by the Bank's President and appointed by the Minister of Economy and Finance.

The members of the Operations Committee are currently as follows:

Name	Member Since	Position
Moon-kyu Bang	October 30, 2019	Chairman and President of KEXIM
Il Young Park	February 23, 2022	Deputy Minister for International Affairs, Ministry of Economy and Finance
Seong-Deok Yun	February 28, 2022	Deputy Minister for Economic Affairs, Ministry of Foreign Affairs
Dong-min Moon	March 26, 2021	Deputy Minister for International Trade and Investment, Ministry of Trade, Industry & Energy
Hyuk Jin Kwon	July 10, 2020	Assistant Minister for Infrastructure Affairs, Ministry of Land, Infrastructure and Transport
Jae-Woo Jun	February 9, 2021	Director General of Shipping and Logistics Bureau, Ministry of Oceans and Fisheries
Se-Hoon Lee	July 30, 2021	Secretary General, Financial Services Commission
SangHyeong Lee	July 22, 2021	Deputy Governor, The Bank of Korea
Ho Hyoung Lee	March 9, 2020	Senior Executive Director, Korea Federation of Banks
Kwan Sup Lee	February 26, 2021	Executive Vice Chairman, Korea International Trade Association
Ho Ill Kim	March 22, 2022	Deputy President, Korea Trade Insurance Corporation
Taeyoon Sung	May 4, 2021	Professor, Yonsei University
Hae Sun Park	February 16, 2022	Professor, Konkuk University

Employees

As of December 31, 2021, the Bank had 1,194 employees, among whom 966 employees were members of the Bank's labor union. The Bank have never experienced a work stoppage of a serious nature. Every two years, the management and union negotiate and enter into a collective bargaining agreement. The most recent collective bargaining agreement was entered into in September 2020.

Tables and Supplementary Information

A. External Debt of the Bank

(1) External Bonds of the Bank

Currency	Original Principal Amount	Interest Rate (%)	Issue Date	Maturity Date	Principal Amount Outstanding as of December 31, 2021
USD	1,000,000,000	5	January 11, 2012	April 11, 2022*	1,000,000,000
USD	100,000,000	6.78	January 27, 2012	January 27, 2027	100,000,000
USD	50,000,000	4.369	August 27, 2013	February 27, 2025	50,000,000
USD	25,000,000	3.81	October 30, 2013	October 30, 2023	25,000,000
USD	45,000,000	3.81	October 30, 2013	October 30, 2023	45,000,000
USD	49,000,000	3.81	October 30, 2013	October 30, 2023	49,000,000
USD	20,000,000	3.9	October 30, 2013	October 30, 2023	20,000,000
USD	50,000,000	3.66	November 06, 2013	November 06, 2023	50,000,000
USD	50,000,000	3.87	November 06, 2013	November 06, 2025	50,000,000
USD	20,000,000	3.67	November 06, 2013	November 06, 2023	20,000,000
USD	40,000,000	4	November 07, 2013	November 07, 2025	40,000,000
USD	40,000,000	3.73	November 07, 2013	November 07, 2023	40,000,000
USD	50,000,000	3.91	November 07, 2013	November 07, 2025	50,000,000
USD	20,000,000	3.71	November 07, 2013	November 07, 2023	20,000,000
USD	20,000,000	4.03	November 08, 2013	November 08, 2025	20,000,000
USD	30,000,000	4.03	November 08, 2013	November 08, 2025	30,000,000
USD	50,000,000	4.03	November 08, 2013	November 08, 2025	50,000,000

Currency	Original Principal Amount	Interest Rate (%)	Issue Date	Maturity Date	Principal Amount Outstanding as of December 31, 2021
USD	50,000,000	3.76	November 08, 2013	November 08, 2023	50,000,000
USD	30,000,000	4.03	November 12, 2013	November 12, 2025	30,000,000
USD	35,000,000	3.786	November 12, 2013	November 12, 2023	35,000,000
USD	750,000,000	4	January 14, 2014	January 14, 2024	750,000,000
USD	220,000,000	3.95	January 27, 2014	January 27, 2024	220,000,000
USD	50,000,000	4.14	January 28, 2014	January 28, 2026	50,000,000
USD	50,000,000	4.14	February 03, 2014	February 03, 2026	50,000,000
USD	50,000,000	4.14	February 03, 2014	February 03, 2026	50,000,000
USD	50,000,000	4.07	February 04, 2014	February 04, 2026	50,000,000
USD	50,000,000	4.06	February 04, 2014	February 04, 2026	50,000,000
USD	20,000,000	4.02	February 05, 2014	February 05, 2026	20,000,000
USD	30,000,000	4	February 13, 2014	February 13, 2026	30,000,000
USD	30,000,000	4	February 18, 2014	February 18, 2026	30,000,000
USD	40,000,000	4.04	February 19, 2014	February 19, 2026	40,000,000
USD	30,000,000	3.3	July 07, 2014	July 07, 2024	30,000,000
USD	500,000,000	3.25	August 12, 2014	August 12, 2026	500,000,000
USD	50,000,000	3.409	October 24, 2014	October 24, 2029	50,000,000
USD	50,000,000	3.409	October 24, 2014	October 24, 2029	50,000,000
USD	50,000,000	3.402	October 29, 2014	October 29, 2029	50,000,000
USD	50,000,000	3.23	October 30, 2014	October 30, 2026	50,000,000
USD	30,000,000	3.463	October 31, 2014	October 31, 2029	30,000,000
USD	50,000,000	3.5	November 06, 2014	November 06, 2029	50,000,000
USD	50,000,000	3.5	November 19, 2014	November 19, 2029	50,000,000
USD	50,000,000	3.53	November 20, 2014	November 20, 2029	50,000,000
USD	50,000,000	3.5	November 25, 2014	November 26, 2029	50,000,000
USD	50,000,000	3.35	November 28, 2014	November 28, 2026	50,000,000
USD	1,250,000,000	2.875	January 21, 2015	January 21, 2025	1,250,000,000
USD	50,000,000	2.62	February 27, 2015	February 27, 2023	50,000,000
USD	50,000,000	3.02	March 04, 2015	March 04, 2030	50,000,000
USD	50,000,000	3.02	March 04, 2015	March 04, 2030	50,000,000
USD	30,000,000	3.044	March 06, 2015	March 06, 2030	30,000,000
USD	30,000,000	3.044	March 06, 2015	March 06, 2030	30,000,000
USD	50,000,000	2.81	March 06, 2015	March 06, 2025	50,000,000
USD	40,000,000	3.087	March 10, 2015	March 10, 2030	40,000,000
USD	50,000,000	2.845	March 10, 2015	March 10, 2025	50,000,000
USD	50,000,000	2.8	March 17, 2015	March 17, 2025	50,000,000
USD	50,000,000	2.7	April 01, 2015	April 01, 2027	50,000,000
USD	50,000,000	2.4075	May 08, 2015	May 08, 2023	50,000,000
USD	50,000,000	2.41	May 11, 2015	May 11, 2023	50,000,000
USD	50,000,000	2.4125	May 12, 2015	May 12, 2023	50,000,000
USD	50,000,000	2.675	May 27, 2015	May 27, 2023	50,000,000
USD	50,000,000	2.552	May 27, 2015	May 27, 2023	50,000,000
USD	50,000,000	2.62	May 28, 2015	May 28, 2023	50,000,000
USD	400,000,000	3.25	June 30, 2015	August 12, 2026	400,000,000
USD	50,000,000	3.45	August 04, 2015	August 04, 2030	50,000,000
USD	30,000,000	3.33	August 04, 2015	August 04, 2027	30,000,000
USD	50,000,000	3.047	September 01, 2015	September 01, 2025	50,000,000
USD	50,000,000	3.32	September 03, 2015	September 03, 2030	50,000,000
USD	1,000,000,000	3.25	November 10, 2015	November 10, 2025	1,000,000,000
USD	50,000,000	3.95	January 21, 2016	January 21, 2031	50,000,000
USD	50,000,000	3.95	January 21, 2016	January 21, 2031	50,000,000
USD	50,000,000	3.94	February 11, 2016	February 11, 2031	50,000,000
USD	50,000,000	3.94	February 11, 2016	February 11, 2031	50,000,000
USD	50,000,000	3.83	February 16, 2016	February 16, 2031	50,000,000
USD	50,000,000	2.6	February 25, 2016	February 25, 2026	50,000,000
USD	50,000,000	2.6	February 25, 2016	February 25, 2026	50,000,000
USD	1,000,000,000	2.625	May 26, 2016	May 26, 2026	1,000,000,000
USD	50,000,000	2.38	July 01, 2016	July 01, 2026	50,000,000
USD	50,000,000	2.52	July 22, 2016	July 22, 2031	50,000,000
USD	50,000,000	2.085	July 22, 2016	July 22, 2026	50,000,000
USD	50,000,000	3.09	August 02, 2016	August 02, 2031	50,000,000
USD	50,000,000	2.205	August 02, 2016	August 02, 2026	50,000,000
USD	50,000,000	2.29	August 03, 2016	August 03, 2026	50,000,000
USD	50,000,000	3.1	August 09, 2016	August 09, 2031	50,000,000
USD	30,000,000	2.27	August 16, 2016	August 16, 2026	30,000,000
USD	50,000,000	2.29	August 17, 2016	August 17, 2026	50,000,000
USD	45,000,000	3.25	August 19, 2016	August 19, 2031	45,000,000
USD	50,000,000	2.01	August 30, 2016	August 30, 2024	50,000,000
USD	50,000,000	3.08	September 30, 2016	September 30, 2031	50,000,000
USD	700,000,000	2.375	October 21, 2016	April 21, 2027	700,000,000
USD	50,000,000	2.74	November 17, 2016	November 17, 2028	50,000,000
USD	50,000,000	3.23	December 12, 2016	December 12, 2028	50,000,000
USD	50,000,000	3.2	December 14, 2016	December 14, 2028	50,000,000
USD	30,000,000	3.42	January 06, 2017	January 06, 2029	30,000,000
USD	30,000,000	3.42	January 06, 2017	January 06, 2029	30,000,000
USD	50,000,000	3.47	January 12, 2017	January 12, 2032	50,000,000
USD	30,000,000	3.4	January 18, 2017	January 18, 2032	30,000,000

Currency	Original Principal Amount	Interest Rate (%)	Issue Date	Maturity Date	Principal Amount Outstanding as of December 31, 2021
USD	50,000,000	3.38	January 18, 2017	January 18, 2032	50,000,000
USD	50,000,000	3.33	January 19, 2017	January 19, 2032	50,000,000
USD	500,000,000	LIBOR 3M+0.875	January 25, 2017	January 25, 2022*	500,000,000
USD	500,000,000	2.75	January 25, 2017	January 25, 2022*	500,000,000
USD	50,000,000	3.475	February 17, 2017	February 17, 2032	50,000,000
USD	50,000,000	3.475	February 17, 2017	February 17, 2032	50,000,000
USD	50,000,000	LIBOR 3M+0.72	March 23, 2017	March 23, 2022*	50,000,000
USD	50,000,000	3.54	April 24, 2017	April 26, 2032	50,000,000
USD	50,000,000	3.25	April 24, 2017	April 24, 2029	50,000,000
USD	400,000,000	LIBOR 3M+0.80	July 05, 2017	July 05, 2022	400,000,000
USD	50,000,000	3.58	August 17, 2017	August 17, 2037	50,000,000
USD	50,000,000	3.56	August 18, 2017	August 18, 2037	50,000,000
USD	200,000,000	LIBOR 3M+4.10	October 11, 2017	October 11, 2047	200,000,000
USD	50,000,000	3.65	October 25, 2017	October 25, 2047	50,000,000
USD	50,000,000	3.65	October 25, 2017	October 25, 2047	50,000,000
USD	600,000,000	LIBOR 3M+0.925	November 01, 2017	November 01, 2022	600,000,000
USD	1,000,000,000	3	November 01, 2017	November 01, 2022	1,000,000,000
USD	50,000,000	3.55	November 08, 2017	November 08, 2037	50,000,000
USD	50,000,000	3.55	November 08, 2017	November 08, 2037	50,000,000
USD	50,000,000	3.65	November 17, 2017	November 17, 2047	50,000,000
USD	50,000,000	3.65	November 17, 2017	November 17, 2047	50,000,000
USD	20,000,000	3.72	November 17, 2017	November 17, 2047	20,000,000
USD	50,000,000	3.72	November 17, 2017	November 17, 2047	50,000,000
USD	50,000,000	3.65	November 27, 2017	November 27, 2047	50,000,000
USD	50,000,000	3.7	December 06, 2017	December 06, 2047	50,000,000
USD	50,000,000	3.92	February 05, 2018	February 05, 2048	50,000,000
USD	30,000,000	LIBOR 3M+0.60	March 20, 2018	March 20, 2023	30,000,000
USD	400,000,000	LIBOR 3M+0.74	March 22, 2018	March 22, 2023	400,000,000
USD	700,000,000	LIBOR 3M+0.775	June 01, 2018	June 01, 2023	700,000,000
USD	1,400,000	2.8	July 13, 2018	July 21, 2022	1,400,000
USD	30,200,000	3.09	November 05, 2018	November 08, 2023	30,200,000
USD	500,000,000	3.625	November 27, 2018	November 27, 2023	500,000,000
USD	150,000,000	LIBOR 3M+0.44	January 28, 2019	January 28, 2022*	150,000,000
USD	21,900,000	2.64	February 27, 2019	February 22, 2024	21,900,000
USD	50,000,000	LIBOR 3M+0.39	March 14, 2019	March 14, 2022*	50,000,000
USD	50,000,000	LIBOR 3M+0.39	March 15, 2019	March 15, 2022*	50,000,000
USD	500,000,000	LIBOR 3M+0.525	June 25, 2019	June 25, 2022	500,000,000
USD	500,000,000	2.375	June 25, 2019	June 25, 2024	500,000,000
USD	21,200,000	1.3	August 29, 2019	August 28, 2024	21,200,000
USD	45,000,000	LIBOR 3M+0.39	September 6, 2019	September 6, 2022	45,000,000
USD	50,000,000	LIBOR 3M+0.40	September 9, 2019	September 9, 2022	50,000,000
USD	50,000,000	LIBOR 3M+0.42	October 8, 2019	October 7, 2022	50,000,000
USD	50,000,000	LIBOR 3M+0.42	October 10, 2019	October 11, 2022	50,000,000
USD	50,000,000	LIBOR 3M+0.34	October 11, 2019	February 11, 2022*	50,000,000
USD	50,000,000	LIBOR 3M+0.34	October 11, 2019	February 11, 2022*	50,000,000
USD	40,000,000	LIBOR 3M+0.42	October 31, 2019	October 31, 2022	40,000,000
USD	50,000,000	LIBOR 3M+0.45	November 12, 2019	November 12, 2022	50,000,000
USD	500,000,000	1.88	February 12, 2020	February 12, 2025	500,000,000
USD	50,000,000	LIBOR 3M+0.30	March 11, 2020	March 11, 2022*	50,000,000
USD	50,000,000	LIBOR 3M+0.30	March 11, 2020	March 11, 2022*	50,000,000
USD	50,000,000	LIBOR 3M+0.36	March 17, 2020	March 17, 2022*	50,000,000
USD	425,000,000	1.38	March 20, 2020	March 20, 2025	425,000,000
USD	50,000,000	LIBOR 3M+1.35	April 24, 2020	July 24, 2025	50,000,000
USD	700,000,000	LIBOR 3M+1.20	April 27, 2020	April 27, 2023	700,000,000
USD	50,000,000	LIBOR 3M+0.94	June 2, 2020	June 2, 2025	50,000,000
USD	100,000,000	1.22	June 5, 2020	June 5, 2024	100,000,000
USD	100,000,000	1.33	June 5, 2020	June 5, 2025	100,000,000
USD	100,000,000	0.71	July 24, 2020	July 24, 2022	100,000,000
USD	50,000,000	0.65	July 28, 2020	July 28, 2022	50,000,000
USD	50,000,000	LIBOR 3M+0.40	August 3, 2020	February 3, 2022*	50,000,000
USD	50,000,000	0.64	August 5, 2020	August 5, 2022	50,000,000
USD	150,000,000	0.62	August 12, 2020	August 12, 2022	150,000,000
USD	50,000,000	LIBOR 3M+0.52	August 12, 2020	August 12, 2023	50,000,000
USD	100,000,000	0.83	August 19, 2020	August 19, 2024	100,000,000
USD	400,000,000	0.75	September 21, 2020	September 21, 2025	400,000,000
USD	500,000,000	1.25	September 21, 2020	September 21, 2030	500,000,000
USD	50,000,000	0.00	October 29, 2020	October 29, 2050	50,000,000
USD	50,000,000	0.00	December 15, 2020	December 15, 2050	50,000,000
USD	50,000,000	0.00	December 7, 2020	December 7, 2050	50,000,000
USD	50,000,000	0.00	December 7, 2020	December 7, 2050	50,000,000
USD	50,000,000	0.52	November 2, 2020	November 2, 2022	50,000,000
USD	50,000,000	0.50	November 2, 2020	November 2, 2022	50,000,000
USD	300,000,000	0.60	November 16, 2020	November 16, 2023	300,000,000
USD	200,000,000	0.38	January 4, 2021	January 4, 2022*	200,000,000
USD	500,000,000	0.375	February 9, 2021	February 9, 2024	500,000,000
USD	200,000,000	0.625	February 9, 2021	February 9, 2026	200,000,000
USD	300,000,000	1.375	February 9, 2021	February 9, 2031	300,000,000

Currency	Original Principal Amount	Interest Rate (%)	Issue Date	Maturity Date	Principal Amount Outstanding as of December 31, 2021
USD	500,000,000	0.625	February 9, 2021	February 9, 2026	500,000,000
USD	50,000,000	1.375	March 9, 2021	March 20, 2025	50,000,000
USD	50,000,000	0.45	March 15, 2021	March 15, 2024	50,000,000
USD	50,000,000	0.45	March 15, 2021	March 15, 2024	50,000,000
USD	240,000,000	USD SOFR ON + 0.3	March 11, 2021	March 11, 2024	240,000,000
USD	50,000,000	1.375	March 18, 2021	March 20, 2025	50,000,000
USD	50,000,000	0.39	March 19, 2021	March 19, 2023	50,000,000
USD	300,000,000	1.125	March 24, 2021	March 24, 2026	300,000,000
USD	50,000,000	0.62	April 8, 2021	April 8, 2024	50,000,000
USD	50,000,000	0.65	April 13, 2021	April 12, 2024	50,000,000
USD	50,000,000	USD SOFR ON + 0.22	April 14, 2021	October 14, 2022	50,000,000
USD	50,000,000	3.07	April 16, 2021	April 16, 2051	50,000,000
USD	400,000,000	USD SOFR ON + 0.32	April 29, 2021	April 29, 2024	400,000,000
USD	200,000,000	USD SOFR ON + 0.47	May 6, 2021	May 6, 2026	200,000,000
USD	200,000,000	USD SOFR ON + 0.37	May 27, 2021	April 27, 2024	200,000,000
USD	50,000,000	2.95	June 10, 2021	June 10, 2051	50,000,000
USD	750,000,000	0.625	June 29, 2021	June 29, 2024	750,000,000
USD	750,000,000	1.125	June 29, 2021	December 29, 2026	750,000,000
USD	500,000,000	2.5	June 29, 2021	June 29, 2041	500,000,000
USD	50,000,000	1.375	July 13, 2021	March 20, 2025	50,000,000
USD	50,000,000	USD SOFR Index+0.25	August 5, 2021	August 5, 2024	50,000,000
USD	50,000,000	USD SOFR Index+0.25	August 5, 2021	August 5, 2024	50,000,000
USD	300,000,000	0.16	September 7, 2021	September 7, 2022	300,000,000
USD	300,000,000	0.19	September 9, 2021	September 9, 2022	300,000,000
USD	50,000,000	0.915	September 9, 2021	September 9, 2025	50,000,000
USD	50,000,000	1.125	September 10, 2021	March 24, 2026	50,000,000
USD	40,000,000	2.8	September 16, 2021	September 16, 2051	40,000,000
USD	50,000,000	2.8	October 1, 2021	October 2, 2051	50,000,000
USD	700,000,000	1.75	October 19, 2021	October 19, 2028	700,000,000
USD	300,000,000	1.75	October 19, 2021	October 19, 2028	300,000,000
USD	50,000,000	2.9	October 27, 2021	October 27, 2051	50,000,000
USD	100,000,000	0.0	December 9, 2021	September 9, 2022	100,000,000
		Subtotal in Original Currency			USD 33,325,463,200
		Subtotal in Equivalent Amount of Won[1]			W 39,507,336,623,600
HKD	300,000,000	2.28	April 13, 2015	April 13, 2022*	300,000,000
HKD	233,000,000	2.1	November 03, 2016	November 03, 2023	233,000,000
HKD	252,000,000	2.405	October 26, 2017	October 26, 2022	252,000,000
HKD	243,000,000	2.69	December 14, 2017	December 14, 2022	243,000,000
HKD	235,000,000	2.87	February 27, 2018	February 27, 2023	235,000,000
HKD	325,000,000	3.13	April 26, 2018	April 26, 2023	325,000,000
HKD	380,000,000	2.0775	September 25, 2019	September 25, 2024	380,000,000
HKD	390,000,000	2.05	September 26, 2019	September 26, 2024	390,000,000
HKD	320,000,000	2.34	March 26, 2020	March 26, 2025	320,000,000
HKD	385,000,000	2.22	April 14, 2020	April 14, 2025	385,000,000
HKD	380,000,000	HIBOR 3M+0.70	June 2, 2020	June 2, 2022	380,000,000
HKD	350,000,000	HIBOR 3M+0.70	June 1, 2020	June 1, 2022	350,000,000
HKD	380,000,000	0.50	April 16, 2021	October 16, 2023	380,000,000
HKD	380,000,000	0.50	April 16, 2021	October 16, 2023	380,000,000
HKD	1,000,000,000	0.52	April 27, 2021	January 26, 2024	1,000,000,000
HKD	380,000,000	0.2725	June 1, 2021	June 1, 2023	380,000,000
HKD	310,000,000	0.70	July 20, 2021	July 20, 2025	310,000,000
HKD	310,000,000	0.97	July 21, 2021	July 21, 2026	310,000,000
HKD	345,000,000	0.90	August 13, 2021	August 13, 2026	345,000,000
HKD	320,000,000	0.98	August 18, 2021	August 18, 2026	320,000,000
HKD	320,000,000	1.00	August 19, 2021	August 19, 2026	320,000,000
		Subtotal in Original Currency			HKD 7,538,000,000
		Subtotal in Equivalent Amount of Won[2]			₩ 1,146,002,140,000
MXN................	7,000,000,000	7.93	August 8, 2019	July 30, 2026	7,000,000,000
MXN................	5,000,000,000	MXN TIIE 28D+0.20	January 26, 2021	January 20, 2026	5,000,000,000
		Subtotal in Original Currency			MXN 12,000,000,000
		Subtotal in Equivalent Amount of Won[3]			₩ 695,040,000,000
BRL.................	131,400,000	8	July 13, 2018	August 03, 2022	131,400,000
BRL.................	200,000,000	3.73	November 3, 2020	December 23, 2022	200,000,000
BRL.................	170,000,000	3.79	November 3, 2020	December 23, 2022	170,000,000
BRL.................	250,000,000	4.525	March 18, 2021	September 20, 2022	250,000,000
BRL.................	240,000,000	4.58	March 19, 2021	September 20, 2022	240,000,000
BRL.................	274,500,000	4.83	April 30, 2021	December 15, 2022	274,500,000
BRL.................	250,000,000	6.42	July 19, 2021	December 15, 2022	250,000,000
BRL.................	250,000,000	6.45	July 26, 2021	December 15, 2022	250,000,000
BRL.................	1,041,500,000	6.405	July 29, 2021	January 20, 2023	1,041,500,000
BRL.................	850,000,000	7.149	August 11, 2021	February 3, 2023	850,000,000
BRL.................	390,000,000	10.93	November 26, 2021	November 25, 2022	390,000,000
BRL.................	250,000,000	11.09	November 30, 2021	November 30, 2023	250,000,000

Currency	Original Principal Amount	Interest Rate (%)	Issue Date	Maturity Date	Principal Amount Outstanding as of December 31, 2021
		Subtotal in Original Currency			BRL 4,297,400,000
		Subtotal in Equivalent Amount of Won[4]			₩ 914,357,798,000
EUR	117,000,000	3.875	July 12, 2012	July 12, 2032	117,000,000
EUR	30,000,000	3.6	July 19, 2012	July 19, 2027	30,000,000
EUR	750,000,000	0.5	May 30, 2017	May 30, 2022	750,000,000
EUR	750,000,000	0.625	July 11, 2018	July 11, 2023	750,000,000
EUR	25,000,000	1.64	August 06, 2018	August 06, 2030	25,000,000
EUR	25,000,000	1.64	August 06, 2018	August 06, 2030	25,000,000
EUR	30,000,000	1.53	August 13, 2018	August 13, 2028	30,000,000
EUR	20,000,000	1.54	August 23, 2018	August 23, 2028	20,000,000
EUR	750,000,000	0.375	March 26, 2019	March 26, 2024	750,000,000
EUR	150,000,000	0.137	December 16, 2019	December 16, 2024	150,000,000
EUR	700,000,000	0.83	April 27, 2020	April 27, 2025	700,000,000
EUR	500,000,000	0.00	September 21, 2020	September 21, 2023	500,000,000
EUR	42,000,000	EURIBOR 3M+0.80	November 5, 2020	November 7, 2022	42,000,000
EUR	850,000,000	0.00	October 19, 2021	October 19, 2024	850,000,000
		Subtotal in Original Currency			EUR 4,799,000,000
		Subtotal in Equivalent Amount of Won[5]			₩ 6,441,889,660,000
THB	1,500,000,000	3.9	August 27, 2012	August 27, 2022	1,500,000,000
THB	2,800,000,000	4.34	March 11, 2013	March 11, 2023	2,800,000,000
THB	500,000,000	4.78	July 31, 2013	July 31, 2025	500,000,000
THB	1,500,000,000	4.78	July 31, 2013	July 31, 2025	1,500,000,000
THB	1,580,000,000	1.06	June 9, 2020	June 9, 2025	1,580,000,000
		Subtotal in Original Currency			THB 7,880,000,000
		Subtotal in Equivalent Amount of Won[6]			₩ 280,291,600,000
CHF	45,000,000	2.1	September 05, 2013	December 30, 2023	45,000,000
CHF	5,000,000	2.1	September 06, 2013	December 30, 2023	5,000,000
CHF	250,000,000	0.17	July 18, 2017	July 18, 2025	250,000,000
CHF	150,000,000	0.253	March 06, 2018	March 06, 2023	150,000,000
CHF	350,000,000	0.253	March 06, 2018	March 06, 2023	350,000,000
CHF	300,000,000	0.3825	July 11, 2018	July 11, 2024	300,000,000
CHF	150,000,000	0.0	November 27, 2019	May 27, 2025	150,000,000
		Subtotal in Original Currency			CHF 1,250,000,000
		Subtotal in Equivalent Amount of Won[7]			₩ 1,621,837,500,000
AUD	20,000,000	6.8	April 11, 2012	April 11, 2022*	20,000,000
AUD	22,000,000	5.975	August 08, 2013	August 08, 2023	22,000,000
AUD	21,000,000	5.15	November 24, 2014	November 24, 2029	21,000,000
AUD	200,000,000	4	December 07, 2016	June 07, 2027	200,000,000
AUD	50,000,000	4	December 15, 2016	June 07, 2027	50,000,000
AUD	100,000,000	4	February 14, 2017	June 07, 2027	100,000,000
AUD	250,000,000	BBSW 3M+1.17	February 14, 2017	February 14, 2022*	250,000,000
AUD	150,000,000	3.5	February 14, 2017	February 14, 2022*	150,000,000
AUD	60,000,000	3.98	October 10, 2017	October 10, 2027	60,000,000
AUD	40,000,000	3.4	December 08, 2017	December 08, 2024	40,000,000
AUD	500,000,000	BBSW 3M+0.95	October 30, 2018	October 30, 2023	500,000,000
AUD	91,800,000	2.6	November 05, 2018	November 08, 2023	91,800,000
AUD	33,800,000	2.2	February 27, 2019	February 22, 2024	33,800,000
AUD	500,000,000	BBSW 3M+0.85	May 23, 2019	May 23, 2024	500,000,000
AUD	34,100,000	0.93	August 29, 2019	August 28, 2024	34,100,000
AUD	400,000,000	BBSW 3M+0.8	October 08, 2019	October 08, 2024	400,000,000
AUD	72,600,000	1.525	November 15, 2019	November 15, 2022	72,600,000
AUD	142,900,000	2.51	December 06, 2019	December 06, 2049	142,900,000
AUD	208,000,000	3.00	April 14, 2020	April 16, 2035	208,000,000
AUD	500,000,000	BBSW 3M+1.07	May 29, 2020	May 29, 2023	500,000,000
AUD	200,000,000	1.31	May 29, 2020	May 29, 2023	200,000,000
AUD	65,000,000	2.65	April 7, 2021	April 7, 2036	65,000,000
AUD	55,000,000	BBSW 3M +0.8	November 22, 2021	November 22, 2031	55,000,000
AUD	60,000,000	2.7	December 22, 2021	December 22, 2036	60,000,000
		Subtotal in Original Currency			AUD 3,776,200,000
		Subtotal in Equivalent Amount of Won[8]			₩ 3,243,340,418,000
INR	3,175,000,000	6.9	February 07, 2018	February 07, 2023	3,175,000,000
INR	1,900,000,000	6.75	February 09, 2018	August 09, 2022	1,900,000,000
INR	3,200,000,000	6.75	February 09, 2018	August 09, 2022	3,200,000,000
INR	3,175,000,000	6.9	February 12, 2018	February 07, 2023	3,175,000,000
INR	3,200,000,000	6.9	March 09, 2018	February 07, 2023	3,200,000,000
INR	3,200,000,000	6.75	April 03, 2018	August 09, 2022	3,200,000,000
INR	3,250,000,000	7.15	April 18, 2018	April 18, 2025	3,250,000,000
INR	16,504,000,000	4.89	August 9, 2021	August 9, 2023	16,504,000,000
		Subtotal in Original Currency			INR 37,604,000,000
		Subtotal in Equivalent Amount of Won[9]			₩ 599,031,720,000
CNY	120,000,000	4.55	August 23, 2013	August 23, 2023	120,000,000

Currency	Original Principal Amount	Interest Rate (%)	Issue Date	Maturity Date	Principal Amount Outstanding as of December 31, 2021
CNY	300,000,000	4.5	November 06, 2013	November 06, 2023	300,000,000
CNY	500,000,000	4.5	January 27, 2014	January 27, 2024	500,000,000
CNY	500,000,000	4.2	February 26, 2015	February 26, 2022*	500,000,000
CNY	200,000,000	5.535	March 17, 2017	March 17, 2022*	200,000,000
CNY	200,000,000	4.765	May 31, 2018	May 31, 2023	200,000,000
CNY	200,000,000	4.14	September 04, 2018	September 04, 2023	200,000,000
CNY	200,000,000	3.58	April 23, 2019	April 23, 2024	200,000,000
CNY	302,000,000	2.60	July 29, 2020	July 29, 2023	302,000,000
CNY	280,000,000	2.60	July 30, 2020	July 30, 2023	280,000,000
CNY	345,000,000	2.65	August 3, 2020	August 3, 2023	345,000,000
CNY	345,000,000	2.80	August 13, 2020	August 13, 2022	345,000,000
CNY	270,000,000	3.05	November 5, 2020	November 5, 2025	270,000,000
CNY	1,500,000,000	2.8	March 3, 2021	March 3, 2024	1,500,000,000
CNY	300,000,000	2.85	March 16, 2021	March 16, 2022*	300,000,000
CNY	300,000,000	2.85	March 25, 2021	March 25, 2024	300,000,000
		Subtotal in Original Currency			CNY 6,373,000,000
		Subtotal in Equivalent Amount of Won[10]			₩ 1,187,034,980,000
IDR	670,000,000,000	7.25	December 07, 2017	December 07, 2024	670,000,000,000
IDR	630,000,000,000	7.25	January 19, 2018	December 07, 2024	630,000,000,000
IDR	625,000,000,000	7.25	February 05, 2018	December 07, 2024	625,000,000,000
IDR	677,500,000,000	6.36	February 14, 2018	February 14, 2023	677,500,000,000
IDR	685,500,000,000	6.5	March 07, 2018	March 07, 2025	685,500,000,000
IDR	645,000,000,000	7.25	March 07, 2018	December 07, 2024	645,000,000,000
IDR	645,000,000,000	7.25	March 12, 2018	December 07, 2024	645,000,000,000
IDR	640,000,000,000	7.25	April 16, 2018	December 07, 2024	640,000,000,000
IDR	635,000,000,000	7.25	April 19, 2018	December 07, 2024	635,000,000,000
IDR	700,000,000,000	8	February 28, 2019	May 15, 2024	700,000,000,000
IDR	675,000,000,000	8	April 03, 2019	May 15, 2024	675,000,000,000
IDR	700,000,000,000	6.65	September 25, 2019	May 15, 2023	700,000,000,000
IDR	700,000,000,000	6.71	November 25, 2019	November 25, 2024	700,000,000,000
IDR	705,000,000,000	6.7	December 02, 2019	December 02, 2024	705,000,000,000
IDR	700,000,000,000	5.75	March 5, 2021	March 5, 2024	700,000,000,000
IDR	700,000,000,000	5.10	April 21, 2021	April 21, 2023	700,000,000,000
		Subtotal in Original Currency			IDR 10,733,000,000,000
		Subtotal in Equivalent Amount of Won[11]			₩ 891,912,300,000
PEN	61,000,000	6.875	September 07, 2010	September 07, 2022	61,000,000
PEN	47,000,000	6.875	July 08, 2011	September 07, 2022	47,000,000
PEN	20,000,000	6.875	July 19, 2011	September 07, 2022	20,000,000
PEN	15,000,000	6.875	August 05, 2011	September 07, 2022	15,000,000
PEN	54,500,000	7.25	October 25, 2011	October 25, 2041	54,500,000
PEN	13,600,000	7.15	November 04, 2011	November 04, 2041	13,600,000
PEN	54,500,000	6.875	November 21, 2011	September 07, 2022	54,500,000
PEN	105,000,000	4.14	November 21, 2019	November 21, 2024	105,000,000
PEN	102,000,000	4.15	December 10, 2019	December 10, 2024	102,000,000
		Subtotal in Original Currency			PEN 472,600,000
		Subtotal in Equivalent Amount of Won[12]			₩ 140,390,556,000
SGD................	200,000,000	2.318	September 27, 2017	September 27, 2022	200,000,000
		Subtotal in Original Currency			SGD 200,000,000
		Subtotal in Equivalent Amount of Won[13]			₩ 175,428,000,000
NZD	400,000,000	4	March 09, 2017	March 09, 2022*	400,000,000
NZD	54,000,000	2.645	June 8, 2021	June 8, 2031	54,000,000
NZD	60,000,000	2.62	September 15, 2021	September 15, 2031	60,000,000
NZD	60,000,000	3.085	November 24, 2021	November 24, 2026	60,000,000
		Subtotal in Original Currency			NZD 574,000,000
		Subtotal in Equivalent Amount of Won[14]			₩ 464,733,360,000
ZAR	700,000,000	8.5	May 28, 2019	May 28, 2025	700,000,000
ZAR	600,000,000	8.43	November 27, 2019	November 27, 2026	600,000,000
ZAR	600,000,000	8.20	March 19, 2020	March 19, 2030	600,000,000
ZAR	715,000,000	8.05	September 28, 2021	September 28, 2031	715,000,000
		Subtotal in Original Currency			ZAR 2,615,000,000
		Subtotal in Equivalent Amount of Won[15]			₩ 194,529,850,000
CAD	65,000,000	3.16	February 16, 2017	February 16, 2032	65,000,000
		Subtotal in Original Currency			CAD 65,000,000
		Subtotal in Equivalent Amount of Won[16]			₩ 60,489,650,000
NOK................	250,000,000	4.55	June 26, 2013	June 26, 2025	250,000,000
NOK................	250,000,000	4.55	June 26, 2013	June 26, 2025	250,000,000
NOK................	250,000,000	4.55	June 26, 2013	June 26, 2025	250,000,000
NOK................	300,000,000	4.5075	September 09, 2013	September 11, 2023	300,000,000
NOK................	300,000,000	4.5075	September 10, 2013	September 11, 2023	300,000,000

Currency	Original Principal Amount	Interest Rate (%)	Issue Date	Maturity Date		Principal Amount Outstanding as of December 31, 2021
NOK................	300,000,000	4.5075	September 11, 2013	September 11, 2023		300,000,000
NOK................	300,000,000	4.5075	September 12, 2013	September 11, 2023		300,000,000
NOK................	300,000,000	4.5075	September 13, 2013	September 11, 2023		300,000,000
		Subtotal in Original Currency			NOK	2,250,000,000
		Subtotal in Equivalent Amount of Won(17)			₩	302,152,500,000
GBP	35,000,000	1.2	November 15, 2019	November 15, 2022		35,000,000
		Subtotal in Original Currency			GBP	35,000,000
		Subtotal in Equivalent Amount of Won(18)			₩	56,008,750,000
SEK	250,000,000	1.28	December 11, 2017	December 11, 2024		250,000,000
		Subtotal in Original Currency			SEK	250,000,000
		Subtotal in Equivalent Amount of Won(19)			₩	32,760,000,000
CZK	1,140,000,000	1.52	November 6, 2019	November 6, 2024		1,140,000,000
CZK	1,140,000,000	1.55	November 06, 2019	November 06, 2024		1,140,000,000
CZK	1,140,000,000	1.54	November 14, 2019	November 14, 2024		1,140,000,000
		Subtotal in Original Currency			CZK	3,420,000,000
		Subtotal in Equivalent Amount of Won(20)			₩	184,611,600,000
PLN.................	194,000,000	2.12	October 25, 2019	October 25, 2024		194,000,000
		Subtotal in Original Currency			PLN	194,000,000
		Subtotal in Equivalent Amount of Won(21)			₩	56,661,580,000
	Total External Bonds of the Bank in Equivalent Amount of Won				₩	58,344,512,585,600

* Repaid on the respective maturity dates.

(1) U.S. dollar amounts are converted to Won amounts at the rate of US$1.00 to Won 1,185.50, the market average exchange rate in effect on December 31, 2021, as announced by Seoul Money Brokerage Services, Ltd.

(2) Hong Kong Dollar amounts are converted to Won amounts at the rate of HKD 1.00 to Won 152.03, the market average exchange rate in effect on December 31, 2021, as announced by Seoul Money Brokerage Services, Ltd.

(3) Mexican Peso amounts are converted to Won amounts at the rate of MXN 1.00 to Won 57.94, the market average exchange rate in effect on December 31, 2021, as announced by Seoul Money Brokerage Services, Ltd.

(4) Brazilian Real amounts are converted to Won amounts at the rate of BRL 1.00 to Won 212.78, the market average exchange rate in effect on December 31, 2021, as announced by Seoul Money Brokerage Services, Ltd.

(5) Euro amounts are converted to Won amounts at the rate of EUR 1.00 to Won 1,342.34, the market average exchange rate in effect on December 31, 2021, as announced by Seoul Money Brokerage Services, Ltd.

(6) Thai Baht amounts are converted to Won amounts at the rate of THB 1.00 to Won 35.57, the market average exchange rate in effect on December 31, 2021, as announced by Seoul Money Brokerage Services, Ltd.

(7) Swiss Franc amounts are converted to Won amounts at the rate of CHF 1.00 to Won 1,297.47, the market average exchange rate in effect on December 31, 2021, as announced by Seoul Money Brokerage Services, Ltd.

(8) Australian Dollar amounts are converted to Won amounts at the rate of AUD 1.00 to Won 858.89, the market average exchange rate in effect on December 31, 2021, as announced by Seoul Money Brokerage Services, Ltd.

(9) Indian Rupee amounts are converted to Won amounts at the rate of INR 1.00 to Won 15.93, the market average exchange rate in effect on December 31, 2021, as announced by Seoul Money Brokerage Services, Ltd.

(10) Chinese Yuan amounts are converted to Won amounts at the rate of CNY 1.00 to Won 186.26, the prevailing market rate on December 31, 2021.

(11) Indonesian Rupiah amounts are converted to Won amounts at the rate of IDR 100.00 to Won 8.31, the market average exchange rate in effect on December 31, 2021, as announced by Seoul Money Brokerage Services, Ltd.

(12) Peruvian Sol amounts are converted to Won amounts at the rate of PEN 1.00 to Won 297.06, the prevailing market rate on December 31, 2021.

(13) Singapore Dollar amounts are converted to Won amounts at the rate of SGD 1.00 to Won 877.14, the market average exchange rate in effect on December 31, 2021, as announced by Seoul Money Brokerage Services, Ltd.

(14) New Zealand Dollar amounts are converted to Won amounts at the rate of NZD 1.00 to Won 809.64, the market average exchange rate in effect on December 31, 2021, as announced by Seoul Money Brokerage Services, Ltd.

(15) South African Rand amounts are converted to Won amounts at the rate of ZAR 1.00 to Won 74.45, the market average exchange rate in effect on December 31, 2021, as announced by Seoul Money Brokerage Services, Ltd.

(16) Canadian Dollar amounts are converted to Won amounts at the rate of CAD 1.00 to Won 930.61, the market average exchange rate in effect on December 31, 2021, as announced by Seoul Money Brokerage Services, Ltd.

(17) Norwegian Krone amounts are converted to Won amounts at the rate of NOK 1.00 to Won 134.29, the market average exchange rate in effect on December 31, 2021, as announced by Seoul Money Brokerage Services, Ltd.

(18) British Pound amounts are converted to Won amounts at the rate of GBP 1.00 to Won 1,600.25, the market average exchange rate in effect on December 31, 2021, as announced by Seoul Money Brokerage Services, Ltd.

(19) Swedish Krona amounts are converted to Won amounts at the rate of SEK 1.00 to Won 131.04, the market average exchange rate in effect on December 31, 2021, as announced by Seoul Money Brokerage Services, Ltd.

(20) Czech Koruna amounts are converted to Won amounts at the rate of CZK 1.00 to Won 53.98, the market average exchange rate in effect on December 31, 2021, as announced by Seoul Money Brokerage Services, Ltd.

(21) Polish Zloty amounts are converted to Won amounts at the rate of PLN 1.00 to Won 292.11, the market average exchange rate in effect on December 31, 2021, as announced by Seoul Money Brokerage Services, Ltd.

(2) External Borrowings of the Bank

Lender	Classifications	Range of Interest Rates	Range of Years of Issue	Range of Years of Maturity	Principal Amount Outstanding as of December 31, 2021[(1)]
		(%)			(millions of Won)
Bank of America, N.A.	Borrowings from BofA	LIBOR 3M+0.55	2019	2022	237,100
Mizuho Bank, Seoul..........................	Borrowings from Mizuho	LIBOR 3M+0.47	2020	2022	237,100
Long-term Borrowings from Foreign Financial Institution					₩ 474,200
Compulsory Loan		LIBOR 3M + 0.64 ~ 0.78	2014	2024	₩ 947,309
Foreign Currency CP		-0.45 ~ 2.33	2020	2021	₩ 1,995,123
Others (including foreign banks and Credit Support Annexes)					₩ 799,699
Total External Borrowings of the Bank					₩ 4,216,331

(1) Converted to Won amounts at the relevant market average exchange rates in effect on December 31, 2021 as announced by Seoul Money Brokerage Services, Ltd.

B. Internal Debt of the Bank

Title	Range of Interest Rates	Range of Years of Issue	Range of Years of Original Maturity	Principal Amounts Outstanding as of December 31, 2018
	(%)			(millions of Won)
Bonds				
Short-term Won-denominated domestic bonds...	0.75~1.72	2021	2022	₩ 11,030,000
Long-term Won-denominated domestic bonds ...	0.76~4.70	2015~2021	2022~2041	11,880,000
Total Bonds..	0.75~4.70	2015~2021	2022~2041	22,910,000
Total Internal Debt...				₩ 22,910,000

Financial Statements and the Auditors

The Minister of Economy and Finance appoints the Bank's internal Auditor who is responsible for examining its financial operations and auditing its financial statements and accounting records. The present internal Auditor is Kim, Jong-cheol, who was appointed for a three-year term on January 25, 2021.

The Bank prepares its financial statements annually for submission to the Minister of Economy and Finance, accompanied by an opinion of the Auditor. Although the Bank is not legally required to have financial statements audited by external auditors, an independent public accounting firm has audited the Bank's separate financial statements since 1983 and consolidated financial statements since 1998. As of the date of this Offering Circular, the Bank's independent auditor is KPMG Samjong Accounting Corp., located at 27th Floor, Gangnam Finance Center, 152 Teheran-ro, Gangnam-gu, Seoul, 06236, Korea, which has audited its separate financial statements as of and for the years ended December 31, 2021 and 2020 included in this Offering Circular.

The Bank's separate financial statements and information included in this Offering Circular were prepared under K-IFRS. For a summary of financial statement preparation and significant accounting policies, see "—Notes to Separate Financial Statements as of and for the years ended December 31, 2021 and 2020—Note 2." These principles and procedures differ in certain material respects from generally accepted accounting principles in the United States.

The Bank recognizes interest income on loans and debt securities using the effective interest method. See "—Notes to Separate Financial Statements as of and for the years ended December 31, 2021 and 2020—Note 3(15)."

The Bank classifies a non-derivative financial asset as held for trading if either it is acquired for the purpose of selling it in the near term, or it is part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit taking. The Bank classifies debt securities with fixed or determinable payments and fixed maturities, and which the Bank intends to hold to maturity, as held-to-maturity securities. The Bank classifies investments that are categorized as neither trading securities nor held-to-maturity securities as available-for-sale securities. The Bank records its trading and available-for-sale securities at fair value. However, investments in available-for-sale securities that do not have readily determinable fair values are recognized at cost. The Bank records held-to-maturity securities at amortized cost. The Bank recognizes impairment losses on securities in current operations when the recoverable amounts are less than the carrying amount of equity securities or amortized cost of debt securities.

The Bank records debenture issuance costs as discounts on debentures and amortize them over the maturity period of the debentures using the effective interest method.

The Bank's financial statements are separate financial statements prepared in accordance with the requirements of K-IFRS 1027 Separate Financial Statements, in which a parent, or an investor with joint control of, or significant influence over, an investee accounts for the investments based on the cost method or valuation methods in accordance with K-IFRS 1109 *Financial Instruments*.

Since the Bank initially adopted K-IFRS in 2013, its premises and equipment on the statements of financial position as of January 1, 2013 have been measured at their fair value in accordance with IFRS 1 paragraph 30(b), and the Bank has chosen to apply the cost model to the premises and equipment in accordance with IAS 16 paragraph 29.

K-IFRS 1109, *Financial Instruments*, which is aimed at improving and simplifying the accounting treatment of financial instruments, is effective for annual periods beginning on or after January 1, 2018 and replaces K-IFRS 1039, *Financial Instruments: Recognition and Measurement*. The Bank has applied the new accounting standard, K-IFRS 1109, which requires all financial assets to be classified and measured on the basis of an entity's business model for managing financial assets and the contractual cash flow characteristics of the financial assets, in the Bank's separate financial statements as of and for the years ended December 31, 2021 and 2020 included in this Offering Circular.

K-IFRS 1116, *Leases*, which was enacted on May 22, 2017, is aimed at facilitating a more faithful representation of, and improving the transparency of information relating to, lease-related assets and liabilities, and is effective for annual periods beginning on or after January 1, 2019. K-IFRS 1116, which replaces K-IFRS 1017, *Leases*, requires a lessee to recognize a right-of-use asset representing the lessee's right to use the underlying leased asset and a lease liability representing the present value of the lessee's obligation to make future lease payments. The Bank has applied K-IFRS 1116 in its separate financial statements beginning with the year ended December 31, 2019.

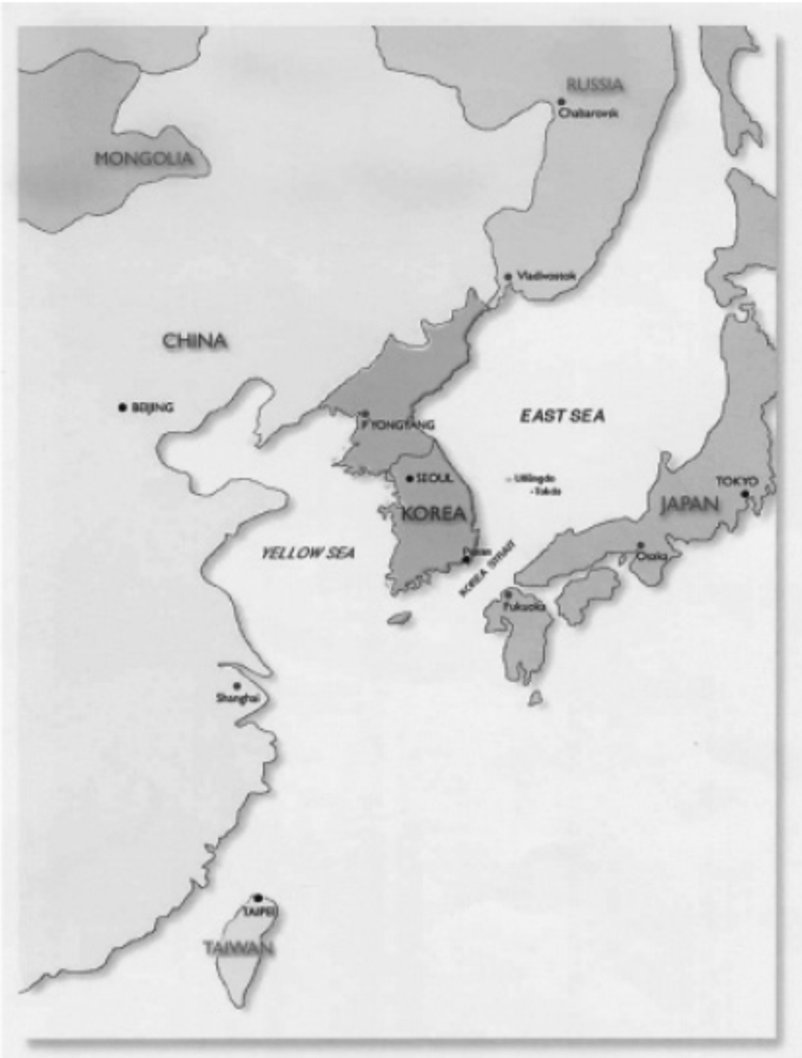
THE REPUBLIC OF KOREA

Land and History

Territory and Population

Located generally south of the 38th parallel on the Korean peninsula, the Republic of Korea covers about 38,000 square miles, approximately one-fourth of which is arable. The Republic has a population of approximately 51 million people. The country's largest city and capital, Seoul, has a population of about 10 million people.

Map of the Republic of Korea



Political History

Dr. Rhee Seungman, who was elected President in each of 1948, 1952, 1956 and 1960, dominated the years after the Republic's founding in 1948. Shortly after President Rhee's resignation in 1960 in response to student-led demonstrations, a group of military leaders headed by Park Chung Hee assumed power by coup. The military leaders established a civilian government, and the country elected Mr. Park as President in October 1963. President Park served as President until his assassination in

1979 following a period of increasing strife between the Government and its critics. The Government declared martial law and formed an interim government under Prime Minister Choi Kyu Hah, who became the next President. After clashes between the Government and its critics, President Choi resigned, and General Chun Doo Hwan, who took control of the Korean army, became President in 1980.

In late 1980, the country approved, by national referendum, a new Constitution, providing for indirect election of the President by an electoral college and for certain democratic reforms, and shortly thereafter, in early 1981, re-elected President Chun.

Responding to public demonstrations in 1987, the legislature revised the Constitution to provide for direct election of the President. In December 1987, Roh Tae Woo won the presidency by a narrow plurality, after opposition parties led by Kim Young Sam and Kim Dae Jung failed to unite behind a single candidate. In February 1990, two opposition political parties, including the one led by Kim Young Sam, merged into President Roh's ruling Democratic Liberal Party.

In December 1992, the country elected Kim Young Sam as President. The election of a civilian and former opposition party leader considerably lessened the controversy concerning the legitimacy of the political regime. President Kim's administration reformed the political sector and deregulated and internationalized the Korean economy.

In December 1997, the country elected Kim Dae Jung as President. President Kim's party, the Millennium Democratic Party (formerly known as the National Congress for New Politics), formed a coalition with the United Liberal Democrats led by Kim Jong Pil, with Kim Jong Pil becoming the first prime minister in President Kim's administration. The coalition, which temporarily ended before the election held in April 2000, continued with the appointment of Lee Han Dong of the United Liberal Democrats as the Prime Minister in June 2000. The coalition again ended in September 2001.

In December 2002, the country elected Roh Moo Hyun as President. President Roh and his supporters left the Millennium Democratic Party in 2003 and formed a new party, the Uri Party, in November 2003. On August 15, 2007, 85 members of the National Assembly, previously belonging to the Uri Party, or the Democratic Party, formed the United New Democratic Party, or the UNDP. The Uri Party merged into the UNDP on August 20, 2007. In February 2008, the UNDP merged back into the Democratic Party. In December 2011, the Democratic Party merged with the Citizens Unity Party to form the Democratic United Party, which changed its name to the Democratic Party in May 2013.

In December 2007, the country elected Lee Myung-Bak as President. He commenced his term on February 25, 2008. In April 2018, the Korean prosecutor's office indicted former President Lee on 16 counts of corruption, including bribery, abuse of power, embezzlement and other irregularities. In October 2018, a Seoul district court sentenced him to 15 years of prison term, which decision he subsequently appealed. In October 2020, the Supreme Court ruled against such appeal and sentenced him to 17 years of prison term, which he is currently serving.

In December 2012, the country elected Park Geun-hye as President. She commenced her term on February 25, 2013. In March 2017, the Constitutional Court unanimously upheld a parliamentary vote to impeach President Park, triggering her immediate dismissal, for a number of constitutional and criminal violations, including violation of the Constitution and abuse of power by allowing her confidant to exert influence on state affairs and allowing senior presidential aides to aid in her extortion from companies. After a series of trials, former President Park was sentenced to a combined 22 years of prison term and a fine of ₩21.5 billion. In light of her deteriorating health, however, former President Park was granted a special pardon by President Moon, her successor, and was released from prison on December 31, 2021.

A special election to elect a successor to former President Park was held on May 9, 2017 and the country elected Moon Jae-in as President. His term, which commenced on May 10, 2017, ended on May 9, 2022.

In March 2022, the country elected Yoon Suk-yeol as President. His term commenced on May 10, 2022. The Yoon administration's key policy objectives include, among others, the following:

- mitigating the adverse effects of the ongoing COVID-19 pandemic on the Korean economy, including through the provision of relief packages in support of small businesses and the self-employed;
- stabilizing the housing market by increasing the supply of new homes and reforming property-related tax regulations;
- pursuing economic prosperity by promoting private sector growth and supporting the semiconductor, artificial intelligence, battery and other strategic industries;
- pursuing the denuclearization of the Korean Peninsula, enhancing Korea's core military capabilities and improving foreign relations and national security;
- pursuing enhanced environmental, social and corporate governance management, including through efforts to achieve carbon neutrality by reversing the previous administration's nuclear-phase out policy and combining renewable energy with nuclear power generation; and
- pursuing an efficient management of the government through various measures, including the establishment of a digital platform and the relocation of presidential offices.

Government and Politics

Government and Administrative Structure

Governmental authority in the Republic is centralized and concentrated in a strong presidency. The President is elected by popular vote and can only serve one term of five years. The President chairs the State Council, which consists of the President, the prime minister, the deputy prime ministers, the respective heads of Government ministries and the ministers of state. The President can select the members of the State Council and appoint or remove all other Government officials, except for elected local officials.

The President can veto new legislation and take emergency measures in cases of natural disaster, serious fiscal or economic crisis, state of war or other similar circumstances. The President must promptly seek the concurrence of the National Assembly for any emergency measures taken and failing to do so automatically invalidates the emergency measures. In the case of martial law, the President may declare martial law without the consent of the National Assembly; provided, however, that the National Assembly may request the President to rescind such martial law.

The National Assembly exercises the country's legislative power. The Constitution and the Election for Public Offices Act provide for the direct election of about 84% of the members of the National Assembly and the distribution of the remaining seats proportionately among parties winning more than five seats in the direct election or receiving over 3% of the popular vote. National Assembly members serve four-year terms. The National Assembly enacts laws, ratifies treaties and approves the national budget. The executive branch drafts most legislation and submits it to the National Assembly for approval.

The country's judicial branch comprises the Supreme Court, the Constitutional Court and lower courts of various levels. The President appoints the Chief Justice of the Supreme Court and appoints the other Justices of the Supreme Court upon the recommendation of the Chief Justice. All appointments to the Supreme Court require the consent of the National Assembly. The Chief Justice, with the consent of the conference of Supreme Court Justices, appoints all the other judges in Korea. Supreme Court Justices serve for six years and all other judges serve for ten years. Other than the Chief Justice, justices and judges may be reappointed to successive terms.

The President formally appoints all nine judges of the Constitutional Court, but three judges must be designated by the National Assembly and three by the Chief Justice of the Supreme Court. Constitutional Court judges serve for six years and may be reappointed to successive terms.

Administratively, the Republic comprises eight provinces, one special autonomous province (Jeju), one special city (Seoul), six metropolitan cities (Busan, Daegu, Incheon, Gwangju, Daejeon and Ulsan) and one special autonomous city (Sejong). From 1961 to 1995, the national government controlled the provinces and the President appointed provincial officials. Local autonomy, including the election of provincial officials, was reintroduced in June 1995.

Political Parties

The 21st legislative general election was held on April 15, 2020 and the term of the National Assembly members elected in the 21st legislative general election commenced on May 30, 2020. Currently, there are three major political parties: The Democratic Party of Korea, or the DPK, the People Power Party, or the PPP, and the Justice Party, or the JP.

As of May 31, 2022, the parties control the following number of seats in the National Assembly:

	DPK	**PPP**	**JP**	**Others**	**Total**
Number of seats..	167	109	6	10	292

Relations with North Korea

Relations between the Republic and North Korea have been tense over most of the Republic's history. The Korean War began with the invasion of the Republic by communist forces from the north in 1950, which was repelled by the Republic and the United Nations forces led by the United States. Following a military stalemate, an armistice was reached establishing a demilitarized zone monitored by the United Nations in the vicinity of the 38th parallel in 1953.

North Korea maintains a military force estimated at more than a million regular troops, mostly concentrated near the northern side of the demilitarized zone, and approximately 7.6 million reserves. The Republic's military forces, composed of approximately 555,000 regular troops and 3.1 million reserves, maintain a state of military preparedness along the southern side of the demilitarized zone. In addition, the United States has maintained its military presence in the Republic since the signing of the armistice and currently has approximately 28,500 troops stationed in the Republic. The Republic and the United States share a joint command structure over their military forces in Korea. In October 2014, the United States and the Republic agreed to implement a conditions-based approach to the dissolution of their joint command structure at an appropriate future date, which would allow the Republic to assume the command of its own armed forces in the event of war on the Korean peninsula. Over the years, the Republic and the United States have entered into a series of Special Measures Agreements, or SMAs, which cover the Republic's contribution to the cost of maintaining the U.S. military presence in the Republic. In March 2021, the Republic and the United States reached an agreement to enter into a new six-year SMA, under which the Republic would increase its share of the cost of the American military presence in the Republic, which became effective in September 2021 upon ratification by the National Assembly.

The level of tension between the two Koreas has fluctuated and may increase abruptly as a result of current and future events. In particular, since the death of Kim Jong-il in December 2011, there has been increased uncertainty with respect to the future of North Korea's political leadership and concern regarding its implications for political and economic stability in the region. Kim Jong-il's third son, Kim Jong-eun, has assumed power as his father's designated successor.

In addition, there have been heightened security concerns in recent years stemming from North Korea's nuclear weapons and ballistic missile programs as well as its hostile military and other actions against Korea. Some of the significant incidents in recent years include the following:

- From time to time, North Korea has conducted ballistic missile tests. In February 2016, North Korea launched a long-range rocket in violation of its agreement with the United States as well as United Nations sanctions barring it from conducting launches that use ballistic missile technology. Despite international condemnation, North Korea released a statement that it intends to continue its rocket launch program and it conducted a series of ballistic missile tests in 2016 and 2017. In response, the United Nations Security Council issued unanimous statements condemning North Korea and agreeing to continue to closely monitor the situation and to take further significant measures, and in December 2017, unanimously passed a resolution extending existing sanctions that were imposed on North Korea.

- North Korea renounced its obligations under the Nuclear Non-Proliferation Treaty in January 2003 and conducted three rounds of nuclear tests between October 2006 and February 2013. In January 2016, North Korea conducted a fourth nuclear test, claiming that the test involved its first hydrogen bomb. In September 2016, North Korea conducted a fifth nuclear test, claiming to have successfully detonated a nuclear warhead that could be mounted on ballistic missiles. In September 2017, North Korea announced that it successfully conducted its sixth nuclear test by detonating a hydrogen bomb designed to be mounted on an intercontinental ballistic missile, which resulted in increased tensions in the region and elicited strong objections worldwide. In response to such tests (as well as North Korea's long-range ballistic missile program), the United Nations Security Council unanimously passed several rounds of resolutions condemning North Korea's actions and significantly expanding the scope of the sanctions applicable to North Korea, while the United States and the European Union also imposed additional sanctions on North Korea.

- In August 2015, two Korean soldiers were injured in a landmine explosion near the Korean demilitarized zone. Claiming the landmines were set by North Koreans, the Korean army re-initiated its propaganda program toward North Korea utilizing loudspeakers near the demilitarized zone. In retaliation, the North Korean army fired artillery rounds on the loudspeakers, resulting in the highest level of military readiness for both Koreas.

- 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 one hundred 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 were held between Korea and North Korea in April and May 2018 and between the United States and North Korea in June 2018, February 2019 and June 2019, there can be no assurance that the level of tension on the Korean peninsula will not escalate in the future or that such escalation will not have a material adverse impact on the Republic's economy and the Bank. Any further increase in tension, which may occur, for example, if North Korea experiences a leadership crisis, high-level contacts between the Republic and North Korea break down or further military hostilities occur, could have a material adverse effect on the Republic's economy and the Bank. Over the longer term, reunification of the two Koreas could occur. Reunification may entail a significant economic commitment by the Republic.

Foreign Relations and International Organizations

The Republic maintains diplomatic relations with most nations of the world, most importantly with the United States with which it entered into a mutual defense treaty and several economic agreements. The Republic also has important relationships with Japan and China, its largest trading partners together with the United States.

The Republic belongs to a number of supranational organizations, including:

- United Nations;
- the International Monetary Fund, or the IMF;
- the World Bank;
- the Asian Development Bank, or the ADB;
- the Multilateral Investment Guarantee Agency;
- the International Finance Corporation;
- the International Development Association;
- the African Development Bank;
- the European Bank for Reconstruction and Development;
- the Bank for International Settlements;
- the World Health Organization, or the WHO;
- the World Trade Organization, or the WTO;
- the International Atomic Energy Agency, or the IAEA;
- the Inter-American Development Bank, or the IDB;
- the Organization for Economic Cooperation and Development, or the OECD; and
- the Asian Infrastructure Investment Bank.

The Economy

The following table sets forth information regarding certain of the Republic's key economic indicators for the periods indicated.

	As of or for the year ended December 31,				
	2017	**2018**	**2019**	**2020**	**2021**
	(billions of dollars and trillions of Won, except percentages)				
GDP Growth (at current prices)	5.5%	3.1%	1.3%	0.7%	6.4%[7]
GDP Growth (at chained 2015 year prices)	3.2%	2.7%	2.3%	(0.7)%	4.0%[7]
Inflation[1]	1.9%	1.5%	0.4%	0.5%	2.5%
Unemployment[2]	3.7%	3.8%	3.8%	4.0%	3.7%
Trade Surplus[3]	$ 95.2	$ 69.7	$ 38.9	$ 44.9	$ 29.4
Foreign Currency Reserves	$ 389.3	$ 403.7	$ 408.8	$ 443.1	$ 463.1
External Liabilities[4]	$ 412.0	$ 441.2	$ 470.7	$ 544.9	$ 628.5[7]
Fiscal Balance	₩ 24.0	₩ 31.2	₩ (12.0)	₩ (71.2)	₩ (30.4)[7]
Direct Internal Debt of the Government[5] (as % of GDP[6])	35.2%	35.6%	37.4%	44.2%	N/A[8]
Direct External Debt of the Government[5] (as % of GDP[6])	0.4%	0.4%	0.4%	0.5%	N/A[8]

(1) Measured by the year-on-year change in the consumer price index with base year 2020, as announced by the Bank of Korea.
(2) Average for year.
(3) Derived from customs clearance statistics on a C.I.F. basis, meaning that the price of goods includes insurance and freight cost.
(4) Calculated under the criteria based on the sixth edition of the Balance of Payment Manual published by the International Monetary Fund in December 2010.
(5) Does not include guarantees by the Government. See "—Debt—External and Internal Debt of the Government—Guarantees by the Government" for information on outstanding guarantees by the Government.
(6) At chained 2015 year prices.
(7) Preliminary.
(8) Not available.
Source: The Bank of Korea

Worldwide Economic and Financial Difficulties

In recent years, the global financial markets have experienced significant volatility as a result of, among other things:

- the ongoing COVID-19 pandemic caused by a new strain of coronavirus, as further described below;
- hostilities, political or social tensions involving Russia (including the invasion of Ukraine by Russia and ensuing actions that the United States and other countries have taken or may take in the future, such as the imposition of sanctions against Russia) and the resulting adverse effects on the global supply of oil and other natural resources and the global financial markets;
- rising inflationary pressures leading to increases in the costs of goods and services and a decrease in purchasing power;
- interest rate fluctuations as well as perceived or actual changes in policy rates by, or other monetary and fiscal policies set forth by, the U.S. Federal Reserve and other central banks;
- disruptions in the global supply chain for raw materials, natural resources, consumer goods, rare earth minerals, component parts and other supplies, including as a result of the ongoing COVID-19 pandemic, government policies and labor shortages;
- a deterioration in economic and trade relations between the United States and its major trading partners, including China;
- increased uncertainties resulting from the United Kingdom's exit from the European Union;
- financial and social difficulties affecting many governments worldwide, in particular in Latin America and Europe;
- escalations in trade protectionism globally and geopolitical tensions in East Asia and the Middle East;
- the slowdown of economic growth in China and other major emerging market economies;
- political and social instability in various countries in the Middle East, including Iraq, Syria and Yemen; and
- fluctuations in oil and commodity prices.

COVID-19, an infectious disease caused by severe acute respiratory syndrome coronavirus 2, has spread globally and was declared a "pandemic" by the WHO in March 2020. The ongoing COVID-19 pandemic has led to significant global economic and financial disruptions, including an adverse impact on international trade and business activities. Although there have been mixed signs of recovery in the global economy resulting from the availability of COVID-19 vaccinations and gradual normalization of business activities, the extent to which the COVID-19 pandemic continues to impact the global economy will depend on future developments, including the scope and duration of the ongoing COVID-19 pandemic as well as the timeliness and effectiveness of actions taken by governmental authorities, central banks, healthcare providers and other third parties around the world in order to contain and mitigate the effects of COVID-19. The possibility of a global recession in major markets due to the impact of COVID-19, including discrepancies in vaccine rollout rates, continued decline in consumer confidence and weakened demand for face-to-face services, could cause significant volatility in the global economic and financial systems.

There has been significant volatility in global financial markets since the global outbreak of COVID-19, and more recently due to Russia's invasion of Ukraine and ensuing sanctions against Russia. See "—The Financial System—Securities Markets". Declines in the 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 and banks to raise capital. Moreover, the value of the Won relative to major foreign currencies in general and the U.S. dollar in particular has fluctuated widely. A depreciation of the Won generally increases the cost of imported goods and services and the required amount of the Won revenue for Korean companies to service foreign currency-denominated debt.

In light of the high level of interdependence of the global economy, any of the foregoing developments could have a material adverse effect on the Korean economy and financial markets. In addition, in the event of difficult conditions in the global credit markets or a deterioration of the global economy in the future, the Korean economy could be adversely affected and Korean banks may be forced to fund their operations at a higher cost or may be unable to raise as much funding as they need to support their lending and other activities.

In addition to the global developments, domestic developments that could lead to or contribute to a material adverse effect on the Korean economy include, among other things, the following:

- a slowdown in consumer spending and depressed consumer sentiment due to the outbreak of infectious diseases, such as the ongoing COVID-19 pandemic discussed above, and national tragedies, such as the sinking of the Sewol passenger ferry in April 2014, which led to the death of hundreds of passengers;

- increasing delinquencies and credit defaults by consumer and small- and medium-sized enterprise borrowers, which may occur due to, among others, the impact of the ongoing COVID-19 pandemic;

- steadily rising household debt consisting of housing loans and merchandise credit, which increased to approximately Won 1,862.1 trillion as of December 31, 2021 from Won 843.2 trillion as of December 31, 2010, primarily due to increases in mortgage loans and purchases with credit cards;

- deterioration in economic or diplomatic relations between Korea and other countries resulting from territorial or trade disputes or disagreements in foreign policy;

- a substantial increase in the Government's expenditures for (i) fiscal stimulus measures to provide emergency relief payments to households and emergency loans to corporations in need of funding due to the COVID-19 pandemic and (ii) pension and social welfare programs, due in part to an aging population (defined as the population of people aged 65 years or older) that accounted for approximately 16.5% of the Republic's total population as of December 31, 2021, an increase from 7.2% as of December 31, 2000, and is expected to surpass 20.3% in 2025 that, together, would lead to the Government's budget deficit;

- decreases in the market prices of Korean real estate; and
- the occurrence of severe health epidemics that affect the livestock industry.

The first confirmed case of the COVID-19 disease in Korea was announced in January 2020 and the subsequent spread of the disease has since resulted in more than 18.0 million confirmed cases and more than 24,000 fatalities related to COVID-19 reported in Korea as of May 31, 2022. In response, the Government implemented a number of measures in order to contain the spread of the COVID-19 disease, including, among others, a nationwide order for social distancing, implementation of strict self-isolation and quarantine measures for those who may be infected, or have a higher chance of being infected, and the closure of public facilities until the possibility of further contamination has subsided sufficiently. In addition, the Government implemented the following measures, among others, in order to alleviate the adverse impact of the COVID-19 pandemic on the Korean economy and stabilize the financial markets:

- lowering of The Bank of Korea's policy rate from 1.25% to 0.75% in March 2020 and subsequently to 0.5% in May 2020 (which has subsequently been raised to 0.75% in August 2021, 1.00% in November 2021, 1.25% in January 2022, 1.50% in April 2022 and 1.75% in May 2022) (See "—Monetary Policy—Interest Rates");
- execution of a bilateral currency swap agreement with the U.S. Federal Reserve for the provision of US$60 billion in exchange for the Republic's Won-denominated treasury bonds in March 2020, which agreement expired in December 2021 after three renewals throughout 2020 and 2021;
- execution of a number of supplementary budgets for spending on various measures to mitigate the adverse effects of the COVID-19 pandemic on the Korean economy, including (i) injection of cash into corporate and financial markets in the form of loans, guarantees and maturity extensions to eligible banks and financial institutions, small- and medium business enterprises, small merchants and self-employed business owners facing liquidity crises, and (ii) offer of emergency relief payments and expansion of social security contribution reliefs for those impacted by the COVID-19 pandemic, including underserved communities and the unemployed. See "—Government Finance".

As part of its efforts to prepare for the post-COVID-19 era, the Government officially announced its plans to pursue a "Korean New Deal" in July 2020. Under such initiative, the Government aims to expedite the Republic's recovery from the COVID-19 pandemic and pursue a digital and green transformation of the Korean economy and to strengthen employment and social safety nets through a total investment of ₩160 trillion and the creation of 1.9 million new jobs by 2025. In order to contain further spread of COVID-19 and to prevent the outbreak of similar epidemics in the future, the Government has continued to cooperate actively with regional and international efforts to develop and implement various measures to combat such outbreaks.

In February 2021, the Government began its COVID-19 vaccination campaign, and as of May 31, 2022, more than 86% of the Korean population was fully vaccinated. The Government's plans to have the country return to life as normal was put on hold in light of the emergence of the new Omicron variant of COVID-19 beginning in December 2021 that spiraled further after mid-February 2022, followed by an exponential surge in the number of new daily cases of COVID-19 infections, peaking at more than 600,000 cases per day in March 2022. Subsequently, the number of confirmed cases began to decline substantially, and in April 2022, the Government announced that it would lift most of its pandemic-related restrictions, including the lifting of limits on private gatherings and extending restaurant hours, while keeping the indoor mask mandate.

While there are signs of recovery from the COVID-19 pandemic, the outlook for the Republic's economy and its financial services sector in 2022 and for the foreseeable future remains uncertain due to the ongoing impact of the COVID-19 pandemic on the Korean and global economies and financial markets, as well as factors such as fluctuations in oil and commodity prices, interest rates and exchange rates, rising inflationary pressures, higher unemployment, lower consumer confidence, stock market volatility, changes in fiscal and monetary policies, the ongoing military conflict involving Russia and Ukraine, and continued tensions with North Korea.

Gross Domestic Product

GDP measures the market value of all final goods and services produced within a country for a given period and reveals whether a country's productive output rises or falls over time. Economists present GDP in both current market prices and "real" or "inflation-adjusted" terms. In March 2009, the Republic adopted a method known as the "chain-linked" measure of GDP, replacing the previous fixed-base, or "constant" measure of GDP, to show the real growth of the aggregate economic activity, as recommended by the System of National Accounts 1993. GDP at current market prices values a country's output using the actual prices of each year, whereas the "chain-linked" measure of GDP is compiled by using "chained indices" linking volume growth between consecutive time periods. In March 2014, the Republic published a revised GDP calculation method by implementing the System of National Accounts 2008 and updating the reference year from 2005 to 2010 to align Korean national accounts statistics with the recommendations of the new international standards for compiling national economic accounts and to maintain comparability with other nations' accounts. The main components of these revisions include, among other things, (i) recognizing expenditures for research and development and creative activity for the products of entertainment, literary and artistic originals as fixed investment, (ii) incorporating a wide array of new and revised source data such as the economic census, the population and housing census and 2010 benchmark input-output tables, which provide thorough and detailed information on the structure of the Korean economy, (iii) developing supply-use tables, which provide a statistical tool for ensuring consistency among the production, expenditure and income approaches to measuring GDP and (iv) recording merchandise trade transactions based on ownership changes rather than movements of goods across the national border. The Republic has updated the reference year from 2010 to 2015 in July 2019 to better align Korean national accounts statistics with the recommendations of the previously implemented System of National Accounts 2008 and to maintain comparability with other countries' accounts.

The following table sets out the composition of the Republic's GDP at current market and chained 2015 year prices and the annual average increase in the Republic's GDP.

Gross Domestic Product

	2017	2018	2019	2020	2021[(1)]	As % of GDP 2021[(1)]
			(billions of Won)			
Gross Domestic Product at Current Market Prices:						
Private	872,791.4	908,273.7	931,669.5	897,449.2	952,529.9	46.3
Government	283,045.8	305,513.0	329,295.5	349,122.5	374,682.7	18.2
Gross Capital Formation	592,711.4	592,858.4	601,581.4	615,921.9	654,616.9	31.8
Exports of Goods and Services	751,428.5	788,279.0	766,602.0	704,554.0	858,424.8	41.7
Less Imports of Goods and Services	(664,278.8)	(701,150.7)	(710,990.2)	(633,487.5)	(782,697.7)	(38.0)
Statistical Discrepancy	0.0	(276.4)	881.5	(407.7)	(108.8)	0.0
Expenditures on Gross Domestic Product	1,835,698.2	1,893,497.0	1,919,039.9	1,933,152.4	2,057,447.8	100.0
Net Factor Income from the Rest of the World	7,482.6	4,955.7	16,675.3	14,868.3	25,128.7	1.2
Gross National Income[(2)]	1,843,180.9	1,898,452.7	1,935,715.2	1,948,020.7	2,082,576.5	101.2
Gross Domestic Product at Chained 2015 Year Prices:						
Private	848,589.3	872,304.4	890,167.7	849,072.1	879,770.0	46.0
Government	271,428.7	286,644.8	304,760.3	319,321.3	336,971.2	17.6
Gross Capital Formation	576,996.7	566,376.1	555,494.6	561,440.4	569,644.5	29.8
Exports of Goods and Services	747,783.5	773,752.6	790,874.0	765,015.6	840,601.8	44.0
Less Imports of Goods and Services	(686,089.2)	(691,374.1)	(693,412.8)	(661,725.2)	(718,301.5)	(37.6)
Statistical Discrepancy	(1,130.3)	(2,511.7)	(1,429.8)	199.6	1,686.4	0.1

	2017	2018	2019	2020	2021[1]	As % of GDP 2021[1]
			(billions of Won)			
Expenditures on Gross Domestic Product[3]	1,760,811.5	1,807,735.9	1,848,958.5	1,836,881.1	1,910,745.0	100.0
Net Factor Income from the Rest of the World in the Terms of Trade	7,084.6	4,519.5	15,335.4	13,772.4	22,679.4	1.2
Trading Gains and Losses from Changes in the Terms of Trade	25,915.5	3,272.8	(40,224.9)	(26,407.1)	(46,122.6)	(2.4)
Gross National Income[4]	1,793,818.4	1,815,558.4	1,824,136.5	1,824,242.5	1,887,369.0	98.8
Percentage Increase (Decrease) of GDP over Previous Year:						
At Current Prices	5.5	3.1	1.3	0.7	6.4	
At Chained 2015 Year Prices	3.2	2.7	2.3	(0.7)	4.0	

(1) Preliminary.
(2) GDP plus net factor income from the rest of the world is equal to the Republic's gross national income.
(3) Under the "chain-linked" measure of GDP, the components of GDP will not necessarily add up to the total GDP.
(4) Under the "chain-linked" measure of Gross National Income, the components of Gross National Income will not necessarily add up to the total Gross National Income.

Source: The Bank of Korea

The following table sets out the Republic's GDP by economic sector at current market prices:

Gross Domestic Product by Economic Sector
(at current market prices)

	2017	2018	2019	2020	2021[1]	As % of GDP 2021[1]
			(billions of Won)			
Industrial Sectors:	672,178.8	680,553.1	661,196.9	665,292.9	706,020.9	34.3
Agriculture, Forestry and Fishing	33,974.3	34,528.9	31,134.9	35,421.0	37,827.3	1.8
Manufacturing, Mining and Quarrying	496,993.7	506,854.7	487,889.2	481,573.6	524,339.4	25.5
Mining and Quarrying	2,348.8	2,247.7	1,943.6	1,945.1	2,008.2	0.1
Manufacturing	494,644.9	504,607.0	485,945.6	479,628.5	522,331.2	25.4
Electricity, Gas and Water Supply	40,014.2	36,813.2	36,580.7	43,118.7	37,934.2	1.8
Construction	101,196.6	102,356.3	105,592.1	105,179.6	105,920.0	5.1
Services:	1,006,839.9	1,049,864.7	1,095,424.2	1,104,240.8	1,178,235.4	57.3
Wholesale and Retail Trade, Accommodation and Food Services	175,124.9	180,661.0	180,358.0	172,245.3	180,741.4	8.8
Transportation and Storage	58,283.7	57,088.1	59,949.6	56,077.8	67,546.2	3.3
Finance and Insurance	96,983.7	104,336.2	104,718.6	110,441.3	122,654.6	6.0
Real Estate	133,152.6	135,890.3	142,735.8	145,464.2	146,657.5	7.1
Information and Communication	76,712.2	79,242.9	82,602.9	87,500.1	97,715.8	4.7
Business Activities	154,495.4	161,832.1	175,225.1	179,476.6	190,842.6	9.3
Public Administration, Defense and Social Security	107,325.6	115,086.1	122,162.4	128,647.1	135,669.1	6.6
Education	87,880.4	90,933.2	93,717.9	92,681.0	98,113.1	4.8
Human Health and Social Work	74,706.8	80,937.0	88,588.1	93,245.6	98,383.3	4.8
Cultural and Other Services	42,174.6	43,857.8	45,365.8	38,461.8	39,911.8	1.9
Taxes Less Subsidies on Products	156,679.6	163,079.3	162,418.6	163,618.9	173,191.5	8.4
Gross Domestic Product at Current Market Prices	1,835,698.2	1,893,497.0	1,919,039.9	1,933,152.4	2,057,447.8	100.0
Net Factor Income from the Rest of the World	7,482.6	4,955.7	16,675.3	14,868.3	25,128.7	1.2
Gross National Income at Current Market Price	1,843,180.9	1,898,452.7	1,935,715.1	1,948,020.7	2,082,576.5	101.2

(1) Preliminary.

Source: The Bank of Korea

The following table sets out the Republic's GDP per capita:

Gross Domestic Product per capita
(at current market prices)

	2017	2018	2019	2020	2021(1)
GDP per capita (thousands of Won)	35,740	36,782	37,218	37,334	39,761
GDP per capita (U.S. dollar)	31,605	33,429	31,929	31,637	34,744
Average Exchange Rate (in Won per U.S. dollar)	1,130.8	1,100.3	1,165.7	1,180.1	1,144.4

(1) Preliminary.
Source: The Bank of Korea

The following table sets out the Republic's Gross National Income, or GNI, per capita:

Gross National Income per capita
(at current market prices)

	2017	2018	2019	2020	2021(1)
GNI per capita (thousands of Won)	35,886	36,930	37,539	37,621	40,247
GNI per capita (U.S. dollar)	31,734	33,564	32,204	31,881	35,168
Average Exchange Rate (in Won per U.S. dollar)	1,130.8	1,100.3	1,165.7	1,180.1	1,144.4

(1) Preliminary.
Source: The Bank of Korea

The following table sets out the Republic's GDP by economic sector:

Gross Domestic Product by Economic Sector
(at chained 2015 year prices)

	2017	2018	2019	2020	2021(1)	As % of GDP 2021(1)
			(billions of Won)			
Industrial Sectors:	640,516.9	654,072.8	658,741.5	653,510.5	686,758.2	35.9
Agriculture, Forestry and Fishing	32,059.8	32,540.4	32,859.2	32,054.3	32,931.8	1.7
Manufacturing, Mining and Quarrying	470,274.80	485,854.0	491,476.4	486,556.9	518,476.5	27.1
Mining and Quarrying	2,204.5	2,030.9	1,863.6	1,908.1	2,005.4	0.1
Manufacturing	468,070.3	483,823.1	489,612.8	484,648.8	516,471.1	27.0
Electricity, Gas and Water Supply	43,813.8	45,116.2	44,921.8	46,810.9	49,102.3	2.6
Construction	94,368.5	90,562.2	89,484.1	88,088.4	86,247.6	4.5
Services:	973,106.40	1,003,834.7	1,039,879.8	1,033,780.7	1,072,521.4	56.1
Wholesale and Retail Trade, Accommodation and Food Services	167,746.5	171,599.5	174,419.9	168,483.3	174,084.3	9.1
Transportation and Storage	60,289.1	61,888.5	62,746.9	53,954.4	56,762.3	3.0
Finance and Insurance	93,709.2	98,999.7	103,386.2	111,653.9	118,422.9	6.2
Real Estate	129,307.2	132,057.6	136,593.8	137,650.2	138,306.8	7.2
Information and Communication	75,814.3	78,941.7	82,473.3	85,520.8	90,643.7	4.7
Business Activities	147,949.8	150,522.3	157,790.8	156,898.3	161,333.0	8.4
Public Administration, Defense and Social Security	100,722.8	104,100.3	108,219.5	112,395.7	116,698.8	6.1
Education	84,806.1	86,440.9	87,493.6	85,465.3	89,481.3	4.7
Human Health and Social Work	72,330.1	78,160.0	85,046.7	87,053.5	91,231.0	4.8
Cultural and Other Services	40,495.8	41,218.1	41,709.1	34,705.3	35,557.3	1.9
Taxes Less Subsidies on Products	147,105.4	149,966.5	150,812.7	150,084.3	153,948.7	8.1
Gross Domestic Product(2)	1,760,811.5	1,807,735.9	1,848,958.5	1,836,881.1	1,910,745.0	100.0

(1) Preliminary.

(2) Under the "chain-linked" measure of GDP, the components of GDP will not necessarily add up to the total GDP.
Source: The Bank of Korea

GDP growth in 2017 was 3.2% at chained 2015 year prices, as aggregate private and general government consumption expenditures increased by 3.1%, gross domestic fixed capital formation increased by 9.8% and exports of goods and services increased by 2.5%, which more than offset an increase in imports of goods and services by 8.9%, each compared with 2016.

GDP growth in 2018 was 2.7% at chained 2015 year prices, as aggregate private and general government consumption expenditures increased by 3.5% and exports of goods and services increased by 3.5%, which more than offset a decrease in gross domestic fixed capital formation by 2.4% and an increase in imports of goods and services by 0.8%, each compared with 2017.

GDP growth in 2019 was 2.3% at chained 2015 year prices, as aggregate private and general government consumption expenditures increased by 3.1%, exports of goods and services increased by 2.2% and imports of goods and services decreased by 0.3%, which more than offset a decrease in gross domestic fixed capital formation by 2.9%, each compared with 2018.

GDP in 2020 contracted by 0.7% at chained 2015 year prices, primarily due to a 4.6% decrease in private consumption expenditures and a 3.3% decrease in exports of goods and services, which were offset in part by a 4.8% increase in general government consumption expenditures, a 2.6% increase in gross domestic fixed capital formation and a 3.3% decrease in imports of goods and services, each compared with 2019. The contraction of the Republic's GDP in 2020 was primarily due to the ongoing COVID-19 pandemic.

Based on preliminary data, GDP growth in 2021 was 4.0% at chained 2015 year prices, as exports of goods and services increased by 9.9%, aggregate private and general government consumption expenditures increased by 4.2% and gross domestic fixed capital formation increased by 2.6%, which more than offset an increase in imports of goods and services by 8.5%, each compared with 2020.

Based on preliminary data, GDP growth in the first quarter of 2022 was 3.1% at chained 2015 year prices, primarily due to an increase in exports of goods and services by 9.0% and an increase in aggregate private and general government consumption expenditures by 5.1%, which more than offset an increase in imports of goods and services by 7.9% and a decrease in gross fixed capital formation by 3.2%, each compared with the corresponding period of 2021.

The Republic's GDP may be adversely affected in 2022 if adverse effects of the ongoing COVID-19 pandemic are prolonged.

Principal Sectors of the Economy

Industrial Sectors

The following table sets out production indices for the principal industrial products of the Republic and their relative contribution to total industrial production:

Industrial Production
(2015 = 100)

	Index Weight[1]	2017	2018	2019	2020	2021[2]
Industries	10,000.0	104.8	106.3	106.7	106.3	114.3
Mining and Manufacturing	9,521.5	104.6	106.1	106.5	106.2	114.4
Mining	32.0	100.2	89.5	85.4	84.1	81.4
Manufacturing	9,489.5	104.7	106.1	106.6	106.3	114.5
Food Products	585.7	102.9	104.1	108.0	109.4	110.9
Beverage Products	141.0	105.7	105.4	103.8	100.3	99.4

	Index Weight[1]	2017	2018	2019	2020	2021[2]
Tobacco Products	67.7	122.7	111.1	121.1	126.5	122.3
Textiles	129.8	95.2	88.7	83.5	74.7	78.9
Wearing Apparel, Clothing Accessories and Fur Articles	93.2	95.9	93.6	87.4	70.1	73.0
Tanning and Dressing of Leather, Luggage and Footwear	24.2	82.0	82.8	71.5	49.4	48.6
Wood and Products of Wood and Cork (Except Furniture)	36.6	103.7	95.3	87.0	85.5	86.1
Pulp, Paper and Paper Products	161.8	97.5	97.0	95.6	93.7	96.9
Printing and Reproduction of Recorded Media	54.0	102.0	100.4	95.3	95.4	96.0
Coke, hard-coal and lignite fuel briquettes and Refined Petroleum Products	139.0	114.8	117.0	115.0	107.8	109.1
Chemicals and Chemical Products	845.3	109.1	111.6	110.1	106.8	114.7
Pharmaceuticals, Medicinal Chemicals and Botanical Products	305.5	118.5	128.1	131.6	142.8	148.6
Rubber and Plastic Products	497.3	99.9	95.1	93.3	87.5	90.8
Non-metallic Minerals	246.5	111.2	107.2	104.3	96.7	100.1
Basic Metals	594.9	102.9	100.1	97.8	91.7	97.0
Fabricated Metal Products	550.4	96.6	88.9	87.5	80.3	75.8
Electronic Components, Computer, Radio, Television and Communication Equipment and Apparatuses	1,963.8	112.6	125.9	132.0	147.7	177.7
Medical, Precision and Optical Instruments, Watches and Clocks	368.6	119.5	136.1	121.1	125.8	149.0
Electrical Equipment	517.6	106.6	106.5	109.6	108.7	115.1
Other Machinery and Equipment	843.8	115.4	111.8	105.2	109.0	120.8
Motor Vehicles, Trailers and Semitrailers	927.2	95.1	93.9	93.4	84.1	88.2
Other Transport Equipment	285.4	68.0	61.6	72.3	70.1	61.3
Furniture	63.2	109.5	101.9	99.9	106.8	110.7
Other Products	47.0	108.2	102.7	108.0	101.7	103.7
Electricity, Gas	478.5	106.3	110.3	108.6	106.6	111.5
Total Index	10,000.0	104.8	106.3	106.7	106.3	114.3

(1) Index weights were established on the basis of an industrial census in 2015 and reflect the average annual value added by production in each of the classifications shown, expressed as a percentage of total value added in the mining, manufacturing and electricity and gas industries in that year.
(2) Preliminary.
Source: The Bank of Korea; Korea National Statistical Office

Industrial production increased by 2.5% in 2017, primarily due to increased domestic consumption and exports. Industrial production increased by 1.4% in 2018, primarily due to increased domestic consumption and exports. Industrial production increased by 0.4% in 2019, primarily due to increased domestic consumption. Industrial production decreased by 0.4% in 2020, primarily due to decreased domestic consumption and exports resulting from the COVID-19 pandemic. Based on preliminary data, industrial production increased by 7.5% in 2021, primarily due to increased exports and domestic consumption.

Manufacturing

The manufacturing sector increased production by 2.3% in 2017, primarily due to increased demand for consumer electronics products, electronic components (including semiconductors), communication equipment and chemical products, which more than offset decreased demand for motor vehicles, trailers and semitrailers. The manufacturing sector increased production by 1.3% in 2018, primarily due to increased demand for consumer electronics products and electronic components (including semiconductors). The manufacturing sector increased production by 0.5% in 2019, primarily due to increased demand for consumer electronics products and electronic components (including semiconductors). The manufacturing sector decreased production by 0.3% in 2020, primarily due to decreased demand for automobiles. Based on preliminary data, the manufacturing sector increased production by 7.7% in 2021, primarily due to increased demand for consumer electronics products, electronic components (including semiconductors) and machinery.

Automobiles. In 2017, automobile production decreased by 2.7%, domestic sales volume recorded a decrease of 2.5% and exports sales volume recorded a decrease of 3.5%, compared with 2016, primarily due to decreased domestic production of automobiles resulting mainly from partial strikes by unionized workers of automobile manufacturers, increased overseas production and decreased exports to the United States and China. In 2018, automobile production decreased by 2.1%, domestic sales volume recorded a decrease of 0.5% and exports sales volume recorded a decrease of 3.2%, compared with 2017, primarily due to decreased domestic production of automobiles resulting mainly from partial strikes by unionized workers of automobile manufacturers and the restructuring of GM Korea's production units and decreased exports to countries in South America and the Middle East. In 2019, automobile production decreased by 1.9%, domestic sales volume recorded a decrease of 1.8% and export sales volume recorded a decrease of 2.0%, compared with 2018, primarily due to decreased domestic production of automobiles resulting mainly from partial strikes by unionized workers of automobile manufacturers, increased overseas production, decreased domestic demand for automobiles and decreased demand for automobiles in China. In 2020, automobile production decreased by 11.2% and export sales volume recorded a decrease of 21.4%, compared with 2019, primarily due to a general decline in global demand for automobiles caused by the COVID-19 pandemic, which outpaced a 4.7% increase in domestic sales volume from 2019 to 2020, primarily due to increased domestic demand for automobiles. Based on preliminary data, in 2021, automobile production decreased by 1.3% and domestic sales volume recorded a decrease of 8.5%, compared with 2020, primarily due to the global shortage of semiconductors amid the ongoing COVID-19 pandemic, but exports sales volume recorded an increase of 8.6% compared with 2020, primarily due to an increase in the market share of domestic automobile manufacturers in the global automotive market.

Electronics. In 2017, electronics production amounted to ₩342,755 billion, an increase of 10.9% from the previous year, and exports amounted to US$197.6 billion, an increase of 21.6% from the previous year, primarily due to increases in demand for semiconductors, organic light-emitting diode, or OLED, display panels and computers. In 2017, export sales of semiconductor memory chips constituted approximately 17.4% of the Republic's total exports. In 2018, electronics production amounted to ₩365,548 billion, an increase of 6.6% from the previous year, and exports amounted to US$220.3 billion, an increase of 11.5% from the previous year, primarily due to increases in demand for semiconductors and lithium-ion batteries. In 2018, export sales of semiconductor memory chips constituted approximately 21.2% of the Republic's total exports. In 2019, electronics production amounted to ₩322,729 billion, a decrease of 11.7% from the previous year, and exports amounted to US$176.9 billion, a decrease of 19.7% from the previous year, primarily due to a significant decrease in semiconductor prices. In 2019, export sales of semiconductor memory chips constituted approximately 17.6% of the Republic's total exports. In 2020, electronics production amounted to ₩332,084 billion, an increase of 2.9% from the previous year, and exports of electronics amounted to US$183.5 billion, an increase of 3.7% from the previous year, primarily due to an increase in demand for semiconductors, computers and other electronic apparatuses. In 2020, export sales of semiconductor memory chips constituted approximately 19.5% of the Republic's total exports. Based on preliminary data, in 2021, electronics production amounted to ₩368,407 billion, an increase of 10.9% from the previous year, and exports amounted to US$227.6 billion, an increase of 24.0% from the previous year, primarily due to an increase in demand for semiconductors, display panels, mobile devices, solid state drives and secondary cell batteries. In 2021, export sales of semiconductor memory chips constituted approximately 20.0% of the Republic's total exports.

Iron and Steel. In 2017, crude steel production totaled 71.0 million tons, an increase of 3.7% from 2016, and export sales volume of iron and steel products increased by 2.3%, primarily due to an increase in global demand for crude steel products but domestic sales volume of iron and steel products decreased by 1.2%, primarily due to adverse conditions in the domestic shipbuilding and automobile industries. In 2018, crude steel production totaled 72.5 million tons, an increase of 1.9% from 2017, primarily due to the recovery of the domestic shipbuilding industry, but export sales volume of iron and steel products decreased by 3.9%, primarily due to restrictions on imports of steel products imposed by the United States, Canada and the European Union. In 2019, crude steel production totaled 71.4 million tons, a decrease of 1.5% from 2018, primarily due to adverse conditions in the construction and shipbuilding industries, and export sales volume of iron and steel products decreased by 0.2%, primarily due to continued restrictions on imports of steel products imposed by the United States, Canada and the European Union. In 2020, crude steel production totaled 67.1 million tons, a decrease of 6.0% from 2019, primarily due to adverse conditions in the construction and shipbuilding industries in light of the COVID-19 pandemic, and export sales volume of iron and steel products decreased by 4.9%, primarily due to a decrease in global demand for crude steel products resulting from the COVID-19 pandemic. Based on preliminary data, in 2021, crude steel production totaled 70.4 million tons, an increase of 4.9% from 2020, primarily due to an increase in domestic demand for crude steel products following a gradual economic recovery from the COVID-19 pandemic, but export sales volume of iron and steel products decreased by 6.1%, primarily due to an increase in the price of steel products coupled with a decrease in global demand for crude steel products resulting from the ongoing COVID-19 pandemic.

Shipbuilding. In 2017, the Republic's shipbuilding orders amounted to approximately 8 million compensated gross tons, an increase of 300% compared to 2016, primarily due to increased demand for LNG carriers, bulk carriers and container carriers. In 2018, the Republic's shipbuilding orders amounted to approximately 13 million compensated gross tons, an increase of 62.5% compared to 2017, primarily due to increased demand for LNG carriers, oil tankers and container carriers. In 2019, the Republic's shipbuilding orders amounted to approximately 10 million compensated gross tons, a decrease of 23.1% compared to 2018, primarily due to decreased demand for container carriers and bulk carriers, which more than offset increased demand for LNG carriers. In 2020, the Republic's shipbuilding orders amounted to approximately 8 million compensated gross tons, a decrease of 20.0% compared to 2019, primarily due to the adverse conditions in the domestic and global shipbuilding industry resulting from the COVID-19 pandemic. Based on preliminary data, in 2021, the Republic's shipbuilding orders amounted to approximately 17 million compensated gross tons, an increase of 112.5% compared to 2020, primarily due to increased demand for container carriers and LNG carriers.

Agriculture, Forestry and Fisheries

The Government's agricultural policy has traditionally focused on:

- grain production;
- development of irrigation systems;
- land consolidation and reclamation;
- seed improvement;
- mechanization measures to combat drought and flood damage; and
- increasing agricultural incomes.

Recently, however, the Government has increased emphasis on cultivating profitable crops and strengthening international competitiveness as a result of the continued opening of the domestic agricultural market.

In 2017, rice production decreased 5.3% from 2016 to 4.0 million tons. In 2018, rice production decreased 2.5% from 2017 to 3.9 million tons. In 2019, rice production decreased 5.1% from 2018 to 3.7

million tons. In 2020, rice production decreased 5.4% from 2019 to 3.5 million tons. In 2021, rice production increased 11.4% from 2020 to 3.9 million tons. Due to limited crop yields resulting from geographical and physical constraints, the Republic depends on imports for certain basic foodstuffs.

The Government is seeking to develop the fishing industry by encouraging the building of large fishing vessels and modernizing fishing equipment, marketing techniques and distribution outlets.

In 2017, the agriculture, forestry and fisheries industry increased by 2.3% compared to 2016, primarily due to an increase in aquafarming production. In 2018, the agriculture, forestry and fisheries industry increased by 0.2% compared to 2017, primarily due to an increase in livestock production. In 2019, the agriculture, forestry and fisheries industry increased by 3.9% compared to 2018, primarily due to an increase in farming and livestock production. In 2020, the agriculture, forestry and fisheries industry decreased by 4.0% compared to 2019, primarily due to a decrease in farming and livestock production. Based on preliminary data, in 2021, the agriculture, forestry and fisheries industry increased by 2.7% compared to 2020, primarily due to an increase in farming and fisheries production.

Construction

In 2017, the construction industry increased by 5.9% compared to 2016, primarily due to an increase in the construction of residential and commercial buildings. In 2018, the construction industry decreased by 2.8% compared to 2017, primarily due to a decrease in the construction of residential and commercial buildings. In 2019, the construction industry decreased by 2.6% compared to 2018, primarily due to a continued decrease in the construction of residential buildings. In 2020, the construction industry decreased by 1.4% compared to 2019, primarily due to a decrease in the construction of residential buildings. Based on preliminary data, in 2021, the construction industry decreased by 2.1% compared to 2020, primarily due to a decrease in the construction of residential buildings.

Electricity and Gas

The following table sets out the Republic's dependence on imports for energy consumption:

Dependence on Imports for Energy Consumption

	Total Primary Energy Supply	Imports	Imports Dependence Ratio
	(millions of tons of oil equivalents[1], except ratios)		
2017	302.5	284.4	94.0
2018	307.6	288.1	93.7
2019	303.1	283.4	93.5
2020	292.1	271.1	92.8
2021[2]	305.2	283.2	92.8

(1) Conversion to tons of oil equivalents was calculated based on energy conversion factors under the Energy Act Enforcement Decree as amended in July 2017.
(2) Preliminary.
Source: Korea Energy Economics Institute; Korea National Statistical Office

Korea has almost no domestic oil or gas production and depends on imported oil and gas to meet its energy requirements. Accordingly, the international prices of oil and gas significantly affect the Korean economy. Any significant long-term increase in the prices of oil and gas will increase inflationary pressures in Korea and adversely affect the Republic's balance of trade.

To reduce its dependence on oil and gas imports, the Government has encouraged energy conservation and energy source diversification emphasizing nuclear energy. The following table sets out the principal primary sources of energy supplied in the Republic, expressed in oil equivalents and as a percentage of total energy consumption.

Primary Energy Supply by Source

	Coal		Petroleum		Nuclear		Others[(1)]		Total	
	Quantity	%	Quantity	%	Quantity	%	Quantity	%	Quantity	%
	(millions of tons of oil equivalents[(2)], except percentages)									
2017	86,177	28.5	119,824	39.6	31,615	10.5	64,874	21.4	302,490	100.0
2018	86,707	28.2	118,521	38.5	28,437	9.2	73,892	24.0	307,557	100.0
2019	82,147	27.1	117,314	38.7	31,079	10.3	72,553	23.9	303,092	100.0
2020	72,241	24.7	110,240	37.7	34,119	11.7	75,476	25.8	292,076	100.0
2021[(3)]..........	72,520	23.8	117,764	38.6	33,657	11.0	81,251	26.6	305,191	100.0

(1) Includes natural gas, hydroelectric power and renewable energy.
(2) Conversion to tons of oil equivalents was calculated based on energy conversion factors under the Energy Act Enforcement Decree as amended in July 2017.
(3) Preliminary.
Source: Korea Energy Economics Institute; The Bank of Korea

The Republic's first nuclear power plant went into full operation in 1978 with a rated generating capacity of 587 megawatts. As of December 31, 2021, the Republic had 24 nuclear plants with a total estimated nuclear power installed generating capacity of 23,250 megawatts and four nuclear plants under construction. In December 2020, the Government announced the Ninth Basic Plan for the period from 2020 to 2034, which focuses on, among other things, (i) changing energy policy to a safe and clean energy mix by reducing coal and nuclear power generation and increasing renewable energy, (ii) preparing implementation measures for further reduction of greenhouse gas, (iii) accelerating investments in renewable energy and expanding infrastructure for the transition to a low-carbon economy/society and (iv) improving the electricity market system to promote fair competition and lay the foundation for expansion of eco-friendly energy. Furthermore, the Ninth Basic Plan includes the following implementation measures: (i) six coal-fired generation plants will be retired by 2022, (ii) 24 other coal-fired generation plants will be retired and converted to LNG fuel use by 2034, (iii) domestic renewable energy generation capacity will be expanded to 77.8 gigawatts by 2034 to meet the target set in the Third Basic National Energy Plan and (iv) the extension of life of eleven nuclear generation units will not be granted and such units will be retired by 2034.

Services Sector

In 2017, the service industry increased by 2.6% compared to 2016 as the health and social work sector increased by 6.4%, the finance and insurance sector increased by 4.2% and the public administration and defense sector increased by 2.8%, each compared with 2016. In 2018, the service industry increased by 3.8% compared to 2017 as the health and social work sector increased by 8.2%, the finance and insurance sector increased by 5.6% and the public administration and defense sector increased by 3.4%, each compared with 2017. In 2019, the service industry increased by 3.4% compared to 2018 as the health and social work sector increased by 8.7%, the public administration and defense sector increased by 4.0% and the finance and insurance sector increased by 4.4%, each compared with 2018. In 2020, the service industry decreased by 1.0% compared to 2019 as the wholesale and retail trade, accommodation and food services sector decreased by 5.7%, the transportation and storage sector decreased by 15.1% and the cultural and other services sector decreased by 18.7%, each compared with 2019. Based on preliminary data, in 2021, the service industry increased by 3.7% compared to 2020 as the finance and insurance sector increased by 6.1%, the wholesale and retail trade, accommodation and food services sector increased by 3.3% and the information and communication sector increased by 6.0%, each compared with 2020.

Prices, Wages and Employment

The following table shows selected price and wage indices and unemployment rates:

	Producer Price Index(1)	Increase (Decrease) Over Previous Year	Consumer Price Index(1)	Increase (Decrease) Over Previous Year	Wage Index(1)(2)	Increase (Decrease) Over Previous Year	Unemployment Rate(1)(3)
	(2015=100)	(%)	(2020=100)	(%)	(2015=100)	(%)	(%)
2017	101.6	3.5	97.6	1.9	106.4	2.1	3.7
2018	103.5	1.9	99.1	1.5	113.6	6.8	3.8
2019	103.5	0.0	99.5	0.4	116.2	2.3	3.8
2020	103.0	(0.5)	100.0	0.5	115.5	(0.6)	4.0
2021	109.6	6.4	102.5	2.5	123.5	6.9	3.7

(1) Average for year.
(2) Nominal wage index of average earnings in the manufacturing industry.
(3) Expressed as a percentage of the economically active population.
Source: The Bank of Korea; Korea National Statistical Office

In 2017, the inflation rate increased to 1.9%, primarily due to increases in the prices of agricultural and livestock products and oil. In 2018, the inflation rate decreased to 1.5%, primarily due to a slowdown in the growth rate of agricultural goods and oil prices. In 2019, the inflation rate decreased to 0.4%, primarily due to decreases in the prices of agricultural and livestock products and oil. In 2020, the inflation rate increased to 0.5%, primarily due to increases in agricultural and livestock product prices. In 2021, the inflation rate increased to 2.5%, primarily due to increases in agricultural and livestock product prices and oil prices. Based on preliminary data, the inflation rate was 3.8% in the first quarter of 2022.

In 2017, the unemployment rate remained unchanged at 3.7%. In 2018, the unemployment rate increased to 3.8%, primarily due to the continued sluggishness of the domestic economy. In 2019, the unemployment rate remained constant at 3.8%. In 2020, the unemployment rate increased to 4.0%, primarily due to the COVID-19 pandemic. In 2021, the unemployment rate decreased to 3.7%, reflecting a gradual recovery of the Korean economy from the COVID-19 pandemic. Based on preliminary data, the unemployment rate was 3.5% in the first quarter of 2022.

From 1992 to 2009, the economically active population of the Republic increased by approximately 24.8% to 24.3 million, while the number of employees increased by approximately 23.7% to 23.5 million. The economically active population over 15 years old as a percentage of the total over-15 population has remained between 61% and 63% over the past decade. Literacy among workers under 50 is almost universal. As of December 31, 2021, the economically active population of the Republic was 28.3 million and the number of employees was 27.3 million.

The following table shows selected employment information by industry and by gender:

	2017	2018	2019	2020	2021
	(all figures in percentages, except as indicated)				
Labor force (in thousands of persons)	26,725	26,822	27,123	26,904	27,273
Employment by Industry:					
Agriculture, Forestry and Fishing	4.8	5.0	5.1	5.4	5.3
Mining and Manufacturing	17.2	16.9	16.4	16.3	16.1
S.O.C & Services	78.0	78.1	78.5	78.3	78.6
Electricity, Transport, Communication and Finance	11.4	11.8	11.7	11.8	12.3
Business, Private & Public Service and Other Services	36.4	36.5	37.4	38.0	38.6
Construction	7.4	7.6	7.4	7.5	7.7
Wholesale & Retail Trade, Hotels and Restaurants	22.8	22.2	22.0	21.0	20.0
Total Employed	100.0	100.0	100.0	100.0	100.0
Employment by Gender:					
Male	57.5	57.3	57.0	57.2	57.0
Female	42.5	42.7	43.0	42.8	43.0
Total Employed	100.0	100.0	100.0	100.0	100.0

Source: The Bank of Korea

Pursuant to certain amendments to the Labor Standards Act that became effective on July 1, 2018, the maximum working hours of employees is in the process of being reduced from 68 hours per week to 52 hours per week, and the number of special industries that are exempt from restrictions on maximum working hours will be significantly reduced. This new maximum working hours restriction under the amended Labor Standards Act is in effect for workplaces with 300 or more workers from July 1, 2018, and has been extended to workplaces with 50 or more but fewer than 300 workers from January 1, 2020, and has been further extended to workplaces with five or more but fewer than 50 workers from July 1, 2021.

Labor unrest in connection with demands by unionized workers for better wages and working conditions and greater job security occur from time to time in the Republic. Some of the significant incidents in recent years include the following:

- In September 2017, several thousand unionized workers at KBS and MBC, Korea's two largest television and radio broadcasters, went on strike, which lasted several months, to protest against alleged management interference in news coverage and unfair labor practices.

- In 2017, unionized workers at Hyundai Motor went on a series of partial strikes demanding higher wages and bonuses.

- In July 2018, unionized workers at Hyundai Heavy Industries went on full strike demanding higher wages.

- In May 2019, unionized bus drivers launched a nationwide strike seeking higher wages and increased manpower in time for the 52-hour work week that was implemented in July 2019.

- In September 2019, unionized workers at GM Korea went on full strike, the first in more than 20 years, demanding higher wages and protesting against GM Korea's restructuring plans.

- In October and November 2019, several thousand members of the National Railroad Workers' Union went on full strike demanding a normalization of wages and requesting the hiring of additional personnel.

- In October, November and December 2020, unionized workers at GM Korea went on partial strikes during wage and collective agreement negotiations.

- In November and December 2020, unionized workers at Kia went on partial strikes demanding higher wages, performance-based incentives and other benefits.

- In November and December 2021, unionized workers at Hankook Tire & Technology, one of Korea's largest tire makers, went on a full strike demanding higher wages and performance-based incentive payments.

- In 2021, unionized workers at CJ Logistics, one of Korea's largest freight transportation companies, went on a series of partial strikes and demonstrations, demanding higher wages commensurate with increases in parcel delivery fees.

Actions such as these by labor unions may hinder implementation of the labor reform measures and disrupt the Government's plans to create a more flexible labor market. Although much effort is being expended to resolve labor disputes in a peaceful manner, there can be no assurance that further labor unrest will not occur in the future. Continued labor unrest in key industries of the Republic may have an adverse effect on the economy.

In 1997, the Korean Confederation of Trade Unions organized a political alliance, which led to the formation of the Democratic Labor Party in January 2000. The Democratic Labor Party merged with The New People's Participation Party and changed its name to The Unified Progressive Party, or the UPP, in December 2011. In October 2012, the UPP split and seven UPP members of the National Assembly and their supporters formed a new party, the Progressive Justice Party, which changed its name to the Justice Party in July 2013. In December 2014, the Constitutional Court ordered the dissolution of the UPP and the removal of the party's five lawmakers from the National Assembly for violating the Republic's Constitution after certain of its members were convicted of trying to instigate an armed rebellion and supporting North Korea. In the legislative general election held on April 13, 2016, the Justice Party won six seats in the National Assembly, and the members-elect began their four-year terms on May 30, 2016. As of December 31, 2021, the Justice Party held six seats in the National Assembly.

The Financial System

Structure of the Financial Sector

The Republic's financial sector includes the following categories of financial institutions:

- The Bank of Korea;
- banking institutions;
- non-bank financial institutions; and
- other financial entities, including:
    - financial investment companies;
    - credit guarantee institutions;
    - venture capital companies; and
    - miscellaneous others.

To increase transparency in financial transactions and enhance the integrity and efficiency of the financial markets, Korean law requires that financial institutions confirm that their clients use their real names when transacting business. The Government also strengthened confidentiality protection for private financial transactions.

In July 2007, the Korean National Assembly passed the Financial Investment Services and Capital Markets Act, or the FSCMA, under which various industry-based capital markets regulatory systems were consolidated into a single regulatory system. The FSCMA, which became effective in February 2009, expands the scope of permitted investment-related financial products and activities through expansive definitions of financial instruments and function-based regulations that allow financial investment companies to offer a wider range of financial services, as well as strengthening investor protection and disclosure requirements.

Prior to the effective date of the FSCMA, separate laws regulated various types of financial institutions depending on the type of the financial institution (for example, securities companies, futures companies, trust business companies and asset management companies) and subjected financial institutions to different licensing and ongoing regulatory requirements (for example, under the Securities and Exchange Act, the Futures Trading Act and the Indirect Investment Asset Management Business Act). By applying one uniform set of rules to financial businesses having the same economic function, the FSCMA attempts to improve and address issues caused by the previous regulatory system under which the same economic function relating to capital markets-related business were governed by multiple regulations. To this end, the FSCMA categorizes capital markets-related businesses into six different functions as follows:

- investment dealing (trading and underwriting of financial investment products);
- investment brokerage (brokerage of financial investment products);
- collective investment (establishment of collective investment schemes and the management thereof);
- investment advice;
- discretionary investment management; and
- trusts (together with the five businesses set forth above, the Financial Investment Businesses).

Accordingly, all financial businesses relating to financial investment products are reclassified as one or more of the Financial Investment Businesses described above, and financial institutions are subject to the regulations applicable to their relevant Financial Investment Businesses, irrespective of what type of financial institution it is. For example, under the FSCMA, derivative businesses conducted by securities companies and future companies are subject to the same regulations, at least in principle.

The banking business and the insurance business are not subject to the FSCMA and will continue to be regulated under separate laws; provided, however, that they are subject to the FSCMA if their activities involve any Financial Investment Businesses requiring a license based on the FSCMA.

Banking Industry

The banking industry comprises commercial banks and specialized banks. Commercial banks serve the general public and corporate sectors. They include nationwide banks, regional banks and branches of foreign banks. Regional banks provide services similar to nationwide banks, but operate in a geographically restricted region. Branches of foreign banks have operated in the Republic since 1967 but provide a relatively small proportion of the country's banking services. As of December 31, 2021, there were six nationwide banks, six regional banks, three internet banks and 35 foreign banks with branches operating in the Republic.

Specialized banks meet the needs of specific sectors of the economy in accordance with Government policy; they are organized under, or chartered by, special laws. Specialized banks include (i) The Korea Development Bank, (ii) The Export-Import Bank of Korea, (iii) The Industrial Bank of Korea, (iv) SuHyup Bank and (v) NongHyup Bank. The Government has made capital contributions to three of these specialized banks as follows:

- **The Korea Development Bank**: the Government owns directly all of its paid-in capital and has made capital contributions since its establishment in 1954. Recent examples include the Government's contributions to its capital of ₩395 billion in 2017, ₩170 billion in 2018, ₩555 billion in 2019, ₩2,103 billion in 2020 and ₩1,121 billion in 2021. Taking into account these capital contributions, its total paid-in capital was ₩21,887 billion as of December 31, 2021.
- **The Export-Import Bank of Korea**: the Government owns, directly and indirectly, all of its paid-in capital and has made capital contributions since its establishment in 1976. Recent examples include the Government's contributions to its capital of ₩1,417 billion in 2017, ₩56 billion in 2019, ₩578 billion in 2020 and ₩299 billion in 2021. Taking into account these capital contributions, its total paid-in capital was ₩12,748 billion as of December 31, 2021.
- **The Industrial Bank of Korea**: the Government directly owned 59.5% of its total shares (including common and preferred shares) as of December 31, 2021. The Government had owned all of the issued share capital of The Industrial Bank of Korea until 1994, but the Government's minimum share ownership requirement was repealed in 1997, and the Government has since periodically adjusted its ownership percentage in the Industrial Bank

of Korea through transactions involving the purchase and sale of its common shares. In 2019, the Industrial Bank of Korea issued an aggregate of 17,178,164 new common shares to the Government for a total of ₩225 billion in cash. In 2020, the Industrial Bank of Korea issued an aggregate of 161,507,381 new common shares to the Government for a total of ₩1,266 billion in cash. In November 2020, the Industrial Bank of Korea acquired from the Government and cancelled an aggregate of 44,847,038 perpetual preferred shares that it had previously issued to the Government. In May 2021, the Industrial Bank of Korea issued and sold 5,636,227 new ordinary shares to the Government for an aggregate consideration of ₩49 billion in cash. Taking into account such transactions, its total paid-in capital was ₩4,211 billion as of December 31, 2021.

The economic difficulties in 1997 and 1998 caused an increase in Korean banks' non-performing assets and a decline in capital adequacy ratios of Korean banks. From 1998 through 2002, the Financial Services Commission amended banking regulations several times to adopt more stringent criteria for non-performing assets that more closely followed international standards.

The following table sets out the total loans (including loans in Won and loans in foreign currencies) and non-performing assets of Korean banks as of the dates indicated.

	Total Loans	Non-Performing Assets[(1)]	Percentage of Total
	(trillions of won)		(percentage)
December 31, 2017	1,775.9	21.1	1.2
December 31, 2018	1,872.6	18.2	1.0
December 31, 2019	1,980.6	15.3	0.8
December 31, 2020	2,171.7	13.9	0.6
December 31, 2021[(2)]	2,371.9	11.8	0.5

(1) Assets classified as substandard or below.
(2) Preliminary.
Source: Financial Supervisory Service

In 2017, these banks posted an aggregate net profit of ₩11.2 trillion, compared to an aggregate net profit of ₩3.0 trillion in 2016, primarily due to decreased loan loss provisions and increased net interest income. In 2018, these banks posted an aggregate net profit of ₩15.6 trillion, compared to an aggregate net profit of ₩11.2 trillion in 2017, primarily due to increased net interest income and decreased loan loss provisions, which more than offset a decrease in net non-interest income. In 2019, these banks posted an aggregate net profit of ₩13.9 trillion, compared to an aggregate net profit of ₩15.6 trillion in 2018, primarily due to losses on investments in subsidiaries and associates in 2019 compared to gains on investments in subsidiaries and associates in 2018, which more than offset decreased loan loss provisions. In 2020, these banks posted an aggregate net profit of ₩12.1 trillion, compared to an aggregate net profit of ₩13.9 trillion in 2019, primarily due to increased loan loss provisions. Based on preliminary data, in 2021, these banks posted an aggregate net profit of ₩16.9 trillion, compared to an aggregate net profit of ₩12.1 trillion in 2020, primarily due to the significant amount of gains recognized by The Korea Development Bank in connection with the exercise of its right to convert its convertible bonds issued by HMM Company Limited into common shares, which took place in June 2021, and to a lesser extent, increased net interest income and decreased loan loss provisions.

Non-Bank Financial Institutions

Non-bank financial institutions include:

- savings institutions, including trust accounts of banks, mutual savings banks, credit unions, mutual credit facilities, community credit cooperatives and postal savings;
- life insurance institutions; and
- credit card companies.

As of December 31, 2021, 79 mutual savings banks, 23 life insurance institutions, which includes joint venture life insurance institutions and wholly-owned subsidiaries of foreign life insurance companies, and eight credit card companies operated in the Republic.

Money Markets

In the Republic, the money markets consist of the call market and markets for a wide range of other short-term financial instruments, including treasury bills, monetary stabilization bonds, negotiable certificates of deposits, repurchase agreements and commercial paper.

Securities Markets

On January 27, 2005, the Korea Exchange was established pursuant to the now repealed Korea Securities and Futures Trading Act by consolidating the Korea Stock Exchange, the Korea Futures Exchange, the KOSDAQ Stock Market, Inc., or the KOSDAQ, and the KOSDAQ Committee of the Korea Securities Dealers Association, which had formerly managed the KOSDAQ. There are three major markets operated by the Korea Exchange: the KRX KOSPI Market, the KRX KOSDAQ Market, and the KRX Derivatives Market. The Korea Exchange has two trading floors located in Seoul, one for the KRX KOSPI Market and one for the KRX KOSDAQ Market, and one trading floor in Busan for the KRX Derivatives Market. The Korea Exchange is a joint stock company with limited liability, the shares of which are held by (i) financial investment companies that were formerly members of the Korea Futures Exchange or the Korea Stock Exchange and (ii) the stockholders of the KOSDAQ. Currently, the Korea Exchange is the only stock exchange in Korea and is operated by membership, having as its members Korean financial investment companies and some Korean branches of foreign financial investment companies.

The Korea Exchange publishes the Korea Composite Stock Price Index every ten seconds, which is an index of all equity securities listed on the Korea Exchange. The Korea Composite Stock Price Index is computed using the aggregate value method, whereby the market capitalizations of all listed companies are aggregated, subject to certain adjustments, and this aggregate is expressed as a percentage of the aggregate market capitalization of all listed companies as of the base date, January 4, 1980.

The following table shows the value of the Korea Composite Stock Price Index as of the dates indicated:

December 28, 2017	2,467.5
January 31, 2018	2,566.5
February 28, 2018	2,427.4
March 30, 2018	2,445.9
April 30, 2018	2,515.4
May 31, 2018	2,423.0
June 29, 2018	2,326.1
July 31, 2018	2,295.3
August 31, 2018	2,322.9
September 28, 2018	2,343.1
October 31, 2018	2,029.7
November 30, 2018	2,096.9
December 28, 2018	2,041.0
January 31, 2019	2,204.9
February 28, 2019	2,195.4
March 29, 2019	2,140.7
April 30, 2019	2,203.6
May 31, 2019	2,041.7
June 28, 2019	2,130.6
July 31, 2019	2,024.6
August 30, 2019	1,967.8
September 30, 2019	2,063.1

October 31, 2019	2,083.5
November 29, 2019	2,088.0
December 30, 2019	2,197.7
January 31, 2020	2,119.0
February 28, 2020	1,987.0
March 31, 2020	1,754.6
April 29, 2020	1,947.6
May 29, 2020	2,029.6
June 30, 2020	2,108.3
July 31, 2020	2,249.4
August 31, 2020	2,326.2
September 29, 2020	2,327.9
October 30, 2020	2,267.2
November 30, 2020	2,591.3
December 30, 2020	2,873.5
January 29, 2021	2,976.2
February 26, 2021	3,013.0
March 31, 2021	3,061.4
April 30, 2021	3,147.9
May 31, 2021	3,203.9
June 30, 2021	3,296.7
July 30, 2021	3,202.3
August 31, 2021	3,199.3
September 30, 2021	3,068.8
October 29, 2021	2,970.7
November 30, 2021	2,839.0
December 30, 2021	2,977.7
January 28, 2022	2,663.3
February 28, 2022	2,699.2
March 31, 2022	2,757.7
April 29, 2022	2,695.1
May 31, 2022	2,685.9

Over the years, liquidity and credit concerns and volatility in the global financial markets have led to fluctuations in the stock prices of Korean companies. In recent years, there was significant volatility in the stock prices of Korean companies due to deteriorating market conditions domestically and abroad due to the ongoing COVID-19 pandemic. The index was 2,625.4 on June 9, 2022.

Supervision System

The Office of Bank Supervision, the Securities Supervisory Board, the Insurance Supervisory Board and all other financial sector regulatory bodies merged in January 1999 to form the Financial Supervisory Service. The Financial Services Commission acts as the executive body over the Financial Supervisory Service. The Financial Services Commission reports to, but operates independently of, the Prime Minister’s office.

The Ministry of Economy and Finance focuses on financial policy and foreign currency regulations. The Bank of Korea manages monetary policy focusing on price stabilization.

Deposit Insurance System

The Republic’s deposit insurance system insures amounts on deposit with banks, non-bank financial institutions, securities companies and life insurance companies.

Since January 2001, deposits at any single financial institution are insured only up to ₩50 million per person regardless of the amount deposited.

The Government excluded certain deposits, such as repurchase agreements, from the insurance scheme, expanded the definition of unsound financial institutions to which the insurance scheme would apply and gradually increased the insurance premiums payable by insured financial institutions.

Monetary Policy

The Bank of Korea

The Bank of Korea was established in 1950 as Korea's central bank and the country's sole currency issuing bank. A seven-member Monetary Policy Committee, chaired by the Governor of The Bank of Korea, formulates and controls monetary and credit policies.

Inflation targeting is the basic system of operation for Korean monetary policy. The consumer price index is used as The Bank of Korea's target indicator. To achieve its established inflation target, the Monetary Policy Committee of The Bank of Korea determines and announces the "Bank of Korea Base Rate", the reference rate applied in transactions such as repurchase agreements between The Bank of Korea and its financial institution counterparts. The Bank of Korea uses open market operations as its primary instrument to keep the call rate in line with the Monetary Policy Committee's target rate. In addition, The Bank of Korea is able to establish policies regarding its lending to banks in Korea and their reserve requirements.

Interest Rates

On July 9, 2010, The Bank of Korea raised the policy rate to 2.25% from 2.0%, which was further raised to 2.5% on November 16, 2010, in response to signs of inflationary pressures and the continued growth of domestic economy. On January 13, 2011, The Bank of Korea raised the policy rate to 2.75%, which was further increased to 3.0% on March 10, 2011 and to 3.25% on June 10, 2011, in response to inflationary pressures driven mainly by rises in the prices of petroleum products and farm products. The Bank of Korea lowered its policy rate to 3.0% from 3.25% on July 12, 2012, which was further lowered to 2.75% on October 11, 2012, 2.5% on May 9, 2013, 2.25% on August 14, 2014, 2.0% on October 15, 2014, 1.75% on March 12, 2015, 1.5% on June 11, 2015 and 1.25% on June 9, 2016, in order to address the sluggishness of the global and domestic economy. On November 30, 2017, The Bank of Korea raised its policy rate to 1.5% from 1.25%, which was further raised to 1.75% on November 30, 2018, in response to signs of inflationary pressures and the continued growth of the global and domestic economy. The Bank of Korea lowered its policy rate to 1.5% from 1.75% on July 18, 2019 and to 1.25% from 1.5% on October 16, 2019 to address the sluggishness of the global and domestic economy. On March 16, 2020, The Bank of Korea further lowered its policy rate to 0.75% from 1.25%, which was further lowered to 0.5% on May 28, 2020, in response to deteriorating economic conditions resulting from the COVID-19 pandemic. The Bank of Korea raised its policy rate from 0.50% to 0.75% on August 26, 2021, to 1.00% on November 25, 2021, to 1.25% on January 14, 2022, to 1.50% on April 14, 2022 and to 1.75% on May 26, 2022 in response to rising levels of household debt and inflationary pressures.

With the deregulation of interest rates on banks' demand deposits on February 2, 2004, The Bank of Korea completed the interest rate deregulation based upon the "Four-Stage Interest Rate Liberalization Plan" announced in 1991. The prohibition on the payment of interest on ordinary checking accounts was, however, maintained.

Money Supply

The following table shows the volume of the Republic's money supply:

	December 31,				
	2017	2018	2019	2020	2021
			(billions of Won)		
Money Supply (M1)(1)..................	849,862.4	865,851.8	952,922.8	1,197,828.9	1,372,336.6
Quasi-money(2)	1,680,491.2	1,834,510.6	1,960,686.8	2,002,006.8	2,241,351.0
Money Supply (M2)(3)..................	2,530,353.6	2,700,362.4	2,913,609.6	3,199,835.7	3,613,687.6

	December 31,				
	2017	2018	2019	2020	2021
			(billions of Won)		
Percentage Increase Over Previous Year.......................	5.1%	6.7%	7.9%	9.8%	12.9%

(1) Consists of currency in circulation and demand and instant access savings deposits at financial institutions.
(2) Includes time and installment savings deposits, marketable instruments, yield-based dividend instruments and financial debentures, excluding financial instruments with a maturity of more than two years.
(3) Money Supply (M2) is the sum of Money Supply (M1) and quasi-money.
Source: The Bank of Korea

Exchange Controls

Authorized foreign exchange banks, as registered with the Ministry of Economy and Finance, handle foreign exchange transactions. The ministry has designated other types of financial institutions to handle foreign exchange transactions on a limited basis.

Korean laws and regulations generally require a report to either the Ministry of Economy and Finance, The Bank of Korea or authorized foreign exchange banks, as applicable, for issuances of international bonds and other instruments, overseas investments and certain other transactions involving foreign exchange payments.

In 1994 and 1995, the Government relaxed regulations of foreign exchange position ceilings and foreign exchange transaction documentation and created free Won accounts which may be opened by non-residents at Korean foreign exchange banks. The Won funds deposited into the free Won accounts may be converted into foreign currencies and remitted outside Korea without any governmental approval. In December 1996, after joining the OECD, the Republic freed the repatriation of investment funds, dividends and profits, as well as loan repayments and interest payments. The Government continues to reduce exchange controls in response to changes in the world economy, including the new trade regime under the WTO, anticipating that such foreign exchange reform will improve the Republic's competitiveness and encourage strategic alliances between domestic and foreign entities.

In September 1998, the National Assembly passed the Foreign Exchange Transactions Act, which became effective in April 1999 and has subsequently been amended numerous times. In principle, most currency and capital transactions, including, among others, the following transactions, have been liberalized:

- the investment in real property located overseas by Korean companies and financial institutions;
- the establishment of overseas branches and subsidiaries by Korean companies and financial institutions;
- the investment by non-residents in deposits and trust products having more than one year maturities; and
- the issuance of debentures by non-residents in the Korean market.

To minimize the adverse effects from further opening of the Korean capital markets, the Ministry of Economy and Finance is authorized to introduce a variable deposit requirement system to restrict the influx of short-term speculative funds.

The Government has also embarked on a second set of liberalization initiatives starting in January 2001, under which ceilings on international payments for Korean residents have been eliminated, including overseas travel expenses, overseas inheritance remittances and emigration expenses. Overseas deposits, trusts, acquisitions of foreign securities and other foreign capital transactions made by residents and the making of deposits in Korean currency by non-residents have also been liberalized.

In line with the foregoing liberalization, measures will also be adopted to curb illegal foreign exchange transactions and to stabilize the foreign exchange market.

Effective as of January 1, 2006, the Government liberalized the regulations governing "capital transactions". The regulations provide that no regulatory approvals are required for any capital transactions. The capital transactions previously subject to approval requirements are now subject only to reporting requirements.

In January 2010, the Financial Supervisory Services released *FX Derivative Transactions Risk Management Guideline* to prevent over-hedging of foreign exchange risk by corporate investors. According to the guideline as amended in December 2014, if a corporate investor, other than a financial institution or a public enterprise, wishes to enter into a currency forward, currency option, foreign exchange swap or currency swap agreement with a bank, the bank is required to verify whether the corporate investor's assets, liabilities or contracts face foreign exchange risks that could be mitigated by a currency forward, currency option, foreign exchange swap or currency swap agreement. In addition, the bank is required to ensure that the corporate investor's risk hedge ratio, which is the ratio of the aggregate notional amount to the aggregate amount of risk, does not exceed 100%.

Foreign Exchange

The following table shows the exchange rate between the Won and the U.S. Dollar (in Won per U.S. Dollar) as announced by the Seoul Money Brokerage Services, Ltd. as of the dates indicated:

	Won/U.S. Dollar Exchange Rate
December 29, 2017	1,071.4
January 31, 2018	1,071.5
February 28, 2018	1,071.0
March 30, 2018	1,066.5
April 30, 2018	1,076.2
May 31, 2018	1,081.3
June 29, 2018	1,121.7
July 31, 2018	1,116.7
August 31, 2018	1,108.8
September 28, 2018	1,112.7
October 31, 2018	1,140.6
November 30, 2018	1,121.8
December 31, 2018	1,118.1
January 31, 2019	1,117.2
February 28, 2019	1,117.8
March 29, 2019	1,137.8
April 30, 2019	1,158.2
May 31, 2019	1,190.0
June 28, 2019	1,156.8
July 31, 2019	1,182.0
August 30, 2019	1,215.2
September 30, 2019	1,201.3
October 31, 2019	1,168.4
November 29, 2019	1,179.3
December 31, 2019	1,157.8
January 31, 2020	1,183.5
February 28, 2020	1,215.9
March 31, 2020	1,222.6
April 29, 2020	1,225.2
May 29, 2020	1,239.4
June 30, 2020	1,200.7
July 31, 2020	1,191.4
August 31, 2020	1,185.1

	Won/U.S. Dollar Exchange Rate
September 29, 2020	1,173.5
October 30, 2020	1,133.4
November 30, 2020	1,104.4
December 31, 2020	1,088.0
January 29, 2021	1,114.6
February 26, 2021	1,108.4
March 31, 2021	1,133.5
April 30, 2021	1,119.4
May 31, 2021	1,116.0
June 30, 2021	1,130.0
July 30, 2021	1,147.4
August 31, 2021	1,164.4
September 30, 2021	1,184.9
October 29, 2021	1,171.7
November 30, 2021	1,193.4
December 31, 2021	1,185.5
January 28, 2022	1,202.4
February 28, 2022	1,202.7
March 31, 2022	1,210.8
April 29, 2022	1,269.4
May 31, 2022	1,245.8

During the period from January 2, 2008 through April 16, 2009, the value of the Won relative to the U.S. dollar declined by approximately 29.9%, due primarily to adverse economic conditions resulting from liquidity and credit concerns and volatility in the global credit and financial markets and repatriations by foreign investors of their investments in the Korean stock market. The exchange rate between the Won and the U.S. Dollar has fluctuated since then. In 2020, 2021 and in recent months, the value of the Won relative to the U.S. dollar fluctuated significantly, due primarily to the impact of the ongoing COVID-19 pandemic. The market average exchange rate was Won 1,255.4 to US$1.00 on June 9, 2022.

Balance of Payments and Foreign Trade

Balance of Payments

Balance of payments figures measure the relative flow of goods, services and capital into and out of the country as represented in the current balance and the capital balance. The current balance tracks a country's trade in goods and services and transfer payments and measures whether a country is living within its income from trading and investments. The capital balance covers all transactions involving the transfer of capital into and out of the country, including loans and investments. The overall balance represents the sum of the current and capital balances. An overall balance surplus indicates a net inflow of foreign currencies, thereby increasing demand for and strengthening the local currency. An overall balance deficit indicates a net outflow of foreign currencies, thereby decreasing demand for and weakening the local currency. The financial account mirrors the overall balance. If the overall balance is positive, the surplus, which represents the nation's savings, finances the overall deficit of the country's trading partners. Accordingly, the financial account will indicate cash outflows equal to the overall surplus. If, however, the overall balance is negative, the nation has an international deficit which must be financed. Accordingly, the financial account will indicate cash inflows equal to the overall deficit.

The following table sets out certain information with respect to the Republic's balance of payments:

Balance of Payments[(1)]

Classification	2017	2018	2019	2020	2021[(4)]
			(millions of dollars)		
Current Account	75,230.9	77,466.5	59,676.1	75,902.2	88,302.2
Goods	113,592.9	110,086.8	79,812.1	80,604.8	76,207.2
Exports[(2)]	580,310.2	626,266.5	556,667.9	517,909.3	650,014.6
Imports[(2)]	466,717.3	516,179.7	476,855.8	437,304.5	573,807.4
Services	(36,734.1)	(29,369.4)	(26,845.3)	(14,670.1)	(3,108.3)
Income	5,336.9	4,901.9	12,856.0	13,486.9	19,328.2
Current Transfers	(6,964.8)	(8,152.8)	(6,146.7)	(3,519.4)	(4,124.9)
Capital and Financial Account	84,489.6	76,790.1	58,857.6	80,996.4	76,626.1
Capital Account	(26.8)	316.7	(169.3)	(386.3)	(154.3)
Financial Account[(3)]	84,516.4	76,473.4	59,026.9	81,382.7	76,780.4
Net Errors and Omissions	9,312.3	(1,309.8)	(479.9)	5,866.8	(11,367.5)

(1) Figures are prepared based on the sixth edition of the Balance of Payment Manual published by International Monetary Fund in December 2010 and implemented by the Government in December 2013. In December 2018, The Bank of Korea revised the Republic's balance of payments information to capture new economic activities and reflect the changes in raw data.
(2) These entries are derived from trade statistics and are valued on a free on board basis, meaning that the insurance and freight costs are not included.
(3) Includes borrowings from the IMF, syndicated bank loans and short-term borrowings.
(4) Preliminary.
Source: The Bank of Korea

The current account surplus in 2020 increased to US$75.9 billion from the current account surplus of US$59.7 billion in 2019, primarily due to a decrease in deficit from the services account, and to a lesser extent, a decrease in deficit from the current transfers account and an increase in surplus from the goods account. Based on preliminary data, the current account surplus in 2021 increased to US$88.3 billion from the current account surplus of US$75.9 billion in 2020, primarily due to a decrease in deficit from the services account and an increase in surplus from the income account, the effect of which was offset in part by a decrease in surplus from the goods account.

Foreign Direct Investment

Since 1960, the Government has adopted a broad range of related laws, administrative rules and regulations that provide a framework for the conduct and regulation of foreign investment activities. In September 1998, the Government promulgated the Foreign Investment Promotion Act, or the FIPA, which replaced previous foreign direct investment related laws, rules and regulations, to promote inbound foreign investments by providing incentives to, and facilitating investment activities in the Republic by, foreign nationals. The FIPA prescribes, among others, procedural requirements for inbound foreign investments, incentives for foreign investments such as tax reductions, and requirements relating to designation and development of foreign investment target regions. The Government believes that providing a stable and receptive environment for foreign direct investment will accelerate the inflow of foreign capital, technology and management techniques.

The following table sets forth information regarding annual foreign direct investment in the Republic for the periods indicated.

Foreign Direct Investment

	2017	2018	2019	2020	2021[(2)]
			(billions of dollars)		
Contracted and Reported Investment					
Greenfield Investment[(1)]	15.7	20.0	15.9	14.5	18.1

	2017	2018	2019	2020	2021(2)
	(billions of dollars)				
Merger & Acquisition	7.2	6.9	7.4	6.2	11.4
Total	22.9	26.9	23.3	20.7	29.5
Actual Investment	13.8	17.3	13.4	11.4	18.0

(1) Includes building new factories and operational facilities.
(2) Preliminary.
Source: Ministry of Trade, Industry and Energy

In 2020, the contracted and reported amount of foreign direct investment in the Republic decreased to US$20.7 billion from US$23.3 billion in 2019, primarily due to a decrease in foreign investment in the manufacturing sector to US$5.9 billion in 2020 from US$8.2 billion in 2019.

Based on preliminary data, in 2021, the contracted and reported amount of foreign direct investment in the Republic increased to US$29.5 billion from US$20.7 billion in 2020, primarily due to an increase in foreign investment in the services sector to US$23.6 billion in 2021 from US$14.4 billion in 2020.

The following table sets forth information regarding the source of foreign direct investment by region and country for the periods indicated:

Foreign Direct Investment by Region and Country

	2017	2018	2019	2020	2021
	(billions of dollars)				
North America					
U.S.A.	4.7	5.9	6.8	5.3	5.3
Others	1.6	1.9	1.7	3.5	1.6
	6.3	7.8	8.6	8.8	6.9
Asia					
Japan	1.8	1.3	1.4	0.8	1.2
Hong Kong	1.8	1.5	1.9	1.1	0.6
Singapore	1.8	1.5	1.3	2.3	4.2
China	0.8	2.7	1.0	2.0	1.9
Others	2.0	2.4	1.0	0.4	1.2
	8.2	9.4	6.6	6.6	9.1
Europe					
Netherlands	1.7	1.4	1.7	0.6	1.0
England	2.2	1.2	2.1	0.7	0.8
Germany	0.7	0.5	0.4	0.5	2.8
France	0.3	0.7	0.1	0.2	0.2
Others	2.4	5.2	3.1	2.8	8.0
	7.3	9.0	7.4	4.8	12.8
Others regions and countries	1.1	0.6	0.7	0.5	0.7
Total	22.9	26.9	23.3	20.7	29.5

Source: Ministry of Trade, Industry and Energy

Trade Balance

Trade balance figures measure the difference between a country's exports and imports. If exports exceed imports the country has a trade balance surplus while if imports exceed exports the country has a deficit. A deficit, indicating that a country's receipts from abroad fall short of its payments to foreigners, must be financed, rendering the country a debtor nation. A surplus, indicating that a country's receipts exceed its payments to foreigners, allows the country to finance its trading partners' net deficit to the extent of the surplus, rendering the country a creditor nation.

The following table summarizes the Republic's trade balance for the periods indicated:

Trade Balance

	Exports(1)	As % of GDP(2)	Imports(1)	As % of GDP(2)	Balance of Trade	Exports as % of Imports
	(billions of dollars, except percentages)					
2017	573.7	35.3%	478.5	29.5%	95.2	119.9
2018	604.9	35.2%	535.2	31.1%	69.7	113.0
2019	542.2	33.0%	503.3	30.7%	38.9	107.7
2020	512.5	31.3%	467.6	28.5%	44.9	109.6
2021(3)	644.4	35.8%	615.1	34.2%	29.3	104.8

(1) These entries are derived from customs clearance statistics on a C.I.F. basis, meaning that the price of goods includes insurance and freight cost.
(2) At current market prices.
(3) Preliminary.
Source: The Bank of Korea; Korea Customs Service

The Republic, due to its lack of natural resources, relies on extensive trading activity for growth. The country meets virtually all domestic requirements for petroleum, wood and rubber with imports, as well as much of its coal and iron needs. Exports consistently represent a high percentage of GDP and, accordingly, the international economic environment is of crucial importance to the Republic's economy. See "—The Economy—Worldwide Economic and Financial Difficulties".

The following tables give information regarding the Republic's exports and imports by major commodity groups:

Exports by Major Commodity Groups (C.I.F.)(1)

	2017	As % of 2017 Total	2018	As % of 2018 Total	2019	As % of 2019 Total	2020	As % of 2020 Total	2021(2)	As % of 2021 Total(2)
	(billions of dollars, except percentages)									
Foods & Consumer Goods	7.8	1.4	7.9	1.3	8.2	1.5	8.6	1.7	9.8	1.5
Raw Materials and Fuels	43.1	7.5	55.1	9.1	48.8	9.0	32.1	6.3	51.4	8.0
Petroleum & Derivatives	35.4	6.2	47.0	7.8	41.3	7.6	24.7	4.8	38.8	6.0
Others	7.7	1.3	8.1	1.3	7.5	1.4	7.4	1.4	12.6	2.0
Light Industrial Products	36.0	6.3	35.8	5.9	34.2	6.3	32.4	6.3	35.3	5.5
Heavy & Chemical Industrial Products	486.8	84.9	506.1	83.7	451.0	83.2	439.3	85.7	548.0	85.0
Electronic & Electronic Products	192.0	33.5	214.8	35.5	171.4	31.6	178.5	34.8	221.8	34.4
Chemicals & Chemical Products	65.7	11.5	74.0	12.2	67.4	12.4	66.6	13.0	91.9	14.3
Metal Goods	46.9	8.2	48.1	8.0	44.1	8.1	39.6	7.7	52.6	8.2
Machinery & Precision Equipment	63.3	11.0	69.4	11.5	67.6	12.5	63.4	12.4	70.9	11.0
Transport Equipment	108.8	19.0	87.4	14.4	87.7	16.2	77.6	15.1	94.2	14.6
Passenger Cars	38.8	6.8	38.2	6.3	40.5	7.5	35.6	6.9	44.3	6.9
Ship & Boat	41.4	7.2	20.7	3.4	19.5	3.6	19.2	3.7	22.4	3.5
Others	28.6	5.0	28.4	4.7	27.7	5.1	22.8	4.4	27.5	4.3
Others	10.1	1.8	12.5	2.1	12.7	2.3	13.6	2.7	16.6	2.6
Total	573.7	100.0	604.9	100.0	542.2	100.0	512.5	100.0	644.4	100.0

(1) These entries are derived from customs clearance statistics. C.I.F. means that the price of goods includes insurance and freight costs.
(2) Preliminary.
Source: The Bank of Korea; Korea Customs Service

Imports by Major Commodity Groups (C.I.F.)(1)

	2017	As % of 2017 Total	2018	As % of 2018 Total	2019	As % of 2019 Total	2020	As % of 2020 Total	2021(2)	As % of 2021 Total(2)
	(billions of dollars, except percentages)									
Industrial Materials and Fuels	233.1	48.7	279.0	52.1	254.0	50.5	206.3	44.1	302.6	49.2
Crude Petroleum	59.6	12.5	80.4	15.0	70.3	14.0	44.5	9.5	67.0	10.9
Mineral	20.3	4.2	22.0	4.1	21.7	4.3	21.4	4.6	33.3	5.4
Chemicals	44.0	9.2	50.0	9.3	47.0	9.3	46.4	9.9	60.4	9.8
Iron & Steel Products	20.3	4.2	19.7	3.7	19.8	3.9	15.2	3.3	22.2	3.6
Non-ferrous Metal	12.1	2.5	12.8	2.4	12.0	2.4	11.7	2.5	18.4	3.0
Others	76.8	16.1	94.1	17.6	83.2	16.5	67.1	14.3	101.3	16.5
Capital Goods	171.8	35.9	174.6	32.6	164.9	32.8	177.1	37.9	212.8	34.6
Machinery & Precision Equipment	63.1	13.2	60.5	11.3	50.7	10.1	57.9	12.4	70.0	11.4
Electric & Electronic Machines	95.8	20.0	100.4	18.8	100.4	20.0	105.1	22.5	127.6	20.7
Transport Equipment	10.8	2.3	11.5	2.1	11.6	2.3	11.9	2.5	13.0	2.1
Others	2.1	0.4	2.2	0.4	2.1	0.4	2.3	0.5	2.2	0.4
Consumer Goods	73.6	15.4	81.6	15.2	84.5	16.8	84.2	18.0	99.6	16.2
Cereals	6.0	1.3	6.8	1.3	6.9	1.4	7.1	1.5	8.9	1.4
Goods for Direct Consumption	19.7	4.1	22.3	4.2	22.2	4.4	22.3	4.8	25.7	4.2
Consumer Durable Goods	30.0	6.3	32.2	6.0	34.5	6.9	34.9	7.5	42.2	6.9
Consumer Nondurable Goods	17.9	3.7	20.3	3.8	20.9	4.2	20.0	4.3	22.8	3.7
Total	478.5	100.0	535.2	100.0	503.3	100.0	467.6	100.0	615.0	100.0

(1) These entries are derived from customs clearance statistics. C.I.F. means that the price of goods includes insurance and freight costs.
(2) Preliminary.
Source: The Bank of Korea; Korea Customs Service

In 2017, the Republic recorded a trade surplus of US$95.2 billion. Exports increased by 15.8% to US$573.7 billion in 2017 from US$495.4 billion in 2016, primarily due to increased demand for semiconductors and steel products. Imports increased by 17.8% to US$478.5 billion in 2017 from US$406.2 billion in 2016, primarily due to an increase in oil prices, which also led to increased unit prices of other major raw materials, and increased imports of machinery, precision equipment and electronic machines.

In 2018, the Republic recorded a trade surplus of US$69.7 billion. Exports increased by 5.4% to US$604.9 billion in 2018 from US$573.7 billion in 2017, primarily due to increased demand for semiconductors and petroleum products. Imports increased by 11.8% to US$535.2 billion in 2018 from US$478.5 billion in 2017, primarily due to an increase in oil prices, which also led to increased unit prices of other major raw materials.

In 2019, the Republic recorded a trade surplus of US$38.9 billion. Exports decreased by 10.4% to US$542.2 billion in 2019 from US$604.9 billion in 2018, primarily due to a significant decrease in semiconductor prices. Imports decreased by 6.0% to US$503.3 billion in 2019 from US$535.2 billion in 2018, primarily due to a decrease in oil prices, which also led to decreased unit prices of other major raw materials.

In 2020, the Republic recorded a trade surplus of US$44.9 billion. Exports decreased by 5.5% to US$512.5 billion in 2020 from US$542.2 billion in 2019, primarily due to a slowdown of the global economy resulting from the COVID-19 pandemic. Imports decreased by 7.1% to US$467.6 billion in 2020 from US$503.3 billion in 2019, primarily due to a decrease in oil prices, which also led to decreased unit prices of other major raw materials, as well as decreased domestic consumption, which were mainly attributed to the ongoing COVID-19 pandemic.

Based on preliminary data, the Republic recorded a trade surplus of US$29.4 billion in 2021. Exports increased by 25.7% to US$644.4 billion in 2021 from US$512.5 billion in 2020, primarily due to a recovery of the global economy from the COVID-19 pandemic. Imports increased by 31.5% to US$615.0 billion in 2021 from US$467.6 billion in 2020, primarily due to an increase in domestic consumption as well as an increase in oil prices, which also led to increased unit prices of other major raw materials.

Based on preliminary data, the Republic recorded a trade deficit of US$4.0 billion in the first quarter of 2022. Exports increased by 10.3% to US$172.9 billion in the first quarter of 2022 from US$156.7 billion in the corresponding period of 2021, primarily due to an improvement in the domestic economic conditions of the Republic's major trading partners. Imports increased by 29.5% to US$176.9 billion in the first quarter of 2022 from US$136.6 billion in the corresponding period of 2021, primarily due to an increase in oil prices, which also led to increased unit prices of other major raw materials.

The following table sets forth the Republic's exports trading partners:

Exports

	2017	As % of 2017 Total	2018	As % of 2018 Total	2019	As % of 2019 Total	2020	As % of 2020 Total	2021(1)	As % of 2021 Total(1)
				(millions of dollars, except percentages)						
China	142,120.0	24.8	162,125.1	26.8	136,202.5	25.1	132,565.4	25.9	162,913.0	25.3
United States	68,609.7	12.0	72,719.9	12.0	73,343.9	13.5	74,115.8	14.5	95,902.0	14.9
Japan	26,816.1	4.7	30,528.6	5.0	28,420.2	5.2	25,097.7	4.9	30,061.8	4.7
Hong Kong	39,112.3	6.8	45,996.4	7.6	31,912.9	5.9	30,653.8	6.0	37,467.1	5.8
Singapore	11,651.9	2.0	11,782.2	1.9	12,768.0	2.4	9,828.4	1.9	14,148.5	2.2
Vietnam	47,753.8	8.3	48,622.1	8.0	48,177.7	8.9	48,510.6	9.5	56,728.5	8.8
Taiwan	14,898.4	2.6	20,783.5	3.4	15,666.3	2.9	16,465.4	3.2	24,285.3	3.8
India	15,055.5	2.6	15,606.2	2.6	15,096.3	2.8	11,937.3	2.3	15,603.3	2.4
Indonesia	8,403.7	1.5	8,833.2	1.5	7,650.1	1.4	6,312.9	1.2	8,550.3	1.3
Mexico	10,932.6	1.9	11,458.2	1.9	10,927.0	2.0	8,241.0	1.6	11,290.2	1.8
Australia	19,861.6	3.5	9,610.4	1.6	7,890.6	1.5	6,188.5	1.2	9,750.5	1.5
Russia	6,906.6	1.2	7,320.9	1.2	7,774.1	1.4	6,900.0	1.3	9,979.5	1.5
Germany	8,483.8	1.5	9,372.7	1.5	8,685.7	1.6	9,576.1	1.9	11,109.9	1.7
Others(2)	153,088.4	26.7	150,100.2	24.8	137,717.3	25.4	126,395.8	24.6	156,610.5	24.3
Total	573,694.4	100.0	604,859.7	100.0	542,232.6	100.0	512,788.7	100.0	644,400.4	100.0

(1) Preliminary.
(2) Includes more than 200 countries and regions.
Source: The Bank of Korea; Korea Customs Service

The following table sets forth the Republic's imports trading partners:

Imports

	2017	As % of 2017 Total	2018	As % of 2018 Total	2019	As % of 2019 Total	2020	As % of 2020 Total	2021(1)	As % of 2021 Total(1)
				(millions of dollars, except percentages)						
China	97,860.1	20.5	106,488.6	19.9	107,228.7	21.3	108,884.6	23.3	138,628.1	22.5
Japan	55,124.7	11.5	54,603.7	10.2	47,580.9	9.5	46,023.0	9.8	54,642.2	8.9
United States	50,749.4	10.6	58,868.3	11.0	61,878.6	12.3	57,492.2	12.3	73,213.4	11.9
Saudi Arabia	19,590.5	4.1	26,335.8	4.9	21,840.6	4.3	15,979.6	3.4	24,271.3	3.9
Qatar	11,267.1	2.4	16,293.6	3.0	13,036.6	2.6	7,562.1	1.6	11,611.1	1.9
Australia	19,159.7	4.0	20,718.6	3.9	20,608.2	4.1	18,707.1	4.0	32,918.0	5.4
Germany	19,748.7	4.1	20,854.0	3.9	19,936.9	4.0	20,680.9	4.4	21,996.3	3.6
Kuwait	9,594.0	2.0	12,794.3	2.4	10,771.1	2.1	5,827.9	1.2	8,253.9	1.3
Taiwan	18,073.0	3.8	16,738.4	3.1	15,717.7	3.1	17,837.0	3.8	23,485.8	3.8
United Arab Emirates	9,557.1	2.0	9,287.4	1.7	8,991.1	1.8	5,692.7	1.2	7,318.7	1.2
Indonesia	9,571.0	2.0	11,161.2	2.1	8,819.8	1.8	7,594.7	1.6	10,725.1	1.7
Malaysia	8,714.7	1.8	10,205.7	1.9	9,279.9	1.8	8,892.6	1.9	10,456.2	1.7
Others(2)	149,468.3	31.2	170,852.9	31.9	157,652.8	31.3	146,458.4	31.3	215,214.6	35.0
Total	478,478.3	100.0	535,202.4	100.0	503,342.9	100.0	467,632.8	100.0	615,093.4	100.0

(1) Preliminary.

(2) Includes more than 200 countries and regions.
Source: The Bank of Korea; Korea Customs Service

The outbreak of severe health epidemics in Korea and various parts of the world, including the ongoing COVID-19 pandemic, raises significant uncertainty about prospects for international trade and economic growth for affected countries, as well as world economic prospects in general. Global economic uncertainties in relation to COVID-19, including uncertainty due to the extent and effectiveness of extensive control measures and vaccination programs, among others, are expected to continue in 2022. Although there have been mixed signs of recovery in the domestic and global economy resulting from the availability of COVID-19 vaccinations and gradual normalization of business activities, the extent to which the COVID-19 pandemic affects international trade is highly uncertain and difficult to predict. In order to contain further spread of such epidemics and to prevent the outbreak of similar epidemics in the future, the Government continues to cooperate actively with regional and international efforts to develop and implement various measures to combat such outbreaks. See "—The Economy—Worldwide Economic and Financial Difficulties".

In 2020, 2021 and in recent months, the value of the Won relative to the U.S. dollar and Japanese Yen has fluctuated widely, in particular due to the impact of the ongoing COVID-19 pandemic. See "—The Economy—Worldwide Economic and Financial Difficulties". An appreciation of the Won against the U.S. dollar and Japanese Yen increases the Won value of the Republic's export sales and diminishes the price-competitiveness of export goods in foreign markets in U.S. dollar and Japanese Yen terms, respectively. However, it also decreases the cost of imported raw materials in Won terms and the cost in Won of servicing the Republic's U.S. dollar and Japanese Yen denominated debt. In general, when the Won appreciates, export dependent sectors of the Korean economy, including automobiles, electronics and shipbuilding, suffer from the resulting pressure on the price-competitiveness of export goods, which may lead to reduced profit margins and loss in market share, more than offsetting a decrease in the cost of imported raw materials. If the export dependent sectors of the Korean economy suffer reduced profit margins or a net loss, it could result in a material adverse effect on the Korean economy.

Since the Government announced its plans to pursue free trade agreements, or FTAs, in 2003, the Republic has entered into FTAs with key trading partners. The Republic has had bilateral FTAs in effect with Chile since 2004, Singapore since 2006, India since 2010, Peru since 2011, the United States since 2012, Turkey since 2013, Australia since 2014, Canada, China, New Zealand and Vietnam since 2015, Colombia since July 2016 and the United Kingdom since January 2021. The Republic is currently in negotiations with a number of other key trading partners. In addition, the Republic has had regional FTAs in effect with the European Free Trade Association since 2006, the Association of Southeast Asian Nations since 2009, the European Union since 2011, with each of Panama, Costa Rica, Guatemala, Honduras, El Salvador and Nicaragua since 2021 and with the Regional Comprehensive Economic Partnership since 2022, and is currently negotiating additional regional FTAs. The Republic and Turkey have completed revisions to their bilateral FTA, which became effective in August 2018. The Republic and the United States have also completed revisions to their bilateral FTA, which became effective in January 2019.

Non-Commodities Trade Balance

The Republic had non-commodities trade deficits of US$38.4 billion in 2017, US$32.6 billion in 2018, US$20.1 billion in 2019 and US$4.7 billion in 2020. Based on preliminary data, the Republic had a non-commodities trade surplus of US$12.1 billion in 2021.

Foreign Currency Reserves

The foreign currency reserves are external assets that are readily available to and controlled by monetary authorities for meeting balance of payments financing needs and for other related purposes. The following table shows the Republic's total official foreign currency reserves:

Total Official Reserves

	December 31,				
	2017	2018	2019	2020	2021
	(millions of dollars)				
Gold	$ 4,794.8	$ 4,794.8	$ 4,794.8	$ 4,794.8	$ 4,794.8
Foreign Exchange[(1)]	379,476.6	393,332.5	397,876.1	430,117.2	438,319.2
Total Gold and Foreign Exchange	384,271.3	398,127.2	402,670.9	434,912.0	443,114.0
Reserve Position at IMF	1,621.1	2,140.4	2,792.9	4,815.3	4,634.9
Special Drawing Rights	3,374.3	3,426.6	3,352.4	3,370.8	15,369.5
Total Official Reserves	$ 389,266.7	$ 403,694.3	$ 408,816.1	$ 443,098.1	$ 463,118.4

(1) More than 95% of the Republic's foreign currency reserves are comprised of convertible foreign currencies.
Source: The Bank of Korea; International Monetary Fund

The Government's foreign currency reserves increased to US$262.2 billion as of December 31, 2007 from US$8.9 billion as of December 31, 1997, primarily due to continued balance of trade surpluses and capital inflows. In 2008, the Government's foreign currency reserves decreased, falling to US$201.2 billion as of December 31, 2008, partially as a result of the Government's use of the foreign currency reserve to provide foreign currency liquidity to Korean financial institutions. The Government's foreign currency reserves increased to US$389.3 billion as of December 31, 2017, US$403.7 billion as of December 31, 2018, US$408.8 billion as of December 31, 2019, US$443.1 billion as of December 31, 2020 and US$463.1 billion as of December 31, 2021, primarily due to continued trade surpluses and capital inflows. The amount of the Government's foreign currency reserve was US$449.3 billion as of April 29, 2022.

Government Finance

The Ministry of Economy and Finance prepares the Government budget and administers the Government's finances.

The Government's fiscal year commences on January 1. The Government must submit the budget, which is drafted by the Minister of Economy and Finance and approved by the President of the Republic, to the National Assembly not later than 90 days prior to the start of the fiscal year and may submit supplementary budgets revising the original budget at any time during the fiscal year.

2020 budgeted revenues increased by 1.0% to ₩450.9 trillion from ₩446.4 trillion in 2019, led by an increase in budgeted tax revenues (including social security contributions and tax on property). 2020 budgeted expenditures and net lending increased by 9.4% to ₩481.4 trillion from ₩439.9 trillion in 2019, led by increases in budgeted expenditures on economic growth (including job creation, research and development and support for start-ups and small businesses), social security, welfare services for senior citizens, unemployed people and temporary workers, and public housing. The 2020 budget anticipated a ₩30.5 billion budget deficit.

2021 budgeted revenues remained relatively stable at ₩450.9 trillion from 2020. 2021 budgeted expenditures and net lending increased by 9.3% to ₩526.3 trillion from ₩481.4 trillion in 2020, led by increases in budgeted expenditures on recovery from the COVID-19 pandemic (including support for individuals and businesses adversely impacted by the COVID-19 pandemic, procurement of COVID-19 vaccines and enhancement of medical facilities and other infrastructure, among others) and revitalization of the economy (public housing, job creation, research and development, social security and welfare services, among others). The 2021 budget anticipated a ₩75.4 trillion budget deficit.

In March 2020, the National Assembly approved a supplementary budget for 2020 in the amount of ₩11.7 trillion as part of the Government's efforts to mitigate adverse effects on the Korean economy resulting from the ongoing COVID-19 pandemic. See "—The Economy—Worldwide Economic and Financial Difficulties". In April 2020, the National Assembly approved the second supplementary budget in the amount of ₩7.6 trillion, which amount was subsequently increased to ₩12.2 trillion, and in July 2020, the National Assembly approved the third supplementary budget in the amount of ₩35.1 trillion. In

September 2020, the National Assembly approved the fourth supplementary budget amounting to ₩7.8 trillion, and the Government announced its COVID-19 relief package plan amounting to ₩9.4 trillion in December 2020, following a resurgence of COVID-19 cases in Korea. In March 2021, the National Assembly approved the first 2021 supplementary budget in the amount of ₩14.9 trillion to be spent on initiatives for relief from the COVID-19 pandemic, and in July 2021, the National Assembly approved the second supplementary budget of 2021 amounting to ₩34.9 trillion, mainly to provide relief packages to small businesses and direct payments to eligible individuals. In December 2021, the National Assembly approved the Republic's budget for 2022 in the amount of ₩607.7 trillion, a significant portion of which is expected to be used for measures to continue to mitigate the adverse effects of the COVID-19 pandemic on the Korean economy. In February 2022, the National Assembly approved a 2022 supplementary budget in the amount of ₩16.9 trillion as part of the Government's continuing efforts to support small businesses and vulnerable groups as well as strengthen disease control measures amid the ongoing COVID-19 pandemic. In May 2022, the National Assembly approved the second supplementary budget in the amount of ₩62 trillion, most of which is expected to be used to compensate small businesses and self-employed individuals to compensate for losses incurred due to the COVID-19 restrictions.

These supplementary budgets (including relief packages), the largest of their kind drawn up in response to an outbreak of an infectious disease in Korea, focus on the provision of financial support for certain industries that are most vulnerable to, or adversely impacted by, the COVID-19 pandemic, such as tourism, aviation, shipping, logistics and food services, among others. The Government has used, and will continue to use, the supplementary budgets for the following purposes: (i) provision of loans and guarantees for small businesses, (ii) relief packages and household support, including daycare vouchers and emergency livelihood support, (iii) disease prevention (including purchases and administration of vaccines), testing and treatment, (iv) various forms of financial support for local communities most affected by the COVID-19 pandemic and (v) measures to revitalize the economy from the impact of the COVID-19 pandemic. The supplementary budgets have been, and will continue to be, funded through the issuance of treasury bonds by the Government, The Bank of Korea's unappropriated surplus and other surplus funds available to the Government, among others.

Any significant increase in additional spending measures as stipulated by the supplementary budgets (including relief packages) may lead to a budget deficit for 2022, which could result in a deterioration in the Government's fiscal position and an increase in borrowings. The impact of such effects is highly uncertain and will depend on, among others, the speed and extent of the economic recovery in Korea and internationally, which in turn will likely depend significantly on the scope and duration of the ongoing COVID-19 pandemic.

The following table shows consolidated Government revenues and expenditures:

Consolidated Central Government Revenues and Expenditures

	Actual					Budget[1]		
	2017	2018	2019	2020	2021[2]	2019	2020	2021
	(billions of Won)							
Total Revenues	403,839	438,262	443,853	446,628	537,619	446,398	450,873	450,905
Current Revenues	400,659	435,558	441,148	443,694	534,999	443,271	447,925	447,865
Total Tax Revenues	325,845	358,424	363,005	360,129	422,182	364,539	365,389	359,775
Taxes on income, profits and capital gains	134,242	155,399	155,736	148,622	184,509	159,618	152,837	143,121
Social security contributions	60,460	64,854	69,550	74,583	78,104	69,747	73,392	77,032
Tax on property	12,945	15,473	15,474	22,735	31,392	14,611	16,013	19,300
Taxes on goods and services	95,535	99,056	98,614	91,047	99,840	97,263	98,154	95,658
Taxes on international trade and transaction	8,529	8,815	7,882	7,059	8,227	9,056	8,791	8,347
Other tax	14,133	14,828	15,748	16,084	20,110	14,244	16,202	16,316
Non-Tax Revenues	74,814	77,134	78,143	83,565	112,818	78,732	82,536	88,091
Operating surpluses of departmental enterprise sales and property income	27,692	28,616	29,345	33,571	56,664	28,692	31,026	32,791
Administration fees & charges and non-industrial sales	9,067	9,004	10,181	9,929	10,865	9,940	10,355	10,724
Fines and forfeits	23,769	24,455	22,554	23,583	26,993	23,726	24,643	26,950
Contributions to government employee pension fund	12,311	13,206	13,523	13,876	14,918	13,445	13,944	15,385

	Actual					Budget(1)		
	2017	2018	2019	2020	2021(2)	2019	2020	2021
				(billions of Won)				
Current revenue of non-financial public enterprises	1,974	1,853	2,540	2,606	3,378	2,929	2,568	2,241
Capital Revenues	3,180	2,703	2,705	2,934	2,620	3,127	2,948	3,040
Total Expenditures and Net Lending	379,809	407,099	455,850	517,781	568,013	439,868	481,352	526,292
Total Expenditures	363,671	389,610	436,698	489,966	537,934	425,270	460,044	496,661
Current Expenditures	332,719	360,176	387,100	455,098	502,091	394,567	426,721	459,333
Expenditure on goods and service	67,536	71,459	60,196	79,460	88,144	80,219	85,521	94,636
Interest payment	13,976	14,287	13,837	14,452	15,431	14,362	15,525	17,254
Subsidies and other current transfers	248,513	272,080	309,575	357,295	395,726	295,970	321,672	343,636
Current expenditure of non-financial public enterprises	2,694	2,350	3,492	3,891	2,790	4,016	4,003	3,807
Capital Expenditures	30,952	29,434	49,598	34,868	35,842	30,704	33,323	37,328
Net Lending	16,138	17,489	19,152	27,815	30,079	14,597	21,308	29,631

(1) Budget information for 2022 is not yet available.
(2) Preliminary.
Source: Ministry of Economy and Finance; The Bank of Korea; Korea National Statistical Office

The consolidated Government account consists of a General Account, Special Accounts (including a non-financial public enterprise special account) and Public Funds. The Government segregates the accounts of certain functions of the Government into Special Accounts and Public Funds for more effective administration and fiscal control. The Special Accounts and Public Funds relate to business type activities, such as economic development, road and railway construction and maintenance, monopolies, and communications developments and the administration of loans received from official international financial organizations and foreign governments.

Revenues derive mainly from national taxes and non-tax revenues. Taxes in Korea can be roughly classified into the following types:

- income tax and capital gains tax,
- property tax,
- value-added tax,
- customs duty tax, and
- other taxes.

Income tax and capital gains tax are imposed on income derived from labor, business operation and ownership of assets and profits derived from capital appreciation. Income tax and capital gains tax, depending on the type of taxpayer, can be further classified into corporate income tax and individual income tax. Property tax is imposed on exchange or ownership of property and includes inheritance tax and gift tax. Value-added tax is imposed on value added to goods and services. Customs duty tax is imposed on imported goods. Other taxes include tax on certain securities transactions and a stamp tax for certain documents.

Expenditures include general administration, national defense, community service, education, health, social security, certain annuities and pensions and local finance, which involves the transfer of tax revenues to local governments.

For 2017, the Republic recorded total revenues of ₩403.8 trillion and total expenditures and net lending of ₩379.8 trillion. The Republic had a fiscal surplus of ₩24.0 trillion in 2017.

For 2018, the Republic recorded total revenues of ₩438.3 trillion and total expenditures and net lending of ₩407.1 trillion. The Republic had a fiscal surplus of ₩31.2 trillion in 2018.

For 2019, the Republic recorded total revenues of ₩443.9 trillion and total expenditures and net lending of ₩455.9 trillion. The Republic had a fiscal deficit of ₩12.0 trillion in 2019.

For 2020, the Republic recorded total revenues of ₩446.6 trillion and total expenditures and net lending of ₩517.8 trillion. The Republic had a fiscal deficit of ₩71.2 trillion in 2020.

Based on preliminary data, the Republic recorded total revenues of ₩537.6 trillion and total expenditures and net lending of ₩568.0 trillion in 2021. The Republic had a fiscal deficit of ₩30.4 trillion in 2021.

The Government currently expects that the Republic's fiscal deficit will decrease in 2022, primarily due to an increase in tax revenues following a steady recovery of the economy as well as an increase in real estate-related taxes. However, such predictions are highly uncertain and will depend on, among others, the speed and extent of the economic recovery in Korea and internationally, which in turn will likely depend significantly on the scope and duration of the ongoing COVID-19 pandemic.

Debt

The Government estimates that the total outstanding debt of the Government (including guarantees by the Government) as of December 31, 2019 amounted to approximately ₩713.8 trillion, an increase of 6.7% over the previous year.

The Government estimates that the total outstanding debt of the Government (including guarantees by the Government) as of December 31, 2020 amounted to approximately ₩831.7 trillion, an increase of 16.5% over the previous year.

The Government expects that the amount of the Government's debt will further increase in 2022 as it continues to execute large stimulus plans to support the Republic's economic recovery and prepare for the transition to a post-pandemic economy. The Ministry of Economy and Finance administers the national debt of the Republic.

External and Internal Debt of the Government

The following table sets out, by currency and the equivalent amount in U.S. dollars, the estimated outstanding direct external debt of the Government as of December 31, 2020:

Direct External Debt of the Government

	Amount in Original Currency		Equivalent Amount in U.S. Dollars[1]	
	(millions)			
US$	US$	6,525.0	US$	6,525.0
Euro (EUR)	EUR	1,825.0		2,244.8
Total			US$	8,769.8

(1) Amounts expressed in currencies other than US$ are converted to US$ at the arbitrage rate announced by the Seoul Money Brokerage Services, Ltd. in effect on December 31, 2020.

The following table summarizes, as of December 31 of the years indicated, the outstanding direct internal debt of the Republic:

Direct Internal Debt of the Government

	(billions of Won)
2016	584,785.0
2017	619,971.9
2018	643,550.9

	(billions of Won)
2019	690,524.1
2020	808,941.0

The following table sets out all guarantees by the Government of indebtedness of others:

Guarantees by the Government

	December 31,				
	2016	2017	2018	2019	2020
	(billions of Won)				
Domestic	24,241.6	21,130.5	17,016.3	14,760.0	12,490.0
External[(1)]	—	—	—	—	—
Total	24,241.6	21,130.5	17,016.3	14,760.0	12,490.0

(1) Converted to Won at foreign exchange banks' telegraphed transfer selling rates to customers or the market average exchange rates in effect on December 31 of each year.

For further information on the outstanding indebtedness, including guarantees, of the Republic, see "—Tables and Supplementary Information".

External Liabilities

The following tables set out certain information regarding the Republic's external liabilities calculated under the criteria based on the sixth edition of the Balance of Payment Manual, or BPM6, published by the International Monetary Fund in December 2010 and implemented by the Government in December 2013. Under BPM6, in particular, prepayments received in connection with the construction of ships are excluded from the external liabilities.

	December 31,				
	2017	2018	2019	2020	2021[(1)]
	(billions of dollars)				
Long-term Liabilities	296.1	315.6	335.3	385.6	462.2
General Government	78.0	83.5	91.2	119.4	142.8
Monetary Authorities	14.5	15.2	14.4	15.0	35.9
Banks	91.7	100.1	104.4	112.2	128.1
Other Sectors	111.8	116.8	125.2	139.0	155.4
Short-term Liabilities	116.0	125.6	135.5	159.3	166.2
General Government	2.0	1.0	1.6	2.1	1.6
Monetary Authorities	8.1	12.8	10.9	10.8	9.6
Banks	85.5	90.3	102.0	120.4	123.6
Other Sectors	20.4	21.5	21.0	26.0	31.5
Total External Liabilities	412.0	441.2	470.7	544.9	628.5

(1) Preliminary.

Commitments to Assume Treasury Obligations

The Government may, if deemed necessary for recovery from disasters and calamities, make commitments to assume treasury obligations to the extent resolved by the National Assembly each fiscal year. In such cases, such commitments shall be executed in accordance with the procedures for spending reserve funds within general accounts. As of December 31, 2021, such commitments assumed by the Government amounted to ₩45.7 trillion.

Debt Record

The Government has always paid when due the full amount of principal of, interest on, and amortization of sinking fund requirements of, all of its indebtedness.

Tables and Supplementary Information

A. External Debt of the Government

(1) External Bonds of the Government

Series	Issue Date	Maturity Date	Interest Rate (%)	Currency	Original Principal Amount	Principal Amount Outstanding as of December 31, 2020
2005-001	November 2, 2005	November 3, 2025	5.625	USD	400,000,000	400,000,000
2006-002	December 7, 2006	December 7, 2021	4.250	EUR	375,000,000	375,000,000
2013-001	September 11, 2013	September 11, 2023	3.875	USD	1,000,000,000	1,000,000,000
2014-001	June 10, 2014	June 10, 2044	4.125	USD	1,000,000,000	1,000,000,000
2014-002	June 10, 2014	June 10, 2024	2.125	EUR	750,000,000	750,000,000
2017-001	January 19, 2017	January 19, 2027	2.750	USD	1,000,000,000	1,000,000,000
2018-001	September 20, 2018	September 20, 2028	3.500	USD	500,000,000	500,000,000
2018-002	September 20, 2018	September 20, 2048	3.875	USD	500,000,000	500,000,000
2019-001	June 19, 2019	June 19, 2029	2.500	USD	1,000,000,000	1,000,000,000
2019-002	June 19, 2019	June 19, 2024	2.000	USD	500,000,000	500,000,000
2020-001	September 16, 2020	September 16, 2030	1.000	USD	625,000,000	625,000,000
2020-002	September 16, 2020	September 16, 2025	0.000	EUR	700,000,000	700,000,000
Total External Bonds in Original Currencies						USD 6,525,000,000
						EUR 1,825,000,000
Total External Bonds in Equivalent Amount of Won(1)						W 9,541,488,000,000

(1) U.S. dollar amounts are converted to Won amounts at the rate of US$1.00 to ₩1,088.0, the market average exchange rate in effect on December 31, 2020, as announced by Seoul Money Brokerage Services, Ltd. Euro amounts are converted to Won amounts at the rate of EUR 1.00 to ₩1,338.2, the market average exchange rate in effect on December 31, 2020, as announced by Seoul Money Brokerage Services, Ltd.

(2) External Borrowings of the Government

None.

B. External Guaranteed Debt of the Government

None.

C. Internal Debt of the Government

Title	Range of Interest Rates	Range of Years of Issue	Range of Years of Original Maturity	Principal Amounts Outstanding as of December 31, 2020
	(%)			(billions of Won)
1. Bonds				
Interest-Bearing Treasury Bond for Treasury Bond Management Fund	0.875-5.750	2006-2020	2021-2070	726,766.1
Interest-Bearing Treasury Bond for National Housing I.........................	1.00-3.00	2011-2020	2016-2025	78,862.8
Interest-Bearing Treasury Bond for National Housing II........................	0.0-3.0	1996-2017	2016-2029	34.6
Interest-Bearing Treasury Bond for National Housing III.......................	0	2005	2015	0
Non-interest-Bearing Treasury Bond for Contribution to International Organizations(1)..	0	1968-1985	—	9.4
Total Bonds				805,672.9
2. Borrowings				
Borrowings from The Bank of Korea...	0.712	2020	2021	213.0
Borrowings from the Sports Promotion Fund	0.785-1.575	2019-2020	2021-2022	927.0
Borrowings from The Korea Foundation Fund	0.955-1.825	2019-2020	2021-2022	118.1
Borrowings from the Labor Welfare Promotion Fund	1.07-1.26	2020	2021	50.0
Borrowings from Korea Technology Finance Corporation.....................	0.81-2.34	2018-2020	2022	195.0
Borrowings from the Credit Guarantee Fund for Agriculture, Forestry and Fisheries Suppliers...	1.285-1.825	2019	2021	850.0
Borrowings from the Government Employees' Pension Fund...............	1.51	2018	2021	10.0
Borrowings from the Film Industry Development Fund	1.43-1.575	2019	2021	75.0

Title	Range of Interest Rates	Range of Years of Issue	Range of Years of Original Maturity	Principal Amounts Outstanding as of December 31, 2020
	(%)			(billions of Won)
Borrowings from the Korea Credit Guarantee Fund	0.81	2020	2023	250.0
Borrowings from the Housing Finance Credit Guarantee Fund	0.815-1.285	2020	2023	530.0
Borrowings from the Korea Infrastructure Credit Guarantee Fund	0.81	2020	2023	50.0
Total Borrowings				3,268.1
Total Internal Funded Debt				808,941.0

(1) Interest Rates and Years of Original Maturity not applicable.

D. Internal Guaranteed Debt of the Government

Title	Range of Interest Rates	Range of Years of Issue	Range of Years of Original Maturity	Principal Amounts Outstanding as of December 31, 2020
	(%)			(billions of Won)
1. Bonds of Government-Affiliated Corporations				
Korea Deposit Insurance Corporation	2.14-2.52	2018	2021	1,480.0
Korea Student Aid Foundation	0.00-4.79	2011-2020	2021-2040	10,490.0
Key Industry Stabilization Fund	0.73-1.45	2020	2021-2025	520.0
Total Internal Guaranteed Debt				12,490.0

E. Others

Commitments to Assume Treasury Obligations

The Government may, if deemed necessary for recovery from disasters and calamities, make commitments to assume treasury obligations to the extent resolved by the National Assembly each fiscal year. In such cases, such commitments shall be executed in accordance with the procedures for spending reserve funds within general accounts. As of December 31, 2021, such commitments assumed by the Government amounted to ₩45.7 trillion.

TAXATION

United States Taxation

The following is a summary of certain U.S. federal income tax considerations of the purchase, ownership and disposition of the Notes as of the date of this Offering Circular. This summary deals only with Notes held as capital assets within the meaning of Section 1221 of the Internal Revenue Code of 1986, as amended (the "Code") by Noteholders who purchase the Notes for cash upon original issuance in this offering at the issue price (i.e., the first price at which a substantial amount of the Notes is sold for cash to investors, including sales to bond houses, brokers, or similar persons or organizations acting in the capacity of underwriters, placement agents, or wholesalers).

As used herein, a "U.S. Noteholder" means a beneficial owner of the Notes that is, for U.S. federal income tax purposes, any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity treated as a corporation) that is created or organized under the laws of the United States, any state thereof or the District of Columbia;
- an estate the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust if it (i) is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all substantial decisions of the trust or (ii) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

The term "non-U.S. Noteholder" means a beneficial owner of the Notes (other than an entity treated as a partnership for U.S. federal income tax purposes) that is not a U.S. Noteholder.

If an entity classified as a partnership for U.S. federal income tax purposes holds Notes, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. If you are a partnership or a partner in a partnership considering an investment in the Notes, you should consult your tax adviser.

This summary does not represent a detailed description of the U.S. federal income tax consequences applicable to you if you are subject to special tax treatment under the U.S. federal income tax laws, including, without limitation:

- a dealer in securities or currencies;
- a financial institution;
- a regulated investment company;
- a real estate investment trust;
- a tax-exempt organization;
- an insurance company;
- a person holding the Notes as part of a hedging, integrated, conversion or constructive sale transaction or a straddle;
- a trader in securities that has elected the mark-to-market method of accounting for your securities;
- a person liable for the alternative minimum tax;
- a partnership or other pass-through entity (or an investor in such an entity);
- a U.S. Noteholder whose "functional currency" is not the U.S. dollar;
- a person required for U.S. federal income tax purposes to conform the timing of income accruals with respect to the Notes to its financial statements under Section 451(b) of the Code;
- a "controlled foreign corporation";
- a "passive foreign investment company"; or
- a U.S. expatriate.

This summary is based on the Code, U.S. Treasury regulations, administrative rulings and judicial decisions as of the date hereof. Those authorities may be changed, possibly on a retroactive basis, or interpreted differently by the U.S. Internal Revenue Service ("IRS") or the courts so as to result in U.S. federal income tax consequences different from those summarized below. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance that the IRS will not take positions concerning the tax consequences of the purchase, ownership or disposition of the Notes that are different from those discussed below.

This summary does not represent a detailed description of the U.S. federal income tax consequences to you in light of your particular circumstances and does not address the effects of any U.S. federal tax consequences other than income taxes and does not address state, local or non-U.S. tax laws, gift or estate tax laws, or the Medicare tax on net investment income. It is not intended to be, and should not be construed to be, legal or tax advice to any particular purchaser of the Notes. If you are considering the purchase of the Notes, you should consult your tax adviser concerning the particular U.S. federal income tax consequences to you of the purchase, ownership and disposition of the Notes, as well as the consequences to you arising under other U.S. federal tax laws and the laws of any other taxing jurisdiction.

U.S. Noteholders

Stated Interest. Stated interest on the Notes will generally be taxable as ordinary interest income when accrued or received by a U.S. Noteholder, in accordance with the U.S. Noteholder's regular method of accounting for U.S. federal income tax purposes. It is expected, and this discussion assumes, that the Notes will be issued without original issue discount for U.S. federal income tax purposes.

Additional Amounts. In addition to interest payments on the Notes, a U.S. Noteholder will be required to include in income any additional amounts and any Korean tax withheld from payments under the Guarantee notwithstanding that such U.S. Noteholder in fact did not receive such withheld tax. A U.S. Noteholder may be entitled to deduct or credit this tax, subject to certain limitations (including that the election to deduct or credit foreign taxes applies to all foreign taxes for a particular tax year). Interest income on a Note (including any additional amounts and any Korean tax withheld from payments under the Guarantee) generally will be considered United States source income for purposes of the United States foreign tax credit. As a result, a U.S. Noteholder may not be able to benefit from the foreign tax credit for any Korean tax withheld from payments under the Guarantee unless such U.S. Noteholder has other income from foreign sources against which the credit can be applied. The rules governing the foreign tax credit are complex. U.S. Noteholders are urged to consult their tax advisers regarding the availability of the foreign tax credit under their particular circumstances.

Sale, Exchange and Retirement of the Notes. Upon the sale, exchange, retirement or other taxable disposition of a Note, a U.S. Noteholder will generally recognize gain or loss equal to the difference between the amount realized upon the sale, exchange, retirement or other taxable disposition (less an amount equal to any accrued and unpaid interest, which will be taxable as such) and the U.S. Noteholder's adjusted tax basis in the Note. A U.S. Noteholder's adjusted tax basis in a Note will generally be the cost for that Note. Such gain or loss will be capital gain or loss and will be long-term capital gain or loss if at the time of sale, exchange, retirement or other taxable disposition, the Note has been held for more than one year. Capital gains of individuals derived with respect to capital assets held for more than one year are generally eligible for reduced rates of taxation. The deductibility of capital losses is subject to limitations.

Information Reporting and Backup Withholding. Information reporting requirements generally apply in connection with payments on the Notes to, and the proceeds from a sale or other disposition of the Notes by, non-corporate U.S. Noteholders. A U.S. Noteholder will be subject to backup withholding on these payments if the U.S. Noteholder fails to provide its taxpayer identification number to the paying agent or comply with certain certification procedures or otherwise establish an exemption from backup withholding. Backup withholding is not an additional tax. Any amount paid as backup withholding may be creditable against the holder's U.S. federal income tax liability, provided that the required information is timely furnished to the U.S. Internal Revenue Service ("IRS").

Non-U.S. Noteholders

Stated Interest. Subject to the discussions of backup withholding and FATCA below, a non-U.S. Noteholder will not generally be subject to U.S. federal income tax or U.S. federal withholding tax with respect to any payment of interest on the Notes under the "portfolio interest rule," provided that:

- interest paid on the Notes is not effectively connected with the non-U.S. Noteholder's conduct of a trade or business in the United States;
- the non-U.S. Noteholder does not actually (or constructively) own 10% or more of the total combined voting power of all classes of the Issuer's voting stock within the meaning of the Code and applicable U.S. Treasury regulations;
- the non-U.S. Noteholder is not a controlled foreign corporation that is related to the Issuer, directly or indirectly, through stock ownership;
- the non-U.S. Noteholder is not a bank whose receipt of interest on the Notes is described in Section 881(c)(3)(A) of the Code; and
- either (i) the non-U.S. holder provides its name and address on an IRS Form W-8BEN or IRS Form W-8BEN-E (or other applicable form), and certifies, under penalties of perjury, that it is not a U.S. person as defined under the Code, or (ii) the non-U.S. Noteholder holds its Notes through certain foreign intermediaries and satisfies the certification requirements of applicable U.S. Treasury regulations. Special certification rules apply to non-U.S. Noteholders that are pass-through entities rather than corporations or individuals.

If the non-U.S. Noteholder cannot satisfy the requirements described above, payments of interest made to the holder will be subject to a 30% U.S. federal withholding tax, unless the Noteholder provides the applicable withholding agent with a properly executed:

- IRS Form W-8BEN or IRS Form W-8BEN-E (or other applicable form) certifying an exemption from or reduction in withholding under the benefit of an applicable income tax treaty; or
- IRS Form W-8ECI (or other applicable form) certifying that interest paid on the Notes is not subject to withholding tax because it is effectively connected with such Noteholder's conduct of a trade or business in the United States (as discussed below).

If a non-U.S. Noteholder is engaged in a trade or business in the United States and interest on the Notes is effectively connected with the conduct of that trade or business (and, if required by an applicable income tax treaty, is attributable to a U.S. permanent establishment of the non-U.S. Noteholder), the Noteholder will not be subject to withholding tax, but will be subject to U.S. federal income tax on that interest on a net income basis in generally the same manner as if the non-U.S. Noteholder were a U.S. person as defined under the Code. If a non-U.S. Noteholder is eligible for the benefits of an income tax treaty between the United States and its country of residence, any interest income that is effectively connected with a U.S. trade or business will be subject to U.S. federal income tax in the manner specified by the treaty and generally will only be subject to such tax if such income is attributable to a permanent establishment (or a fixed base in the case of an individual) maintained by the non-U.S. Noteholder in the United States. In addition, a non-U.S. Noteholder that is treated as a foreign corporation may be subject to a branch profits tax equal to 30% (or a lower applicable income tax treaty rate) of its effectively connected earnings and profits, subject to adjustments. Payments under the Guarantee may be subject to U.S. federal withholding tax. No additional amounts, however, will be payable with respect to any U.S. withholding taxes imposed, if any, on payments under the Guarantee.

Sale, Exchange and Retirement of the Notes. Subject to the discussions of backup withholding and FATCA below, any gain realized on the sale or other taxable disposition of a Note generally will not be subject to U.S. federal income tax unless:

- the gain is effectively connected with the non-U.S. Noteholder's conduct of a trade or business in the United States (and, if required by an applicable income tax treaty, is attributable to a U.S. permanent establishment), in which case such gain will be subject to U.S. federal income tax in generally the same manner as effectively connected interest is taxed; or
- the non-U.S. Noteholder is an individual who is present in the United States for 183 days or more in the taxable year of that disposition, and certain other conditions are met, in which case, unless an applicable income tax treaty provides otherwise, such non-U.S. Noteholder will be subject to a flat 30% U.S. federal income tax on the gain derived from the sale or other taxable disposition, which may be offset by certain U.S.-source capital losses.

Information Reporting and Backup Withholding. If required, the applicable reporting agent will report to the IRS and to each non-U.S. Noteholder the amount of any interest paid on the Notes in each calendar year, and the amount of U.S. federal income tax withheld, if any, with respect to these payments. Copies of the information returns reporting such interest payments and any withholding may also be made available to the tax authorities in the country in which a non-U.S. Noteholder resides under the provisions of an applicable income tax treaty.

In general, a non-U.S. Noteholder will not be subject to backup withholding with respect to payments of interest on the Notes provided that the applicable withholding agent does not have actual knowledge or reason to know that the Noteholder is a U.S. person as defined under the Code, and the applicable withholding agent has received the required certification that the Noteholder is a non-U.S. Noteholder described above in the fifth bullet point under "—Non-U.S. Noteholders—Stated interest."

Information reporting and, depending on the circumstances, backup withholding will apply to the proceeds of a sale or other taxable disposition of the Notes within the United States or conducted through certain U.S.-related financial intermediaries, unless the non-U.S. Noteholder certifies to the payor under penalties of perjury that it is a non-U.S. Noteholder (and the payor does not have actual knowledge or reason to know that the Noteholder is a U.S. person as defined under the Code), or the Noteholder otherwise establishes an exemption. Backup withholding is not an additional tax and any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against the Noteholder's U.S. federal income tax liability provided that the required information is timely furnished to the IRS.

Payments to Certain Foreign Entities. Under the Foreign Account Tax Compliance Act, commonly known as "FATCA", a 30% withholding tax is imposed on interest on, and (subject to the proposed Treasury Regulations described below) gross proceeds from the sale or other disposition of, debt instruments paid to a foreign financial institution or to a non-financial foreign entity (including in some instances, where the foreign financial institution or non-financial foreign entity is acting as an intermediary for another party), unless (1) the foreign financial institution undertakes certain diligence and reporting, (2) the non-financial foreign entity either certifies it does not have any substantial United States owners or furnishes identifying information regarding each substantial United States owner, or (3) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. An intergovernmental agreement between the United States and the applicable jurisdiction may modify these requirements. In December 2018, the IRS and the Treasury Department issued proposed regulations that would exclude gross proceeds from the sale or other disposition of debt instruments from the FATCA withholding tax requirements; taxpayers may rely on these proposed regulations until final regulations are issued. Prospective Noteholders are encouraged to consult their own tax advisers regarding the possible implications of FATCA on their investments in the Notes.

THE DISCUSSION OF TAX MATTERS SET FORTH ABOVE IS INCLUDED FOR GENERAL INFORMATION ONLY AND MAY NOT BE APPLICABLE DEPENDING UPON A NOTEHOLDER'S PARTICULAR SITUATION. NOTEHOLDERS SHOULD CONSULT THEIR OWN TAX ADVISERS WITH RESPECT TO THE TAX CONSEQUENCES TO THEM OF THE PURCHASE, OWNERSHIP, AND DISPOSITION OF THE NOTES, INCLUDING THE TAX CONSEQUENCES UNDER STATE, LOCAL,

NON-U.S. AND OTHER TAX LAWS AND THE POSSIBLE EFFECTS OF CHANGES IN FEDERAL OR OTHER TAX LAWS.

Korean Taxation

The following summary of Korean tax considerations applies to non-Korean resident individuals and corporations ("Non-Residents") having no permanent establishment (as defined under Korean law and applicable tax treaty) in Korea to which the relevant income is attributable or with which such income is effectively connected. Non-Residents with such a permanent establishment are taxed under different rules.

All payments, other than the payment of the principal amount, under the Guarantee by the Guarantor to a Non-Resident holder of the Notes may be subject to withholding tax at the rate of 22% (including the local income surtax) or such reduced rate or non-taxation (tax exemption) as applicable under the relevant tax treaty between Korea and the country of tax residence of the Non-Resident Noteholder, given that the Non-Resident holder is a beneficial owner of the payments. Payment of any interest on the Notes under the Guarantee by the Guarantor to a Non-Resident Noteholder may be subject to withholding tax in Korea. If this is the case, the Guarantor shall pay such additional amounts, in accordance with the terms of the Notes, as may be necessary to ensure that the Noteholders receive the amounts guaranteed under the Guarantee that would otherwise have been receivable in the absence of such deduction or withholding, subject to certain exceptions. See Condition 9 of the Terms and Conditions of the Notes.

The Proposed Financial Transaction Tax

The European Commission has published a proposal (the “Commission’s Proposal”) for a Directive for a common financial transaction tax (“FTT”) in Austria, Belgium, Estonia, France, Germany, Greece, Italy, Portugal, Slovakia, Slovenia and Spain (the “participating Member States”).However, Estonia has since stated that it will not participate.

The Commission’s Proposal has very broad scope and could, if introduced in its current form, apply to certain dealings in the Notes in certain circumstances.

Under the Commission’s Proposal, the FTT could apply in certain circumstances to persons both within and outside of the participating Member States. Generally, it would apply to certain dealings in the Notes where at least one party is a financial institution, and at least one party is established in a participating Member State. A financial institution may be, or be deemed to be, “established” in a participating Member State in a broad range of circumstances, including (a) by transacting with a person established in a participating Member State or (b) where the financial instrument which is subject to the dealings is issued in a participating Member State.

The FTT remains subject to negotiation between the participating Member States and the legality of the proposal is uncertain. It may therefore be altered prior to any implementation, the timing of which remains unclear. Additional EU Member States may decide to participate and/or certain of the participating Member States may decide to withdraw.

Prospective Noteholders are advised to seek their own professional advice in relation to the FTT.

SUBSCRIPTION AND SALE

Crédit Agricole Corporate and Investment Bank, J.P. Morgan Securities LLC, The Korea Development Bank and Standard Chartered Bank (the "**Joint Lead Managers**") are acting as joint lead managers and bookrunners in this offering. Subject to the terms and conditions set forth in a subscription agreement dated as of June 21, 2022 (the "**Subscription Agreement**") among the Issuer, the Guarantor and the Joint Lead Managers, the Issuer has agreed to sell to the Joint Lead Managers, and each of the Joint Lead Managers has agreed, severally and not jointly, to purchase from the Issuer, the principal amount of Notes set forth opposite its name below.

Joint Lead Managers	Principal Amount of the Notes
	(US$)
Crédit Agricole Corporate and Investment Bank	75,000,000
J.P. Morgan Securities LLC	75,000,000
The Korea Development Bank	75,000,000
Standard Chartered Bank	75,000,000
Total	**US$300,000,000**

The Korea Development Bank, in its capacity as a Joint Lead Manager, has agreed to offer and sell the Notes only outside the United States to non-U.S. persons.

Subject to the terms and conditions set forth in the Subscription Agreement, the Joint Lead Managers have agreed, severally and not jointly, to purchase all of the Notes sold under the Subscription Agreement if any of the Notes are purchased. If a Joint Lead Manager defaults, the Subscription Agreement provides that the purchase commitments of the non-defaulting Joint Lead Managers may be increased or the Subscription Agreement may be terminated.

The Issuer has agreed to indemnify the Joint Lead Managers against certain liabilities in connection with this offering, including in respect of any taxes, levies, imports, duties, fees, assessments or other charges of whatever nature imposed by the United States, or by any department, agency or other political subdivision or taxing authority thereof or therein, and all interest, penalties or similar liabilities with respect thereto.

The Joint Lead Managers are offering the Notes, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of certain legal matters by counsel, including the validity of the Notes, and other conditions contained in the Subscription Agreement, such as the receipt by the Joint Lead Managers of officer's certificates and legal opinions.

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

The Notes and the Guarantee have not been, and will not be, registered under the Securities Act or any state securities laws of the United States. The Joint Lead Managers propose to offer the Notes and the Guarantee for resale in transactions not requiring registration under the Securities Act or applicable state securities laws, including sales pursuant to Rule 144A and Regulation S. The Joint Lead Managers will not offer or sell the Notes except to persons they reasonably believe to be QIBs or pursuant to offers and sales to non-U.S. persons that occur outside of the United States without the directed selling efforts in compliance with Regulation S. In addition, until 40 days following the commencement of this offering, an offer or sale of Notes within the United States by a dealer (whether or not participating in the offering) may violate the registration requirements of the Securities Act unless the dealer makes the offer or sale in compliance with Rule 144A or another exemption from registration under the Securities Act. Each purchaser of the Notes will be deemed to have made acknowledgments, representations and agreements as described under "*Notice to Investors.*"

The Notes are a new issue of securities with no established trading market. The Joint Lead Managers have advised the Issuer and the Guarantor 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. Accordingly, no assurances can be made as to 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 Guarantor, general economic conditions and other factors. If a jurisdiction requires that the offering be made by a licensed broker or dealer and any of the Joint Lead Managers or any affiliate of the Joint Lead Managers is a licensed broker or dealer in that jurisdiction, the offering shall be deemed to be made by such Joint Lead Manager or such affiliate on behalf of the Issuer in such jurisdiction.

Delivery of the Notes is expected on or about July 5, 2022. Purchasers who wish to trade the Notes prior to the delivery of the Notes will be required to specify an alternative settlement arrangement at the time of any such trade to prevent a failed settlement. Noteholders who wish to trade the Notes prior to the date of delivery should consult their advisers.

The Issuer has agreed with each of the Joint Lead Managers that until the expiration of 60 days after the date of the closing, the Issuer shall not issue any debt securities having an original tenor of more than one year (other than the Notes) in a registered or unregistered offering pursuant to Rule 144A and/or Regulation S without the prior consent from the Joint Lead Managers.

Short Positions and Stabilizing Transactions

In connection with the offering, each of the Joint Lead Managers as a Stabilization Manager, may purchase and sell the Notes in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing purchases. Short sales involve the sale by a Stabilization Manager of a greater principal amount of the Notes than they are required to purchase in the offering. A Stabilization Manager must close out any short position by purchasing the Notes in the open market. A short position is more likely to be created if the Joint Lead Managers 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. Stabilizing transactions involve bids to purchase the Notes so long as the stabilizing bids do not exceed a specified maximum.

Similar to other purchase transactions, a Stabilization Manager's purchases to cover the syndicate short sales and stabilizing purchases 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 Issuer, the Guarantor or any of the Joint Lead Managers makes 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 Issuer, the Guarantor or any of the Joint Lead Managers makes any representation that the Joint Lead Managers will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice at any time. No assurance can be given as to the liquidity of, or the trading market for, the Notes.

Other Relationships

The Joint Lead Managers and certain of their affiliates may have performed certain investment banking and advisory services for the Issuer, the Guarantor and/or their respective affiliates from time to time for which they have received customary fees and commissions and may, from time to time, engage in transactions with and perform services for the Issuer, the Guarantor and/or their respective affiliates in the ordinary course of their business. The Joint Lead Managers or certain of their affiliates may purchase the Notes and be allocated the Notes for asset management and/or proprietary purposes but not with a view to distribution.

The Joint Lead Managers or their respective affiliates may purchase the Notes for their own account and enter into transactions, including credit derivatives, such as asset swaps, repackaging and credit default swaps relating to the Notes and/or other securities of the Issuer, the Guarantor or their respective subsidiaries or associates at the same time as the offer and sale of the 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 the Notes to which this Offering Circular relates (notwithstanding that such selected counterparties may also be purchasers of the Notes).

Each of the Issuer and the Guarantor has been advised by the Joint Lead Managers that they may offer and sell the Notes to or through any of their respective affiliates and any such affiliate may offer and sell the Notes purchased by it to or through any Joint Lead Manager.

Selling Restrictions

United States

The Notes and the Guarantee have not been, and will not be, registered under the Securities Act and may not be offered or sold within the United States or to, or for the account or benefit of, 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 of the United States. In addition, until 40 days after the commencement of this offering, an offer or sale of the Notes within the United States by a dealer (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 Joint Lead Managers, through their respective affiliates, acting as selling agents where applicable, propose to offer the Notes to certain persons in offshore transactions in reliance on Regulation S and in accordance with applicable law and propose to offer the Notes to QIBs in the United States pursuant to Rule 144A. Each of the Joint Lead Managers has agreed with the Issuer and the Guarantor that, except as permitted under the Subscription Agreement, it will not offer, sell or deliver the Notes within the United States. Any offer or sale of the Notes in the United States in reliance on Rule 144A will be made by broker-dealers 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 ''Notice to Investors.''

United Kingdom

Each Joint Lead Manager has represented and agreed that:

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

Each Joint Lead Manager has represented and agreed that the Notes have not been and will not be registered with the Financial Services Commission of Korea under the Financial Investment Services and Capital Markets Act of Korea, as amended. Accordingly, each Joint Lead Manager has represented and agreed that the Notes have not been and will not be offered, sold, delivered or transferred directly or indirectly, in Korea or to, or for the account or benefit of, any resident of Korea (as defined in the Foreign Exchange Transactions Law of Korea and its Enforcement Decree) or to others for re-offering or resale, except as otherwise permitted by 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 (as such term is defined in the Foreign Exchange Transaction Act of Korea and the Enforcement Decree thereof) other than a qualified institutional buyer (or a ''Korean QIB'', as defined in the regulation on issuance, public disclosure, etc. of securities of Korea) registered with the Korea Financial Investment Association (the ''KOFIA'') as a Korean QIB and subject to the requirement of monthly reports with the KOFIA of its holding of Korean QIB bonds as defined in the Regulation on Issuance, Public Disclosure, etc. of Securities of Korea, provided that (a) the Notes are denominated, and the principal and interest payments thereunder are made, in a currency other than Korean Won, (b) the amount of the Notes acquired by such Korean QIBs in the primary market is limited to less than 20% of the aggregate issue amount of the Notes, (c) the Notes are listed on one of the major overseas securities markets designated by the Financial Supervisory Service of Korea, or certain procedures, such as registration or report with a foreign financial investment regulator, have been completed for offering of the Notes in a major overseas securities market, (d) the one-year restriction on offering, delivering or selling of the Notes to a Korean resident other than a Korean QIB is expressly stated in the Notes, the relevant underwriting agreement, purchase agreement, and the offering circular and (e) the Issuer and the Joint Lead Managers shall individually or collectively keep the evidence of fulfillment of conditions (a) through (d) above after having taken necessary actions therefor.

Singapore

This Offering Circular has not been and will not be registered as a prospectus with the Monetary Authority of Singapore under the Securities and Futures Act 2001 of Singapore (the "SFA"). Accordingly, this Offering Circular and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Notes may not be circulated or distributed, nor may the Notes be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor under Section 274 of the SFA, (ii) to a relevant person pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA and (where applicable) Regulation 3 of the Securities and Futures (Classes of Investors) Regulations 2018 of Singapore, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the Notes are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
(b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities or securities-based derivatives contracts (each term as defined in the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the Notes pursuant to an offer made under Section 275 of the SFA except:

(1) to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(c)(ii) of the SFA;
(2) where no consideration is or will be given for the transfer;

(3) where the transfer is by operation of law;
(4) as specified in Section 276(7) of the SFA; or
(5) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018 of Singapore.

***Notification under Section 309B(1)(c) of the SFA** — the Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A(1) of the SFA), that the Notes are prescribed capital markets products (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018 of Singapore) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).*

Hong Kong

Each Joint Lead Manager 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 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.

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 Joint Lead Manager 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.

NOTICE TO INVESTORS

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.

Neither the Notes nor the Guarantee has been or will be registered under the Securities Act or the securities laws of any state of the United States and, subject to certain exceptions, the Notes may not be offered or sold directly or indirectly within the United States or to or for the account or benefit of U.S. persons, as defined in Regulation S. Accordingly, the Notes are being offered and sold only (i) in the United States to QIBs within the meaning of, and in compliance with, Rule 144A or (ii) in offshore transactions within the meaning of, and in compliance with, Regulation S.

Each Noteholder 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 are used herein as defined therein):

(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 purchasing the Notes in an "offshore transaction" without any "directed selling efforts" (as such terms are defined in Regulation S) pursuant to Regulation S;

(2) it acknowledges that the Notes and the Guarantee have not been, and will not be, registered under the Securities Act or with any securities regulatory authority of any jurisdiction and that the Notes 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 Issuer, (ii) to a person whom the seller reasonably believes is a QIB in a transaction meeting the requirements of Rule 144A, (iii) in an offshore transaction meeting the requirements of Rule 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 Issuer 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 Noteholder 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 the Notes initially offered in the United States to QIBs will be represented by one or more Restricted Global Note Certificates and that the Notes initially offered outside of the United States in reliance on Regulation S will be represented by one or more Unrestricted Global Note Certificates;

(6) it understands that the Restricted Global Note Certificates will, until the expiration of the applicable holding period with respect to the Notes set forth in Rule 144 of the Securities Act, unless otherwise agreed by the Issuer, bear a legend substantially to the following effect:

"THIS NOTE HAS NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"). THE NOTEHOLDER HEREOF, BY

PURCHASING THIS NOTE, AGREES FOR THE BENEFIT OF HANWHA ENERGY USA HOLDINGS CORPORATION (THE "COMPANY") THAT PRIOR TO THE DATE THAT IS ONE YEAR AFTER THE LATER OF THE ORIGINAL ISSUE DATE HEREOF AND THE LAST DATE ON WHICH THE COMPANY OR ANY AFFILIATE OF THE COMPANY WAS THE OWNER OF THIS NOTE, THIS NOTE 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) IN AN OFFSHORE TRANSACTION WITHOUT ANY DIRECTED SELLING EFFORTS MEETING THE REQUIREMENTS OF RULE 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. THE NOTEHOLDER AGREES TO, AND EACH SUBSEQUENT NOTEHOLDER IS REQUIRED TO, NOTIFY ANY PURCHASER OF THE NOTE FROM IT OF THE RESALE RESTRICTIONS REFERRED TO IN (A) ABOVE, IF THEN APPLICABLE."

(7) if it holds an interest in the Unrestricted Global Note Certificates and decides to resell or otherwise transfer such interest prior to the expiration of 40 days after the later of the commencement of this offering and the completion of the distribution of the Notes, it will do so only (A)(i) to a non-U.S. person located outside of the United States in compliance with Rule 904 of Regulation S or (ii) to a QIB in compliance with Rule 144A and (B) in accordance with any applicable securities laws of any state of the United States; and it understands that the Unrestricted Global Note Certificates will, unless otherwise agreed by the Issuer, bear a legend substantially to the following effect:

"THIS NOTE (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 UNTIL 40 DAYS AFTER THE LATER OF THE COMMENCEMENT OF THE OFFERING OF THE NOTE AND THE DATE OF ORIGINAL ISSUANCE OF THE NOTE, 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 any Notes in certificated form or of beneficial interests in the Global Note Certificates (other than pursuant to an effective registration statement), the Noteholder or the holder of beneficial interests in the Global Note Certificates, 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 Agency Agreement; and

(9) it acknowledges that the Issuer, the Guarantor, the Joint Lead Managers, 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 Issuer; 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.

(10) THE NOTES HAVE NOT BEEN 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 TRANSACTION LAW 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 KOREAN QIB WHO IS REGISTERED WITH THE KOFIA AS A KOREAN QIB AND SUBJECT TO THE REQUIREMENT OF MONTHLY REPORTS WITH THE KOFIA OF ITS HOLDING OF KOREAN QIB BONDS AS DEFINED IN THE REGULATION ON ISSUANCE, PUBLIC DISCLOSURE, ETC. OF SECURITIES OF KOREA, PROVIDED THAT (A) THE NOTES ARE DENOMINATED, AND THE PRINCIPAL AND INTEREST PAYMENTS THEREUNDER ARE MADE, IN A CURRENCY OTHER THAN KOREAN WON, (B) THE AMOUNT OF THE NOTES ACQUIRED BY SUCH KOREAN QIBS IN THE PRIMARY MARKET IS LIMITED TO LESS THAN 20% OF THE AGGREGATE ISSUE AMOUNT OF THE NOTES, (C) THE NOTES ARE LISTED ON ONE OF THE MAJOR OVERSEAS SECURITIES MARKETS DESIGNATED BY THE FINANCIAL SUPERVISORY SERVICE OF KOREA, OR CERTAIN PROCEDURES, SUCH AS REGISTRATION OR REPORT WITH A FOREIGN FINANCIAL INVESTMENT REGULATOR, HAVE BEEN COMPLETED FOR OFFERING OF THE NOTES IN A MAJOR OVERSEAS SECURITIES MARKET, (D) THE ONE-YEAR RESTRICTION ON OFFERING, DELIVERING OR SELLING OF NOTES TO A KOREAN RESIDENT OTHER THAN A KOREAN QIB IS EXPRESSLY STATED IN THE NOTES, THE RELEVANT PURCHASE AGREEMENT AND OFFERING CIRCULAR AND (E) THE COMPANY AND THE JOINT LEAD MANAGERS SHALL INDIVIDUALLY OR COLLECTIVELY KEEP THE EVIDENCE OF FULFILLMENT OF CONDITIONS (A) THROUGH (D) ABOVE AFTER HAVING TAKEN NECESSARY ACTIONS THEREFOR.

LEGAL MATTERS

Certain legal matters relating to the issue and sale of the Notes will be passed upon by Paul Hastings LLP as to matters of U.S. and English law for the Issuer, Linklaters LLP as to matters of U.S. and English law for the Joint Lead Managers and Kim & Chang as to matters of Korean law for the Guarantor. Paul Hastings LLP and Linklaters LLP may rely as to all matters of Korean law on the opinion of Kim & Chang, and Kim & Chang may rely as to all matters of U.S. and English law on the opinion of Paul Hastings LLP.

INDEPENDENT AUDITORS

The Issuer's consolidated financial statements as of and for the years ended December 31, 2021 and 2020 have been audited by Warren Averett, LLC, independent auditors, as stated in their reports appearing herein. Warren Averett, LLC, the Issuer's independent auditor, has not been engaged to perform and has not performed, since the date of its reports included herein, any procedures on the financial statements addressed in those reports. Warren Averett, LLC also has not performed any procedures relating to this Offering Circular.

The Guarantor's separate financial statements as of and for the years ended December 31, 2021 and 2020 have been audited by KPMG Samjong Accounting Corp., independent auditors, as stated in their reports appearing herein. KPMG Samjong Accounting Corp., the Guarantor's independent auditor, has not been engaged to perform and has not performed, since the date of its report included herein, any procedures on the financial statements addressed in that report. KPMG Samjong Accounting Corp. also has not performed any procedures relating to this Offering Circular.

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HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES

CONSOLIDATED FINANCIAL STATEMENTS
AND SUPPLEMENTARY INFORMATION

DECEMBER 31, 2021

Warren Averett
CPAs AND ADVISORS

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AND SUBSIDIARIES
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DECEMBER 31, 2021

Warren Averett
CPAs AND ADVISORS

3815 Interstate Court
Montgomery, AL 36109
334.271.2200
warrenaverett.com

INDEPENDENT AUDITORS' REPORT

To the Board of Directors and Stockholder
Hanwha Energy USA Holdings Corporation and Subsidiaries

Opinion

We have audited the accompanying consolidated financial statements of Hanwha Energy USA Holdings Corporation (a Delaware Corporation) and Subsidiaries, which comprise the consolidated balance sheet as of December 31, 2021, and the related consolidated statements of loss and comprehensive loss, changes in stockholder's equity and cash flows for the year then ended, and the related notes to the consolidated financial statements.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Hanwha Energy USA Holdings Corporation and Subsidiaries as of December 31, 2021, and the results of its operations and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of Hanwha Energy USA Holdings Corporation and Subsidiaries and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about Hanwha Energy USA Holdings Corporation and Subsidiaries' ability to continue as a going concern within one year after the date that the financial statements are available to be issued.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with generally accepted auditing standards will always detect a material misstatement when it exists.

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. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with generally accepted auditing standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.

- 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 Hanwha Energy USA Holdings Corporation and Subsidiaries' internal control. Accordingly, no such opinion is expressed.

- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.

- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about Hanwha Energy USA Holdings Corporation and Subsidiaries' ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings and certain internal control related matters that we identified during the audit.

Emphasis of Matter
As discussed in Note 19 to the financial statements, certain adjustments were made to previously issued financial statements in relation to change in accounting principle and correction of errors. Our opinion is not modified with respect to these matters.

Report on Supplementary Information
Our audit was conducted for the purpose of forming an opinion on the consolidated financial statements as a whole. The supplementary information on Pages 43 to 48 is presented for purposes of additional analysis and is not a required part of the consolidated financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the consolidated financial statements. The information has been subjected to the auditing procedures applied in the audit of the consolidated financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the consolidated financial statements or to the consolidated financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the consolidated financial statements as a whole.

Warren Averett, LLC

Montgomery, Alabama
March 21, 2022

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEET
DECEMBER 31, 2021

ASSETS

CURRENT ASSETS		
Cash	$	131,516,480
Restricted cash		6,146,000
Accounts receivable - trade, net of allowance for sales returns and doubtful accounts of $6,870,494		46,523,761
Receivable from related parties		38,750,911
Notes receivable		1,685,475
Other receivable		264,840
Costs and estimated earnings in excess of billings		2,422,420
Income tax refundable		8,573,108
Value-added tax receivables		1,420,634
Accrued revenue		2,955,586
Project assets		66,722,901
Prepaid expenses and other current assets		4,756,705
Total current assets		311,738,821
NONCURRENT ASSETS		
Restricted cash		9,112,719
Property and equipment, net		780,440
Photovoltaic (PV) system, net		155,031,584
Asset retirement cost, net		2,706,680
Operating lease right-of-use assets, net		101,055,093
Investment in unconsolidated affiliate		153,554,223
Investment at fair value		4,566,000
Long-term deposits		233,423
Project assets		245,616,600
Deferred tax assets		1,207,292
Goodwill		6,399,481
Other intangible assets		1,214,778
Other noncurrent assets		12,265,814
Total noncurrent assets		693,744,127
TOTAL ASSETS	$	1,005,482,948

See notes to the financial statements.

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEET
DECEMBER 31, 2021

LIABILITIES AND EQUITY	
CURRENT LIABILITIES	
Accounts payable	$ 17,961,195
Payable to related parties	2,853,571
Other payables	9,226,951
Short-term borrowings	190,000,000
Current portion of long-term debt	10,949,812
Bond payable	
(net of bond discount and current debt issuance cost $831,267)	299,168,733
Accrued interest	3,573,253
Billings in excess of costs and estimated earnings	841,192
Current portion of long-term operating lease liabilities	7,013,540
Advance from customer	1,936,950
Accrued expenses and other current liabilities	12,269,052
Total current liabilities	555,794,249
NONCURRENT LIABILITIES	
Other Payables	8,486,464
Long-term debt	294,373,953
Bond payable (net of unamortized debt issue cost of $67,921)	33,673,117
Asset retirement obligation	2,665,338
Operating lease liabililties	99,241,144
Deferred tax liability	3,793,940
Accrued expenses and other noncurrent liabilities	1,008,782
Total noncurrent liabilities	443,242,738
TOTAL LIABILITIES	999,036,987
EQUITY	
Stockholder's equity:	
Common stock, par value $1,000 per share; 105,201 shares authorized,	
105,201 shares issued and outstanding (1 share issued with no par value)	105,200,000
Additional paid-in capital	(70,420)
Accumulated deficit	(97,633,078)
Accumulated other comprehensive loss	(1,105,559)
Stockholder's equity attributable to the Company	6,390,943
Noncontrolling interest	55,018
TOTAL EQUITY	6,445,961
TOTAL LIABILITIES AND EQUITY	$ 1,005,482,948

See notes to the financial statements.

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF LOSS AND COMPREHENSIVE LOSS
FOR THE YEAR ENDED DECEMBER 31, 2021

REVENUE	$	392,630,365
COST OF REVENUE		448,326,138
GROSS LOSS		(55,695,773)
OPERATING EXPENSES		58,433,485
LOSS FROM OPERATIONS		(114,129,258)
OTHER INCOME (EXPENSES)		
Interest income		438,385
Interest expense		(13,140,438)
Guarantee fees		(6,456,076)
Loss on equity method investment		(58,609,596)
Foreign currency gain(loss) and other income (expenses)		(3,809,350)
Other income (expenses)		(22,270,378)
Total other income (expenses), net		(103,847,453)
LOSS BEFORE BENEFIT FROM INCOME TAXES		(217,976,711)
BENEFIT FROM INCOME TAXES		(13,172,217)
NET LOSS		(204,804,494)
INCOME ATTRIBUTABLE TO NONCONTROLLING INTEREST		491
LOSS ATTRIBUTABLE TO THE COMPANY		(204,804,985)
OTHER COMPREHENSIVE INCOME		
Foreign currency translation gain, net of income tax expense of $48,509		182,485
COMPREHENSIVE LOSS	$	(204,622,500)

See notes to the financial statements.

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
FOR THE YEAR ENDED DECEMBER 31, 2021

	Common Stock							
	Shares	Amount	Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total Stockholder's Equity	Noncontrolling Interest	Total Equity
BALANCE AT DECEMBER 31, 2020 (Previously Reported)	105,201	$ 105,200,000	$ 7,970,347	$ 79,615,533	$ (1,288,044)	$ 191,497,836	$ 62,319,471	$ 253,817,307
Prior period adjustment, net of tax		-	-	27,556,374	-	27,556,374	(38,846,528)	(11,290,154)
BALANCE AT DECEMBER 31, 2020 (Corrected)	105,201	105,200,000	7,970,347	107,171,907	(1,288,044)	219,054,210	23,472,943	242,527,153
Distribution	-	-	(45,900)	-	-	(45,900)	(8,100)	(54,000)
Purchase of noncontrolling interest	-	-	(24,520)	-	-	(24,520)	(675,480)	(700,000)
Loss on deconsolidation	-	-	(7,970,347)	-	-	(7,970,347)	(22,734,836)	(30,705,183)
Foreign currency translation gain, net of income tax expense of $48,509	-	-	-	-	182,485	182,485	-	182,485
Net loss	-	-	-	(204,804,985)	-	(204,804,985)	491	(204,804,494)
BALANCE AT DECEMBER 31, 2021	105,201	$ 105,200,000	$ (70,420)	$ (97,633,078)	$ (1,105,559)	$ 6,390,943	$ 55,018	$ 6,445,961

See notes to the financial statements.

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED DECEMBER 31, 2021

CASH FLOWS FROM OPERATING ACTIVITIES	
Loss attributable to the Company	$ (204,804,985)
Gain attributable to noncontrolling interest	491
Net loss	(204,804,494)
Adjustments to reconcile net loss to net cash used in operating activities:	
Depreciation	13,386,123
Amortization	5,322,607
Interest expense from lease liabilities	54,923
Provision expense	6,829,571
Lease expenses	(239,379)
Bad debt expense	5,313,141
Project impairment loss	10,103,237
Foreign currency gain	709,779
Gain on derivative	(343,827)
Deferred income taxes	(4,872,165)
Equity loss from unconsolidated affiliate	58,609,596
Changes in assets and liabilities:	
Accounts receivable	(47,116,299)
Receivable from related parties	(38,512,276)
Notes receivable	1,303,650
Prepaid expenses and other current assets	(3,135,435)
Accrued revenue	(290,222)
Loss on deconsolidation	30,705,183
Project assets	(53,413,837)
Prepaid income taxes	(6,610,771)
Value-added tax receivables	9,674,557
Costs and estimated earnings in excess of billings	(980,809)
Other assets	(5,445,507)
Accounts payable	(2,284,939)
Accrued expenses and other current liabilities	3,435,780
Lease liabilities	(973,432)
Billings in excess of costs and estimated earnings	(160,632)
Total adjustments	(18,931,383)

See notes to the financial statements.

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED DECEMBER 31, 2021

CASH FLOWS FROM INVESTING ACTIVITIES	
Investment at fair value	$ (7,667,518)
Investment in unconsolidated affiliate	(3,370,000)
Capital expenditure for property and equipment	(468,293)
Increase in derivative	1,022,796
Decrease in derivative	(1,133,475)
Capital contribution to investment in unconsolidated affiliate	(700,000)
Distribution income	107,646,145
Distribution to noncontrolling interest	(54,000)
Net cash provided by investing activities	95,275,655
CASH FLOWS FROM FINANCING ACTIVITIES	
Lease payment	(7,711,611)
Proceeds from short-term debt	170,000,000
Repayment of short-term debt	(50,000,000)
Proceeds from long-term debt	110,000,000
Repayment of long-term debt	(3,641,724)
Net cash provided by financing activities	218,646,665
FOREIGN CURRENCY TRANSLATION ADJUSTMENT	182,485
INCREASE IN CASH AND RESTRICTED CASH	90,368,929
CASH AND RESTRICTED CASH AT BEGINNING OF YEAR	56,406,270
CASH AND RESTRICTED CASH AT END OF YEAR	$ 146,775,199

See notes to the financial statements.

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED DECEMBER 31, 2021

SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION	
Cash paid during the year for:	
Interest, including capitalized interest	$ 18,067,996
Income tax	$ 283,532
SUPPLEMENTAL DISCLOSURES OF NONCASH TRANSACTIONS	
Increase in operating lease right-of-use assets	$ 667,427
Increase in operating lease liabilities	$ 667,427
Reclass from short-term debt to long-term debt	$ 63,670,322
Investment in unconsolidated affiliate	$ 146,078,649
Reclass from property, and equipment to PV system	$ 15,676,447
Reclass from project assets to property, and equipment	$ 15,003,133
Capitalized interest in project assets	$ 6,593,439
Capitalized lease expense in project assets	$ 10,178,913
Reclass from long-term debt to current portion of long-term debt	$ 6,997,156
Goodwill adjustment	$ 304,000
Reclass from long-term lease to current portion of long-term lease	$ 7,006,357
Reclass from advanced payment to other payables	$ 2,000,719

See notes to the financial statements.

1. NATURE OF BUSINESS

Hanwha Energy USA Holdings Corporation is a wholly owned subsidiary of Hanwha Energy Corporation (the Parent), located in Korea. The Company was incorporated as Hanwha Energy Corporation America in the state of Delaware in December 2013, changed its name to 174 Power Global Corporation in August 2016, and in December 2018 changed its name to Hanwha Energy USA Holdings Corporation.

The accompanying consolidated financial statements are comprised of the accounts of Hanwha Energy USA Holdings Corporation and its wholly owned and majority-owned subsidiaries (the Company).

The Company engages mainly in development and in engineering, procurement, construction (EPC) of solar power projects on utility-scale or commercial sites in the United States and Latin America, along with providing electricity to the retail utility market in Texas.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The consolidated financial statements of the Company have been prepared in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP).

Principles of Consolidation

The accompanying consolidated financial statements have been prepared in accordance with U.S. GAAP and reflect the accounts and operations of the Company and those of its subsidiaries, including Funds, in which the Company has a controlling financial interest. The typical condition for a controlling financial interest ownership is holding a majority of the voting interests of an entity. However, a controlling financial interest may also exist in entities, such as variable interest entities (VIEs), through arrangements that do not involve controlling voting interests. In accordance with the provisions of Financial Accounting Standards Board (FASB) Accounting Standards Codification Topic 810 (ASC 810) *Consolidation*, the Company consolidates any VIE of which it is the primary beneficiary. The primary beneficiary, as defined in ASC 810, is the party that has (1) the power to direct the activities of a VIE that most significantly impact the VIE's economic performance, and (2) the obligation to absorb the losses of the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. The Company evaluates its relationships with its VIEs on an ongoing basis to determine whether it continues to be the primary beneficiary. The consolidated financial statements reflect the assets and liabilities of VIEs that are consolidated. All intercompany transactions and balances have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – CONTINUED

Use of Estimates – Continued

Significant accounting estimates reflected in the Company's consolidated financial statements include revenue recognition for sales of solar power projects, EPC and development services accounted for under a cost-based input method, allowance for doubtful accounts receivable, provision for contingent liability, impairment of long-lived assets and project assets, the estimated useful lives of long-lived assets, discount rates used to measure operating lease liabilities, fair value estimate of financial instruments, accrual for uncertain tax positions, valuation allowances for deferred tax assets and applying acquisition method of accounting to business acquisitions.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash on hand and bank deposits, which are unrestricted as to withdrawal and use and have original maturities less than 90 days.

Restricted cash represents amounts held by banks, which are not available for the Company's general use, as security for issuance of letters of credit, short-term notes payable and bank borrowings. Upon maturity of the letters of credit, repayment of short-term notes payable or bank borrowings, the deposits are released by the bank and become available for general use by the Company.

Accounts Receivable

Accounts receivable represents unconditional rights to consideration arising from performance under contracts with customers. The carrying value of such receivables, net of the allowance for doubtful accounts, represents their estimated net realizable value.

At contract inception, the Company does not adjust the promised amount of consideration for the effects of a significant financing component when it is expected that the period between transfer of a promised product or service to a customer and when the customer pays for that product or service will be one year or less. The Company typically does not include extended payment terms in contracts with customers.

Allowance for Doubtful Receivables

The Company estimates allowance for doubtful accounts for specific receivable balances based on historical collection trends, the age of outstanding receivables, existing economic conditions and the financial security, if any, associated with the receivables. Past-due receivable balances are written off when internal collection efforts have been unsuccessful.

Costs and Estimated Earnings in Excess of Billings

Costs and estimated earnings in excess of billings represents a contract asset for revenue that has been recognized in advance of billing the customer. The Company uses a cost-based input method to recognize revenue from EPC and development services when all relevant revenue recognition criteria have been met.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – CONTINUED

Costs and Estimated Earnings in Excess of Billings – Continued

Under this accounting method, revenue may be recognized in advance of billing the customer, which results in the recording of costs and estimated earnings in excess of billings. Once the Company meets the billing criteria under such contract, the rights to consideration becomes unconditional, it bills the customer and reclassifies the unbilled balance to accounts receivable. Billing requirements vary by contract but are generally structured around completion of certain construction milestones.

Project Assets

Project assets primarily consist of costs related to solar power projects in various stages of development that are capitalized prior to the completion of the sale of the project, including projects that may have begun commercial operation under Power Purchase Agreements (PPAs) and are actively marketed and intended to be sold. These project related costs include costs for land, development, and construction of a Photovoltaic (PV) solar power system. Development costs may include legal, consulting, permitting, transmission upgrade, interconnection and other similar costs. The Company typically classifies project assets as noncurrent due to the nature of solar power projects (long-lived assets) and the time required to complete all activities to develop, construct and sell projects, which is typically longer than 12 months. Project assets are classified as current when the Company intends to sell within 12 months. The Company presents all expenditures related to the development and construction of project assets, whether fully or partially owned, as a component of cash flows from operating activities.

The Company reviews project assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. The Company considers a project commercially viable or recoverable if it is anticipated to be sold for a profit once it is either fully developed or fully constructed. The Company considers a partially developed or partially constructed project commercially viable or recoverable if the anticipated selling price is higher than the carrying value of the related project assets. The Company examines a number of factors to determine if the project is expected to be recoverable, including whether there are any changes in environmental, ecological, permitting, market pricing or regulatory conditions that may impact the project. Such changes could cause the costs of the project to increase or the selling price of the project to decrease. If a project is not considered recoverable, the Company impairs the respective project assets and adjusts the carrying value to the estimated fair value, with the resulting impairment recorded within operating expense. The Company performed an impairment test as of December 31, 2021, and an impairment loss of $10,103,237 was recognized.

Interest Capitalization

The interest cost associated with a major development and construction project is capitalized and included in the cost of the project assets. Interest capitalization ceases once a project is substantially complete or no longer undergoing construction activities to prepare it for its intended use. When no debt is specifically identified as being incurred in connection with a construction project, the Company capitalizes interest on amounts expended on the project at the Company's weighted-average cost of borrowed money. Total interest capitalized for 2021 was $6,593,439.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – CONTINUED

Property and Equipment

Property and equipment is stated at cost less accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful lives of the assets, which range from three to twenty-five years. Leasehold improvements are amortized over the shorter of the useful life of the related assets or the lease term. Expenditures for repairs and maintenance are charged to expense as incurred. For assets sold or otherwise disposed of, the cost and related accumulated depreciation are removed from the accounts, and any related gain or loss is reflected in income for the period.

Investments in Unconsolidated Affiliates

The Company accounts for unconsolidated affiliates depending upon whether the Company has the ability to exercise significant influence over the affiliate. As part of this evaluation, the Company considers participation and protective rights in the affiliate as well as its legal form. The Company uses the equity method of accounting for investments when the Company has the ability to significantly influence, but not control, the operations or financial activities of the investee.

If the Company does not have the ability to significantly influence the operations or financial activities of the investee, unconsolidated affiliates with readily determinable fair values are measured at fair value. Unconsolidated affiliates without readily determinable fair values are measured at cost with adjustments for observable changes in price or impairments (referred to as the measurement alternative). The Company performs a qualitative assessment at each reporting period and recognizes an impairment if there are sufficient indicators that the fair value of the investment is less than carrying value. Changes in value are recorded in other income (expense), net. The Company records any distributions received from the net accumulated earnings of such investments as income. Distributions received in excess of their earnings are considered returns of investment and are recorded as reductions in the cost of the investments.

Impairment of Long-lived Assets

The Company reviews long-lived assets for impairment whenever events or changes in circumstances indicate that carrying amounts of such assets may not be recoverable. When these events occur, the Company evaluates for impairment by comparing the carrying amount of the assets to the future undiscounted net cash flows expected to result from the use of the assets and their eventual disposition. If the sum of the expected undiscounted cash flows is less than the carrying amount of the assets, the Company would recognize an impairment loss based on the excess of the carrying amount of the asset over its fair value. The Company performed an impairment test as of December 31, 2021, and no impairment loss was recognized for long-lived assets other than project assets.

Debt Issuance Costs

Financing costs are amortized over the term of the related debt and the amortization of debt issuance cost is included with interest.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – CONTINUED

Concentration of Risk

Assets that potentially subject the Company to significant concentration of credit risk are primarily cash and cash equivalents.

The Company maintains cash and cash equivalents in accounts that are in excess of the Federal Deposit Insurance Corporation (FDIC) insured limits of $250,000. As of December 31, 2021, approximately $145.7 million in cash and cash equivalents was uninsured based upon the FDIC insurance coverage limits.

The Company mitigates its risk of loss by continuing to monitor the financial strength of the financial institutions in which it makes deposits.

Fair Value Measurement

The Company measures certain assets and liabilities at fair value, which is defined as the price that would be received from the sale of an asset or paid to transfer a liability (i.e., an exit price) on the measurement date in an orderly transaction between market participants in the principal or most advantageous market for the asset or liability. The Company uses the following hierarchy for fair value measurement, which prioritizes valuation inputs based on the extent to which the inputs are observable in the market.

Level 1 – Valuation techniques in which all significant inputs are unadjusted quoted prices from active markets for assets or liabilities that are identical to the assets or liabilities being measured.

Level 2 – Valuation techniques in which significant inputs include quoted prices from active markets for assets or liabilities that are similar to the assets or liabilities being measured and/or quoted prices for assets or liabilities that are identical or similar to the assets or liabilities being measured from markets that are not active. Also, model-derived valuations in which all significant inputs are observable in active markets are Level 2 valuation techniques.

Level 3 – Valuation techniques in which one or more significant inputs are unobservable. Such inputs reflect estimate of assumptions that market participants would use to price an asset or liability.

The cost approach is based on the amount that would currently be required to replace an asset.

Fair Value of Financial Instruments

The carrying amounts reported in the consolidated balance sheet for cash, restricted cash, accounts receivable, other receivables, short-term notes receivable, prepaid expenses and other current assets, accounts payable, notes payable, accrued expenses and other current liabilities, short-term borrowings and current portion of long-term debt approximate fair value because of the short-term maturity of those financial instruments. The carrying amount reported for certain long-term debt in the consolidated financial statements approximates fair value due to the variable rate of these borrowings.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – CONTINUED

Derivatives Instruments and Hedging Activity

The Company's main objective for entering derivative financial instruments is to manage risks. Depending on the terms and the agreement of the specific derivative instruments and market conditions, some of the Company's derivative instruments may be assets and liabilities at any particular point in time. The recognition of gains or losses resulting from changes in fair value of these derivative instruments is based on the use of each derivative instrument and whether it qualifies for hedge accounting.

The Company enters into several derivatives to hedge risk exposures to losses from price adjustments of electricity, foreign currency risk, and interest rate risk. When the Company determines to designate a derivative instrument as a cash flow hedge, the Company formally documents the hedging relationship and its risk management objective and strategy for undertaking the hedge, the hedging instrument, the hedged item, the nature of the risk being hedged, how the hedging instrument's effectiveness in offsetting the hedged risk will be assessed, and a description of the method of measuring ineffectiveness. The Company also formally assesses, both at the hedge's inception and on an ongoing basis, whether the derivative that is used in hedging transactions is highly effective in offsetting changes in cash flows of hedged items. The effective portion of gains and losses on derivatives designated as cash flow hedges are initially deferred in other comprehensive income before being recognized in the statements of operations in the same period as the hedged transactions are reflected in earnings. Gains and losses on derivatives that are not designated or fail to qualify as effective hedges are recognized in the statements of operations as incurred.

Fair value of the derivative instruments is determined using pricing models developed based on the underlying price of the hedged items. The values are also adjusted to reflect nonperformance risk of the counterparty and the Company, as necessary.

Deferred Revenue

When consideration is received, or such consideration is unconditionally due, from a customer prior to transferring goods or services to the customer under the terms of a sales contract, deferred revenue is recorded, which represents a contract liability. Deferred revenue is recognized after transfer of control of the goods or services to the customer and all revenue recognition criteria are met.

Contingencies

Liabilities for loss contingencies arising from claims, assessments, litigation, fines and penalties and other sources are recorded when it is probable that a liability has been incurred and the amount can be reasonably estimated. If a potential material loss contingency is not probable but is reasonably possible, or is probable but the amount cannot be estimated, then the nature of the contingent liability, together with an estimate of the range of possible loss if determinable and material, is disclosed. Legal costs incurred in connection with loss contingencies are expensed as incurred.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – CONTINUED

Leases

At inception of a contract, the Company 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 Company assesses whether:

(a) The contract involves the use of an identified asset.
(b) The Company has the right to obtain substantially all of the economic benefits from the use of the asset.
(c) The Company has the right to direct the use of the asset.

The Company recognizes a right-of-use (ROU) 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, plus any initial direct costs incurred. The lease liability is initially measured at the present value of the lease payments, discounted using the Company's incremental borrowing rate.

The Company has elected not to recognize right-of-use assets and lease liabilities for short-term leases with terms of 12 months or less. The Company accounts for the lease and non-lease components as a single lease component. Additionally, the Company applies a portfolio approach to effectively account for right-of-use assets and lease liabilities.

The Company assesses ROU assets for impairment. When events or circumstances indicate the carrying value may not be recoverable, the Company evaluates the net book value of the asset for impairment by comparison to the projected undiscounted future cash flows. If the carrying value of the asset is determined to not be recoverable and is in excess of the estimated fair value, the Company recognizes an impairment charge in asset impairments on its consolidated statements of loss and comprehensive loss.

Foreign Currency Translation

The United States dollar (U.S. dollars or $), the currency in which a substantial amount of the Company's transactions are denominated, is used as the functional and reporting currency.

The Company translates assets and liabilities of its foreign operations into the reporting currency at the exchange rates in effect at the balance sheet date. The Company translates income and expense items of such foreign operations into the reporting currency at the average exchange rate during the year. The resulting translation adjustments are recorded in other comprehensive loss. The Company operates internationally and is exposed to potentially adverse movements in currency exchange rates.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – CONTINUED

Revenue and Cost Recognition
The Company applies ASC 606 '*Revenue from Contracts with Customers*'. According to the standard, revenue is recognized by applying a five-step revenue model to all types of contracts.

- Identify the contract with the customer
- Identify the performance obligations
- Determine the transaction price
- Allocate the transaction price
- Recognize revenue when (or as) the entity satisfies a performance obligation

The following are the main points that affect the Company's financial statements:

- Variable consideration — The Company is engaged in the business of producing recycled polyester staple fiber. The consideration may change due to the amount paid or expected to be paid to customers when supplying produced goods. When ASC 606 is applied, the Company recognizes revenue by deducting the amount payable to customers from sales.

- Consideration payable to the customer — When the Company supplies a product to a customer under a contract and receives identifiable goods or services from the customer, a portion of the fair value is recognized as an expense or an asset and the remainder is deducted from consideration.

Development
Revenue for the sale of a development project or for the sale of a completed system is recognized when the Company enters into the associated sales contract with the customer. Revenue from contracts with customers is recognized when control of promised goods and services is transferred to customers, in an amount that reflects the consideration the Company expects to be entitled to in exchange for those goods or services.

The solar power projects or PV systems are often held in separate legal entities which are formed for the special purpose of constructing the solar power projects, which the Company refers to as "project entities". The Company applies guidance under ASC 810 to determine deconsolidation of the project companies upon transfer of equity interest to the customers, and then applies guidance under ASC 606 for revenue recognition.

Cost of revenue includes all direct material and labor costs and those indirect costs related to development and construction of a solar power system. Development costs include legal, consulting, permitting and other similar costs. Selling, general and administrative costs are charged to expense as incurred.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – CONTINUED

Revenue and Cost Recognition – Continued

Retail

Revenue for electricity sales is recognized upon delivery of electricity to the customer's meter. Electric services not billed by month-end are accrued based upon estimated deliveries to customers as tracked and recorded by the Company multiplied by the Company's average billing rate per kilowatt hour (kwh) in effect at the time.

The Company uses a revenue estimation process by using its settlement statements to determine the volumes and associated estimated revenue for a month. Supplies delivered to customers for the month, measured on a daily basis, provides the basis for revenues.

Engineering, Procurement, and Construction (EPC) Services

Revenue for EPC services are recognized over time as the Company creates or enhances an energy generation asset controlled by the customer. The Company recognizes revenue using cost-based input methods, which recognize revenue and gross profit as work is performed based on the relationship between actual costs incurred compared to the total estimated costs of the contract, after consideration of customers' commitment to perform its obligations under the contract, which is typically measured through the forms of financial security issued by creditworthy financial institutions or parent entities.

In applying cost-based input methods of revenue recognition, the Company uses the actual costs incurred relative to the total estimated costs (including solar module costs) to determine progress towards contract completion and to calculate the corresponding amount of revenue and gross profit to recognize. Cost-based input methods of revenue recognition are considered a faithful depiction of efforts to satisfy long-term construction contracts and therefore reflect the transfer of goods to a customer under such contracts. Costs incurred that do not contribute to satisfying performance obligations (inefficient costs) are excluded from input methods of revenue recognition as the amounts are not reflective of transferring control of the system to the customer. Costs incurred toward contract completion may include costs associated with solar modules, direct materials, labor, subcontractors and other indirect costs related to contract performance. The Company recognizes solar module and direct material costs as incurred when such items have been installed in a system.

Cost-based input methods of revenue recognition are required to make estimates of net contract revenues and costs to complete projects. In making such estimates, significant judgment is required to evaluate assumptions related to the amount of net contract revenues, including the impact of any performance incentives, liquidated damages and other payments to customers. Significant judgment is also required to evaluate assumptions related to the costs to complete projects, including materials, labor, contingencies and other system costs.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – CONTINUED

Revenue and Cost Recognition – Continued

If the estimated total costs on any contract, including any inefficient costs, are greater than the net contract revenues, the Company recognizes the entire estimated loss in the period the loss becomes known. The cumulative effect of revisions to estimates related to net contract revenues or costs to complete contracts are recorded in the period in which the revisions to estimates are identified and the amounts can be reasonably estimated. The effect of the changes on future periods are recognized as if the revised estimates had been used since revenue was initially recognized under the contract. Such revisions could occur in any reporting period, and the effects may be material depending on the size of the contracts or the changes in estimates.

Operation and Maintenance (O&M) Services

O&M services are transferred over time when customers receive and consume the benefits provided by the Company's performance under the terms of service arrangements. Revenues from O&M services are recognized overtime based on the work completed to date which does not require re-performances and the costs of O&M services are expensed when incurred.

Electricity Revenue

Electricity revenue is generated primarily by the Company's solar power plants under long-term PPAs and performance-based energy incentives. For electricity sold under PPAs, the Company recognizes electricity revenue based on the price stated in the PPAs when electricity has been generated and transmitted to the grid. The solar power plants that generate this revenue stream may be sold to potential buyers.

Advertising and Promotion Costs

The costs of advertising, promotional, sales and marketing programs are charged to operations when incurred and are included as sales and marketing expenses in the accompanying consolidated statement of loss and comprehensive loss. Advertising, promotional, sales and marketing costs totaled $1,275,444 for the year ended December 31, 2021.

Assets Retirement Obligation

Certain jurisdictions in which the Company's project assets are located or certain land lease agreements require the removal of the PV systems when the system is decommissioned. Assets retirement obligation ("ARO") for the estimated costs of decommissioning associated with PV systems at a future date are accounted for in accordance with ASC 410-20, Asset Retirement Obligations ("ASC 410-20"). ASC 410-20 requires an entity to recognize the fair value of a liability for an ARO in the period in which it is incurred and a reasonable estimate of fair value can be made. Upon initial recognition of a liability for an ARO, the asset retirement cost is capitalized by increasing the carrying amount of the related long-lived asset by the same amount. Over time, the liability is accreted to its expected future value, while the capitalized cost is depreciated over the useful life of the related asset. The Company made a prior period adjustment regarding ARO to record the fair value of a liability for an ARO in the period in which it is incurred.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – CONTINUED

Income Taxes and Uncertain Tax Positions
The Company is a C corporation and pays income taxes on its federal and state taxable income.

Provision for income taxes is based on taxes payable or refundable for the current year and deferred taxes on temporary differences between the amount of taxable income and pretax financial income and between the tax bases of assets and liabilities and their reported amounts in the financial statements. Deferred tax assets and liabilities are included in the consolidated financial statements at currently enacted income tax rates applicable to the period in which the deferred tax assets and liabilities are expected to be realized or settled. As changes in tax laws or rates are enacted, deferred tax assets and liabilities are adjusted through the provision for income taxes.

The Company follows the accounting guidance for uncertainty in income taxes using the provisions of FASB ASC 740. Using that guidance, tax provisions are initially recognized in the consolidated financial statements when it is more-likely-than-not the provisions will be sustained upon examination by the tax authorities.

As of December 31, 2021, the Company had no uncertain tax positions, or interest and penalties that qualify for either recognition or disclosure in the consolidated financial statements.

Noncontrolling Interests and Redeemable Noncontrolling Interests
The Company attributes income and loss to the noncontrolling interests and redeemable noncontrolling interests for tax equity investors using the hypothetical liquidation at book value (HLBV) method.

Under the HLBV method, the amounts of income and loss attributed to the noncontrolling interests and redeemable noncontrolling interests in the consolidated statements of operations reflect changes in the amounts the investors would hypothetically receive at each balance sheet date under the liquidation provisions of the contractual agreements of these arrangements, which are based on the investors' tax capital accounts, assuming the net assets of these funding structures were liquidated at recorded amounts. The Company’s initial calculation of the investor’s noncontrolling interest in the results of operations of these funding arrangements is determined as the difference in the noncontrolling interests’ claim under the HLBV method at the start and end of each reporting period, after taking into account any capital transactions, such as contributions or distributions, between the Fund and the investors.

The Company classifies certain noncontrolling interests with redemption features that are not solely within the control of the Company outside of permanent equity on its consolidated balance sheets. Redeemable noncontrolling interests are reported using the greater of their carrying value as determined by the HLBV method or their estimated redemption value at each reporting date.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – CONTINUED

Recently Issued Accounting Standards

In January 2021, the FASB issued ASU No. 2021-01, *Reference Rate Reform (Topic 848): Scope*, which permits entities to elect certain optional expedients and exceptions when accounting for derivative contracts and certain hedging relationships affected by reference rate reform. This ASU is effective upon issuance and can generally be applied through December 31, 2022.

In October 2021, the FASB issued ASU No. 2021-08, *Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers*, which requires contract assets and contract liabilities acquired in a business combination to be recognized and measured in accordance with ASC Topic 606, *Revenue from Contracts with Customers*. This ASU is effective for interim and annual periods beginning after December 15, 2022 on a prospective basis, with early adoption permitted.

Subsequent Events

Subsequent events have been evaluated through March 21, 2022, the date the financial statements were available for issue.

3. CASH AND RESTRICTED CASH

At December 31, 2021, restricted cash consists of deposits held by various banks to secure certain letters of credit and other deposits designated for the construction or operation of systems projects as well as the payment of amounts related to project specific debt financings.

Cash	$ 131,516,480
Restricted cash	15,258,719
Cash and restricted cash as shown on statement of cash flows	$ 146,775,199

4. ALLOWANCE FOR DOUBTFUL ACCOUNTS

An analysis of allowances for accounts receivable for the year ended December 31, 2021, is as follows:

Beginning of the year	$ 2,960,462
Allowances made (reversed) during the year, net	5,313,141
Accounts written-off against allowances	(1,403,109)
End of the year	$ 6,870,494

5. COSTS AND ESTIMATED EARNINGS ON UNCOMPLETED CONTRACTS

Following is a summary of contracts in progress at December 31, 2021:

Costs incurred on uncompleted contracts	$ 8,418,832
Estimated earnings	1,783,992
	10,202,824
Less billings to date	(8,621,596)
	$ 1,581,228

These amounts are included in the accompanying consolidated balance sheet under the following captions:

Costs and estimated earnings in excess of billings	$ 2,422,420
Billings in excess of costs and estimated earnings	(841,192)
	$ 1,581,228

6. PROPERTY AND EQUIPMENT

At December 31, 2021, property and equipment consists of the following major classifications:

Leasehold improvement	$ 96,494
Tools, furniture and fixtures	300,768
Computer and software	725,726
Office equipment	91,735
Automobiles	46,709
Construction in process	244,603
	1,506,035
Less accumulated depreciation	(725,595)
Total property and equipment, net	$ 780,440

Depreciation expense totaled $275,172 for the year ended December 31, 2021.

7. PHOTOVOLTAIC (PV) SYSTEM

At December 31, 2021, the Company completed construction of several PV systems, solar generating facilities, in Mexico and U.S. in 2019 and 2020. Electricity is now being generated from these facilities.

At December 31, 2021, PV systems is summarized as below:

Photovoltaic (PV) system	$ 168,864,868
Less accumulated depreciation	(13,833,284)
	$ 155,031,584

Depreciation expense totaled $13,110,951 for the year ended December 31, 2021.

8. INVESTMENT AT FAIR VALUE

Since April 2020, the Company has invested $3,666,000 in Juxtapose Ventures II L.P. (Juxtapose) representing 10% of Class A membership interest and invested $900,000 in NoHo Holdings II, LLC representing 2.8% of Class B membership interest. Due to no significant change from investment date through December 31, 2021, the Company recognized no change in value from the investment during the period.

9. INVESTMENT IN UNCONSOLIDATED AFFILIATE

In October 2019, the Company invested $49,000,000 in Green Nikola Holdings LLC (GNH) representing 49% of the total equity contributed. GNH was formed to invest in Nikola Corporation, which designs and manufactures hydrogen-powered semi-trucks.

In return for this investment, the Company acquired 49% of membership interest in GNH which represents a 49% voting interest. The investment is accounted for using the equity method of accounting since the Company does not have voting control but can exercise significant influence in major operating decisions under the terms of the operating agreement.

The rate for distribution and allocation of income or loss is prorated in accordance with membership interest.

The following represents the unaudited summarized financial information for GNH as of and for the year ended December 31, 2021:

Assets:	
Cash	$ 2,953
Investment	109,213,475
Total assets	$ 109,216,428
Liabilities and members' equity:	
Other liabilities	$ 31,542
Equity	109,184,886
Total liabilities and members' equity	$ 109,216,428
Net loss	$ 88,839,338

The Company's equity in loss of GNH is $43,531,275 for the year ended December 31, 2021. The Company received distribution of $68,431,932 for the year ended December 31, 2021. The Company's investment at December 31, 2021 is $53,500,590.

9. INVESTMENT IN UNCONSOLIDATED AFFILIATE – CONTINUED

In January 2021, the Company and TOTAL H SOLAR, LLC (TOTAL) signed an agreement to form two 50/50 joint ventures to develop 12 industrial-scale solar energy storage projects with combined capacity of 1.6GW cumulative capacity in the United States. The Company invested $146,078,649 in Hanwha Total Solar, LLC and Hanwha Total Solar II, LLC (collectively, JV) representing 50% of the total equity contributed.

In return for this investment, the Company acquired 50% of membership interest in JV which represents a 50% voting interest. The investment is accounted for using the equity method of accounting since the Company does not have voting control but can exercise significant influence in major operating decisions under the terms of the operating agreement. The rate for distribution and allocation of income or loss is prorated in accordance with membership interest.

The following represents the unaudited summarized financial information for JV as of and for the year ended December 31, 2021:

Assets:	
Cash and cash equivalents	$ 71,579,636
Prepaid expenses and other current assets	9,461,581
Fixed assets, net	157,288,380
Right of use assets	29,800,238
Project assets	367,276,926
Other noncurrent assets	1,656,893
Total assets	$ 637,063,654
Liabilities and members’ equity:	
Accounts payable	$ 49,093,364
Short-term borrowings	208,715,760
Long-term borrowings	71,783,499
Lease liabilities	31,299,401
Accrued liabilities and others	7,510,008
Members' equity	268,661,622
Total liabilities and members’ equity	$ 637,063,654
Revenues	$ 22,383,767
Expenses	20,592,192
Net income	$ 1,791,575
Income attributable to the company	$ 3,552,324

9. INVESTMENT IN UNCONSOLIDATED AFFILIATE – CONTINUED

The Company's equity in loss of JV is $15,078,321 for the year ended December 31, 2021. The Company made contribution of $7,667,518 and received distribution of $38,614,213 for the year ended December 31, 2021. The Company's investment at December 31, 2021 is $100,053,633.

10. VALUE-ADDED TAX RECEIVABLES

The value added tax (the VAT) is a sales tax that applies to the purchase of most goods and services in Mexico and must be collected and submitted by the merchant to the Mexico governmental revenue department. The Company has a receivable, net of $1,420,635 at December 31, 2021.

In accordance with the relevant tax laws in Mexico, the Company is in compliance with filing its VAT tax return periodically.

11. GOODWILL

Goodwill in the amount of $7,045,481 recorded in the accompanying consolidated balance sheet was recognized in conjunction with the acquisition of OnForce Solar Inc. in 2019.

The qualitative assessment performed by the Company at December 31, 2021, indicated that the fair value does not exceed their corresponding carrying amount. The amount of $646,000 has been impaired since the recognition of Goodwill in 2019.

12. OTHER INTANGIBLE ASSETS

At December 31, 2021, intangible assets are comprised as follows:

Amortization expense for other intangible assets for the year ended December 31, 2021, was $2,788,534.

Contract related intangibles	$ 5,930,000
Accumulated amortization	(4,715,222)
	$ 1,214,778

12. OTHER INTANGIBLE ASSETS – CONTINUED

Estimated amortization of other intangible assets over the next five years and thereafter is as follows:

2022	$ 283,600
2023	283,600
2024	283,600
2025	283,600
2026 and thereafter	80,378
	$ 1,214,778

13. SHORT-TERM BORROWINGS

The Company maintains five term loan agreements with four banks amounting to $190 million:

(a) Standard Chartered Bank with borrowing limit of $50 million and interest charged at LIBOR plus 1.70% per annum (1.83% at December 31, 2021); matures in April 2022. Repayment of the loan is guaranteed by Hanwha Energy Corporation.

(b) Standard Chartered Bank with borrowing limit of $20 million and interest charged at LIBOR plus 1.70% per annum (1.89% at December 31, 2021); matures in April 2022. Repayment of the loan is guaranteed by Hanwha Energy Corporation.

(c) Korea Development Bank (KDB) with borrowing limit of $70 million and interest charged at LIBOR plus 1.50% per annum (1.63% at December 31, 2021); matures in April 2022. Repayment of the loan is guaranteed by Hanwha Energy Corporation.

(d) Nonghyup Bank with borrowing limit of $20 million and interest charged at LIBOR plus 1.87% per annum (2.09% at December 31, 2021); matures in March 2022. Repayment of the loan is guaranteed by Hanwha Energy Corporation.

(e) Kookmin Bank New York with borrowing limit of $30 million and interest charged at LIBOR plus 1.10% per annum (1.28% at December 31, 2021); matures in November 2022. The loan is collateralized by the irrevocable Stand-by Letter of Credit (an aggregate amount of $30 million) issued by Kookmin Bank, Seoul, Korea.

The outstanding balance as of December 31, 2021, from these term loans was $190 million.

14. LONG-TERM DEBT

At December 31, 2021, long-term debt consists of the following:

The Company received a promissory note from OnForce Solar with borrowing limit of $7 million. As of December 31, 2021, the outstanding balance was $3 million, principal maturity is December 31, 2021, and interest is due at maturity at variable interest rates. The Company repaid the outstanding loan and interest expense in January 2022.

The Company entered into a term loan agreement of $80 million with Hana Bank in October 2020, maturing in October 2023. This loan is for the refinancing of an existing loan with Export-Import Bank of Korea Bank. The loan bears interest at three-month LIBOR plus 1.90% per annum (2.02% at December 31, 2021). The outstanding balance as of December 31, 2021 is $80 million which was a single withdrawal. Repayment of the loan is guaranteed by Hanwha Energy Corporation.

The Company entered a term loan agreement of $20 million with Hana Bank in September 2020, maturing in September 2023. The loan bears interest at three-month LIBOR plus 1.90% per annum (2.12% at December 31, 2021). The outstanding balance as of December 31, 2021 is $20 million which was a single withdrawal. Repayment of the loan is guaranteed by Hanwha Energy Corporation.

The Company entered a term loan agreement of $70 million with Hana Bank in February 2021. maturing in February 2023. The loan bears interest at the fixed rate of 2.00%. The outstanding balance as of December 31, 2021 is $70 million which was a single withdrawal. Repayment of the loan is guaranteed by Hanwha Energy Corporation.

The Company entered term loan agreement of $40 million with Woori Bank in April 2021, maturing in April 2024. The loan bears interest at three-month LIBOR plus 1.70% per annum (1.84% at December 31, 2021). The outstanding balance as of December 31, 2021, is $40 million which was a single withdrawal. The principal amount of the loan will be due and payable semi-annually per the payment schedule in the agreement. Repayment of the loan is guaranteed by Hanwha Energy Corporation. The loan contains certain financial covenants. As of December 31, 2021, the Company was in violation of a select few of these covenants, and the Bank waived the Company's existing breach of financial covenants.

The Company entered into a term loan agreement of $6,997,442 in December 2019 with Fifth Third Bank. The Loan bears interest at three-month LIBOR plus 1.875% per annum with a fixed rate of 2.057% (3.93% at December 31, 2021). As of December 31, 2021, the outstanding balance was $6,353,814, and the principal and the interest amount of the loan will be due and payable in consecutive quarterly installments per the payment schedule in the agreement. The loan has a maturity of December 2025. The loan contains certain financial covenants. As of December 31, 2021, the Company was in violation of a select few of these covenants. The Company promptly provided more funding in the reserve account to resolve this matter per the agreement. The loan is collateralized with real and personal property of the project entity.

14. LONG-TERM DEBT – CONTINUED

The Company entered into a credit agreement in September 2018 with Banco Nacional De Comercio Exterior, Sociedad Nacional de Credito, Institucion de Banca de Desarrollo (Bancomext) and Korea Development Bank (KDB) for a construction term loan of $73,785,599. The Credit Agreement allows monthly loan draws during the defined construction period. The credit facility is comprised of three tranches:

- Tranche A Commitment for $47,960,640 – Tranche A is provided by Bancomext at a fixed interest rate of 5.17% per annum. As of December 31, 2021, the outstanding balance was $45,224,786. Tranche A has a final maturity of June 2038.

- Tranche B Commitment for $24,595,199 – Tranche B is provided by KDB and bears interest at three-month LIBOR plus 2.10% (2.23% at December 31, 2021). The outstanding balance of Tranche B, which has a final maturity of September 2034, was $21,279,818 as of December 31, 2021.

- The Tranche C Commitment is $1,229,760. Tranche C is provided by Bancomext and bears interest at three-month LIBOR plus 2.55% (2.68% at December 31, 2021). The outstanding balance of Tranche C was $1,159,610 as of December 31, 2021. Tranche C is co-terminus with Tranche A.

All three loans above are collateralized with the PV generating facility located in Mexico.

The Company entered into a Credit Agreement in October 2020 with Korea Development Bank (KDB) for a construction term loan of $19,298,560. The company is required to pay on the loan every six months according to repayment schedule. The outstanding balance as of December 31, 2021, is $18,305,736. Interest is due at a fixed rate of 2.45% as of December 31, 2021. The loan has a maturity of June 2035. The loan contains certain financial covenants. As of December 31, 2021, the Company was in violation of a select few of these covenants. There is no early repayment requirement per the agreement. The loan is collateralized with real and personal property of the project entity.

Long-term debt is summarized as below:

Long-term debt	$ 305,323,765
Less current portion of long-term debt	(10,949,812)
	$ 294,373,953

14. LONG-TERM DEBT – CONTINUED

Maturities of long-term debt for each of the next five years and thereafter are as follows:

2022	$ 10,949,812
2023	182,168,180
2024	32,265,278
2025	9,473,145
2026	4,302,275
Thereafter	66,165,075
	305,323,765
Less current portion	(10,949,812)
Total	$ 294,373,953

15. BOND PAYABLE

In July 2019, the Company entered into an agreement to issue Green Bond (the Bond) through the Singapore Exchange Securities Trading Limited in the amount of $300 million maturing July 2022. The Bond is used to finance new or existing renewable energy projects related to renewable energy. The Bond's issue price was 99.692% of the offering amount and bears the interest rate of 2.375% per annum. The Bond is offered in the United States to qualified institutional buyers. The fiscal agent of the bond is Citicorp international Limited. The Bond is guaranteed by Hanwha Energy Corporation and KDB.

The Bond is summarized as below:

The offering amount of the Bond	$ 300,000,000
Less bond discount	(184,928)
Less debt issuance cost	(646,339)
	$ 299,168,733

Amortization expense of the Bond discount and the debt issuance cost are $311,122 and $1,108,011, respectively, for the year ended December 31, 2021.

15. BOND PAYABLE – CONTINUED

In July 2020, the Company entered into an agreement to issue Arirang Bond (the Bond) in the amount of South Korean Won (KRW) 40 Billion ($33,375,052 in USD) maturing July 2023 in Korea. The Bond is used to finance new or existing renewable energy projects related to renewable energy. The Bond bears the fixed interest rate of 2.55% per annum. The Bond is offered in Korea to buyers such as financial institutions. The fiscal agent of the bond is DB Financial Investment Co., Ltd. The Bond is guaranteed by Hanwha Energy Corporation.

The Bond is summarized as follows:

The offering amount of the Bond	$ 36,670,273
Less debt issuance cost	(67,921)
Gain on foreign currency exchange (“FX”) translation	(2,929,235)
	$ 33,673,117

Amortization expense of the debt issuance cost is $26,512 for the year ended December 31, 2021.

Maturities of long-term debt for each of the next two years are as follows:

2022	$ 299,168,733
2023	33,673,117
	332,841,850
Less current portion	(299,168,733)
Total	$ 33,673,117

16. ASSET RETIREMENT OBLIGATION (ARO)

The Company has a legal obligation to decommission its PV system following the expiration of their land leases. To estimate its decommissioning obligation related to its PV system for financial accounting and reporting purposes, the Company uses a probability-weighted, discounted cash flow model which, on a unit-by-unit basis, considers multiple outcome scenarios that include significant estimates and assumptions, and are based on decommissioning cost studies, cost escalation rates, probabilistic cash flow models and discount rates. The Company updates its ARO annually unless circumstances warrant more frequent updates, based on its review of updated cost studies and its annual evaluation of cost escalation factors and probabilities assigned to various scenarios.

16. ASSET RETIREMENT OBLIGATION (ARO) – CONTINUED

Following is a summary of obligation at December 31, 2021:

Beginning of the year	$ 2,550,667
Accretion Expense	114,671
End of the year	$ 2,665,338

17. REVENUE FROM CONTRACTS WITH CUSTOMERS

The primary source of revenue is substantially from five different sources: sale of development projects in the United States, electricity sale to the retail market in Texas, EPC service, O&M service, and revenue from sale of electricity.

The following table presents the disaggregation of revenue from contracts with customers for the year ended December 31, 2021.

Category:	
Development	$ 321,122,435
Retail sales in Texas	56,928,998
EPC services	3,812,258
O&M Services	2,037,281
Electricity Revenue	8,729,393
	$ 392,630,365

Accounts receivable and Receivable from related parties are $46,523,761 and $38,750,911 respectively. Deferred revenue is $50,522. Accrued revenue associated with retail sale and electricity revenue is $2,955,586 and Costs and estimated earnings in excess of billings in EPC services is $2,422,420 at December 31, 2021.

18. FAIR VALUE MEASUREMENT

The Company's assets and liabilities recorded at fair value have been categorized based upon a fair value hierarchy in accordance with the fair value provisions of the ASC. The ASC defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles and expands disclosures about fair value measurements. See Note 2 for a discussion of the Company's policies regarding the hierarchy.

As of December 31, 2021, the Company's financial assets and liabilities were measured at fair value on a recurring basis in periods subsequent to their initial recognition all using the significant other observable inputs, which are Level 2 inputs.

The Company and Standard Chartered Bank entered into a foreign exchange forward contract to hedge its foreign currency risk exposure in regards of issuing Arirang Bond in 2020 which expires in 2023. The forward contract is formally designated and qualify as fair value hedges and are recorded at fair value in the Consolidated Balance Sheets in other assets and/or other liabilities. The changes in fair value of both the foreign exchange forward and the hedged portion of the underlying debt both were recognized in other expense in the Consolidated Statement of Loss.

The Company and Fifth Third Bank entered into a Interest rate swap agreement to hedge risk exposure in interest rate. The underlying base rate, which is the variable 3-month LIBOR per the loan agreement, is converted to a fixed rate of 2.057% locked through the swap agreement. The swap agreement is formally designated and qualify as fair value hedges and are recorded at fair value in the Consolidated Balance Sheets in other assets and/or other liabilities. As of December 31, 2021, the balance was immaterial. The changes in fair value of both the interest rate swaps and the hedged portion of the underlying debt both were recognized in interest expense in the Consolidated Statement of Loss.

The Company and Oberon Solar IA, LLC (Oberon) entered into a floor contract to hedge the price of energy (Commodity) produced from the Oberon Solar Facility on August 22, 2019 (Trade Date) . The floor contract includes an upfront premium of $2.98 million which is required to be paid by Oberon to the Company, and the Company is contractually obligated to settle Oberon the difference between the floor price of $23.23 and the floating price multiplied by the notional quantity set forth in the floor contract. The term of this floor contract is from April 1, 2020, through December 31, 2032. The floor contract is formally designated and qualify as fair value hedges and are recorded at fair value in the Consolidated Balance Sheets in other assets and/or other liabilities. The changes in fair value of both the floor contract and the hedged portion of the underlying advance receipt both were recognized in other income in the Consolidated Statement of Loss.

The Company and Oberon Solar IA, LLC (Oberon) entered into a basis swap agreement to hedge the price of energy (Commodity) produced from the Oberon Solar Facility on May 4, 2020 (Trade Date) . The term of this basis swap agreement is from January 1, 2021, through December 31, 2027. The basis swap agreement is formally designated and qualify as fair value hedges and are recorded at fair value in the Consolidated Balance Sheets in other assets and/or other liabilities. The changes in fair value of both the basis swaps and the hedged portion of the underlying liability both were recognized in other expense in the Consolidated Statement of Loss.

18. FAIR VALUE MEASUREMENT– CONTINUED

The Company recorded assets (liabilities) for the fair value of its derivatives on its consolidated balance sheets as follows at December 31, 2021:

Derivative Designated as Hedging Instruments	Amount
Foreign exchange forward contract - Standard Chartered Bank	$ (621,288)
Interest rate swap agreement - Fifth Third Bank	-
Floor Contract - Oberon Solar IA, LLC	(845,928)
Basis Swap Agreement - Oberon Solar IA, LLC	(810,965)
	$ (2,278,181)

The Company recorded (gain) or loss on the change in its assets (liabilities) relating to derivatives as follows for the year ended December 31, 2021:

Derivatives Designated as Hedging Instruments	Amount
Foreign exchange forward contract - Standard Chartered Bank	$ 3,212,759
Interest rate swap agreement - Fifth Third Bank	-
Floor Contract - Oberon Solar IA, LLC	(1,154,791)
Basis Swap Agreement - Oberon Solar IA, LLC	810,965
	$ 2,868,933

19. PRIOR YEAR ADJUSTMENTS

The Company implemented a change in accounting policy with regard to accounting for certain equity investments that has been applied retrospectively. Additionally, the Company identified certain errors in recording right-of-use assets and lease liabilities and an asset retirement obligation in previously issued financial statements that have been corrected in the current year presentation. Beginning retained earnings have been adjusted in total by $11,290,154, net of an increase in deferred tax assets of approximately, $2,522,000, which was offset by an increase in the valuation allowance to reflect the result of these adjustments as of the beginning of the current reporting period.

Change in Accounting Principle

The Company adopted a change in accounting principle related to accounting for the equity interest in Oberon IA Solar, LLC. The change from equity method to the hypothetical liquidation at book value (HLBV) method more closely aligns with the ownership characteristics and operating agreement of the entity. The HLBV method is widely used in the industry and was determined to better represent the interest in the entity. Applying the change retrospectively results in an adjustment to the beginning noncontrolling interest balance and an increase in stockholder's equity of $38,846,527 and an increase in accumulated impairment loss of $12,041,229 as of December 31, 2020. Applying this retrospectively would result in a decrease in net income of $12,041,229, net of income tax for the year-ended December 31, 2020.

Correction of Errors

The Company determined that land leases related to certain project assets were omitted in the prior year financial statement presentation resulting in an understatement of net of right of use assets of $130,332,991, PV system of $447,961, project asset of $2,217,113, prepaid expenses of $417,000, other payables of $4,473,711, lease liabilities of $132,396,767, and common stock of $73,887 as of December 31, 2020. This results in an understatement of net income of $618,474, net of income tax for the year-ended December 31, 2020.

Additionally, the Company identified additional asset retirement obligations for certain land lease contracts the Company made for PV systems resulting in an understatement of asset retirement cost, net of $9,604,628 and related asset retirement obligation of $9,472,027 as of December 31, 2020. This results in an understatement of net income of $132,601, net of income tax for the year-ended December 31, 2020.

20. LEASES

Lease arrangements include land for solar energy systems, corporate and administrative offices, vehicles and office equipment. These leases have remaining lease terms of one to thirty-five years, some of which include options to extend the leases for up to 20 years, and some of which include options to terminate the leases within one year.

The following table presents certain quantitative information related to lease arrangements for the year ended December 31, 2021:

Operating lease cost	$ 7,711,611

Other information includes:

Payments included in the measurement of operating lease liabilities	$ 7,711,611
Weighted-average remaining lease term — operating leases	28.90 years
Weighted-average discount rate — operating leases	4.19%

The Future lease payments required under operating lease agreements are as follows:

2022	$ 6,964,187
2023	6,223,395
2024	5,036,472
2025	5,073,593
2026 and thereafter	162,749,644
Total	186,047,292
Less effects of discounting	(79,792,608)
Lease liabilities recognized	$ 106,254,684

21. INCOME TAXES

For the year ended December 31, 2021, the provision for income taxes consists of the following:

Current:	
Federal	$ 8,123,802
State and local	96,477
Foreign	79,773
Total current income taxes	8,300,052
Deferred:	
Federal	4,505,414
State and local	2,251,906
Foreign	1,454,845
Total deferred income taxes	8,212,165
Tax benefit from net operating loss carryforward	(3,340,000)
Total benefit from income taxes	$ 13,172,217

The provision for income taxes differs from that computed by applying federal statutory rates to income before income taxes. The primary difference results from providing for state income taxes, deducting certain expenses for financial statement purposes but not for federal income tax purposes and adjustments of deferred tax asset (liability) for enacted changes in tax rates.

21. INCOME TAXES – CONTINUED

The temporary differences at December 31, 2021, which give rise to deferred tax assets and liabilities, were as follows:

	U.S.	Mexico
Deferred Tax Assets:		
Intangible assets	$ 409,927	$ -
Bad debts	1,559,459	-
Accrued expenses	266,880	-
Accrued bonus	644,952	-
Accrued vacation	214,712	-
163(j) Adjustments	3,143,928	-
Lease liabilities	21,951,560	-
ARO liabilities	604,976	-
Provision liabilities	1,550,170	-
Impairment loss	1,002,177	-
Foreign currency translation	726,461	-
State tax - current	1,460	-
NOL	37,069,286	9,753,682
Charitable contribution limitation	57,863	-
Investment tax credit	17,433,195	-
Valuation allowance	(36,846,694)	-
Total deferred tax assets	49,790,312	9,753,682
Deferred Tax Liabilities:		
Fixed assets	(11,355,535)	(12,340,330)
Partership income/(loss)	(16,076,342)	-
Right-of-Use assets	(20,992,986)	-
Asset retirement obligation	(614,360)	-
Derivative	(78,042)	-
State tax - deferred	(673,047)	-
Total deferred tax liabilities	(49,790,312)	(12,340,330)
Net deferred tax liabilities	$ -	$ (2,586,648)

Net operating losses for federal and state income tax reporting were approximately $156,500,000 and $176,200,000 respectively as of December 31, 2021. The federal and state net operating tax losses are available to carry forward to offset federal taxable income generated in future years.

Net operating loss for Mexico income tax reporting was approximately $32,800,000 as of December 31, 2021. The federal net operating tax loss is available to carry forward to offset federal taxable income generated in future years in Mexico.

22. 401(k) RETIREMENT PLAN

Eligible employees may participate in the Company's 401(k) plan, qualified under Section 401(k) of the Internal Revenue Code of 1986. Under the plan, employees who have met certain service requirements may contribute a certain portion of their eligible compensation each year, subject to certain limitations and Internal Revenue Service regulations. The Company matches contributions equal to 100% of the first 3% and then 50% of 2% of the employee's contributions. The employer contributions are completely vested immediately. Contributions made by the Company in 2021 were $419,383.

23. RELATED PARTY TRANSACTIONS

Transactions with related parties as of December 31, 2021, and for the year ended are summarized as follows:

Outsourcing service received	$ 46,921
Outsourcing service provided	$ 2,608,512
Gain from derivatives	$ 1,431,980
Loss from derivatives	$ 9,560,705
Interest payment	$ 248,904
Guarantee fee	$ 4,184,204
Purchase of engineering, procurement and construction	$ 1,095,927
Receivable from related parties	$ 38,750,911
Short-term notes receivable	$ 110,475
Payable to related parties	$ 2,853,571

24. COMMITMENTS AND CONTINGENCIES

In management's opinion, the ultimate outcome of the pending claims below will not have a material effect on the Company's consolidated financial position, operating results or liquidity.

Midway Solar, LLC is a party to a lawsuit filed in December 2018 by mineral interest owners in the District Court in Texas. Even though the Company sold the interests in Midway Solar LLC in August 2018, the Company was contractually obligated to the purchaser of the interests to assume the defense of this lawsuit.

The plaintiffs filed suit that the Midway Solar project is trespassing on and obstructing plaintiffs' right to develop their mineral interests. Even though the plaintiffs were not actively attempting to develop their minerals, they claimed the Midway Solar project impaired their future ability to drill for any oil and gas that lied beneath the surface of the Midway Solar project and sought damages from Midway Solar for that lost opportunity. In June 2019, the trial court found in favor of Midway Solar LLC, but the plaintiffs appealed to the Court of Appeals, Eighth District of Texas, El Paso. In December 2020, the Court of Appeals agreed with the trial court's judgment in favor of Midway Solar LLC regarding the plaintiffs' claims for trespass and breach of contract, except that the Court of Appeals dismissed the plaintiffs' claims without prejudice. The Court of Appeals concluded that any trespass or breach of contract claim is premature until such time that the plaintiffs actually seek to develop their mineral estate.

The plaintiffs appealed the Court of Appeals' judgement to the Supreme Court of Texas in 2021. While the ultimate outcome of this matter is not presently determinable, it is the opinion of management that the resolution will not have a material adverse effect on the financial position or the operations of the Company.

Oberon Solar 1B, LLC has been named as a defendant in multiple lawsuits relating to the February 2021 cold weather event in Texas. These lawsuits have been consolidated for pre-trial purposes in a multi-district litigation. Five bellwether cases have been selected in which the defendants will attempt to have the plaintiffs' claims dismissed. All other deadlines have been administratively stayed for all purposes, including answer deadlines and discovery. While the ultimate outcome of this matter is not presently determinable, it is the opinion of management that the resolution will not have a material adverse effect on the financial position or the operations of the Company.

25. GOING CONCERN

The accompanying financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America, which contemplates a continuation of the Company as a going concern.

The Company has accumulated deficits of $97,633,078 as of December 31, 2021. The Parent has informed the Company of its intention and ability to provide the Company with financial support necessary to maintain the financial viability of the Company and sustain its operations through at least one year from the issuance of financial statement, including providing financing support and guarantees as needed.

Having considered the above, management of the Company continues using the going concern basis in preparing the financial statements, which assumes that the Company will continue in operation for the foreseeable future.

26. UNCERTAINTIES

The outbreak of the novel coronavirus has adversely impacted global commercial activity and contributed to significant declines and volatility in financial markets. The coronavirus pandemic and government responses are creating disruption in global supply chains and adversely impacting many industries. The outbreak could have a continued material adverse impact on economic and market conditions and trigger a period of global economic slowdown. The rapid development and fluidity of this situation precludes any prediction as to the ultimate material adverse impact of the novel coronavirus. Nevertheless, the novel coronavirus presents material uncertainty and risk with respect to the Company, its performance and its financial results.

SUPPLEMENTARY INFORMATION

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATING BALANCE SHEETS
DECEMBER 31, 2021

	174 Power Global Corporation	174 PG O&M Global, O&M	174 Power Global, LLC	174 Power Global Retail	174 Power Global Retail TX, LLC	Intermountain HoldCo, LLC	Intermountain Solar, LLC	Kupehau	SweetWater HoldCo, LLC	Techren HoldCo, LLC	Techren Solar, LLC	174 PG JV Holdings, LLC	174 PG MX Holding	174 PG Solar III	174 O&M MX
ASSETS															
CURRENT ASSETS															
Cash	$ 101,579,219	$ 3,949,366	$ 822,990	$ -	$ 12,768,320	$ -	$ -	$ -	$ -	$ -	$ 309,275	$ -	$ 929,689	$ 781	$ 106,914
Restricted cash	2,000,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accounts receivable, net of allowance	42,496,951	412,489	-	-	1,815,059	-	-	-	-	-	-	-	-	-	-
Receivable from related parties	28,247,312	1,292,872	1,197,685	-	-	-	-	-	-	-	-	8,011,598	1,444	-	-
Notes receivable	43,825	-	-	-	40,000	-	-	-	-	-	-	-	-	-	-
Other receivable	142,328	-	(134)	-	8,671	-	-	-	-	-	20,818	-	-	-	-
Costs and estimated earnings in excess of billings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Income tax refundable	8,573,108	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Value-added tax receivables	-	-	-	-	-	-	-	-	-	-	3,022	-	141,207	83,069	78,168
Accrued revenue	-	-	-	-	1,826,308	-	-	-	-	-	-	-	-	-	-
Project assets	66,722,900	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prepaid expenses and other current assets	18,559,662	197,672	328,512	-	150,792	-	-	-	-	-	-	-	1,768	-	73,188
Total current assets	268,365,305	5,852,399	2,349,053	-	16,609,150	-	-	-	-	-	333,115	8,011,598	1,074,108	83,850	258,270
NONCURRENT ASSETS															
Restricted cash	-	-	-	-	986,129	-	-	-	-	-	-	-	-	-	-
Property and equipment, net	212,682	-	-	-	426,561	-	-	-	-	-	-	-	2,065	-	-
Photovoltaic (PV) system, net	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asset retirement cost, net	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Operating lease right-of-use assets, net	30,966,578	-	56,355,867	-	1,185	-	-	-	-	-	-	-	-	-	-
Investment in unconsolidated affiliate	180,531,052	-	-	-	-	-	-	-	-	-	-	22,399,954	-	-	-
Investment at fair value	4,566,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Investments	109,302,523	-	15,754,755	40,000,000	-	445,646	-	-	-	2,014,596	-	-	1,043,706	-	-
Intercompany receivables	275,280,705	377,655	1,932,726	-	73,896	-	-	-	-	324,122	260,000	13,110	69,452,088	-	256,092
Long-term deposits	130,674	-	-	-	4,150	-	-	-	-	-	-	-	2,290	-	-
Project assets	157,593,869	-	19,745,991	-	-	-	450,885	-	-	-	-	-	-	-	-
Deferred tax assets	-	-	-	-	-	-	-	-	-	-	-	-	1,028,669	178,623	-
Goodwill	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other intangible assets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other noncurrent assets	5,139,891	-	-	-	5,880,028	-	-	-	-	-	-	-	-	-	-
Total noncurrent assets	763,723,974	377,655	93,789,339	40,000,000	7,371,949	445,646	450,885	-	-	2,338,718	260,000	22,413,064	71,528,818	178,623	256,092
TOTAL ASSETS	$ 1,032,089,279	$ 6,230,054	$ 96,138,392	$ 40,000,000	$ 23,981,099	$ 445,646	$ 450,885	$ -	$ -	$ 2,338,718	$ 593,115	$ 30,424,662	$ 72,602,926	$ 262,473	$ 514,362

See independent auditors’ report.

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATING BALANCE SHEETS
DECEMBER 31, 2021

	Ho Ohana Solar I, LLC	FCHQC Development	HEC Guam A, LLC	HEC Guam B, LLC	Diamond Solar	Keawe Solar	174 PG NE	BNS 136	MRP 136	BNS Commerce	Forest Mall	WPL4	WPL10	BNS	Brainum	174 PG TORREON	Oberon 1B, LLC	Imeson Solar Farm, LLC	Eliminations	Total Consolidated
ASSETS																				
CURRENT ASSETS																				
Cash	$ 7,874	$ -	$ -	$ -	$ -	$ -	$ 3,022,040	$ 36,650	$ 56,242	$ 40,079	$ 52,534	$ 22,653	$ 18,305	$ 19,040	$ 39,848	$ 5,794,318	$ 1,017,444	$ 922,899	$ -	$ 131,516,480
Restricted cash	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,146,000	6,146,000
Accounts receivable, net of allowance	-	-	-	-	-	-	1,628,215	3,678	1,069	15,829	5,047	-	-	-	21,639	5,402	5,783	112,600	-	46,523,761
Receivable from related parties	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38,750,911
Notes receivable	-	-	-	-	-	-	1,601,650	-	-	-	-	-	-	-	-	-	-	-	-	1,685,475
Other receivable	-	-	-	-	-	-	4,917	-	-	-	-	-	-	-	-	83,240	5,000	-	-	264,840
Costs and estimated earnings in excess of billings	-	-	-	-	-	-	2,422,420	-	-	-	-	-	-	-	-	-	-	-	-	2,422,420
Income tax refundable	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,573,108
Value-added tax receivables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,115,168	-	-	-	1,420,635
Accrued revenue	-	-	-	-	-	-	-	4,779	19,571	37,072	24,984	63,857	7,310	-	22,592	949,113	-	-	-	2,955,586
Project assets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	66,722,900
Prepaid expenses and other current assets	-	-	-	-	-	-	135,370	-	-	-	-	-	-	1,120	900	200,051	654,189	13,481	(15,560,000)	4,756,705
Total current assets	7,874	-	-	-	-	-	8,814,612	45,107	76,882	92,980	82,565	86,510	25,615	20,160	84,979	8,147,292	1,682,416	1,048,980	(11,414,000)	311,738,821
NONCURRENT ASSETS																				
Restricted cash	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	273,634	352,956	7,500,000	9,112,719
Property and equipment, net	-	-	-	-	-	-	139,132	-	-	-	-	-	-	-	-	-	-	-	-	780,440
Photovoltaic (PV) system, net	-	-	-	-	-	-	377,150	-	-	-	-	-	-	-	-	102,934,583	36,868,521	14,625,300	226,030	155,031,584
Asset retirement cost, net	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,271,099	435,581	-	2,706,680
Operating lease right-of-use assets, net	7,934,277	-	-	-	-	-	1,388,860	-	-	-	-	-	-	-	-	-	1,386,813	3,021,513	-	101,055,093
Investment in unconsolidated affiliate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(49,376,783)	153,554,223
Investment at fair value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,566,000
Investments	-	3,364,104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(171,925,330)	-
Intercompany receivables	-	-	2,466	-	10,000	-	461,643	-	-	-	-	-	-	-	-	1,530	119,970	6,244,290	(354,810,293)	-
Long-term deposits	-	-	-	-	-	-	96,244	-	-	65	-	-	-	-	-	-	-	-	-	233,423
Project assets	18,381,565	-	9,322,214	7,022,603	14,599,348	13,229,035	4,401,959	-	-	-	-	-	-	-	-	-	-	-	869,132	245,616,601
Deferred tax assets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,207,291
Goodwill	-	-	-	-	-	-	6,399,481	-	-	-	-	-	-	-	-	-	-	-	-	6,399,481
Other intangible assets	-	-	-	-	-	-	1,214,778	-	-	-	-	-	-	-	-	-	-	-	-	1,214,778
Other noncurrent assets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,245,895	-	-	-	12,265,814
Total noncurrent assets	26,315,842	3,364,104	9,324,680	7,022,603	14,609,348	13,229,035	14,479,247	-	-	65	-	-	-	-	-	104,182,008	40,920,037	24,679,640	(567,517,244)	693,744,127
TOTAL ASSETS	$ 26,323,716	$ 3,364,104	$ 9,324,680	$ 7,022,603	$ 14,609,348	$ 13,229,035	$ 23,293,859	$ 45,107	$ 76,882	$ 93,045	$ 82,565	$ 86,510	$ 25,615	$ 20,160	$ 84,979	$ 112,329,300	$ 42,602,453	$ 25,728,620	$ (578,931,244)	$ 1,005,482,948

See independent auditors' report.

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATING BALANCE SHEETS
DECEMBER 31, 2021

	174 Power Global Corporation	174 PG O&M Global, O&M	174 Power Global, LLC	174 Power Global Retail	174 Power Global Retail TX, LLC	Intermountain HoldCo, LLC	Intermountain Solar, LLC	Kupehau	SweetWater HoldCo, LLC	Techren HoldCo, LLC	Techren Solar, LLC	174 PG JV Holdings, LLC	174 PG MX Holding	174 PG Solar III	174 O&M MX
LIABILITIES AND EQUITY															
CURRENT LIABILITIES															
Accounts payable	$ 15,091,636	$ 294,277	$ 142,670	$ -	$ 1,256,365	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 15,372	$ 3,277	$ 1,041
Payable to related parties	1,684,760	-	-	-	-	-	-	-	-	-	-	13,110	-	-	-
Other payables	8,833,921	-	-	-	313,435	-	-	-	-	-	-	-	(9,179)	9,873	(569)
Short-term borrowings	190,000,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Current portion of long-term debt	4,000,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bond payable (net of bond discount															
and current debt issuance cost $831,267)	299,168,733	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accrued interest	3,509,037	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Billings in excess of costs and estimated earnings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Current portion of long-term lease liabilities	5,150,757	-	1,312,518	-	-	-	-	-	-	-	-	-	-	-	-
Advance from customer	560,020	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tax payable	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accrued expenses and other current liabilities	3,761,109	41,088	-	-	7,246,488	-	-	-	-	-	16,021	-	75,032	1,051	14,100
Total current liabilities	531,759,973	335,365	1,455,188	-	8,816,288	-	-	-	-	-	16,021	13,110	81,225	14,201	14,572
NONCURRENT LIABILITIES															
Other payables	8,486,464	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Intercompany payables	7,355,362	4,632,925	11,964,149	-	120,608,846	-	53,810	411,010	1,125,625	3,969,123	210,310	8,011,598	69,330,383	545,000	50,000
Long-term debt	206,000,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bond payable															
(net of unamortized debt issue cost of $67,921)	33,673,117	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asset retirement obligation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Operating lease liabililties	26,554,516	-	58,349,924	-	1,241	-	-	-	-	-	-	-	-	-	-
Deferred tax liability	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accrued expenses and other noncurrent liabilities	699,805	-	-	-	308,977	-	-	-	-	-	-	-	-	-	-
Total noncurrent liabilities	282,769,264	4,632,925	70,314,073	-	120,919,064	-	53,810	411,010	1,125,625	3,969,123	210,310	8,011,598	69,330,383	545,000	50,000
TOTAL LIABILITIES	814,529,237	4,968,290	71,769,261	-	129,735,352	-	53,810	411,010	1,125,625	3,969,123	226,331	8,024,708	69,411,608	559,201	64,572
EQUITY															
Stockholder's equity:															
Common stock	105,200,000	-	25,468,647	40,000,000	40,000,000	450,520	397,075	-	523,682	3,165,113	10,891,256	22,399,954	5,500,000	-	-
Additional paid-in capital	-	-	-	-	-	(4,874)	-	-	-	(415,100)	-	-	-	-	-
Retained earnings (accumulated deficit)	112,360,042	1,261,764	(1,099,516)	-	(145,754,253)	-	-	(411,010)	(1,649,307)	(4,380,418)	(10,524,472)	-	(1,529,189)	(308,939)	405,296
Accumulated other comprehensive loss	-	-	-	-	-	-	-	-	-	-	-	-	(779,493)	12,211	44,494
TOTAL EQUITY (DEFICIT)	217,560,042	1,261,764	24,369,131	40,000,000	(105,754,253)	445,646	397,075	(411,010)	(1,125,625)	(1,630,405)	366,784	22,399,954	3,191,318	(296,728)	449,790
Noncontrolling interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL EQUITY (DEFICIT)	217,560,042	1,261,764	24,369,131	40,000,000	(105,754,253)	445,646	397,075	(411,010)	(1,125,625)	(1,630,405)	366,784	22,399,954	3,191,318	(296,728)	449,790
TOTAL LIABILITIES AND EQUITY	$ 1,032,089,279	$ 6,230,054	$ 96,138,392	$ 40,000,000	$ 23,981,099	$ 445,646	$ 450,885	$ -	$ -	$ 2,338,718	$ 593,115	$ 30,424,662	$ 72,602,926	$ 262,473	$ 514,362

See independent auditors' report.

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATING BALANCE SHEETS
DECEMBER 31, 2021

	Ho Ohana Solar I, LLC	FCHQC Development	HEC Guam A, LLC	HEC Guam B, LLC	Diamond Solar	Keawe Solar	174 PG NE	BNS 136	MRP 136	BNS Commerce	Forest Mall	WPL4	WPL10	BNS	Brainum	174 PG TORREON	Oberon 1B LLC	Imeson Solar Farm, LLC	Eliminations	Total Consolidated
LIABILITIES AND EQUITY																				
CURRENT LIABILITIES																				
Accounts payable	$ -	$ -	$ -	$ -	$ -	$ -	$ 497,698	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,680	$ 1,350	$ 30,528	$ 625,475	$ 3,261	$ (3,435)	$ 17,961,195
Other payables	-	-	-	-	-	-	79,470	-	-	-	-	-	-	-	-	-	-	-	-	9,226,951
Payable to related parties	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14,768	1,140,933	-	-	2,853,571
Short-term borrowings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	190,000,000
Current portion of long-term debt	-	-	-	-	-	-	3,000,000	-	-	-	-	-	-	-	-	2,553,310	1,106,706	289,796	-	10,949,812
Bond payable (net of bond discount																				
and current debt issuance cost $831,267)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	299,168,733
Accrued interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	64,216	-	3,573,253
Billings in excess of costs and estimated earnings	-	-	-	-	-	-	841,192	-	-	-	-	-	-	-	-	-	-	-	-	841,192
Current portion of long-term lease liabilities	98,405	-	-	-	-	-	302,927	-	-	-	-	-	-	-	-	-	78,978	69,955	-	7,013,540
Advance from customer	-	-	-	-	-	-	1,936,930	-	-	-	-	-	-	-	-	-	-	-	(560,000)	1,936,950
Tax payable	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accrued expenses and other current liabilities	-	-	-	-	-	-	788,061	151	66	32	31	34	-	-	85	316,714	-	8,989		12,269,052
Total current liabilities	98,405	-	-	-	-	-	7,446,278	151	66	32	31	34	-	1,680	1,435	2,915,320	2,952,092	436,217	(563,435)	555,794,249
NONCURRENT LIABILITIES																				
Other payables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,486,464
Intercompany payables	14,048,983	-	9,296,428	6,995,866	416,112	445,441	300,325	35,339	50,304	86,000	30,000	100,000	30,000	70,000	60,000	69,119,955	24,087,302	1,366,661	(354,806,857)	-
Long-term debt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	65,110,904	17,199,030	6,064,019	-	294,373,953
Bond payable																				
(net of unamortized debt issue cost of $67,921)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33,673,117
Asset retirement obligation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,236,631	428,707	-	2,665,338
Operating lease liabililties	8,812,280	-	-	-	-	-	1,181,180	-	-	-	-	-	-	-	-	-	1,344,257	2,997,746	-	99,241,144
Deferred tax liability	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,793,940	-	-	-	3,793,940
Accrued expenses and other noncurrent liabilities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,008,782
Total noncurrent liabilities	22,861,263	-	9,296,428	6,995,866	416,112	445,441	1,481,505	35,339	50,304	86,000	30,000	100,000	30,000	70,000	60,000	138,024,799	44,867,220	10,857,133	(354,806,857)	443,242,738
TOTAL LIABILITIES	22,959,668	-	9,296,428	6,995,866	416,112	445,441	8,927,783	35,490	50,370	86,032	30,031	100,034	30,000	71,680	61,435	140,940,119	47,819,312	11,293,350	(354,806,857)	999,036,987
EQUITY																				
Stockholder's equity:																				
Common stock	3,364,104	3,364,104	28,252	26,737	14,193,236	12,783,594	27,500,000	-	-	-	-	-	-	-	-	1,006,049	-	15,049,255	(226,111,578)	105,200,000
Additional paid-in capital	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	349,554	(70,420)
Retained earnings (accumulated deficit)	(56)	-	-	-	-	-	(13,133,924)	9,617	26,512	7,013	52,534	(13,524)	(4,385)	(51,520)	23,544	(29,234,097)	(5,216,859)	(613,985)	2,146,053	(97,633,078)
Accumulated other comprehensive loss	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(382,771)	-	-	-	(1,105,559)
TOTAL EQUITY (DEFICIT)	3,364,048	3,364,104	28,252	26,737	14,193,236	12,783,594	14,366,076	9,617	26,512	7,013	52,534	(13,524)	(4,385)	(51,520)	23,544	(28,610,819)	(5,216,859)	14,435,270	(223,615,971)	6,390,943
Noncontrolling interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	55,018	55,018
TOTAL EQUITY (DEFICIT)	3,364,048	3,364,104	28,252	26,737	14,193,236	12,783,594	14,366,076	9,617	26,512	7,013	52,534	(13,524)	(4,385)	(51,520)	23,544	(28,610,819)	(5,216,859)	14,435,270	(223,560,953)	6,445,961
TOTAL LIABILITIES AND EQUITY	$ 26,323,716	$ 3,364,104	$ 9,324,680	$ 7,022,603	$ 14,609,348	$ 13,229,035	$ 23,293,859	$ 45,107	$ 76,882	$ 93,045	$ 82,565	$ 86,510	$ 25,615	$ 20,160	$ 84,979	$ 112,329,300	$ 42,602,453	$ 25,728,620	$ (578,367,810)	$ 1,005,482,948

See independent auditors' report.

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATING STATEMENTS OF LOSS AND COMPREHENSIVE LOSS
FOR THE YEAR ENDED DECEMBER 31, 2021

	174 Power Global Corporation	174 PG O&M Global O&M	174, LLC	174 Power Global Retail	174 Power Global Retail TX, LLC	Intermountain HoldCo, LLC	Intermountain Solar, LLC	Kupehau	SweetWater HoldCo, LLC	Techren HoldCo, LLC	Techren Solar, LLC	174 PG JV Holdings	174 PG MX Holding	174 PG Solar III	174 O&M MX
REVEN UE	$ 323,029,725	$ 2,471,976	$ -	$ -	$ 56,928,998	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 877,680
COST OF REVENUE	271,192,418	17,460,238	-	-	166,879,392	-	-	-	-	-	-	-	3,028	-	694,549
GROSS PROFIT (LOSS)	51,837,307	(14,988,262)	-	-	(109,950,394)	-	-	-	-	-	-	-	(3,028)	-	183,131
OPERATING EXPENSES	26,243,416	-	1,094,816	-	13,622,348	-	-	411,010	-	-	6,791	-	1,689,250	518,265	25,368
INCOME (LOSS) FROM OPERATIONS	25,593,891	(14,988,262)	(1,094,816)	-	(123,572,742)	-	-	(411,010)	-	-	(6,791)	-	(1,692,278)	(518,265)	157,763
OTHER INCOME (EXPENSES)															
Dividend income	196,941	-	196,941	-	-	-	-	-	-	-	-	-	-	-	-
Interest income	4,466,932	-	-	-	15,537	-	-	-	-	-	1,178	-	4,133,423	-	-
Interest expense	(9,272,819)	-	-	-	(100)	-	-	-	-	-	-	-	(4,187,496)	-	-
Guarantee fees	(6,456,076)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain on equity method investment	(58,609,596)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other income (expenses)	(13,609,150)	-	-	-		-	-	-	-	-	8,888	-	-	-	-
Foreign currency gain and other income (expense)	(189,091)	-	-	-	-	-	-	-	-	-	-	-	(34,371)	40,274	(7,687)
Total other income (expenses), net	(83,472,859)	-	196,941	-	15,437	-	-	-	-	-	10,066	-	(88,444)	40,274	(7,687)
INCOME BEFORE PROVISION FOR (BENEFIT FROM) INCOME TAXES	(57,878,968)	(14,988,262)	(897,875)	-	(123,557,305)	-	-	(411,010)	-	-	3,275	-	(1,780,722)	(477,991)	150,076
PROVISION FOR (BENEFIT FROM) INCOME TAXES	(14,977,599)	-	-	-	-	-	-	-	-	-	-	-	(646,293)	(160,934)	110,208
NET INCOME (LOSS)	(42,901,369)	(14,988,262)	(897,875)	-	(123,557,305)	-	-	(411,010)	-	-	3,275	-	(1,134,429)	(317,057)	39,868
INCOME ATTRIBUTABLE TO NONCONTROLLING INTEREST	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NET INCOME (LOSS) ATTRIBUTABLE TO THE COMPANY	$ (42,901,369)	$ (14,988,262)	$ (897,875)	$ -	$ (123,557,305)	$ -	$ -	$ (411,010)	$ -	$ -	$ 3,275	$ -	$ (1,134,429)	$ (317,057)	$ 39,868

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HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATING STATEMENTS OF LOSS AND COMPREHENSIVE LOSS
FOR THE YEAR ENDED DECEMBER 31, 2021

	Ho Ohana Solar I, LLC	FCHQC Development	HEC Guam A LLC	HEC Guam B LLC	Diamond Solar	Keawe Solar	174 PG NE	BNS 136	MRP 136	BNS Commerce	Forest Mall	WPL4	WPL10	BNS	Brainum	174 PG TORREON	Oberon 1B	Imeson Solar	Eliminations	Total Consolidated
REVENUE	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,534,806	$ 9,751	$ 22,518	$ 55,718	$ 57,803	$ 71,374	$ 12,122	$ -	$ 48,165	$ 7,498,739	$ 261,386	$ 969,268	$ (3,219,664)	$ 392,630,365
COST OF REVENUE	-	-	-	-	-	-	3,153,301	4,827	8,173	27,084	9,203	14,730	2,619	2,240	1,047	6,251,151	674,258	931,021	(18,983,141)	448,326,138
GROSS PROFIT (LOSS)	-	-	-	-	-	-	381,505	4,924	14,345	28,634	48,600	56,644	9,503	(2,240)	47,118	1,247,588	(412,872)	38,247	15,763,477	(55,695,773)
OPERATING EXPENSES	42	-	-	-	-	-	7,383,850	-	-	-	815	-	-	49,280	23,574	264,366	439,169	6,123	6,655,002	58,433,485
INCOME (LOSS) FROM OPERATIONS	(42)	-	-	-	-	-	(7,002,345)	4,924	14,345	28,634	47,785	56,644	9,503	(51,520)	23,544	983,222	(852,041)	32,124	9,108,475	(114,129,258)
OTHER INCOME (EXPENSES)																				
Dividend income	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(393,882)	-
Interest income	-	-	-	-	-	-	80,400	-	-	-	-	-	-	-	-	20,604	-	5,777	(8,285,466)	438,385
Interest expense	-	-	-	-	-	-	(113,075)	-	-	-	-	-	-	-	-	(7,049,492)	(469,832)	(303,646)	8,256,022	(13,140,438)
Guarantee fees	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(6,456,076)
Gain on equity method investment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(58,609,596)
Other income (expenses)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(5,297,159)	(4,127,118)	-	754,161	(22,270,378)
Foreign currency gain and other income (expense)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(3,618,475)	-	-	-	(3,809,350)
Total other income (expenses), net	-	-	-	-	-	-	(32,675)	-	-	-	-	-	-	-	-	(15,944,522)	(4,596,950)	(297,869)	330,835	(103,847,453)
INCOME BEFORE PROVISION FOR (BENEFIT FROM) INCOME TAXES	(42)	-	-	-	-	-	(7,035,020)	4,924	14,345	28,634	47,785	56,644	9,503	(51,520)	23,544	(14,961,300)	(5,448,991)	(265,745)	9,439,311	(217,976,711)
PROVISION FOR (BENEFIT FROM) INCOME TAXES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,502,401	-	-	-	(13,172,217)
NET INCOME (LOSS)	(42)	-	-	-	-	-	(7,035,020)	4,924	14,345	28,634	47,785	56,644	9,503	(51,520)	23,544	(17,463,701)	(5,448,991)	(265,745)	9,439,311	(204,804,494)
INCOME ATTRIBUTABLE TO NONCONTROLLING INTEREST	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	491	491
NET INCOME (LOSS) ATTRIBUTABLE TO THE COMPANY	$ (42)	$ -	$ -	$ -	$ -	$ -	$ (7,035,020)	$ 4,924	$ 14,345	$ 28,634	$ 47,785	$ 56,644	$ 9,503	$ (51,520)	$ 23,544	$ (17,463,701)	$ (5,448,991)	$ (265,745)	$ 9,438,819	$ (204,804,985)

See independent auditors' report.

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES

CONSOLIDATED FINANCIAL STATEMENTS
AND SUPPLEMENTARY INFORMATION

DECEMBER 31, 2020

Warren Averett
CPAs AND ADVISORS

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
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DECEMBER 31, 2020

Warren Averett
CPAs AND ADVISORS

3815 Interstate Court
Montgomery, AL 36109
334.271.2200
warrenaverett.com

INDEPENDENT AUDITORS' REPORT

To the Stockholder
Hanwha Energy USA Holdings Corporation and Subsidiaries

Report on the Consolidated Financial Statements
We have audited the accompanying consolidated financial statements of Hanwha Energy USA Holdings Corporation and Subsidiaries (the Company) which comprise the consolidated balance sheet as of December 31, 2020, and the related consolidated statements of income and comprehensive income, changes in equity, and cash flows for the year then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Financial Statements
Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility
Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion
In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and the results of its operations and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Report on Supplementary Information
Our audit was conducted for the purpose of forming an opinion on the consolidated financial statements as a whole. The supplementary information on pages 32 through 40 is presented for purposes of additional analysis and is not a required part of the consolidated financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the consolidated financial statements. The information has been subjected to the auditing procedures applied in the audit of the consolidated financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the consolidated financial statements or to the consolidated financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the consolidated financial statements as a whole.

Warren Averett, LLC

Montgomery, Alabama USA
April 26, 2021

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEET
DECEMBER 31, 2020

ASSETS

CURRENT ASSETS		
Cash	$	34,268,224
Restricted cash		22,138,046
Accounts receivable		4,796,863
Receivable from related parties		238,635
Other receivables		525,052
Advance payment		206,797
Short-term notes receivable		1,598,825
Costs and estimated earnings in excess of billings		1,441,611
Accrued revenue		2,665,364
Project assets		13,802,212
Project assets – Photovoltaic (PV) system		337,899,571
Prepaid income taxes		1,911,760
Value-added tax receivables		6,598,726
Prepaid expenses and other current assets		3,735,907
Total current assets		431,827,593
NONCURRENT ASSETS		
Notes receivable		1,390,300
Property and equipment, net		15,851,125
Operating lease right-of-use assets, net		12,982,770
Investment in unconsolidated affiliate		165,463,798
Investment at fair value		1,796,000
Project assets		293,654,079
Deferred tax assets		6,414,026
Goodwill and other intangible assets		7,045,481
Other intangible assets		3,651,314
Other noncurrent assets		8,511,730
Total noncurrent assets		516,760,623
TOTAL ASSETS	$	948,588,216

See notes to the consolidated financial statements.

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEET
DECEMBER 31, 2020

LIABILITIES AND EQUITY

CURRENT LIABILITIES	
Accounts payable	$ 16,512,687
Payable to related parties	7,247,560
Notes payable to related parties	5,000,000
Short-term borrowings	65,000,000
Current portion of long-term debt	74,931,516
Accrued interest	3,665,773
Billings in excess of costs and estimated earnings	1,001,824
Current portion of long-term lease liabilities	835,336
Accrued expenses and other current liabilities	11,564,863
Total current liabilities	185,759,559
NONCURRENT LIABILITIES	
Long-term debt	146,624,364
Bonds payable (net of bond discount and unamortized debt issue cost of $2,344,833)	334,419,873
Other noncurrent liabilities	1,072,704
Operating lease liabililties	13,072,147
Deferred tax liabilities	13,822,262
Total noncurrent liabilities	509,011,350
TOTAL LIABILITIES	694,770,909
EQUITY	
Stockholder's equity:	
Common stock, par value $1,000 per share; 100,000 shares authorized, 105,201 shares issued and outstanding (1 share issued with no par value)	105,200,000
Additional paid-in capital	7,970,347
Retained earnings	79,615,533
Accumulated other comprehensive loss	(1,288,044)
Stockholder's equity attributable to the Company	191,497,836
Noncontrolling interest	62,319,471
TOTAL EQUITY	253,817,307
TOTAL LIABILITIES AND EQUITY	$ 948,588,216

See notes to the consolidated financial statements.

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF INCOME AND COMPREHENSIVE INCOME
FOR THE YEAR ENDED DECEMBER 31, 2020

REVENUE	$	50,751,905
COST OF REVENUE		52,164,590
GROSS LOSS		(1,412,685)
OPERATING EXPENSES		30,022,015
LOSS FROM OPERATIONS		(31,434,700)
OTHER INCOME (EXPENSES)		
Interest income		467,309
Interest expense		(16,159,033)
Guarantee fees		(4,310,107)
Gain on equity method investment		59,833,175
Foreign currency gain and other income (expenses), net		5,180,350
Total other income (expenses), net		45,011,694
INCOME BEFORE BENEFIT FROM INCOME TAXES		13,576,994
BENEFIT FROM INCOME TAXES		(1,606,636)
NET INCOME		15,183,630
INCOME ATTRIBUTABLE TO NONCONTROLLING INTEREST		4,064,402
INCOME ATTRIBUTABLE TO THE COMPANY		11,119,228
OTHER COMPREHENSIVE LOSS		
Foreign currency translation loss, net of income tax benefit of $252,072		(948,269)
COMPREHENSIVE INCOME	$	10,170,959

See notes to the consolidated financial statements.

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
FOR THE YEAR ENDED DECEMBER 31, 2020

	Common Stock		Additional	Retained	Accumulated Other Comprehensive	Total Stockholder's	Noncontrolling	Total
	Shares	Amount	Paid-in Capital	Earnings	Loss	Equity	Interest	Equity
BALANCE AT DECEMBER 31, 2019	55,201	$ 55,200,000	$ -	$ 68,496,305	$ (339,775)	$ 123,356,530	$ 1,635,415	$ 124,991,945
Contribution	50,000	50,000,000	7,970,347	-	-	57,970,347	58,758,504	116,728,851
Distribution	-	-	-	-	-	-	(2,138,850)	(2,138,850)
Foreign currency translation loss, net of income tax benefit of $252,072	-	-	-	-	(948,269)	(948,269)	-	(948,269)
Net Income	-	-	-	11,119,228	-	11,119,228	4,064,402	15,183,630
BALANCE AT DECEMBER 31, 2020	105,201	$ 105,200,000	$ 7,970,347	$ 79,615,533	$ (1,288,044)	$ 191,497,836	$ 62,319,471	$ 253,817,307

See notes to the consolidated financial statements.

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED DECEMBER 31, 2020

CASH FLOWS FROM OPERATING ACTIVITIES		
Income attributable to the Company	$	11,119,228
Income attributable to noncontrolling interest		4,064,402
Net income		15,183,630
Adjustments to reconcile net income to net cash used in operating activities:		
Depreciation		1,024,154
Amortization		2,356,918
Amortization of right-of-use assets		749,359
Provision for bad debt expense		2,700,424
Foreign currency loss		4,467,535
Deferred income tax benefit		(1,500,163)
Loss on disposal of tangible assets		118,248
Equity gain from unconsolidated affiliate		(59,833,175)
Changes in assets and liabilities:		
Accounts receivable		1,171,485
Receivable from related parties		(145,956)
Other receivables		(158,629)
Accrued revenue		(1,405,941)
Advance payment		5,762
Prepaid expenses		(955,742)
Project assets		86,701,276
Project assets - Photovoltaic (PV) system		(217,887,716)
Prepaid income taxes		1,406,112
Other current assets		191,411
Value-added tax receivables		14,773,341
Costs and estimated earnings in excess of billings		143,620
Other assets		3,852,674
Accounts payable		7,735,443
Accrued expenses and other current liabilities		623,274
Lease liabilities		(317,765)
Payable to related parties		(11,907,470)
Billings in excess of costs and estimated earnings		(567,685)
Other noncurrent liabilities		411,315
Total adjustments		(166,247,891)
Net cash used in operating activities		(151,064,261)

See notes to the consolidated financial statements.

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED DECEMBER 31, 2020

CASH FLOWS FROM INVESTING ACTIVITIES		
Capital expenditures for property and equipment	$	(722,350)
Notes receivable		657,200
Equity Investment		(1,296,000)
Distribution to nonconctrolling interest		(2,138,850)
Net cash used in investing activities		(3,500,000)
CASH FLOWS FROM FINANCING ACTIVITIES		
Capital contributions		108,758,504
Debt issue cost		(106,051)
Proceeds from short-term debt		103,889,051
Repayment of short-term debt		(241,789,051)
Proceeds from long-term debt		200,373,969
Repayment of long-term debt		(10,071,448)
Net cash provided by financing activities		161,054,974
FOREIGN CURRENCY TRANSLATION ADJUSTMENT		(4,617,621)
INCREASE IN CASH AND RESTRICTED CASH		1,873,092
CASH AND RESTRICTED CASH AT BEGINNING OF YEAR		54,533,178
CASH AND RESTRICTED CASH AT END OF YEAR	$	56,406,270
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION		
Cash paid during the year for:		
Interest	$	16,018,356
Income taxes	$	220,312
SUPPLEMENTAL DISCLOSURES OF NONCASH TRANSACTIONS, INVESTING, AND FINANCING ACTIVITIES		
Operating lease right-of-use assets	$	70,942
Operating lease liabilities	$	70,942
Reclass from project assets to Photovoltaic (PV) system	$	181,918,680
Reclass from property and equipment to project assets	$	1,207,239
Capital increase from the transaction with tax equity investor	$	7,970,347

See notes to the consolidated financial statements.

1. ORGANIZATION AND PRINCIPAL ACTIVITIES

Hanwha Energy USA Holdings Corporation is a wholly-owned subsidiary of Hanwha Energy Corporation (the Parent), located in Korea. The Company incorporated as Hanwha Energy Corporation America in the State of Delaware in December 2013, changed its name to 174 Power Global Corporation in August 2016, and in December 2018 changed its name to Hanwha Energy USA Holdings Corporation.

The accompanying consolidated financial statements are comprised of the accounts of Hanwha Energy USA Holdings Corporation and its wholly-owned and majority-owned subsidiaries (the Company).

The Company engages mainly in development and in engineering, procurement, construction (EPC) of solar power projects on utility-scale or commercial sites in the United States and Latin America, along with providing electricity to the retail utility market in Texas.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The consolidated financial statements of the Company have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP").

Basis of Consolidation

The accompanying consolidated financial statements have been prepared in accordance with U.S. GAAP and reflect the accounts and operations of the Company and those of its subsidiaries, including Funds, in which the Company has a controlling financial interest. The typical condition for a controlling financial interest ownership is holding a majority of the voting interests of an entity. However, a controlling financial interest may also exist in entities, such as variable interest entities ("VIEs"), through arrangements that do not involve controlling voting interests. In accordance with the provisions of Financial Accounting Standards Board ("FASB") Accounting Standards Codification Topic 810 ("ASC 810") *Consolidation*, the Company consolidates any VIE of which it is the primary beneficiary. The primary beneficiary, as defined in ASC 810, is the party that has (1) the power to direct the activities of a VIE that most significantly impact the VIE's economic performance and (2) the obligation to absorb the losses of the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. The Company evaluates its relationships with its VIEs on an ongoing basis to determine whether it continues to be the primary beneficiary. The consolidated financial statements reflect the assets and liabilities of VIEs that are consolidated. All intercompany transactions and balances have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – CONTINUED

Use of Estimates – Continued

Significant accounting estimates reflected in the Company's consolidated financial statements include revenue recognition for sales of solar power projects, EPC and development services accounted for under a cost-based input method, allowance for doubtful accounts receivable, provision for contingent liability, impairment of long-lived assets and project assets, the estimated useful lives of long-lived assets, discount rates used to measure operating lease liabilities, fair value estimate of financial instruments, accrual for uncertain tax positions, valuation allowances for deferred tax assets, and applying acquisition method of accounting to business acquisitions.

Cash and Cash Equivalents and Restricted Cash

Cash and cash equivalents consist of cash on hand and bank deposits, which are unrestricted as to withdrawal and use and have original maturities less than 90 days.

Restricted cash represents amounts held by banks, which are not available for the Company's general use, as security for issuance of letters of credit, short-term notes payable and bank borrowings. Upon maturity of the letters of credit, repayment of short-term notes payable or bank borrowings, the deposits are released by the bank and become available for general use by the Company.

Accounts Receivable

Accounts receivable represent unconditional rights to consideration arising from performance under contracts with customers. The carrying value of such receivables, net of the allowance for doubtful accounts, represents their estimated net realizable value.

As a practical expedient, the Company does not adjust the promised amount of consideration for the effects of a significant financing component when it is expected, at contract inception, that the period between transfer of a promised product or service to a customer and when the customer pays for that product or service will be one year or less. The Company typically does not include extended payment terms in contracts with customers.

Allowance for Doubtful Receivables

The Company estimates allowance for doubtful accounts for specific receivable balances based on historical collection trends, the age of outstanding receivables, existing economic conditions, and the financial security, if any, associated with the receivables. Past-due receivable balances are written off when internal collection efforts have been unsuccessful.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – CONTINUED

Costs and Estimated Earnings in Excess of Billings

Costs and estimated earnings in excess of billings represents a contract asset for revenue that has been recognized in advance of billing the customer. The Company uses a cost-based input method to recognize revenue from EPC and development services when all relevant revenue recognition criteria have been met. Under this accounting method, revenue may be recognized in advance of billing the customer, which results in the recording of costs and estimated earnings in excess of billings. Once the Company meets the billing criteria under such contract, the rights to consideration becomes unconditional, it bills the customer and reclassifies the unbilled balance to accounts receivable. Billing requirements vary by contract, but are generally structured around completion of certain construction milestones.

Project Assets

Project assets primarily consist of costs related to solar power projects in various stages of development that are capitalized prior to the completion of the sale of the project, including projects that may have begun commercial operation under PPAs and are actively marketed and intended to be sold. These project related costs include costs for land, development, and construction of a PV solar power system. Development costs may include legal, consulting, permitting, transmission upgrade, interconnection, and other similar costs. The Company typically classifies project assets as noncurrent due to the nature of solar power projects (long-lived assets) and the time required to complete all activities to develop, construct, and sell projects, which is typically longer than 12 months. The Company presents all expenditures related to the development and construction of project assets, whether fully or partially owned, as a component of cash flows from operating activities.

The Company reviews project assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. The Company considers a project commercially viable or recoverable if it is anticipated to be sold for a profit once it is either fully developed or fully constructed. The Company considers a partially developed or partially constructed project commercially viable or recoverable if the anticipated selling price is higher than the carrying value of the related project assets. The Company examines a number of factors to determine if the project is expected to be recoverable, including whether there are any changes in environmental, ecological, permitting, market pricing, or regulatory conditions that may impact the project. Such changes could cause the costs of the project to increase or the selling price of the project to decrease. If a project is not considered recoverable, the Company impairs the respective project assets and adjusts the carrying value to the estimated fair value, with the resulting impairment recorded within operating expense.

The Company does not depreciate the project assets. Revenue generated from the project assets are considered incidental revenue and accounted for in other income, totaling $10,370,062 for the year ended December 31, 2020.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – CONTINUED

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful lives of the assets, which range from three to twenty-five years. Leasehold improvements are amortized over the shorter of the useful life of the related assets or the lease term. Expenditures for repairs and maintenance are charged to expense as incurred. For assets sold or otherwise disposed of, the cost and related accumulated depreciation are removed from the accounts, and any related gain or loss is reflected in income for the period.

Investments in Unconsolidated Affiliates

The Company accounts for unconsolidated affiliates depending upon whether the Company has the ability to exercise significant influence over the affiliate. As part of this evaluation, the Company considers participation and protective rights in the affiliate as well as its legal form. The Company uses the equity method of accounting for investments when the Company has the ability to significantly influence, but not control, the operations or financial activities of the investee.

If the Company does not have the ability to significantly influence the operations or financial activities of the investee, unconsolidated affiliates with readily determinable fair values are measured at fair value. Unconsolidated affiliates without readily determinable fair values are measured at cost with adjustments for observable changes in price or impairments (referred to as the measurement alternative). The Company performs a qualitative assessment at each reporting period and recognizes an impairment if there are sufficient indicators that the fair value of the investment is less than carrying value. Changes in value are recorded in other income (expense), net. The Company records any distributions received from the net accumulated earnings of such investments as income. Distributions received in excess of their earnings are considered returns of investment and are recorded as reductions in the cost of the investments.

Impairment of Long-lived Assets

The Company reviews long-lived assets for impairment whenever events or changes in circumstances indicate that carrying amounts of such assets may not be recoverable. When these events occur, the Company evaluates for impairment by comparing the carrying amount of the assets to the future undiscounted net cash flows expected to result from the use of the assets and their eventual disposition. If the sum of the expected undiscounted cash flows is less than the carrying amount of the assets, the Company would recognize an impairment loss based on the excess of the carrying amount of the asset over its fair value. The Company performed an impairment test as of December 31, 2020, and no impairment loss was recognized.

Debt Issuance Costs

Financing costs are amortized over the term of the related debt and the amortization of debt issuance cost is included with interest.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – CONTINUED

Fair Value Measurement

The Company measures certain assets and liabilities at fair value, which is defined as the price that would be received from the sale of an asset or paid to transfer a liability (i.e., an exit price) on the measurement date in an orderly transaction between market participants in the principal or most advantageous market for the asset or liability. The Company uses the following hierarchy for fair value measurement, which prioritizes valuation inputs based on the extent to which the inputs are observable in the market.

Level 1 – Valuation techniques in which all significant inputs are unadjusted quoted prices from active markets for assets or liabilities that are identical to the assets or liabilities being measured.

Level 2 – Valuation techniques in which significant inputs include quoted prices from active markets for assets or liabilities that are similar to the assets or liabilities being measured and/or quoted prices for assets or liabilities that are identical or similar to the assets or liabilities being measured from markets that are not active. Also, model-derived valuations in which all significant inputs are observable in active markets are Level 2 valuation techniques.

Level 3 – Valuation techniques in which one or more significant inputs are unobservable. Such inputs reflect estimate of assumptions that market participants would use to price an asset or liability.

The cost approach is based on the amount that would currently be required to replace an asset.

Fair Value of Financial Instruments

The carrying amounts reported in the consolidated balance sheet for cash, restricted cash, accounts receivable, other receivables, short-term notes receivable, prepaid expenses and other current assets, accounts payable, notes payable, accrued expenses and other current liabilities, short-term borrowings, and current portion of long-term debt approximate fair value because of the short-term maturity of those financial instruments. The carrying amount reported for certain long-term debt in the consolidated financial statements approximates fair value due to the variable rate of these borrowings.

Concentration of Risk

Assets that potentially subject the Company to significant concentration of credit risk are primarily cash and cash equivalents.

The Company maintains cash in accounts that are in excess of the Federal Deposit Insurance Corporation (FDIC) insured limits of $250,000. As of December 31, 2020, approximately $52.0 million in cash was uninsured based upon the FDIC insurance coverage limits.

The Company mitigates its risk of loss by continuing to monitor the financial strength of the financial institutions in which it makes deposits.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – CONTINUED

Leases

Effective January 1, 2019, the Company adopted Accounting Standards Update ("ASU") No. 2016-02, *Leases* (Topic 842), as amended ("ASC 842") for its lease arrangements, which were recorded under ASC 840, Leases, before implementation. Upon adoption of ASC 842, the Company elected to use the remaining lease term as of January 1, 2019 in the estimation of the applicable discount rate for leases that were in place at adoption.

Right-of-use (ROU) assets represent right to use an underlying asset for the lease term and lease liabilities represent obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As most leases do not provide an implicit rate, the Company generally uses incremental borrowing rate based on the estimated rate of interest for collateralized borrowing over a similar term of the lease payments at commencement date. The operating lease ROU asset also includes any lease payments made and excludes lease incentives. Lease terms may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option.

The Company has elected not to recognize right-of-use assets and lease liabilities for short-term leases with terms of 12 months or less. The Company accounts for the lease and non-lease components as a single lease component.

The Company assesses ROU assets for impairment. When events or circumstances indicate the carrying value may not be recoverable, the Company evaluates the net book value of the asset for impairment by comparison to the projected undiscounted future cash flows. If the carrying value of the asset is determined to not be recoverable and is in excess of the estimated fair value, the Company recognizes an impairment charge in asset impairments on its consolidated statements of income and comprehensive income.

Deferred Revenue

When consideration is received, or such consideration is unconditionally due, from a customer prior to transferring goods or services to the customer under the terms of a sales contract, deferred revenue is recorded, which represents a contract liability. Deferred revenue is recognized after transfer of control of the goods or services to the customer and all revenue recognition criteria are met.

Contingencies

Liabilities for loss contingencies arising from claims, assessments, litigation, fines, and penalties and other sources are recorded when it is probable that a liability has been incurred and the amount can be reasonably estimated. If a potential material loss contingency is not probable but is reasonably possible, or is probable but the amount cannot be estimated, then the nature of the contingent liability, together with an estimate of the range of possible loss if determinable and material, is disclosed. Legal costs incurred in connection with loss contingencies are expensed as incurred.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – CONTINUED

Revenue and Cost Recognition
The Company adopted ASC 606 '*Revenue from Contracts with Customers*'. According to the released standard, revenue is recognized by applying a five-step revenue model to all types of contracts.

- Identify the contract with the customer
- Identify the performance obligations
- Determine the transaction price
- Allocate the transaction price
- Recognize revenue when (or as) the entity satisfies a performance obligation

The following are the main points that affect the Company's financial statements.

- Variable consideration — The Company is engaged in the business of producing recycled polyester staple fiber. The consideration may change due to the amount paid or expected to be paid to customers when supplying produced goods. When ASC 606 is applied, the Company recognizes revenue by deducting the amount payable to customers from sales.

- Consideration payable to the customer — When the Company supplies a product to a customer under a contract and receives identifiable goods or services from the customer, a portion of the fair value is recognized as an expense or an asset and the remainder is deducted from consideration.

Development
Revenue from contracts with customers is recognized when control of promised goods and services is transferred to customers, in an amount that reflects the consideration the Company expects to be entitled to in exchange for those goods or services.

Cost of revenue includes all direct material and labor costs and those indirect costs related to development and construction of a solar power system. Development costs include legal, consulting, permitting, and other similar costs. Selling, general, and administrative costs are charged to expense as incurred.

Retail
Revenue for electricity sales is recognized upon delivery of electricity to the customer's meter. Electric services not billed by month-end are accrued based upon estimated deliveries to customers as tracked and recorded by the Company multiplied by the Company's average billing rate per kilowatt hour (kwh) in effect at the time.

The Company uses a revenue estimation process by using its settlement statements to determine the volumes and associated estimated revenue for a month. Supplies delivered to customers for the month, measured on a daily basis, provides the basis for revenues.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – CONTINUED

Revenue and Cost Recognition – Continued

Engineering, Procurement, and Construction Services

Revenue for EPC services are recognized over time as the Company creates or enhances an energy generation asset controlled by the customer. The Company recognizes revenue using cost based input methods, which recognize revenue and gross profit as work is performed based on the relationship between actual costs incurred compared to the total estimated costs of the contract, after consideration of customers' commitment to perform its obligations under the contract, which is typically measured through the forms of financial security issued by creditworthy financial institutions or parent entities.

In applying cost based input methods of revenue recognition, the Company uses the actual costs incurred relative to the total estimated costs (including solar module costs) to determine progress towards contract completion and to calculate the corresponding amount of revenue and gross profit to recognize. Cost based input methods of revenue recognition are considered a faithful depiction of efforts to satisfy long-term construction contracts and therefore reflect the transfer of goods to a customer under such contracts. Costs incurred that do not contribute to satisfying performance obligations (inefficient costs) are excluded from input methods of revenue recognition as the amounts are not reflective of transferring control of the system to the customer. Costs incurred toward contract completion may include costs associated with solar modules, direct materials, labor, subcontractors, and other indirect costs related to contract performance. The Company recognizes solar module and direct material costs as incurred when such items have been installed in a system.

Cost based input methods of revenue recognition are required to make estimates of net contract revenues and costs to complete projects. In making such estimates, significant judgment is required to evaluate assumptions related to the amount of net contract revenues, including the impact of any performance incentives, liquidated damages, and other payments to customers. Significant judgment is also required to evaluate assumptions related to the costs to complete projects, including materials, labor, contingencies, and other system costs.

If the estimated total costs on any contract, including any inefficient costs, are greater than the net contract revenues, the Company recognizes the entire estimated loss in the period the loss becomes known. The cumulative effect of revisions to estimates related to net contract revenues or costs to complete contracts are recorded in the period in which the revisions to estimates are identified and the amounts can be reasonably estimated. The effect of the changes on future periods are recognized as if the revised estimates had been used since revenue was initially recognized under the contract. Such revisions could occur in any reporting period, and the effects may be material depending on the size of the contracts or the changes in estimates.

O&M Services

O&M services are transferred over time when customers receive and consume the benefits provided by the Company's performance under the terms of service arrangements. Revenues from O&M services are recognized overtime based on the work completed to date which does not require re-performances and the costs of O&M services are expensed when incurred.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – CONTINUED

Revenue and Cost Recognition – Continued

Electricity Revenue

Electricity revenue is generated primarily by the Company's solar power plants under long-term PPAs and performance based energy incentives. For electricity sold under PPAs, the Company recognizes electricity revenue based on the price stated in the PPAs when electricity has been generated and transmitted to the grid. The solar power plants that generate this revenue stream are subject to be sold to potential buyers as the Company's original plan was to develop this project to sell to the buyers.

Income Taxes and Uncertain Tax Positions

The Company is a C corporation and pays income taxes on its federal and state taxable income.

Provision for income taxes is based on taxes payable or refundable for the current year and deferred taxes on temporary differences between the amount of taxable income and pretax financial income and between the tax bases of assets and liabilities and their reported amounts in the financial statements. Deferred tax assets and liabilities are included in the consolidated financial statements at currently enacted income tax rates applicable to the period in which the deferred tax assets and liabilities are expected to be realized or settled. As changes in tax laws or rates are enacted, deferred tax assets and liabilities are adjusted through the provision for income taxes.

The Company follows the accounting guidance for uncertainty in income taxes using the provisions of FASB ASC 740. Using that guidance, tax provisions are initially recognized in the consolidated financial statements when it is more-likely-than-not the provisions will be sustained upon examination by the tax authorities.

As of December 31, 2020, the Company had no uncertain tax positions, or interest and penalties that qualify for either recognition or disclosure in the consolidated financial statements.

Advertising and Promotion Costs

The costs of advertising, promotional, sales and marketing programs are charged to operations when incurred and are included as sales and marketing expenses in the accompanying consolidated statement of income and comprehensive income. Advertising, promotional, sales and marketing costs totaled $2,904,790 for the year ended December 31, 2020.

Foreign Currency Translation

The United States dollars ("U.S. dollars" or "$"), the currency in which a substantial amount of the Company's transactions are denominated, is used as the functional and reporting currency.

The Company translates assets and liabilities of its foreign operations into the reporting currency at the exchange rates in effect at the balance sheet date. The Company translates income and expense items of such foreign operations into the reporting currency at the average exchange rate during the year. The resulting translation adjustments are recorded in other comprehensive loss. The Company operates internationally and is exposed to potentially adverse movements in currency exchange rates.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – CONTINUED

Recently Adopted Accounting Standards

In November 2018, the FASB issued ASU 2018-18, *Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606*, which (i) clarifies that certain transactions between collaborative arrangement participants should be accounted for as revenue under Topic 606; (ii) adds unit-of-account guidance in Topic 808 to align with the guidance in Topic 606; and (iii) requires that in a transaction with a collaborative arrangement participant that is not directly related to sales to third parties, presenting the transaction together with revenue recognized under Topic 606 is precluded if the collaborative arrangement participant is not a customer. The Company adopted the ASU during 2020. The adoption did not have a material impact on the consolidated financial statements.

In August 2017, the FASB issued ASU 2017-12, *Derivatives and Hedging (Topic 815) – Targeted Improvements to Accounting for Hedging Activities*, to simplify certain aspects of hedge accounting for both non-financial and financial risks and better align the recognition and measurement of hedge results with an entity's risk management activities. ASU 2017-12 also amends certain presentation and disclosure requirements for hedging activities and changes how an entity assesses hedge effectiveness. The adoption of ASU 2017-12 in 2020 did not have a significant impact on the consolidated financial statements and associated disclosures.

On January 1, 2019, the Company adopted the new ASU No. 2016-01, *Financial Instrument – Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*. The adoption of ASU 2016-01 did not materially change the measurement and presentation of financial assets and liabilities. The Company did not record any cumulative-effect adjustment to retained earnings as of January 1, 2019 as a result of adopting ASU 2016-01.

Subsequent Events

Subsequent events have been evaluated through April 26, 2021, the date the financial statements were available for issue.

In January 2021, the Company and TOTAL H SOLAR, LLC ("TOTAL") signed an agreement to form a 50/50 joint venture to develop 12 industrial-scale solar energy storage projects with combined capacity of 1.6GW cumulative capacity in the United States.

174 Power Global Retail Texas, LLC d/b/a Chariot Energy ("Chariot Energy" or "the Company"), a Texas-based retail energy provider specializing in electricity generated from renewable sources, is a retail business unit under Hanwha Energy USA Holdings Corporation. The Company experienced substantial financial impact due to the Weather Event in Texas that occurred in February 2021 ("Weather Event"), and the loss from the event is estimated to be approximately $100 million. While Chariot Energy hedges weather risk based on historical scenarios, the Weather Event was unprecedented in Texas and it impacted the entire power market. As of the date of this report, there are ongoing negotiations among the Texas Legislature, Public Utility Commission of Texas and market participants on whether the wholesale price at the region's Real Time Market and Day Ahead Market was reasonable and allowable under current protocols, and the loss impact on the Company may be reduced based on the potential decisions.

3. CASH AND RESTRICTED CASH

At December 31, 2020, restricted cash consists of deposits held by various banks to secure certain letters of credit and other deposits designated for the construction or operation of systems projects as well as the payment of amounts related to project specific debt financings.

Cash	$ 34,268,224
Restricted cash	22,138,046
Cash and restricted cash as shown on statement of cash flows	$ 56,406,270

4. ALLOWANCE FOR DOUBTFUL ACCOUNTS

An analysis of allowances for accounts receivable for the years ended December 31, 2020 is as follows:

Beginning of the year	$ -
Allowances made (reversed) during the year, net	3,600,424
Accounts written-off against allowances	(639,962)
End of the year	$ 2,960,462

5. COSTS AND ESTIMATED EARNINGS ON UNCOMPLETED CONTRACTS

Following is a summary of contracts in progress at December 31, 2020.

Costs incurred on uncompleted contracts	$ 5,701,019
Estimated earnings	1,105,164
	6,806,183
Less billings to date	(6,366,396)
	$ 439,787

These amounts are included in the accompanying consolidated balance sheet under the following captions:

Costs and estimated earnings in excess of billings	$ 1,441,611
Billings in excess of costs and estimated earnings	(1,001,824)
	$ 439,787

6. PROPERTY AND EQUIPMENT

At December 31, 2020, property and equipment consists of the following major classifications:

Leasehold improvement	$ 96,716
Tools, furniture and fixtures	205,234
Computer and software	597,664
Office equipment	91,740
Automobiles	46,709
PV system	15,954,643
	16,992,706
Less accumulated depreciation	(1,141,581)
	$ 15,851,125

Depreciation expense totaled $1,024,154 for the year ended December 31, 2020.

7. PROJECT ASSETS – PHOTOVOLTAIC (PV) SYSTEM

At December 31, 2020, the Company completed construction of PV systems, solar generating facilities, in Mexico and US in July 2019 and in May 2020, respectively, and electricity is being generated from the facilities. However, the Company does not depreciate these facilities because the Company's plan is to sell these facilities. The Company has been actively searching a purchaser. The balance of the asset is $337,899,571.

8. INVESTMENT AT FAIR VALUE

In June 2019, the Company invested $500,000 in Blueprint Power Technologies Inc. (Blueprint) representing 4.5% of Series A Preferred stock. In April 2020, the Company invested $846,000 in Juxtapose Ventures II Investment representing 10.0% of "Class A interest" and invested $450,000 in NoHo Holdings II Investment representing 2.8% of "Class B interest." Due to no significant change from investment date through December 31, 2020, the Company recognized no change in value from the investment during the period.

9. INVESTMENT IN UNCONSOLIDATED AFFILIATE

In October 2019, the Company invested $49,000,000 in Green Nikola Holdings LLC (GNH) representing 49% of the total equity contributed. GNH was formed to invest in Nikola Corporation, which designs and manufactures hydrogen-powered semi-trucks.

In return for this investment, the Company acquired 49% of membership interest in GNH which represents a 49% voting interest. The investment is accounted for using the equity method of accounting since the Company does not have voting control but can exercise significant influence in major operating decisions under the terms of the operating agreement.

The rate for distribution and allocation of income or loss is prorated in accordance with membership interest.

The following represents the unaudited summarized financial information for GNH as of and for the year ended December 31, 2020:

Assets:	
Cash	$ 3,096
Investment	337,709,675
Total assets	$ 337,712,771
Liabilities and members' equity:	
Other payable	$ 31,542
Equity	337,681,229
Total liabilities and members' equity	$ 337,712,771
Net income	$ 122,108,521

The Company's equity in gain of GNH is $59,833,175 for the year ended December 31, 2020. The Company's investment at December 31, 2020 is $165,463,798.

10. TAX EQUITY TRANSACTIONS

In 2020, the Company, through its wholly-owned indirect subsidiary, Oberon Solar IA Class B, LLC, entered into the following tax equity transaction:

In May 2020, the Company completed the sale of 100% of the class A membership interests of Oberon Solar IA Holdco, LLC, the holding company of Oberon IA Solar, LLC to a tax equity investor. The Company maintains 100% indirect ownership in the class B membership interests of Oberon IA Solar Holdco, LLC.

Under the LLC agreement, the class A member and class B member will receive varying amounts, respectively, of future cash flow distributions, and the tax equity investor is entitled to substantially all of the project's federal tax benefits.

11. GOODWILL

Goodwill in the amount of $7,045,481 recorded in the accompanying consolidated balance sheet was recognized in conjunction with the acquisition of OnForce Solar Inc. in 2019.

The qualitative assessment performed by the Company at December 31, 2020 indicated that the fair value exceeded their corresponding carrying amount, including recorded goodwill, and no impairment existed at December 31, 2020.

12. OTHER INTANGIBLE ASSETS

At December 31, 2020, intangible assets are comprised as follows:

Contract related intangibles	$ 5,588,000
Accumulated amortization	(1,936,686)
	$ 3,651,314

Amortization expense for other intangible assets for the year ended December 31, 2020, was $1,237,290.

Estimated amortization of other intangible assets over the next five years and thereafter is as follows:

2021	$ 1,075,788
2022	661,626
2023	247,464
2024	207,462
2025 and thereafter	1,458,974
	$ 3,651,314

13. SHORT-TERM BORROWINGS

The Company entered into a line of credit of $50,000,000 with The Standard Chartered Bank in May 2020 expiring in April 2021. Per the agreement, the Company can withdraw funds until the first anniversary of the date of the agreement, and the maturity date is one year after the disbursement date. The line of credit bears interest at three-month London Interbank Offered Rate (LIBOR) plus 2.4% per annum (2.55% at December 31, 2020). The outstanding balance as of December 31, 2020 is $50,000,000 which was a single withdrawal. The line of credit is guaranteed by Hanwha Energy Corporation.

The Company entered into a credit agreement of $15,000,000 with Shinhan Bank in November 2020 expiring in February 2021. The credit agreement bears fixed interest rate at 1.7% per annum. The outstanding balance as of December 31, 2020 is $15,000,000.

The Company borrowed $5,000,000 from HEC Singapore Pte. Ltd. in December 2020 repaying in January 2021. The interest of the borrowings is 1.93% per annum.

14. LONG-TERM DEBT

At December 31, 2020, long-term debt consists of the following:

The Company received a promissory note from OnForce Solar with borrowing limit of $7 million. As of December 31, 2020, the outstanding balance was $3 million, principal maturity is December 2021, and interest is due at maturity at variable interest rates.

The Company entered into a line of credit agreement of $80,000,000 in October 2020 expiring in October 2023. This loan is for refinancing of existing loan with Export-Import Bank of Korea Bank. Per the agreement, the Company can withdraw funds until the third anniversary of the date of the agreement, and the maturity date is three years after entered date. The line of credit bears interest at three-month LIBOR plus 1.9% per annum (2.05% at December 31, 2020). The outstanding balance as of December 31, 2020 is $80,000,000 which was a single withdrawal. The line of credit is guaranteed by Hanwha Energy Corporation.

The Company entered a line of credit of $20,000,000 with The Hana Bank in September 2020 expiring in 2023. Per the agreement, the Company can withdraw funds until the first anniversary of the date of the agreement, and the maturity date is one year after entered date. The line of credit bears interest at three-month LIBOR plus 1.9% per annum (2.10% at December 31, 2020). The outstanding balance as of December 31, 2020 is $20,000,000 which was a single withdrawal. The line of credit is guaranteed by Hanwha Energy Corporation.

14. LONG-TERM DEBT – CONTINUED

The Company entered into a term loan agreement of $6,997,442 with Fifth Third Bank in December 2019. The loan bears interest at three-month LIBOR plus 1.875% per annum (2.03% at December 31, 2020). As of December 31, 2020, the outstanding balance was $6,680,451, and the principal and the interest amount of the loan will be due and payable in consecutive quarterly installments per the payment schedule in the agreement. The loan has a maturity of December 2025. This loan contains certain financial covenants. As of December 31, 2020, the Company is in compliance with such covenants. The loan is collateralized with real and personal property of the project entity.

The Company entered into a credit agreement in September 2019 with Banco Nacional De Comercio Exterior, Sociedad Nacional de Credito, Institucion de Banca de Desarrollo (Bancomext) and Korea Development Bank (KDB) for a construction term loan of $73,785,599. The credit agreement allows monthly loan draws during the defined construction period. The credit facility is comprised of three tranches:

- The Tranche A Commitment is $47,960,640. Tranche A is provided by Bancomext at a fixed interest rate of 5.17% per annum. As of December 31, 2020, the outstanding balance is $46,330,420. Tranche A has a final maturity of September 2038.

- The Tranche B Commitment is $24,595,199. Tranche B is provided by KDB and bears interest at three-month LIBOR plus 2.10% (2.25% at December 31, 2020). The outstanding balance of Tranche B, which has a final maturity of June 2034, is $22,621,991 as of December 31, 2020.

- The Tranche C Commitment is $1,229,760. Tranche C is provided by Bancomext and bears interest at three-month LIBOR plus 2.55% (2.70% at December 31, 2020). The outstanding balance of Tranche C is $1,187,960 as of December 31, 2020. Tranche C is co-terminus with Tranche A.

All loans above are collateralized with the PV generating facility located in Mexico.

The Company entered into a term loan agreement of $20,893,715 with Credit Agricole Corporate in June 2020. The loan bears interest at three-month LIBOR plus 1.25% per annum (1.43% at December 31, 2020). As of December 31, 2020, the outstanding balance was $20,590,391, and the principal and the interest amount of the loan will be due and payable in consecutive quarterly installments per the payment schedule in the agreement. The loan has a maturity of June 2025.

The Company entered into a revolving loan agreement of $2,000,000 with Credit Agricole Corporate in June 2020. The loan bears interest at three-month LIBOR plus 1.25% per annum (1.43% at December 31, 2020). As of December 31, 2020, the outstanding balance was $2,000,000 which was a single withdrawal. The principal maturity is June 2025.

14. LONG-TERM DEBT – CONTINUED

The Company entered into a term loan agreement of $19,298,559 with KDB in October 2020. The loan bears interest at 2.45%. As of December 31, 2020, the outstanding balance was $19,144,667, and the principal and the interest amount of the loan will be due and payable in consecutive quarterly installments per the payment schedule in the agreement. The loan has a maturity of June 2035. This loan agreement contains negative and affirmative covenants, events of default and repayment and prepayment provisions customarily applicable to similar facilities. As of December 31, 2020, the Company met all the requirements of financial covenants.

Long-term debt is summarized as follows:

Long-term debt	$ 221,555,880
Less current portion of long-term debt	(74,931,516)
	$ 146,624,364

Maturities of long-term debt for each of the next five years and thereafter are as follows:

2021	$ 74,931,516
2022	336,535
2023	100,346,792
2024	357,326
2025 and thereafter	45,583,711
	$ 221,555,880

15. BONDS PAYABLE

In July 2019, the Company entered into an agreement to issue Green Bond (the Bond) through the Singapore Exchange Securities Trading Limited in the amount of $300 million maturing July 2022. The Bond is used to finance new or existing renewable energy projects related to renewable energy. The Bond's issue price was 99.692% of the offering amount and bears the interest rate of 2.375% per annum. The Bond is offered in the United States to qualified institutional buyers. The fiscal agent of the bond is Citicorp International Limited. The Bond is guaranteed by Hanwha Energy Corporation and KDB.

The Bond is summarized as follows:

The offering amount of the Bond	$ 300,000,000
Less bond discount	(496,050)
Less debt issuance cost	(1,754,350)
	$ 297,749,600

15. BONDS PAYABLE – CONTINUED

Amortization expense of the Bond discount and the debt issuance cost are $303,541 and $1,013,578, respectively, for the year ended December 31, 2020.

In July 2020, the Company entered into an agreement to issue Arirang Bond (the Bond) in the amount of KRW 40 Billion (USD 33,375,052.15) maturing July 2023 in Korea. The Bond is used to finance new or existing renewable energy projects related to renewable energy. The Bond bears the fixed interest rate of 2.55% per annum. The Bond is offered in Korea to buyers such as financial institution's. The fiscal agent of the bond is DB Financial Investment Co.,Ltd. The Bond is guaranteed by Hanwha Energy Corporation.

The Bond is summarized as follows:

The offering amount of the Bond	$ 33,375,052
Less debt issuance cost	(94,433)
Loss on foreign currency exchange ("FX") translation	3,389,654
	$ 36,670,273

Amortization expense of the debt issuance cost is $11,617 for the year ended December 31, 2020.

To avoid the risk of exchange rate exposure, the Company entered into a FX swap with Standard Chartered Bank and recognized a $2,591,471 gain on the swap in 2020.

16. SOURCE OF REVENUE

The primary source of revenue is substantially from three different sources: sale of solar power projects in the United States, electricity sale to the retail market in Texas, and EPC service.

The following table represents a disaggregation of revenue by source.

Category:	
Electricity sales to retail	$ 46,271,596
Sale of solar power project	1,352,295
EPC service	3,128,014
Total	$ 50,751,905

17. LEASES

Lease arrangements include land for solar energy systems, corporate and administrative offices, vehicle, and office equipment. These leases have remaining lease terms of 1 year to 35 years, some of which include options to extend the leases for up to 20 years, and some of which include options to terminate the leases within 1 year.

The following table presents certain quantitative information related to lease arrangements for the year ended December 31, 2020.

Operating lease cost	$ 1,067,123
Other information:	
Payments included in the measurement of operating lease liabilities	$ 1,164,319
Weighted-average remaining lease term — operating leases	26.82 years
Weighted-average remaining lease term — operating leases	4.35%

The future lease payments required under operating lease agreements are as follows:

2021	$ 1,349,322
2022	1,076,058
2023	912,799
2024	905,658
2025 and thereafter	21,877,184
Total	26,121,021
Less effects of discounting	(12,213,538)
Lease liabilities recognized	$ 13,907,483

18. INCOME TAXES

For the year ended December 31, 2020, the benefit for income taxes consists of the following:

Current:	
Federal	$ -
State and local	220,312
Foreign	-
Subtotal	220,312
Deferred:	
Federal	7,042,565
State and local	(522,209)
Foreign	(375,238)
Subtotal	6,145,118
Tax benefit from net operating loss carryforward	(7,972,066)
Total benefit from income taxes	$ (1,606,636)

The provision for income taxes differs from that computed by applying federal statutory rates to income before income taxes. The primary difference results from providing for state income taxes, deducting certain expenses for financial statement purposes but not for federal income tax purposes and adjustments of deferred tax asset (liability) for enacted changes in tax rates.

18. INCOME TAXES – CONTINUED

The temporary differences at December 31, 2020, which give rise to deferred tax assets and liabilities, were as follows:

	U.S.	Mexico
Deferred Tax Assets:		
Intangible Assets	$ 150,924	$ -
Bad Debts	686,717	-
Accrued Expenses	168,463	-
Accrued Bonus	502,879	-
Accrued Vacation	183,990	-
163(j) Adjustments	1,767,345	-
Deferred Rent	5,701	-
Lease Liabilities	1,400,821	-
Impairment Loss	337,964	-
Foreign Currency Translation	786,273	-
State Tax — Deferred	472,900	-
State Tax — Current	47,859	-
NOL	14,437,520	6,414,026
Charitable Contribution Limitation	27,836	-
Investment Tax Credit	16,833,425	-
Total deferred tax assets	37,810,617	6,414,026
Deferred Tax Liabilities:		
Future financial statement depreciation in excess of tax return depreciation	(11,990,666)	(7,064,943)
Partnership income/(loss)	(31,254,101)	-
Right-of-use assets	(1,323,169)	-
Total deferred tax liabilities	(44,567,936)	(7,064,943)
Net deferred tax liabilities	$ (6,757,319)	$ (650,917)

The Company has determined that it is more likely than not that the deferred tax assets will be utilized through the generation of future taxable income and has not established a valuation allowance.

18. INCOME TAXES – CONTINUED

Net operating loss for federal income tax reporting was approximately $65,500,000 as of December 31, 2020.

Net operating loss for Mexico income tax reporting was approximately $21,000,000 as of December 31, 2020. The federal net operating tax loss is available to carry forward to offset federal taxable income generated in future years.

19. 401(k) RETIREMENT PLAN

Eligible employees may participate in the Company's 401(k) plan, qualified under Section 401(k) of the Internal Revenue Code of 1986. Under the plan, employees who have met certain service requirements may contribute a certain portion of their eligible compensation each year, subject to certain limitations and Internal Revenue Service regulations. The Company matches contributions equal to 100% of the first 3% and then 50% of 2% of the employee's contributions. The employer contributions are completely vested immediately. Contributions made by the Company in 2020 were $347,870.

20. RELATED PARTY TRANSACTIONS

Transactions with related parties as of December 31, 2020 and for the year ended are summarized as follows:

Outsourcing service provided	$ 15,166
Guarantee fee	$ 4,212,268
Outsourcing service received	$ 230,013
Purchase of engineering, procurement, and construction	$ 3,839,792
Receivable from related parties	$ 238,635
Short-term notes receivable	$ 98,825
Payable to related parties	$ 7,247,560
Note payable to related parties	$ 5,000,000

21. COMMITMENTS AND CONTINGENCIES

In management's opinion, the ultimate outcome of these pending claims will not have a material effect on the Company's consolidated financial position, operating results or liquidity.

Midway Solar LLC is a party to a lawsuit filed in December 2018 by mineral interest owners in the District Court in Texas. Even though the Company sold in August 2018 the interests in Midway Solar LLC, the Company was contractually obligated to the purchaser of the interests to assume the defense of this lawsuit.

The plaintiffs filed suit that the Midway Solar project is trespassing on and obstructing plaintiffs' right to develop their mineral interests. Even though the plaintiffs were not actively attempting to develop their minerals, they claimed the Midway Solar project impaired their future ability to drill for any oil and gas that lied beneath the surface of the Midway Solar project and sought damages from Midway Solar for that lost opportunity. In June 2019, the trial court found in favor of Midway Solar LLC, but the plaintiffs appealed to the Court of Appeals, Eight District of Texas, El Paso. In December 2020, the Court of Appeals agreed with the trial court's judgment in favor of Midway Solar LLC regarding plaintiffs' claims for trespass and breach of contract, except that the Court of Appeals dismissed plaintiffs' claims without prejudice. The Court of Appeals concluded that any trespass or breach of contract claim is premature until such time that the plaintiffs actually seek to develop their mineral estate.

The plaintiffs are appealing once again to the Texas Supreme Court and are expected to file their petition to the Texas Supreme Court this month. While the ultimate outcome of this matter is not presently determinable, it is the opinion of management that the resolution will not have a material adverse effect on the financial position or the operations of the Company.

22. UNCERTAINTIES

The outbreak of the novel coronavirus has adversely impacted global commercial activity and contributed to significant declines and volatility in financial markets. The coronavirus pandemic and government responses are creating disruption in global supply chains and adversely impacting many industries. The outbreak could have a continued material adverse impact on economic and market conditions and trigger a period of global economic slowdown. The rapid development and fluidity of this situation precludes any prediction as to the ultimate material adverse impact of the novel coronavirus. Nevertheless, the novel coronavirus presents material uncertainty and risk with respect to the Company, its performance and its financial results.

SUPPLEMENTARY INFORMATION

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATING BALANCE SHEETS
DECEMBER 31, 2020

	174 Power Global Corporation	174PG O&M	174 Power Global LLC	174 PG Retail LLC	174 PG Retail TX LLC	SkySol HoldCo, LLC	SkySol, LLC	Intermountain HoldCo, LLC	Intermountain Solar, LLC	Imeson Solar Farm LLC	Kupehau Solar LLC	SweetWater HoldCo, LLC	Techren HoldCo, LLC	Techren Solar , LLC	Oberon Solar LLC	Oberon 1A Class B
ASSETS																
CURRENT ASSETS																
Cash	$ 12,841,799	$ 635,795	$ 419,911	$ -	$ 3,070,238	$ -	$ -	$ -	$ -	$ 629,930	$ -	$ -	$ -	$ -	$ -	$ 2,855,446
Restricted cash	14,497,674	-	-	-	807,918	-	-	-	-	352,956	-	-	-	-	-	2,200,000
Accounts receivable	-	822,758	-	-	3,092,546	-	-	-	-	69,602	-	-	324,122	620,000	-	2,006,088
Receivable from related parties	3,507	229,038	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other receivables	13,731	-	(134)	-	136,242	-	-	-	-	-	-	-	-	20,817	-	-
Advance payment	206,797	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Short-term notes receivable	58,825	-	-	-	40,000	-	-	-	-	-	-	-	-	-	-	-
Costs and estimated earnings in excess of billings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accrued revenue	-	-	-	-	2,632,853	-	-	-	-	-	-	-	-	-	-	-
Project assets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Project assets – Photovoltaic (PV) system	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prepaid income taxes	1,897,820	-	-	-	-	-	-	-	-	-	-	-	-	3,023	-	-
Value-added tax receivables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prepaid expenses and other current assets	2,064,781	25,299	-	-	1,162,560	-	-	-	-	12,600	-	-	-	-	-	-
Total current assets	31,584,934	1,712,890	419,777	-	10,942,357	-	-	-	-	1,065,088	-	-	324,122	643,840	-	7,061,534
NONCURRENT ASSETS																
Notes receivable	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Property and equipment, net	197,490	-	-	-	303,990	-	-	-	-	15,263,486	-	-	-	-	-	-
Operating lease right-of-use assets, net	511,504	-	-	-	4,029	-	-	-	-	2,576,918	-	-	-	-	-	-
Investment in unconsolidated affiliate	165,463,798	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Investment at fair value	1,796,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120,746,951
Investments	309,712,964	15,800,000	15,754,755	26,000,000	-	1,768,926	-	445,646	-	-	-	-	2,014,596	-	-	162,763
Intercompany receivables	110,770,194	119,797	1,364,543	-	383,481	-	-	-	-	6,244,290	-	-	-	-	-	1,390,300
Project assets	148,700,073	-	9,341,157	-	-	-	1,768,926	-	439,084	-	311,010	-	-	-	-	-
Deferred tax assets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Goodwill and other intangible assets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other intangible assets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other noncurrent assets	7,024,836	-	-	-	107,383	-	-	-	-	-	-	-	-	-	-	-
Total noncurrent assets	744,176,859	15,919,797	26,460,455	26,000,000	798,883	1,768,926	1,768,926	445,646	439,084	24,084,694	311,010	-	2,014,596	-	-	122,300,014
TOTAL ASSETS	$ 775,761,793	$ 17,632,687	$ 26,880,232	$ 26,000,000	$ 11,741,240	$ 1,768,926	$ 1,768,926	$ 445,646	$ 439,084	$ 25,149,782	$ 311,010	$ -	$ 2,338,718	$ 643,840	$ -	$ 129,361,548

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HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATING BALANCE SHEETS
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	Oberon IV Solar	Oberon VI Solar	Oberon Solar 1A HoldCo	Oberon 1A LLC	Oberon 1B LLC	PROJECT I	PROJECT II	174PG MX Holding	174PG Solar III	174 O&M_MX	Ho Ohana Solar 1 LLC	FCHQC Development	174PG Torreon	HEC GUAM A LLC	HEC GUAM B LLC	Rayos del sol Solar
ASSETS																
CURRENT ASSETS																
Cash	$ -	$ -	$ -	$ 313,888	$ 4,532,594	$ -	$ -	$ 1,503,036	$ 10,014	$ 303,086	$ 5,128	$ -	$ 4,833,705	$ -	$ -	$ -
Restricted cash	-	-	2,000,000	1,390,300	889,198	-	-	-	-	-	-	-	-	-	-	-
Accounts receivable	-	-	-	495,722	-	-	-	-	-	-	-	-	(6)	-	-	-
Receivable from related parties	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other receivables	-	-	-	-	5,000	-	-	-	-	-	-	-	113,629	-	-	-
Advance payment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Short-term notes receivable	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Costs and estimated earnings in excess of billings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accrued revenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Project assets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Project assets – Photovoltaic (PV) system	-	-	-	197,718,680	-	-	-	-	-	-	-	-	116,268,343	-	-	-
Prepaid income taxes	-	-	-	-	-	-	-	-	-	-	-	-	10,917	-	-	-
Value-added tax receivables	-	-	-	-	-	-	-	123,954	72,566	-	-	-	6,402,206	-	-	-
Prepaid expenses and other current assets	-	-	-	2,139,759	560,000	-	-	239	-	-	-	-	204,012	-	-	-
Total current assets	-	-	2,000,000	202,058,349	5,986,792	-	-	1,627,229	82,580	303,086	5,128	-	127,832,806	-	-	-
NONCURRENT ASSETS																
Notes receivable	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Property and equipment, net	-	-	-	-	-	-	-	4,460	-	-	-	-	-	-	-	-
Operating lease right-of-use assets, net	-	-	-	7,278,540	-	-	-	-	-	-	-	-	-	-	-	69,024
Investment in unconsolidated affiliate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Investment at fair value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Investments	-	-	195,305,455	-	-	99,170,601	43,857,425	1,072,985	-	-	-	3,364,104	-	-	-	-
Intercompany receivables	-	-	6,089	-	135,696	-	17,200	65,226,277	-	-	-	-	-	-	-	-
Project assets	1,135,995	37,297	-	(1,448)	39,103,150	-	78,967,949	1,475,908	431,623	-	5,798,425	-	-	6,855,045	6,838,800	33,828,397
Deferred tax assets	-	-	-	-	-	-	-	366,196	10,802	193,562	-	-	5,843,466	-	-	-
Goodwill and other intangible assets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other intangible assets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other noncurrent assets	-	-	-	-	-	-	-	2,355	-	-	-	-	1,280,847	-	-	-
Total noncurrent assets	1,135,995	37,297	195,311,544	7,277,092	39,238,846	99,170,601	122,842,574	68,148,181	442,425	193,562	5,798,425	3,364,104	7,124,313	6,855,045	6,838,800	33,897,421
TOTAL ASSETS	$ 1,135,995	$ 37,297	$ 197,311,544	$ 209,335,441	$ 45,225,638	$ 99,170,601	$ 122,842,574	$ 69,775,410	$ 525,005	$ 496,648	$ 5,803,553	$ 3,364,104	$ 134,957,119	$ 6,855,045	$ 6,838,800	$ 33,897,421

HANWHA ENERGY USA HOLDINGS CORPORATION
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	Silver Peak Solar	Ellis Solar	Diamond Solar	KEAWE Solar	Pigeon Run Solar	Shockoe Solar	174 Power Global NorthEast LLC	BNS 136	BNS Commerce	CDG Forest Mall	MRP 136	WPL4	WPL10	Elimination	Total Consolidated
ASSETS															
CURRENT ASSETS															
Cash	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,058,580	$ 35,825	$ 16,702	$ 26,740	$ 45,807	$ 100,000	$ 30,000	$ -	$ 34,268,224
Restricted cash	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22,138,046
Accounts receivable	-	-	-	-	-	-	1,247,244	913	14,605	6,829	1,342	-	-	(3,904,902)	4,796,863
Receivable from related parties	-	-	-	-	-	-	-	-	-	-	-	-	-	6,090	238,635
Other receivables	-	-	-	-	-	-	20,739	1,950	36,055	9,995	4,264	-	-	162,764	525,052
Advance payment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	206,797
Short-term notes receivable	-	-	-	-	-	-	1,500,000	-	-	-	-	-	-	-	1,598,825
Costs and estimated earnings in excess of billings	-	-	-	-	-	-	1,441,611	-	-	-	-	-	-	-	1,441,611
Accrued revenue	-	-	-	-	-	-	-	1,344	12,697	7,411	11,059	-	-	-	2,665,364
Project assets	-	-	-	-	-	-	-	-	-	-	-	-	-	13,802,212	13,802,212
Project assets – Photovoltaic (PV) system	-	-	-	-	-	-	397,934	-	-	-	-	-	-	23,514,614	337,899,571
Prepaid income taxes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,911,760
Value-added tax receivables	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,598,726
Prepaid expenses and other current assets	-	-	-	-	-	-	125,487	-	-	-	-	1,577	312	(2,560,719)	3,735,907
Total current assets	-	-	-	-	-	-	6,791,595	40,032	80,059	50,975	62,472	101,577	30,312	31,020,059	431,827,593
NONCURRENT ASSETS															
Notes receivable	-	-	-	-	-	-	-	-	-	-	-	-	-	1,390,300	1,390,300
Property and equipment, net	-	-	-	-	-	-	81,699	-	-	-	-	-	-	-	15,851,125
Operating lease right-of-use assets, net	-	1,494,473	-	-	-	-	1,048,282	-	-	-	-	-	-	-	12,982,770
Investment in unconsolidated affiliate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	165,463,798
Investment at fair value	-	-	-	-	-	-	-	-	-	-	-	-	-	(120,746,951)	1,796,000
Investments	-	-	-	-	-	-	-	-	-	-	-	-	-	(714,430,220)	-
Intercompany receivables	-	-	-	-	-	-	331,643	-	-	-	-	-	-	(185,989,510)	-
Project assets	2,382,591	1,946,809	67,706	382,650	1,326,635	1,103,867	1,855,908	-	-	-	-	-	-	(50,443,478)	293,654,079
Deferred tax assets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,414,026
Goodwill and other intangible assets	-	-	-	-	-	-	7,045,481	-	-	-	-	-	-	-	7,045,481
Other intangible assets	-	-	-	-	-	-	3,651,314	-	-	-	-	-	-	-	3,651,314
Other noncurrent assets	-	-	-	-	-	-	96,244	-	65	-	-	-	-	-	8,511,730
Total noncurrent assets	2,382,591	3,441,282	67,706	382,650	1,326,635	1,103,867	14,110,571	-	65	-	-	-	-	(1,070,219,859)	516,760,623
TOTAL ASSETS	$ 2,382,591	$ 3,441,282	$ 67,706	$ 382,650	$ 1,326,635	$ 1,103,867	$ 20,902,166	$ 40,032	$ 80,124	$ 50,975	$ 62,472	$ 101,577	$ 30,312	$ (1,039,199,800)	$ 948,588,216

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HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATING BALANCE SHEETS
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	174 Power Global Corporation	174PG O&M	174 Power Global LLC	174 PG Retail LLC	174 PG Retail TX LLC	SkySol HoldCo, LLC	SkySol, LLC	Intermountain HoldCo, LLC	Intermountain Solar, LLC	Imeson Solar Farm LLC	Kupehau Solar LLC	SweetWater HoldCo, LLC	Techren HoldCo, LLC	Techren Solar , LLC	Oberon Solar LLC	Oberon 1A Class B
LIABILITIES AND EQUITY																
CURRENT LIABILITIES																
Accounts payable	$ 13,088,057	$ 217,662	$ 1,416,285	$ -	$ 1,657,198	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 260,000	$ 64,122	$ -	$ 1,825
Payable to related parties	908,252	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Notes payable to related parties	5,000,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Short-term borrowings	65,000,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Current portion of long-term debt	-	-	-	-	-	-	-	-	-	282,557	-	-	-	-	-	628,169
Accrued interest	3,583,680	-	-	-	-	-	-	-	-	27,581	-	-	-	-	-	-
Billings in excess of costs and estimated earnings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Current portion of long-term lease liabilities	402,278	-	-	-	2,900	-	-	-	-	85,431	-	-	-	-	-	-
Accrued expenses and other current liabilities	4,892,188	-	-	-	4,122,880	-	-	-	-	-	-	-	-	16,021	-	-
Total current liabilities	92,874,455	217,662	1,416,285	-	5,782,978	-	-	-	-	395,569	-	-	260,000	80,143	-	629,994
NONCURRENT LIABILITIES																
Long-term debt	100,000,000	-	-	-	-	-	-	-	-	6,397,895	-	-	-	-	-	21,962,222
Bonds payable (net of bond discount and unamortized debt issue cost of $2,344,833)	334,419,873	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Intercompany payables	6,906,294	1,165,000	-	-	1,383,438	-	-	-	42,009	1,047,312	311,010	1,125,625	3,709,123	146,188	-	4,262
Other noncurrent liabilities	900,000	-	-	-	770,531	-	-	-	-	-	-	-	-	-	-	-
Operating lease labilities	125,985	-	-	-	1,241	-	-	-	-	2,610,485	-	-	-	-	-	-
Deferred tax liabilities	6,757,320	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total noncurrent liabilities	449,109,472	1,165,000	-	-	2,155,210	-	-	-	42,009	10,055,692	311,010	1,125,625	3,709,123	146,188	-	21,966,484
TOTAL LIABILITIES	541,983,927	1,382,662	1,416,285	-	7,938,188	-	-	-	42,009	10,451,261	311,010	1,125,625	3,969,123	226,331	-	22,596,478
EQUITY																
Stockholder's equity:																
Common stock	105,200,000	-	25,468,647	26,000,000	26,000,000	1,768,926	1,768,926	450,520	397,075	15,049,255	-	523,682	3,165,113	10,945,256	-	99,170,601
Additional paid-in capital	-	-	-	-	-	-	-	(4,874)	-	-	-	-	(415,100)	-	-	-
Retained earnings	128,577,866	16,250,025	(4,700)	-	(22,196,948)	-	-	-	-	(350,734)	-	(1,649,307)	(4,380,418)	(10,527,747)	-	7,594,469
Accumulated other comprehensive loss	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stockholder's equity attributable to the Company	233,777,866	16,250,025	25,463,947	26,000,000	3,803,052	1,768,926	1,768,926	445,646	397,075	14,698,521	-	(1,125,625)	(1,630,405)	417,509	-	106,765,070
Noncontrolling interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL EQUITY	233,777,866	16,250,025	25,463,947	26,000,000	3,803,052	1,768,926	1,768,926	445,646	397,075	14,698,521	-	(1,125,625)	(1,630,405)	417,509	-	106,765,070
TOTAL LIABILITIES AND EQUITY	$ 775,761,793	$ 17,632,687	$ 26,880,232	$ 26,000,000	$ 11,741,240	$ 1,768,926	$ 1,768,926	$ 445,646	$ 439,084	$ 25,149,782	$ 311,010	$ -	$ 2,338,718	$ 643,840	$ -	$ 129,361,548

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HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATING BALANCE SHEETS
DECEMBER 31, 2020

	Oberon IV Solar	Oberon VI Solar	Oberon Solar 1A HoldCo	Oberon 1A LLC	Oberon 1B LLC	PROJECT I	PROJECT II	174PG MX Holding	174PG Solar III	174 O&M_MX	Ho Ohana Solar 1 LLC	FCHQC Development	174PG Torreon	HEC GUAM A LLC	HEC GUAM B LLC	Rayos del sol Solar
LIABILITIES AND EQUITY																
CURRENT LIABILITIES																
Accounts payable	$ -	$ -	$ -	$ 350,016	$ 35,667	$ -	$ -	$ 4,344	$ -	$ (5)	$ -	$ -	$ 149,237	$ -	$ -	$ -
Payable to related parties	-	-	2,006,089	3,292,996	3,856,517	-	-	-	-	-	-	-	12,553	-	-	-
Notes payable to related parties	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Short-term borrowings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Current portion of long-term debt	-	-	-	-	880,420	-	-	-	-	-	-	-	70,140,370	-	-	-
Accrued interest	-	-	-	-	-	-	-	-	-	-	-	-	54,512	-	-	-
Billings in excess of costs and estimated earnings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Current portion of long-term lease liabilities	-	-	-	733,294	-	-	-	-	-	-	-	-	-	-	-	20,395
Accrued expenses and other current liabilities	-	-	-	-	-	-	-	71,558	10,890	74,863	-	-	4,305,453	-	-	-
Total current liabilities	-	-	2,006,089	4,376,306	4,772,604	-	-	75,902	10,890	74,858	-	-	74,662,125	-	-	20,395
NONCURRENT LIABILITIES																
Long-term debt	-	-	-	-	18,264,247	-	-	-	-	-	-	-	-	-	-	-
Bonds payable (net of bond discount and unamortized debt issue cost of $2,344,833)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Intercompany payables	-	-	-	-	21,723,493	-	17,200	65,160,729	505,000	-	2,439,463	-	64,721,277	6,826,793	6,812,063	-
Other noncurrent liabilities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Operating lease liabililties	-	-	-	7,135,198	-	-	-	-	-	-	-	-	-	-	-	48,718
Deferred tax liabilities	-	-	-	-	-	-	-	-	-	-	-	-	7,064,942	-	-	-
Total noncurrent liabilities	-	-	-	7,135,198	39,987,740	-	17,200	65,160,729	505,000	-	2,439,463	-	71,786,219	6,826,793	6,812,063	48,718
TOTAL LIABILITIES	-	-	2,006,089	11,511,504	44,760,344	-	17,200	65,236,631	515,890	74,858	2,439,463	-	146,448,344	6,826,793	6,812,063	69,113
EQUITY																
Stockholder's equity:																
Common stock	1,135,995	37,297	195,305,455	194,323,646	-	99,170,601	122,825,374	5,500,000	-	-	3,364,104	3,364,104	1,058,115	28,252	26,737	33,828,308
Additional paid-in capital	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Retained earnings	-	-	-	3,500,291	465,294	-	-	(394,763)	8,117	365,429	(14)	-	(11,770,395)	-	-	-
Accumulated other comprehensive loss	-	-	-	-	-	-	-	(566,458)	998	56,361	-	-	(778,945)	-	-	-
Stockholder's equity attributable to the Company	1,135,995	37,297	195,305,455	197,823,937	465,294	99,170,601	122,825,374	4,538,779	9,115	421,790	3,364,090	3,364,104	(11,491,225)	28,252	26,737	33,828,308
Noncontrolling interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL EQUITY	1,135,995	37,297	195,305,455	197,823,937	465,294	99,170,601	122,825,374	4,538,779	9,115	421,790	3,364,090	3,364,104	(11,491,225)	28,252	26,737	33,828,308
TOTAL LIABILITIES AND EQUITY	$ 1,135,995	$ 37,297	$ 197,311,544	$ 209,335,441	$ 45,225,638	$ 99,170,601	$ 122,842,574	$ 69,775,410	$ 525,005	$ 496,648	$ 5,803,553	$ 3,364,104	$ 134,957,119	$ 6,855,045	$ 6,838,800	$ 33,897,421

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATING BALANCE SHEETS
DECEMBER 31, 2020

	Silver Peak Solar	Ellis Solar	Diamond Solar	KEAWE Solar	Pigeon Run Solar	Shockoe Solar	174 Power Global NorthEast LLC	BNS 136	BNS Commerce	CDG Forest Mall	MRP 136	WPL4	WPL10	Elimination	Total Consolidated
LIABILITIES AND EQUITY															
CURRENT LIABILITIES															
Accounts payable	$ -	$ -	$ -	$ -	$ -	$ -	$ 236,556	$ -	$ 15,745	$ -	$ -	$ 71,744	$ 14,199	$ (1,069,965)	$ 16,512,687
Payable to related parties	-	-	-	-	-	-	-	-	-	-	-	-	-	(2,828,847)	7,247,560
Notes payable to related parties	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,000,000
Short-term borrowings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	65,000,000
Current portion of long-term debt	-	-	-	-	-	-	3,000,000	-	-	-	-	-	-	-	74,931,516
Accrued interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,665,773
Billings in excess of costs and estimated earnings	-	-	-	-	-	-	1,001,824	-	-	-	-	-	-	-	1,001,824
Current portion of long-term lease liabilities	-	-	-	-	-	-	289,003	-	-	-	-	-	-	(697,965)	835,336
Accrued expenses and other current liabilities	-	-	-	-	-	-	615,504	-	-	16,226	-	-	-	(2,560,720)	11,564,863
Total current liabilities	-	-	-	-	-	-	5,142,887	-	15,745	16,226	-	71,744	14,199	(7,157,497)	185,759,559
NONCURRENT LIABILITIES															
Long-term debt	-	-	-	-	-	-	-	-	-	-	-	-	-	-	146,624,364
Bonds payable (net of bond discount and unamortized debt issue cost of $2,344,833)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	334,419,873
Intercompany payables	-	17,200	-	-	-	-	202,260	35,339	86,000	30,000	50,304	100,000	30,000	(184,597,382)	-
Other noncurrent liabilities	-	-	-	-	-	-	304,000	-	-	-	-	-	-	(901,827)	1,072,704
Operating lease liabililties	-	1,600,631	-	-	-	-	851,924	-	-	-	-	-	-	697,965	13,072,147
Deferred tax liabilities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13,822,262
Total noncurrent liabilities	-	1,617,831	-	-	-	-	1,358,184	35,339	86,000	30,000	50,304	100,000	30,000	(184,801,244)	509,011,350
TOTAL LIABILITIES	-	1,617,831	-	-	-	-	6,501,071	35,339	101,745	46,226	50,304	171,744	44,199	(191,958,741)	694,770,909
EQUITY															
Stockholder's equity:															
Common stock	2,382,591	1,823,451	67,706	382,650	1,326,635	1,103,867	20,500,000	-	-	-	-	-	-	(898,262,889)	105,200,000
Additional paid-in capital	-	-	-	-	-	-	-	-	-	-	-	-	-	8,390,321	7,970,347
Retained earnings	-	-	-	-	-	-	(6,098,905)	4,693	(21,621)	4,749	12,168	(70,167)	(13,887)	(19,687,962)	79,615,533
Accumulated other comprehensive loss	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(1,288,044)
Stockholder's equity attributable to the Company	2,382,591	1,823,451	67,706	382,650	1,326,635	1,103,867	14,401,095	4,693	(21,621)	4,749	12,168	(70,167)	(13,887)	(909,560,530)	191,497,836
Noncontrolling interest	-	-	-	-	-	-	-	-	-	-	-	-	-	62,319,471	62,319,471
TOTAL EQUITY	2,382,591	1,823,451	67,706	382,650	1,326,635	1,103,867	14,401,095	4,693	(21,621)	4,749	12,168	(70,167)	(13,887)	(847,241,059)	253,817,307
TOTAL LIABILITIES AND EQUITY	$ 2,382,591	$ 3,441,282	$ 67,706	$ 382,650	$ 1,326,635	$ 1,103,867	$ 20,902,166	$ 40,032	$ 80,124	$ 50,975	$ 62,472	$ 101,577	$ 30,312	$ (1,039,199,800)	$ 948,588,216

See independent auditor's report.

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATING STATEMENTS OF INCOME
FOR THE YEAR ENDED FOR DECEMBER 31, 2020

	174 Power Global Corporation	174PG O&M	174 Power Global LLC	174 PG Retail LLC	174 PG Retail TX LLC	SkySol HoldCo, LLC	SkySol, LLC	Intermountain HoldCo, LLC	Intermountain Solar, LLC	Imeson Solar Farm LLC	Kupehau Solar LLC	SweetWater HoldCo, LLC	Techren HoldCo, LLC	Techren Solar , LLC	Oberon Solar LLC	Oberon 1A Class B
REVENUE	$ -	$ 17,331,302	$ -	$ -	$ 46,271,596	$ -	$ -	$ -	$ -	$ 967,649	$ -	$ -	$ -	$ -	$ -	$ -
COST OF REVENUE	548,771	1,201,052	-	-	45,728,637	-	-	-	-	861,131	-	-	-	22,015	-	-
GROSS PROFIT (LOSS)	(548,771)	16,130,250	-	-	542,959	-	-	-	-	106,518	-	-	-	(22,015)	-	-
OPERATING EXPENSES	13,027,293	-	5,567	-	11,963,035	-	-	-	-	22,029	-	-	-	2,416	-	46,453
INCOME(LOSS) FROM OPERATIONS	(13,576,064)	16,130,250	(5,567)	-	(11,420,076)	-	-	-	-	84,489	-	-	-	(24,431)	-	(46,453)
OTHER INCOME (EXPENSES)																
Interest income	4,983,184	-	877	-	86	-	-	-	-	-	-	-	-	22,654	-	-
Interest expense	(12,100,138)	-	-	-	(1,483)	-	-	-	-	(450,058)	-	-	-	-	-	(327,835)
Guarantee fees	(4,290,328)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gain on equity method investment	66,389,744	-	-	-	-	-	-	-	-	-	-	-	6,556,570	-	-	-
Foreign currency gain and other income (expenses), net	(296,584)	-	-	-	-	-	-	-	-	-	-	-	-	1,733,333	-	7,968,757
Total other income (expenses), net	54,685,878	-	877	-	(1,397)	-	-	-	-	(450,058)	-	-	6,556,570	1,755,987	-	7,640,922
INCOME (LOSS) BEFORE PROVISION FOR (BENEFIT FROM) INCOME TAXES	41,109,814	16,130,250	(4,690)	-	(11,421,473)	-	-	-	-	(365,569)	-	-	6,556,570	1,731,556	-	7,594,469
PROVISION FOR (BENEFIT FROM) INCOME TAXES	(1,190,255)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NET INCOME (LOSS)	42,300,069	16,130,250	(4,690)	-	(11,421,473)	-	-	-	-	(365,569)	-	-	6,556,570	1,731,556	-	7,594,469
INCOME ATTRIBUTABLE TO NONCONTROLLING INTEREST	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
INCOME (LOSS) ATTRIBUTABLE TO THE COMPANY	$ 42,300,069	$ 16,130,250	$ (4,690)	$ -	$ (11,421,473)	$ -	$ -	$ -	$ -	$ (365,569)	$ -	$ -	$ 6,556,570	$ 1,731,556	$ -	$ 7,594,469

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATING STATEMENTS OF INCOME
FOR THE YEAR ENDED FOR DECEMBER 31, 2020

	Oberon IV Solar	Oberon VI Solar	Oberon Solar 1A HoldCo	Oberon 1A LLC	Oberon 1B LLC	PROJECT I	PROJECT II	174PG MX Holding	174PG Solar III	174 O&M_MX	Ho Ohana Solar 1 LLC	FCHQC Development	174 PG Torreon	HEC GUAM A LLC	HEC GUAM B LLC	Rayos del sol Solar
REVENUE	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,265,350	$ -	$ -	$ -	$ -	$ -	$ -
COST OF REVENUE	-	-	-	-	-	-	-	-	-	668,242	-	-	109,699	-	-	-
GROSS PROFIT (LOSS)	-	-	-	-	-	-	-	-	-	597,108	-	-	(109,699)	-	-	-
OPERATING EXPENSES	-	-	-	390,096	-	-	-	254,348	13,580	15,524	14	-	530,888	-	-	-
INCOME(LOSS) FROM OPERATIONS	-	-	-	(390,096)	-	-	-	(254,348)	(13,580)	581,584	(14)	-	(640,587)	-	-	-
OTHER INCOME (EXPENSES)																
Interest income	-	-	-	-	-	-	-	4,873,877	-	-	-	-	122,435	-	-	-
Interest expense	-	-	-	-	-	-	-	(4,839,572)	-	-	-	-	(7,930,577)	-	-	-
Guarantee fees	-	-	-	(6,089)	-	-	-	-	-	-	-	-	(13,690)	-	-	-
Gain on equity method investment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Foreign currency gain and other income (expenses), net	-	-	-	4,239,284	465,294	-	-	80,198	15,288	(44,893)	-	-	(1,991,353)	-	-	-
Total other income (expenses), net	-	-	-	4,233,195	465,294	-	-	114,503	15,288	(44,893)	-	-	(9,813,185)	-	-	-
INCOME (LOSS) BEFORE PROVISION FOR (BENEFIT FROM) INCOME TAXES	-	-	-	3,843,099	465,294	-	-	(139,845)	1,708	536,691	(14)	-	(10,453,772)	-	-	-
PROVISION FOR (BENEFIT FROM) INCOME TAXES	-	-	-	-	-	-	-	10,000	(9,498)	(19,236)	-	-	(397,647)	-	-	-
NET INCOME (LOSS)	-	-	-	3,843,099	465,294	-	-	(149,845)	11,206	555,927	(14)	-	(10,056,125)	-	-	-
INCOME ATTRIBUTABLE TO NONCONTROLLING INTEREST	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
INCOME (LOSS) ATTRIBUTABLE TO THE COMPANY	$ -	$ -	$ -	$ 3,843,099	$ 465,294	$ -	$ -	$ (149,845)	$ 11,206	$ 555,927	$ (14)	$ -	$ (10,056,125)	$ -	$ -	$ -

See independent auditor's report.

HANWHA ENERGY USA HOLDINGS CORPORATION
AND SUBSIDIARIES
CONSOLIDATING STATEMENTS OF INCOME
FOR THE YEAR ENDED FOR DECEMBER 31, 2020

	Silver Peak Solar	Ellis Solar	Diamond Solar	KEAWE Solar	Pigeon Run Solar	Shockoe Solar	174PG NorthEast LLC	BNS 136	BNS Commerce	CDG Forest Mall	MRP 136	WPL4	WPL10	Elimination	Total Consolidated
REVENUE	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,270,247	$ 8,724	$ 57,395	$ 26,356	$ 19,554	$ -	$ -	$ (18,466,268)	$ 50,751,905
COST OF REVENUE	-	-	-	-	-	-	3,098,063	4,034	11,029	5,381	7,015	788	156	(101,423)	$ 52,164,590
GROSS PROFIT (LOSS)	-	-	-	-	-	-	172,184	4,690	46,366	20,975	12,539	(788)	(156)	(18,364,845)	(1,412,685)
OPERATING EXPENSES	-	-	-	-	-	-	4,483,045	-	67,987	16,226	404	69,379	13,731	(900,000)	30,022,015
INCOME(LOSS) FROM OPERATIONS	-	-	-	-	-	-	(4,310,861)	4,690	(21,621)	4,749	12,135	(70,167)	(13,887)	(17,464,845)	(31,434,700)
OTHER INCOME (EXPENSES)															
Interest income	-	-	-	-	-	-	178,283	3	-	-	3	-	-	(9,714,093)	467,309
Interest expense	-	-	-	-	-	-	(223,463)	-	-	-	-	-	-	9,714,093	(16,159,033)
Guarantee fees	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(4,310,107)
Gain on equity method investment	-	-	-	-	-	-	-	-	-	-	-	-	-	(13,113,139)	59,833,175
Foreign currency gain and other income (expenses), net	-	-	-	-	-	-	(118,305)	-	-	-	30	-	-	(6,870,699)	5,180,350
Total other income (expenses), net	-	-	-	-	-	-	(163,485)	3	-	-	33	-	-	(19,983,838)	45,011,694
INCOME (LOSS) BEFORE PROVISION FOR (BENEFIT FROM) INCOME TAXES	-	-	-	-	-	-	(4,474,346)	4,693	(21,621)	4,749	12,168	(70,167)	(13,887)	(37,448,683)	13,576,994
PROVISION FOR (BENEFIT FROM) INCOME TAXES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(1,606,636)
NET INCOME (LOSS)	-	-	-	-	-	-	(4,474,346)	4,693	(21,621)	4,749	12,168	(70,167)	(13,887)	(37,448,683)	15,183,630
INCOME ATTRIBUTABLE TO NONCONTROLLING INTEREST	-	-	-	-	-	-	-	-	-	-	-	-	-	4,064,402	4,064,402
INCOME (LOSS) ATTRIBUTABLE TO THE COMPANY	$ -	$ -	$ -	$ -	$ -	$ -	$ (4,474,346)	$ 4,693	$ (21,621)	$ 4,749	$ 12,168	$ (70,167)	$ (13,887)	$ (41,513,085)	$ 11,119,228

See independent auditor's report.

THE EXPORT-IMPORT BANK OF KOREA

SEPARATE FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED
DECEMBER 31, 2021 AND 2020

ATTACHMENT: INDEPENDENT AUDITORS' REPORT

THE EXPORT-IMPORT BANK OF KOREA

Contents

KPMG SAMJONG

KPMG SAMJONG Accounting Corp.
152, Teheran-ro, Gangnam-gu, Seoul 06236
(Yeoksam-dong, Gangnam Finance Center 27th Floor)
Republic of Korea

Tel +82 (2) 2112 0100
Fax +82 (2) 2112 0101
www.kr.kpmg.com

Independent Auditors' Report

(Based on a report originally issued in Korean)

The Board of Directors and Shareholders of
The Export-Import Bank of Korea:

Opinion

We have audited the accompanying separate financial statements of the Export-Import Bank of Korea (the "Bank"), which comprise the separate statements of financial position as of December 31, 2021 and 2020, the separate statements of comprehensive income, changes in equity and cash flows for the years then ended, and notes, comprising significant accounting policies and other explanatory information.

In our opinion, the accompanying separate financial statements present fairly, in all material respects, the separate financial position of the Bank as of December 31, 2021 and 2020, and its separate financial performance and its separate 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 (KSAs). Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the Separate Financial Statements* section of our report. We are independent of the Bank in accordance with the ethical requirements that are relevant to our audit of the separate 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.

Emphasis of matter

As a matter that does not affect our audit opinion, we draw attention to the following matter.

As described in note 36. (8) to the separate financial statements, the proliferation of COVID-19 has had a negative impact on the global economy, which may have a greater impact than the expected credit loss and potential impairment of assets in a particular portfolio, negatively impacting the profit generation capability of the Bank. Our opinion is not modified in respect of this matter.

Other Matter

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

Responsibilities of Management and Those Charged with Governance for the Separate Financial Statements

Management is responsible for the preparation and fair presentation of the separate financial statements in accordance with K-IFRS, and for such internal control as management determines is necessary to enable the preparation of separate financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the separate financial statements, management is responsible for assessing the Bank'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 Bank or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Bank's financial reporting process.

Auditors' Responsibilities for the Audit of the Separate Financial Statements

Our objectives are to obtain reasonable assurance about whether the separate 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 KSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these separate financial statements.

As part of an audit in accordance with KSAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the separate 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 Bank's internal control.

- Evaluate the appropriateness of accounting policies used in the preparation of the separate financial statements 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 Bank's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the separate 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 Bank to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the separate financial statements, including the disclosures, and whether the separate financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

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.

KPMG Samjong Accounting Corp.

KPMG Samjong Accounting Corp.
Seoul, Korea
April 1, 2022

This report is effective as of April 1, 2022, 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 separate 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.

THE EXPORT-IMPORT BANK OF KOREA

SEPARATE FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED
DECEMBER 31, 2021 AND 2020

The accompanying separate financial statements, including all footnote disclosures, were prepared by, and are the responsibility of, the management of the Bank.

Bang Moon-kyu
Chairman and President

THE EXPORT-IMPORT BANK OF KOREA
SEPARATE STATEMENTS OF FINANCIAL POSITION
AS OF DECEMBER 31, 2021 AND 2020

		December 31, 2021		December 31, 2020
		(Korean won in millions)		
ASSETS:				
Cash and due from financial institutions (Notes 4, 5 and 7)	₩	4,462,685	₩	4,025,737
Financial assets at fair value through profit or loss ("FVTPL") (Notes 4, 5, 8 and 20)		2,598,204		3,478,402
Hedging derivative assets (Notes 4, 5 and 20)		561,911		1,499,766
Loans at amortized cost (Notes 4, 5, 10 and 37)		77,458,119		73,407,381
Financial investments (Notes 4, 5 and 9)		12,745,359		11,042,411
Investments in associates and subsidiaries (Note 11)		1,565,153		1,919,212
Tangible assets, net (Note 12)		270,367		263,087
Intangible assets, net (Note 13)		34,452		28,082
Deferred tax assets (Note 34)		875,099		1,107,370
Retirement benefit assets, net (Note 18)		13,605		4,801
Other assets (Notes 4, 5, 14 and 37)		866,698		813,786
	₩	101,451,652	₩	97,590,035
LIABILITIES AND STOCKHOLDERS' EQUITY				
LIABILITIES:				
Financial liabilities at FVTPL (Notes 4, 5 and 20)	₩	768,115	₩	753,442
Hedging derivative liabilities (Notes 4, 5 and 20)		661,057		418,970
Borrowings (Notes 4, 5 and 15)		5,576,909		6,076,631
Debentures (Notes 4, 5 and 16)		76,486,053		72,641,777
Provisions (Note 17)		621,467		626,611
Other liabilities (Notes 4, 5, 19 and 37)		1,985,120		2,603,158
		86,098,721		83,120,589
STOCKHOLDERS' EQUITY:				
Capital stock (Note 1 and 21)		12,748,254		12,449,456
Capital adjustments		(133,716)		(132,271)
Other components of equity (Notes 20 and 22)		882,669		803,317
Retained earnings (Note 23) (Regulatory reserve for loan losses as of December 31, 2021 and 2020: 149,219 million and 338,574 million)		1,855,724		1,348,944
		15,352,931		14,469,446
	₩	101,451,652	₩	97,590,035

See accompanying notes to separate financial statements.

THE EXPORT-IMPORT BANK OF KOREA
SEPARATE STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020

	2021	2020
	(Korean won in millions)	
OPERATING INCOME:		
Net interest income (Notes 24 and 37):		
Interest income	₩ 1,745,510	₩ 2,288,725
Interest expenses	(841,107)	(1,408,010)
	904,403	880,715
Net commission income (Notes 25 and 37):		
Commission income	309,947	375,494
Commission expenses	(21,105)	(13,935)
	288,842	361,559
Dividend income (Note 26)	49,889	47,184
Net gain (loss) on financial assets at FVTPL (Note 27)	126,987	123,455
Net gain (loss) on hedging derivative assets (Notes 20 and 28)	(1,556,271)	1,793,681
Net gain (loss) on financial investments (Note 29)	3,381	984
Net gain (loss) on foreign exchange transaction	355,702	(1,068,897)
Net other operating income (expenses) (Note 30)	1,191,183	(797,524)
Reversal of (Additional) impairment loss on credit (Note 31 and 37)	(368,469)	(838,485)
General and administrative expenses (Note 32)	(252,846)	(232,078)
Total operating income	742,801	270,594
NON-OPERATING INCOME (Note 33):		
Net gain (loss) on investments in associates and subsidiaries	10,931	(125,334)
Net other non-operating income (expenses)	(7,608)	(5,128)
	3,323	(130,462)
PROFIT BEFORE INCOME TAX	746,124	140,132
INCOME TAX EXPENSES (Note 34)	(198,585)	(37,722)
PROFIT FOR THE YEAR	547,539	102,410
(Profit for the year adjusted for regulatory reserve for loan losses for the years ended December 31, 2021 and 2020: 457,048 million and 291,765 million) (Note 23)		
OTHER COMPREHENSIVE INCOME (LOSS) FOR THE PERIOD (Note 22)		
Items not reclassified subsequently to profit or loss:		
Net gain (loss) on equity securities at FVOCI	91,968	263,872
Remeasurement of net defined benefit liabilities	9,248	(4,272)
Income tax effect	(24,495)	(62,823)
Items that are or may be reclassified subsequently to profit or loss:		
Net gain (loss) on debt securities at FVOCI	(442)	16,001
Net gain (loss) on valuation of cash flow hedge	3,913	4
Income tax effect	(840)	(3,873)
	79,352	208,909
TOTAL COMPREHENSIVE INCOME FOR THE YEAR	₩ 626,891	₩ 311,319

See accompanying notes to separate financial statements

THE EXPORT-IMPORT BANK OF KOREA
SEPARATE STATEMENTS OF CHANGES IN EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020

	Capital stock	Capital adjustments	Other components of equity: Gain (loss) on valuation of financial assets at FVOCI	Gain (loss) on valuation of cash-flow hedge	Remeasurement, net of defined benefit liabilities	Gain (loss) on disposal of financial assets at FVOCI	Retained earnings	Total
	(Korean won in millions)							
January 1, 2020	₩ 11,871,143	₩ (129,487)	₩ 642,729	₩ -	₩ 15,094	₩ (63,415)	₩ 1,355,571	₩ 13,691,635
Payment of dividends	-	-	-	-	-	-	(109,037)	(109,037)
Paid-in Capital Increase	578,313	(2,784)	-	-	-	-	-	575,529
Total comprehensive Income								311,319
Profit for the year	-	-	-	-	-	-	102,410	102,410
Other comprehensive income (loss):								208,909
Net loss on valuation of financial assets at FVOCI, net of tax	-	-	210,834	-	-	-	-	210,834
Net loss on valuation of cash flow hedge, net of tax	-	-	-	3	-	-	-	3
Remeasurement elements of defined benefit plans, net of tax	-	-	-	-	(3,239)	-	-	(3,239)
Net loss on disposal of financial assets at FVOCI, net of tax	-	-	-	-	-	1,311	-	1,311
December 31, 2020	₩ 12,449,456	₩ (132,271)	₩ 853,563	₩ 3	₩ 11,855	₩ (62,104)	₩ 1,348,944	₩14,469,446
January 1, 2021	₩ 12,449,456	₩ (132,271)	₩ 853,563	₩ 3	₩ 11,855	₩ (62,104)	₩ 1,348,944	₩14,469,446
Payment of dividends	-	-	-	-	-	-	(40,759)	(40,759)
Paid-in Capital Increase	298,798	(1,445)	-	-	-	-	-	297,353
Total comprehensive Income								626,891
Profit for the year	-	-	-	-	-	-	547,539	547,539
Other comprehensive income (loss):								79,352
Net loss on valuation of financial assets at FVOCI, net of tax	-	-	77,213	-	-	-	-	77,213
Net loss on valuation of cash flow hedge, net of tax	-	-	-	2,965	-	-	-	2,965
Remeasurement elements of defined benefit plans, net of tax	-	-	-	-	7,010	-	-	7,010
Net loss on disposal of financial assets at FVOCI, net of tax	-	-	-	-	-	(7,836)	-	(7,836)
December 31, 2021	₩ 12,748,254	₩ (133,716)	₩ 930,776	₩ 2,968	₩ 18,865	₩ (69,940)	₩ 1,855,724	₩15,352,931

See accompanying notes to separate financial statements.

THE EXPORT-IMPORT BANK OF KOREA
SEPARATE STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020

	2021	2020
	(Korean won in millions)	
CASH FLOWS FROM OPERATING ACTIVITIES:		
Profit for the year	₩ 547,539	₩ 102,410
Adjustments for:		
Income tax expense	198,585	37,722
Interest income	(1,745,510)	(2,288,725)
Interest expenses	841,107	1,408,010
Dividend and distribution income	(65,705)	(62,516)
Dividend received from subsidiaries and associates	(10,931)	(16,913)
Loss on financial assets at FVTPL	12,951	4,892
Loss on financial assets at FVOCI	-	6
Transfer to derivatives’ credit risk provision	13,863	19,600
Loss on foreign exchange transactions	1,020,030	2,767,309
Impairment loss on credit	368,469	838,485
Loss on investments in subsidiaries and associates	-	142,246
Loss on fair value hedged items	10,284	939,102
Depreciation and amortization	17,814	18,853
Loss on disposals of tangible, intangible and other assets	51	1
Loss on Redemption of Bonds	-	64
Loss on valuation of derivative assets for trading	996,182	715,444
Loss on valuation of derivative assets for hedging	1,248,226	156,940
Retirement benefits	20,940	11,178
Gain on financial assets at FVTPL	(19,351)	(15,134)
Gain on financial assets at FVOCI	(3,381)	(990)
Reversal of derivatives’ credit risk provision	(11,958)	(2,741)
Gain on foreign exchange transactions	(1,376,405)	(1,699,123)
Gain on fair value hedged items	(1,242,036)	(164,126)
Gain on valuation of derivative assets for trading	(856,142)	(834,315)
Gain on valuation of derivative assets for hedging	(32,458)	(1,423,598)
Gain on disposals of tangible, intangible and other assets	(119)	(119)
	(615,494)	551,552
Changes in operating assets and liabilities:		
Due from financial institutions	(352,285)	1,009,258
Financial assets and liabilities at FVTPL	774,772	(1,457,288)
Hedging derivative net assets	(31,913)	(222,276)
Loans at amortized cost	(55,232)	(5,402,682)
Other assets	(18,940)	345,231
Provisions	(399,031)	28,115
Payment of retirement benefits	(20,497)	(15,968)
Other liabilities	(624,198)	411,342
	(727,324)	(5,304,268)
Payment of income tax	(1,560)	(400,397)
Interest received	1,675,762	2,304,547
Interest paid	(698,358)	(1,297,711)
Dividend received	76,636	79,429
Net cash provided by (used in) operating activities	257,201	(3,964,438)

THE EXPORT-IMPORT BANK OF KOREA
SEPARATE STATEMENTS OF CASH FLOWS (CONTINUED)
FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020

		2021		2020
		(Korean won in millions)		
CASH FLOWS FROM INVESTING ACTIVITIES:				
Disposal of financial investments	₩	1,292,634	₩	730,990
Disposal of investments in associates and subsidiaries		-		7,614
Disposal of tangible assets		44		121
Acquisition of financial investments		(2,350,334)		(2,565,665)
Acquisition of investments in associates and subsidiaries		(26,461)		(284,171)
Acquisition of tangible assets		(14,021)		(5,407)
Acquisition of intangible assets		(17,128)		(5,120)
Net cash used in investing activities		(1,115,266)		(2,121,638)
CASH FLOWS FROM FINANCING ACTIVITIES:				
Increase in call money		774,120		-
Proceeds from borrowings		3,521,006		13,246,426
Proceeds from debentures		15,724,020		31,315,417
Paid-in capital increase		298,798		578,313
Increase in deposits		192		2
Repayment in call money		-		(179,967)
Repayment of borrowings		(5,300,930)		(13,181,831)
Repayment of debentures		(14,138,292)		(24,453,497)
Expense related to paid-in capital increases		(1,445)		(2,784)
Payment of dividends		(40,759)		(109,037)
Decrease in deposits		-		(2)
Net cash provided by (used in) financing activities		836,710		7,213,040
NET INCREASE(DECREASE) IN CASH AND CASH EQUIVALENTS		(21,355)		1,126,964
CASH AND CASH EQUIVALENTS, BEGINNING OF THE YEAR		3,071,235		2,913,676
EFFECTS OF FOREIGN EXCHANGE RATE CHANGES ON THE BALANCE OF CASH AND CASH EQUIVALENTS IN FOREIGN CURRENCIES		97,077		(969,405)
CASH AND CASH EQUIVALENTS, END OF THE YEAR (Note 7 and 35)	₩	3,146,957	₩	3,071,235

See accompanying notes to separate financial statements.

THE EXPORT-IMPORT BANK OF KOREA
NOTES TO THE SEPARATE FINANCIAL STATEMENTS
AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020

1. GENERAL:

(1) Summary of The Export-Import Bank of Korea

The Export-Import Bank of Korea (the "Bank") was established in 1976 as a special financial institution under The Export-Import Bank of Korea Act (the "EXIM Bank Act") to grant financial facilities for overseas trade (i.e., export and import), investments and resources development activities. As of December 31, 2021, the Bank operates a head office in Seoul, Marine Finance Center in Busan, a domestic subsidiary, ten domestic branches, three domestic offices, four overseas subsidiaries and twenty-four overseas offices.

The Bank's authorized capital is 15,000,000 million, and through numerous capital increases since the establishment, its paid-in capital is 12,748,254 million as of December 31, 2021. The Government of the Republic of Korea (the "Government"), the Bank of Korea, and the Korea Development Bank hold 68.74%, 9.14%, and 22.12%, respectively, of the ownership of the Bank as of December 31, 2021.

The Bank, as a trustee of the Government, has managed the Economic Development Cooperation Fund ("EDCF") since June 1987 and the Inter-Korean Cooperation Fund ("IKCF") since March 1991. These funds are accounted for separately and are not included in the Bank's separate financial statements. The Bank receives fees from the Government for the trustee services.

(2) Summary of subsidiaries and associates

1) Subsidiaries of the Bank as of December 31, 2021 and 2020 are as follows:

(December 31, 2021)

Subsidiaries	Location	Capital stock		Main business	Number of shares owned	Percentage of ownership (%)	Financial statements as of
KEXIM Bank UK Limited	United Kingdom	GBP	81mil.	Finance	81,283,897	100.00	Dec. 31, 2021
KEXIM Vietnam Leasing Co. (*1)	Vietnam	USD	53mil.	Finance	-	100.00	Dec. 31, 2021
PT.KOEXIM Mandiri Finance	Indonesia	IDR	52,000mil.	Finance	442	85.00	Dec. 31, 2021
KEXIM Asia Limited	Hong Kong	USD	130mil.	Finance	130,000,000	100.00	Dec. 31, 2021
EXIM PLUS Co., Ltd.	Korea	KRW	950mil.	Service	190,000	100.00	Dec. 31, 2021

(*1) This entity does not issue share certificates.

(December 31, 2020)

Subsidiaries	Location	Capital stock		Main business	Number of shares owned	Percentage of ownership (%)	Financial statements as of
KEXIM Bank UK Limited	United Kingdom	GBP	81mil.	Finance	81,283,897	100.00	Dec. 31, 2020
KEXIM Vietnam Leasing Co. (*1)	Vietnam	USD	53mil.	Finance	-	100.00	Dec. 31, 2020
PT.KOEXIM Mandiri Finance	Indonesia	IDR	52,000mil.	Finance	442	85.00	Dec. 31, 2020
KEXIM Asia Limited	Hong Kong	USD	130mil.	Finance	130,000,000	100.00	Dec. 31, 2020
EXIM PLUS Co., Ltd.	Korea	KRW	950mil.	Service	190,000	100.00	Dec. 31, 2020

(*1) This entity does not issue share certificates.

2) Associates of the Bank as of December 31, 2021 and 2020 are as follows:

(December 31, 2021)

Associates	Location	Capital stock		Main business	Number of shares owned	Percentage of ownership (%)	Financial statements as of
Credit Guarantee and Investment Fund	Philippines	USD	1,137mil.	Financial service	171,400,000	15.07	Dec. 31, 2021
KTB Newlake Global Healthcare PEF	Korea	KRW	33,850mil.	Financial service	8,462,558,125	25.00	Dec. 31, 2021
Korea Aerospace Industries. Ltd.	Korea	KRW	487,376mil.	Manufacturing	25,745,964	26.41	Dec. 31, 2021
Daewoo Shipbuilding & Marine Engineering Co., Ltd.	Korea	KRW	541,453mil.	Shipbuilding	-	-	Dec. 31, 2021

(December 31, 2020)

Associates	Location	Capital stock		Main business	Number of shares owned	Percentage of ownership (%)	Financial statements as of
Korea Asset Management Corporation	Korea	KRW	949,566mil.	Financial service	44,482,396	23.41	Dec. 31, 2020
Credit Guarantee and Investment Fund	Philippines	USD	1,102mil.	Financial service	147,600,000	13.39	Dec. 31, 2020
DAESUN Shipbuilding & Engineering Co., Ltd.	Korea	KRW	6,262mil.	Shipbuilding	1,040,000	83.03	Dec. 31, 2020
KTB Newlake Global Healthcare PEF	Korea	KRW	33,850mil.	Financial service	8,462,558,125	25.00	Dec. 31, 2020
Korea Aerospace Industries. Ltd.	Korea	KRW	487,376mil.	Manufacturing	25,745,964	26.41	Dec. 31, 2020
Daewoo Shipbuilding & Marine Engineering Co., Ltd.	Korea	KRW	541,453mil.	Shipbuilding	-	-	Dec. 31, 2020

2. BASIS OF PRESENTATION AND SIGNIFICANT ACCOUNTING POLICIES:

(1) Basis of Financial Statement Presentation

The Bank's separate financial statements are prepared under K-IFRS.

(2) Basis of measurement

The separate 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 assets measured at fair value through profit or loss
- Financial assets measured at fair value through other comprehensive income
- Financial assets and liabilities designated as hedged items in a fair value hedge accounting of which changes in fair value attributable to the hedged risk are recognized in profit or loss
- Liabilities for defined benefit plans, which are recognized as net of the total present value of defined benefit obligations less the fair value of plan assets

(3) Functional and presentation currency

These separate financial statements are presented in Korean won, which is the currency of the primary economic environment in which the Bank operates.

(4) Significant Estimates and Judgments

The preparation of separate financial statements requires the application of accounting policies and certain critical accounting estimates and assumptions may have a significant impact on assets (liabilities) and income (expenses). The management's estimate may differ from the actual outcome if the management's estimate and assumption based on its best judgment at the reporting date are different from an actual environment.

Estimates and assumptions are continually evaluated and the change in an accounting estimate is recognized prospectively by including it in profit or loss in the period of the change, if the change affects that period only, or the period of the change and future periods, if the change affects both.

Uncertainty in estimates and assumptions with significant risk that will result in material adjustment are as follows:

1) Fair value of financial instruments
The fair value of financial instruments where no active market exists or where quoted prices are not otherwise available are determined by using valuation techniques. Financial instruments that are not actively traded in the market and with less transparent market price, will have less objective fair value and will require judgment in liquidity, concentration, uncertainty in market factors and assumption in price determination and other risks.

As described in the significant accounting policies 'Recognition and Measurement of Financial Instruments' diverse valuation techniques are used to determine the fair value of financial instruments, from general market accepted valuation model to internally developed valuation model that incorporates various types of assumptions and variables.

2) Provision of credit losses (allowances for loan losses, provisions for acceptances and guarantees, financial guarantee contracts and unused loan commitments)
The Bank recognizes credit loss allowance for expected credit losses on debt instruments, loans and receivables that are measured at amortized cost, loan commitments and financial guarantee contracts in accordance with K-IFRS No. 1109 'Financial Instruments'. The allowance is determined by techniques, assumptions and input variables used by the Bank to measure expected future cash flows of individual financial instruments and to measure expected credit losses in a collective manner.

3) Defined benefit obligation
The present value of defined benefit obligations is measured by the independent actuaries using projected unit credit method. It is determined by actuarial assumptions and variables such as future increases in salaries, rate of retirement, discount rate and others.

4) Income taxes
The Bank has recognized current and deferred taxes that reflect tax consequences based on the best estimates in which the Bank expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities. However, actual income taxes in the future may not be identical to the recognized deferred tax assets and liabilities, and this difference can affect current and deferred tax at the period when the final tax effect is determined.

5) Hedging relationship
The Bank expects a high hedge effectiveness throughout the hedging period in designating the hedging relationship and it is probable that the hedged transaction will be highly probable in the cash flow hedge.

(5) Changes in Accounting Policies

The Bank has adopted the same accounting policies that applied to the separate financial statements as of and for the year ended December 31, 2020, except for the application of the amended standards first effective from January 1, 2021, which are explained below.

1) Amendments to K-IFRS No.1109, 'Financial Instruments', K-IFRS No.1039, 'Financial Instrument - Recognition and Measurement, K-IFRS No.1107, 'Financial Instruments: Disclosure', K-IFRS No.1104, 'Insurance Contracts' and K-IFRS No.1116, 'Leases' – Interest rate indicator reform

In relation to interest rate benchmark reform, the amendments provide a practical expedient allowing entities to change the effective interest rate instead of changing the carrying amount and apply hedge accounting without discontinuance although the interest rate benchmark is replaced in hedging relationship. These amendments do not have a significant impact on the financial statements.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

(1) General

The significant accounting policies applied in the preparation of these separate financial statements after transition to K-IFRS are set out below.

(2) Investments in subsidiaries and associates

The accompanying separate financial statements have been prepared on a stand-alone basis in accordance with K-IFRS No.1027, 'Separate Financial Statements'. The Bank's investments in subsidiaries and associates are recorded at cost in accordance with K-IFRS No.1027. Dividend received from its subsidiaries and associates is recognized in profit or loss when the Bank is entitled to receive the dividend.

(3) Foreign Currency

1) Foreign currency transactions

In preparing the separate financial statements of the Bank, transactions in currencies other than the Bank's functional currency (foreign currencies) are recorded by applying the rates of exchange at the dates of the transactions.

At the end of each reporting period foreign currency monetary items are translated using the closing rate which is the spot exchange rate at the end of the reporting period. Non-monetary items that are measured at fair value in a foreign currency are translated using the spot exchange rates at the date when the fair value was determined and non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the spot exchange rate at the date of the transaction. Exchange differences arising on the settlement of monetary items or on translating monetary items at rates different from those at which they were translated on initial recognition during the period or in previous financial statements are recognized in profit or loss in the period in which they arise. When gains or losses on a non-monetary item are recognized in other comprehensive income, any exchange component of those gains or losses are recognized in other comprehensive income. Conversely, when gains or losses on a non-monetary item are recognized in profit or loss, any exchange component of those gains or losses are recognized in profit or loss.

2) Foreign operations

The results and financial position of all foreign operations, whose functional currency differs from the Bank's presentation currency, are translated into the Bank's presentation currency using the following procedures;

Assets and liabilities for each statement of financial position presented are translated at the closing rate at the date of that statement of financial position. Income and expenses for statement of comprehensive income presented are translated at average exchange rates for the period.

Any fair value adjustments to the carrying amounts of assets and liabilities arising from the acquisition of that foreign operation are treated as assets and liabilities of the foreign operation. Thus, they are expressed in the functional currency of the foreign operation and are translated into the presentation currency at the closing rate.

On the disposal of a foreign operation, the cumulative amount of the exchange differences relating to that foreign operation, recognized in other comprehensive income and accumulated in the separate component of equity, are reclassified from equity to profit or loss (as a reclassification adjustment) when the gains or losses on disposal are recognized. On the partial disposal of a subsidiary that includes a foreign operation, the Bank reattributes the proportionate share of the cumulative amount of the exchange differences recognized in other comprehensive income to the non-controlling interests in that foreign operation. In any other partial disposal of a foreign operation, the Bank reclassifies to profit or loss only the proportionate share of the cumulative amount of the exchange differences recognized in other comprehensive income.

(4) Cash and cash equivalents

Cash and cash equivalents include cash on hand, foreign currency, and highly liquid short-term investments that are readily convertible to known amounts of cash, which are subject to an insignificant risk of changes in value.

(5) Non-derivative Financial Assets

Financial assets are recognized when the Bank becomes a party to the contractual provisions of the instrument. In addition, a regular way purchase or sale (a purchase or sale of a financial asset under a contract whose terms require delivery of the asset within the time frame established generally by regulation or convention in the market concerned) is recognized on the trade date

A financial asset is measured initially at its fair value plus, for an item not at Fair Value Through Profit or Loss ("FVTPL"), transaction costs that are directly attributable to its acquisition of the financial asset. Transaction costs on the financial assets at FVTPL that are directly attributable to the acquisition are recognized in profit or loss as incurred.

1) Financial assets designated at FVTPL

Financial assets can be irrevocably designated as measured at FVTPL despite of classification standards stated below, if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise from measuring assets or liabilities or recognizing the gains or losses on them on different bases.

2) Equity instruments

For the equity instruments that are not held for trading, at initial recognition, the Bank may make an irrevocable election to present subsequent changes in fair value in other comprehensive income. Equity instruments that are not classified as financial assets at Fair Value through Other Comprehensive Income ("FVOCI") are classified as financial assets at FVTPL.

The Bank subsequently measures all equity investments at fair value. Valuation gains or losses of the equity instruments that are classified as financial assets at FVOCI previously recognized as other comprehensive income is not reclassified as profit or loss on derecognition. The Bank recognizes dividends in profit or loss when the Bank's right to receive payments of the dividend is established.

Valuation gains or losses due to changes in fair value of the financial assets at FVTPL are recognized as gains or losses on financial assets at FVTPL. Impairment loss (reversal) on equity instruments at FVOCI is not recognized separately.

3) Debt instruments

Subsequent measurement of debt instruments depends on the Bank's business model in which the asset is managed and the contractual cash flow characteristics of the asset. Debt instruments are classified as financial assets at amortized cost, at FVOCI, or at FVTPL. Debt instruments are reclassified only when the Bank's business model changes.

① Financial assets at amortized cost

Assets that are held within a business model whose objective is to hold assets to collect contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortized cost. Impairment losses, and gains or losses on derecognition of the financial assets at amortized cost are recognized in profit or loss. Interest income on the effective interest method is included in the 'Interest income' in the separate statement of comprehensive income.

② Financial assets at FVOCI

Assets that are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at FVOCI. Other than impairment losses, interest income amortized using effective interest method and foreign exchange differences, gains or losses of the financial assets at FVOCI are recognized as other comprehensive income in equity. On derecognition, gains or losses accumulated in other comprehensive income are reclassified to profit or loss. The interest income on the effective interest method is included in the 'Interest income' in the separate statement of comprehensive income. Foreign exchange differences and impairment losses are included in the 'Net foreign currency transaction gain' and 'Impairment loss on credit' in the separate statement of comprehensive income, respectively.

③ Financial assets at FVTPL

Debt securities other than financial assets at amortized costs or FVOCI are classified at FVTPL. Unless hedge accounting is applied, gains or losses from financial assets at FVTPL are recognized as profit or loss and are included in 'Net gain on financial assets at fair value through profit or loss' in the separate statement of comprehensive income.

4) Embedded derivatives

Financial assets with embedded derivatives are classified regarding the entire hybrid contract, and the embedded derivatives are not separately recognized. The entire hybrid contract is considered when it is determined whether the contractual cash flows represent solely payments of principal and interest.

5) Derecognition of financial assets

The Bank derecognizes a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. Any interest in transferred financial assets that is created or retained by the Bank is recognized as a separate asset or liability. If the Bank retains substantially all the risks and rewards of ownership of the transferred financial assets, the Bank continues to recognize the transferred financial assets and recognizes financial liabilities for the consideration received.

6) Offsetting

Financial assets and financial liabilities are offset and the net amount is presented in the separate statement of financial position only when the Bank currently has a legally enforceable right to set off the recognized amounts, and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

(6) Derivative Financial Instruments

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

1) Hedge accounting

The Bank holds forward exchange contracts, interest rate swaps, currency swaps and other derivative contracts to manage interest rate risk and foreign exchange risk. The Bank designated 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 Bank formally documents the relationship between the hedging instrument(s) and hedged item(s), 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.

① Fair value hedge

Changes in the fair value of a derivative hedging instrument designated as a fair value hedge are recognized in profit or loss. The gain or loss from remeasuring the hedging instrument at fair value for a derivative hedging instrument and the gain or loss on the hedged item attributable to the hedged risk are recognized in profit or loss in the same line item of the separate statement of comprehensive income.

The Bank discontinues fair value hedge accounting if the hedging instrument expires or is sold, terminated or exercised, or if the hedge no longer meets the criteria. Any adjustment arising from G/L on the hedged item attributable to the hedged risk is amortized to profit or loss from the date the hedge accounting is discontinued.

② 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 or 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.

③ Net investment hedge

The portion of the change in fair value of a financial instrument designated as a hedging instrument that meets the requirements for hedge accounting for a net investment in a foreign operation is recognized in other comprehensive income and the ineffective portion of the hedge is recognized in profit or loss. The portion recognized as other comprehensive income that is effective as a hedge is recognized in the statement of comprehensive income as a result of reclassification adjustments in accordance with K-IFRS No. 1021, ‘Effect of Changes in Foreign Exchange Rates’ at the time of disposing of its overseas operations or disposing of a portion of its overseas operations to profit or loss.

2) 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.

3) Unobservable valuation differences at initial recognition
Any difference between the fair value of over the counter derivatives at initial recognition and the amount that would be determined at that date using a valuation technique in a situation in which the valuation is dependent on unobservable parameters is not recognized in profit or loss but is recognized on a straight-line basis over the life of the instrument or immediately when the fair value becomes observable.

(7) Impairment: Financial assets

The Bank measures expected credit loss and recognizes loss allowance at the end of the reporting period for financial assets measured at amortized cost and fair value through other comprehensive income with the exception of financial asset measured at fair value through profit or loss.

Expected credit losses are a probability-weighted estimate of credit losses (i.e. the present value of all cash shortfalls) over the expected life of the financial instrument. The Bank measures expected credit losses by reflecting reasonable and supportable information that is reasonably available at the reporting date without undue cost or effort, including information about past events, current conditions and forecasts of future economic conditions.

The Bank uses the following three measurement techniques in accordance with Korean IFRS:
- General approach: for financial assets and off-balance-sheet unused credit line that are not applied below two approaches
- Credit-impaired approach: for purchased or originated credit-impaired financial assets

Different measurement approaches are applied depending on significant increase in credit risk. 12 months expected credit losses is recognized when credit risk has not significantly increased since initial recognition. A loss allowance at an amount equal to lifetime expected credit losses is recognized when credit risk has significantly increased since initial recognition. Lifetime is presumed to be a period to the contractual maturity date of a financial asset (the expected life of the financial asset).

One or more of the following items is deemed significant increase in credit risk. When the contractual cash flows of a financial asset are renegotiated or otherwise modified, the Bank determines whether the credit risk has increased significantly since initial recognition using the following information.

- more than 30 days past due;
- decline in credit rating at period end by more than certain notches as compared to that at initial recognition;
- the soundness of the assets is under precautionary from the grade table by Korean Financial Supervisory service

The Bank generally deems one or more of the following items credit-impaired:

- no less than 90 days past due
- legal proceedings related to collection
- a borrower that has received a credit-warning from Korea Credit Information Services
- corporate borrowers that are considered impaired (internally rating S, D, or F)
- a borrower with the external auditor’s opinion that is qualified or disclaimer
- negative capital and
- debt restructuring.

1) Forward-looking information

The Bank uses forward-looking information, when it measures expected credit losses.

The Bank assumes 'probability of default'(PD), which is one of the risk components, has a certain correlation with the business cycle and calculates the expected credit loss by reflecting the forward-looking information with macroeconomic variables on the measurement inputs.

2) Measuring expected credit losses on financial assets at amortized cost

The amount of the loss on financial assets at amortized cost is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows discounted at the financial asset's original effective interest rate.

The Bank estimates expected future cash flows for financial assets that are individually significant (individual assessment of impairment).

For financial assets that are not individually significant, the Bank collectively estimates expected credit loss by grouping loans with homogeneous credit risk profile (collective assessment of impairment).

① Individual assessment of impairment

Individual assessment of impairment losses is calculated using management's best estimate on present value of expected future cash flows. The Bank uses all the available information including operating cash flow of the borrower and net realizable value of any collateral held.

② Collective assessment of impairment

Collective assessment of loss allowance involves historical loss experience along with incorporation of forward-looking information. Such process incorporates factors such as type of collateral, product and borrowers, credit rating, size of portfolio and recovery period and applies 'probability of default'(PD) on a group of assets and 'loss given default'(LGD) by type of recovery method. Also, the expected credit loss model involves certain assumption to determine input based on loss experience and forward-looking information. These models and assumptions are periodically reviewed to reduce gap between loss estimate and actual loss experience.

Lifetime expected credit loss as at the end of the reporting period is calculated by product based on the carrying amount net of expected repayment, PD for each period and LGD adjusted by change in carrying amount.

3) Measuring expected credit losses on financial assets at fair value through other comprehensive income

Measuring method of expected credit losses on financial assets at fair value through other comprehensive income is equal to the method of financial assets at amortized cost, except for loss allowances that are recognized as other comprehensive income. Amounts recognized in other comprehensive income for sale or repayment of financial assets at fair value through other comprehensive income are reclassified to profit or loss.

(8) Tangible assets

1) Recognition and measurement
All property and equipment that qualify for recognition as an asset are measured at their cost and subsequently carried at their cost less any accumulated depreciation and any accumulated impairment losses.

The cost of property and equipment includes 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 expenditures are capitalized only when they prolong the useful life or enhance values of the assets but the costs of the day-to-day servicing of the assets such as repair and maintenance costs are recognized in profit or loss as incurred. If part of an item of an asset has a useful life different from that of the entire asset, it is recognized as a separate asset.

2) Depreciation
Land is not depreciated whereas other property and equipment are depreciated using the method that reflects the pattern in which the asset's future economic benefits are expected to be consumed by the Bank. The depreciable amount of an asset is determined after deducting its residual value.

The depreciation method is straight-line and estimated useful lives of the assets are as follows.

Property and equipment	Estimated useful lives
Buildings and structures	10–60 years
Leasehold Improvements	5 years
Vehicles	4 years
Tools, furniture and fixtures	4–20 years

The residual value, the useful life and the depreciation method applied to an asset are reviewed at least at each financial year-end and, if expectations differ from previous estimates or if there has been a significant change in the expected pattern of consumption of the future economic benefits embodied in the asset, the changes are accounted for as a change in an accounting estimate.

(9) Intangible assets

Intangible assets are measured initially at cost and subsequently carried at its cost less any accumulated amortization and any accumulated impairment losses.

Intangible assets are amortized using the straight-line method with no residual value over their estimated useful economic life since the assets are available for use.

Intangible assets	Estimated useful lives
Software	5 years
System development costs	5 years

The amortization period and the amortization method for intangible assets with a definite useful life are reviewed at least at each financial year-end. The useful life of an intangible asset that is not being amortized is reviewed each period to determine whether events and circumstances continue to support an indefinite useful life assessment for that asset. If there is any change, it is accounted for as a change in an accounting estimate.

(10) Impairment of non-financial assets

The Bank assesses at the end of each reporting period whether there is any indication that a non-financial asset, except for deferred tax assets, assets arising from employee benefits and non-current assets (or group of assets to be sold) classified as held for sale, may be impaired. If any such indication exists, the Bank estimates the recoverable amount of the asset. However, irrespective of whether there is any indication of impairment, the Bank tests goodwill acquired in a business combination, an intangible asset with an indefinite useful life and an intangible asset not yet available for use for impairment annually by comparing its carrying amount with its recoverable amount.

The recoverable amount is estimated for the individual asset. If it is not possible to estimate the recoverable amount of the individual asset, the Bank determines the recoverable amount of the cash-generating unit to which the asset belongs (the asset's cash-generating unit).

The recoverable amount of an asset is the higher of its fair value less costs to sell and its value in use. If the recoverable amount of an asset is estimated to be less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount and such impairment loss is recognized immediately in profit or loss.

(11) Financial liabilities at FVTPL

Financial liabilities at FVTPL include contingent consideration that may be paid by an acquirer as part of a business combination to which K-IFRS No.1103, 'Business Combination' applies, short-term financial liabilities and financial liabilities recognized as financial liabilities at FVTPL initially. Financial liabilities at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. Otherwise, the transaction cost is recognized in current profit or loss.

(12) Provisions

A provision is recognized if the Bank has a present obligation (legal or constructive) as a result of the past event and 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, and where the effect of the time value of money is material, the amount of a provision is the present value of the expenditures expected to be required to settle the obligation.
Provisions on confirmed and unconfirmed acceptances and guarantees, and unused credit line of corporate loans are recognized using valuation model that applies the credit conversion factor, default rates, and loss given default. Provisions are reviewed at the end of each reporting period and adjusted to reflect the current best estimate. If it is no longer probable that an outflow of resources embodying economic benefits will be required to settle the obligation, the provisions are reversed.

(13) Financial guarantee contracts

A financial guarantee contract is a contract that requires the issuer (the Bank) to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due in accordance with the original or modified terms of a debt instrument.

Financial guarantee contracts are initially recognized at fair value and are amortized over the life of the contract. After initial recognition, financial guarantee contracts are measured at the greater of:

- The amount determined in accordance with K-IFRS No.1109, 'Financial Instruments' and
- The initial amount recognized, less, when appropriate, cumulative amortization recognized in accordance with K-IFRS No.1115, 'Revenue from Contracts with Customers'

(14) Equity and Reserve

Equity and Reserve are any contract or agreement that evidences a residual interest in the assets of an entity after deducting all of its liabilities

(15) Interest income and expenses

Interest income and expenses are recognized using the effective interest method. Effective interest method is a method of calculating the amortized cost of a financial asset or a financial liability (or groups of financial assets or financial liabilities) and of allocating the interest income or interest expenses over the relevant period.

The effective interest rate is the rate that exactly discounts estimated future cash receipts or payments through the expected life of the financial instrument or, where appropriate, a shorter period, to the net carrying amount of the financial asset or financial liability. When calculating the effective interest rate, the Bank estimates cash flows considering all contractual terms of the financial instrument but does not consider future credit losses. The calculation includes all fees and points paid or received between parties to the contract that are an integral part of the effective interest rate, transaction costs, and all other premiums or discounts. In those rare cases when it is not possible to estimate reliably the cash flows or the expected life of a financial instrument (or group of financial instruments), the Bank uses the contractual cash flows over the full contractual term of the financial instrument (or group of financial instruments).

Interest on impaired financial assets is recognized using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss.

(16) Fee and commission income

The Bank recognizes financial service fee in accordance with the accounting standard of the financial instrument related to the fees earned.

1) Fees that are an integral part of the effective interest of a financial instrument
Such fees are generally treated as adjustments of effective interest. Such fees may include compensation for activities such as evaluating the borrower's financial condition, evaluating and recording guarantees, collateral and other security arrangements, negotiating the terms of the instrument, preparing and processing documents and closing the transaction and origination fees received on issuing financial liabilities measured at amortized cost. However, fees relating to the creation or acquisition of a financial asset at FVTPL are recognized as revenue immediately

2) Fees earned as services are provided
Such fees are recognized as revenue as the services are provided.

3) Fees that are earned on the execution of a significant act
Such fees are recognized as revenue when the significant act has been completed.

(17) Dividend income

Dividend income is recognized in profit or loss when the right to receive payment is established. Dividend income from financial assets at FVTPL and financial investments is recognized in profit or loss as part of dividend income in the separate statements of comprehensive income.

(18) Employee compensation and benefits

1) Defined contribution plans
When employees render service related to defined contribution plans, contributions related to employees services are recognized in current profit or loss without contributions included in cost of assets. Contributions which are supposed to be paid are recognized in accrued expenses after deducting any amount already paid. Also, if contributions already paid exceed contributions which would be paid at the end of period, the amount of excess is recognized in prepaid expenses.

2) Defined benefit plans
The Bank'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 Bank, 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 OCI. The Bank 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 net 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 curtailment is recognized immediately in profit or loss. The Bank recognizes gains and losses on the settlement of a defined benefit plan when the settlement occurs.

3) 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.

Short-term employee benefits are recognized in current profit and loss when employees render the related service. Short-term employee benefits are not discounted.

(19) Income taxes

Income tax expense represents the sum of the tax currently payable and deferred tax and is recognized as profit or loss, except for taxes directly adjusted in equity or other comprehensive income and loss and for taxes that arise from business combination.

1) Current tax

Current income tax is the amount of income taxes payable (recoverable) in respect of the taxable profit (tax loss) for a period. The difference between the taxable profit and accounting profit may arise when income or expenses are included in accounting profit in one period, but is included in taxable profit in a different period, and if there is revenue that is exempt from taxation, expenses that are not deductible in determining taxable profit (tax loss). Current income tax liabilities (assets) for the current and prior periods are measured at the amount expected to be paid to (recovered from) the taxation authorities, using the tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

The Bank offsets current income tax assets and current income tax liabilities if, and only if, the Bank has a legally enforceable right to set off the recognized amounts and intends either to settle on a net basis, or to realize the asset and settle the liability simultaneously.

2) Deferred tax

Deferred tax is recognized, using the asset-liability method, on temporary differences arising between the tax base amount of assets and liabilities and their carrying amount in the financial statements. Deferred tax liabilities are recognized for all taxable temporary differences and deferred tax assets are recognized for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilized. However, deferred tax liabilities are not recognized if they arise from the initial recognition of goodwill; deferred tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss.

Deferred tax is provided on temporary differences arising on investments in subsidiaries, associates and joint ventures, except for deferred tax liabilities which the timing of the reversal of the temporary difference is controlled by the Bank and it is probable that the temporary difference will not reverse in the foreseeable future.

The carrying amount of a deferred tax asset is reviewed at the end of each reporting period. The Bank reduces the carrying amount of a deferred tax asset 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 the 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 Bank expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

The Bank offsets deferred tax assets and deferred tax liabilities when the Bank has a legally enforceable right to set off current tax assets against current tax liabilities; and the deferred tax assets and the deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity; or different taxable entity which intend either to settle current tax liabilities and assets on a net basis or to realize the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

(20) New standards and interpretations not yet adopted

The following new standards and amendments to existing standards have been published and are mandatory for the Bank to adopt for annual periods beginning on or after January 1, 2022, and the Bank has not early adopted them.

The following new standards and amendments to existing standards are not expected to significantly affect the Bank:

1) Amendments to Korean IFRS No.1116 Leases - COVID-19-Related Rent Concessions, etc. beyond June 30,2021

The application of the practical expedient, a lessee may elect not to assess whether a rent concession occurring as a direct consequence of the COVID-19 pandemic is a lease modification, is extended to lease payments originally due on or before 30 June 2022. A lessee shall apply the practical expedient consistently to eligible contracts with similar characteristics and in similar circumstances. The amendments should be applied for annual reporting periods beginning on or after April 1, 2021, and earlier application is permitted. The Bank does not expect that these amendments have a significant impact on the financial statements.

2) Amendments to Korean IFRS No.1016 Property, Plant and Equipment - Proceeds Before Intended Use

The amendments prohibit an entity from deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while the entity is preparing the asset for its intended use. Instead, the entity will recognize the proceeds from selling such items, and the costs of producing those items, as profit or loss. The amendments should be applied for annual reporting periods beginning on or after January 1, 2022, and earlier application is permitted. The Bank does not expect that these amendments have a significant impact on the financial statements.

3) Amendments to Korean IFRS No.1103 Business Combination – Reference to the Conceptual Framework

The amendments update a reference of definition of assets and liabilities to qualify for recognition in revised Conceptual Framework for Financial Reporting. However, the amendments add an exception for the recognition of liabilities and contingent liabilities within the scope of Korean IFRS No.1037 Provisions, Contingent Liabilities and Contingent Assets, and Korean IFRS No.2121 Levies. The amendments also confirm that contingent assets should not be recognized at the acquisition date. The amendments should be applied for annual reporting periods beginning on or after January 1, 2022, and earlier application is permitted. The Bank does not expect that these amendments have a significant impact on the financial statements.

4) Amendments to Korean IFRS No.1037 Provisions, Contingent liabilities and Contingent assets – Onerous Contracts: Cost of Fulfilling a Contract

The amendments clarify that the direct costs of fulfilling a contract include both the incremental costs of fulfilling the contract and an allocation of other costs directly related to fulfilling contracts when assessing whether the contract is onerous. The amendments should be applied for annual reporting periods beginning on or after January 1, 2022, and earlier application is permitted. The Bank does not expect that these amendments have a significant impact on the financial statements.

4. <u>RISK MANAGEMENT:</u>

4-1. Summary

(1) Overview of Risk Management Policy

The financial risks that the Bank is exposed to are credit risk, market risk, liquidity risk, operational risk, interest risk, credit concentration risk, strategy/reputational risk, outsourcing risk, settlement risk and others. Credit risk, market risk, liquidity risk, and operational risk have been recognized as the Bank's key risks.

The Bank's risk management system focuses on increasing transparency, developing risk management environment and preemptive response to risks due to rapid changes in financial environment to support the Bank's long-term strategy and business decision efficiently.

The note regarding financial risk management provides information about the risks that the Bank is exposed to, the objective, policies and process for managing the risk, the methods used to measure the risk and capital adequacy. Additional quantitative information is disclosed throughout the separate financial statements.

(2) Risk Management Group

1) Risk Management Committee

The Risk Management Committee establishes risk management strategies in accordance with the directives of the board of directors and determines the Bank's target risk appetite, approves significant risk matters and reviews the level of risks that the Bank is exposed to and the appropriateness of the Bank's risk management operations as an ultimate decision-making authority.

2) Risk Management Council

The Risk Management Council is a consultative group that reviews and makes decisions on matters delegated by the Risk Management Committee and discusses the detailed issues relating to the Bank's risk management.

3) Risk Management Practices Committee

The Risk Management Practices Committee assists the Risk Management Committee and the Risk Management Council. It performs practical work process relating to risk management plan, including targeted Bank for International Settlements ("BIS") ratio, risk management strategy, risk measurement, risk analysis, economic capital limit and others.

4-2. Credit risk

(1) Overview of Credit Risk

Credit risk is the risk of possible losses in an asset portfolio in the events of counterparty's default, breach of contract and deterioration in the credit quality of the counterparty. For the risk management reporting purposes, the individual borrower's default risk, country risk, specific risks and other credit risk exposure components are considered as a whole.

(2) Credit Risk Management

The Bank controls the credit concentration risk exposure by applying and managing total exposure limits to prevent the excessive risk concentration to specific industry and specific borrowers. The Bank maintains allowances for loan losses associated with credit risk on loans and receivables to manage its credit risk.

(3) Maximum exposure to credit risk

The Bank's maximum exposure of financial instruments to credit risk as of December 31, 2021 and 2020, is as follows (Korean won in millions):

	Dec. 31, 2021		Dec. 31, 2020	
Cash and due from financial institutions	₩	4,462,685	₩	4,025,737
Financial assets at FVTPL (*1)		2,450,817		3,351,187
Hedging derivative assets		561,911		1,499,766
Loans at amortized cost (*2)		77,460,842		73,421,763
Financial investments (*3)		3,707,673		2,440,468
Other financial assets		846,679		792,202
Acceptances and guarantee contracts		40,231,483		34,702,514
Commitments (*4)		32,101,482		26,024,757
Total	₩	161,823,572	₩	146,258,394

(*1) Financial assets at FVTPL exclude paid-in capital classified as debt securities.
(*2) Loans at amortized cost exclude loans valuation adjustment related to fair value hedging and allowances for loan losses.
(*3) Allowances for loan losses for securities at amortized cost is excluded.
(*4) Commitments exclude commitments on purchase of beneficiary certificates which are included in other commitments in Note 36.

(4) Credit risk of loans

The Bank maintains allowances for loan losses associated with credit risk on loans to manage its credit risk. Impairment loss on loans can be directly from the carrying amount of the asset or deducted using an allowance account.

The Bank measures the credit risk inherent in financial assets classified as loans and presents it in financial statements as Allowance for loan losses in the form of deduction from the carrying amount of the assets. The Bank writes off on non-profitable loans, non-recoverable loans, loans classified as estimated loss by asset quality category, loans requested to be written off by Financial Supervisory Service ("FSS") and others upon approval of Loan Management Committee.

Loans categorized as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

	12 months expected credit losses	Lifetime expected credit losses	Credit-impaired financial assets	Total
Collective assessment:				
Best	₩ 25,780,685	₩ 1,846	₩ 10,011	₩ 25,792,542
Outstanding	27,937,616	-	5,000	27,942,616
Good	21,359,536	1,590,455	63,234	23,013,225
Below normal	-	385,669	81,028	466,697
Subtotal	75,077,837	1,977,970	159,273	77,215,080
Individual assessment:				
Best	-	-	3,991	3,991
Outstanding	-	-	-	-
Good	-	709,590	7,406	716,996
Below normal	-	757,796	1,300,691	2,058,487
Subtotal	-	1,467,386	1,312,088	2,779,474
Total	₩ 75,077,837	₩ 3,445,356	₩ 1,471,361	₩ 79,994,554
Net deferred loan origination fees and costs				(368,209)
Allowances				(2,165,503)
Total				₩ 77,460,842

(December 31, 2020)

	12 months expected credit losses	Lifetime expected credit losses	Credit-impaired financial assets	Total
Collective assessment:				
Best	₩ 22,586,463	₩ 4,534	₩ 4,601	₩ 22,595,598
Outstanding	22,639,881	-	-	22,639,881
Good	24,329,178	1,713,345	4,894	26,047,417
Below normal	-	516,491	86,999	603,490
Subtotal	69,555,522	2,234,370	96,494	71,886,386
Individual assessment:				
Best	-	-	3,663	3,663
Outstanding	-	-	-	-
Good	-	2,062,518	25,677	2,088,195
Below normal	-	1,116,284	1,193,484	2,309,768
Subtotal	-	3,178,802	1,222,824	4,401,626
Total	₩ 69,555,522	₩ 5,413,172	₩ 1,319,318	₩ 76,288,012
Net deferred loan origination fees and costs				(364,854)
Allowances				(2,501,395)
Total				₩ 73,421,763

The above carrying amounts exclude loan valuation adjustment related to fair value hedging amounting to ₩(2,723) million and ₩(14,382)million as of December 31, 2021 and 2020, respectively.

(5) Credit quality of Financial investments (debt securities)

Financial investments (debt securities) exposed to credit risk as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

	12 months expected credit losses	Lifetime expected credit losses	Credit-impaired financial assets	Total
Grade 1	₩ 3,707,673	₩ -	₩ -	₩ 3,707,673
Grade 2	-	-	-	-
Grade 3	-	-	-	-
Grade 4	-	-	-	-
Grade 5	-	-	-	-
Total	₩ 3,707,673	₩ -	₩ -	₩ 3,707,673

(December 31, 2020)

	12 months expected credit losses	Lifetime expected credit losses	Credit-impaired financial assets	Total
Grade 1	₩ 2,440,468	₩ -	₩ -	₩ 2,440,468
Grade 2	-	-	-	-
Grade 3	-	-	-	-
Grade 4	-	-	-	-
Grade 5	-	-	-	-
Total	₩ 2,440,468	₩ -	₩ -	₩ 2,440,468

(6) Concentration of credit risk

The amounts disclosed below exclude loan valuation adjustment related to fair value hedging amounting to ₩(2,723) million and ₩(14,382) million as of December 31, 2021 and 2020, respectively.

1) Loans by country where the credit risk belongs to as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

	Loans in local currency	Loans in foreign currencies	Others	Total	Ratio (%)	Deferred loan origination fees	Allowances
Asia:							
Korea	₩ 24,210,953	₩ 7,741,888	₩ 2,038,511	₩ 33,991,352	42.49	₩ (22,202)	₩ (713,282)
China	-	2,324,587	411,263	2,735,850	3.42	(1,531)	(35,833)
Saudi Arabia	-	2,190,841	7,930	2,198,771	2.75	(24,914)	(13,240)
India	-	2,322,922	20,219	2,343,141	2.93	(16,348)	(3,099)
Indonesia	15,000	2,986,511	13,892	3,015,403	3.77	(42,164)	(6,304)
Uzbekistan	-	4,068,879	161,045	4,229,924	5.29	(26,414)	(46,057)
Vietnam	-	281,279	481	281,760	0.35	(16,307)	(2,744)
Australia	-	15,458	-	15,458	0.02	(1)	(637)
Philippines	-	509,196	-	509,196	0.64	(1,727)	(2,914)
Qatar	-	579,042	23,013	602,055	0.75	(3,845)	(520)
Singapore	-	1,170,554	-	1,170,554	1.46	(13,101)	(14,849)
Oman	-	262,030	245,927	507,957	0.63	-	(1,024)
Hong Kong	-	4,597,422	9,904	4,607,326	5.76	(19,130)	(2,329)
The United Arab Emirates	-	1,134,276	-	1,134,276	1.42	(8,870)	(30,918)
Others	11,400	3,209,925	808,949	4,030,274	5.04	(83,450)	(88,289)
Subtotal	24,237,353	33,394,810	3,741,134	61,373,297	76.72	(280,004)	(962,039)
Europe:							
Russia	-	348,174	-	348,174	0.44	(324)	(1,074)
United Kingdom	-	1,778,473	164,964	1,943,437	2.43	(10,402)	(427,599)
France	-	84,899	6,597	91,496	0.11	(630)	(78)
Netherlands	-	-	15,396	15,396	0.02	-	(88)
Greece	-	1,937,778	-	1,937,778	2.42	(9,648)	(2,844)
Ireland	-	53,802	-	53,802	0.07	(254)	(117)
Turkey	-	1,343,317	16,570	1,359,887	1.70	(12,448)	(118,579)
Germany	-	299,618	16,770	316,388	0.40	(343)	(983)
Ukraine	-	60,128	-	60,128	0.08	(79)	(116)
Hungary	-	1,333,943	-	1,333,943	1.67	(1,746)	(1,929)
Others	-	2,025,612	139,083	2,164,695	2.69	(6,634)	(18,829)
Subtotal	-	9,265,744	359,380	9,625,124	12.03	(42,508)	(572,236)
America:							
Panama	-	1,054,208	27,034	1,081,242	1.35	(5,834)	(1,740)
United States	-	2,743,778	16,404	2,760,182	3.45	(3,521)	(15,001)
The British Virgin Islands	-	14,054	-	14,054	0.02	-	-
Mexico	-	337,718	-	337,718	0.42	(3,194)	(1,912)
Brazil	-	1,713,043	-	1,713,043	2.14	(3,683)	(5,718)
Others	-	1,381,962	-	1,381,962	1.73	(7,076)	(14,117)
Subtotal	-	7,244,763	43,438	7,288,201	9.11	(23,308)	(38,488)
Africa:							

	Loans in local currency	Loans in foreign currencies	Others	Total	Ratio (%)	Deferred loan origination fees	Allowances
Marshall Islands	-	546,075	-	546,075	0.68	(2,577)	(1,313)
Liberia	-	18,095	-	18,095	0.02	(324)	(69)
Nigeria	-	348,377	-	348,377	0.44	(6,017)	(6,443)
Morocco	-	96,955	-	96,955	0.12	(943)	(127)
Others	-	698,430	-	698,430	0.88	(12,528)	(584,788)
Subtotal	-	1,707,932	-	1,707,932	2.14	(22,389)	(592,740)
Total	₩ 24,237,353	₩ 51,613,249	₩ 4,143,952	₩ 79,994,554	100.00	₩ (368,209)	₩ (2,165,503)

(December 31, 2020)

	Loans in local currency	Loans in foreign currencies	Others	Total	Ratio (%)	Deferred loan origination fees	Allowances
Asia:							
Korea	₩ 23,613,174	₩ 7,168,916	₩ 2,481,756	₩ 33,263,846	43.60	₩ (11,881)	₩ (1,235,386)
China	-	2,054,071	389,330	2,443,401	3.20	(2,121)	(27,196)
Saudi Arabia	-	2,373,563	315,958	2,689,521	3.53	(28,597)	(10,531)
India	-	2,337,629	94,826	2,432,455	3.19	(17,974)	(3,171)
Indonesia	17,000	3,069,737	6,217	3,092,954	4.05	(51,141)	(12,867)
Uzbekistan	-	3,510,539	81,247	3,591,786	4.71	(24,260)	(34,211)
Vietnam	-	325,312	524	325,836	0.43	-	(144)
Australia	-	63,299	-	63,299	0.08	(21)	(763)
Philippines	-	550,527	-	550,527	0.72	(2,003)	(3,028)
Qatar	-	504,408	292	504,700	0.66	(2,083)	(792)
Singapore	-	1,005,790	52	1,005,842	1.32	(14,130)	(8,464)
Oman	-	270,700	1,051,401	1,322,101	1.73	(107)	(9,845)
Hong Kong	-	4,159,300	5,734	4,165,034	5.46	(19,862)	(1,874)
The United	-	1,062,147	-	1,062,147	1.39	(9,929)	(29,620)
Others	13,000	3,174,857	1,231,313	4,419,170	5.80	(92,654)	(89,988)
Subtotal	23,643,174	31,630,795	5,658,650	60,932,619	79.87	(276,763)	(1,467,880)
Europe:							
Russia	-	114,835	-	114,835	0.15	-	(506)
United Kingdom	-	997,553	831	998,384	1.31	(8,941)	(262,805)
France	-	87,201	5,384	92,585	0.12	(712)	(147)
Netherlands	-	-	9,199	9,199	0.01	-	(53)
Malta	-	1,517,733	2,513	1,520,246	1.99	(10,349)	(2,432)
Greece	-	46,710	-	46,710	0.06	(272)	(102)
Turkey	-	1,043,559	8,087	1,051,646	1.38	(13,513)	(54,237)
Germany	-	167,815	22,297	190,112	0.25	(265)	(1,041)
Ukraine	-	30,464	-	30,464	0.04	-	(32)
Hungary	-	605,948	-	605,948	0.79	(390)	(608)
Others	-	1,868,075	78,157	1,946,232	2.56	(7,294)	(12,032)
Subtotal	-	6,479,893	126,468	6,606,361	8.66	(41,736)	(333,995)
America:							
Panama	-	803,007	-	803,007	1.05	(3,656)	(51,223)
United States	-	2,303,389	19,275	2,322,664	3.04	(4,065)	(12,171)
The British Virgin Islands	-	29,865	-	29,865	0.04	(124)	(14)
Mexico	-	459,154	-	459,154	0.60	(3,616)	(1,944)
Bermuda	-	88,499	-	88,499	0.12	(652)	-

	Loans in local currency	Loans in foreign currencies	Others	Total	Ratio (%)	Deferred loan origination fees	Allowances
Brazil	-	1,842,203	-	1,842,203	2.41	(4,074)	(4,672)
Others	-	1,102,916	-	1,102,916	1.45	(4,106)	(15,947)
Subtotal	-	6,629,033	19,275	6,648,308	8.71	(20,293)	(85,971)
Africa:							
Marshall Islands	-	549,415	-	549,415	0.72	(2,848)	(9,384)
Madagascar	-	377,443	-	377,443	0.49	(1,123)	(376,320)
Nigeria	-	392,252	-	392,252	0.51	(6,926)	(7,395)
Morocco	-	114,195	-	114,195	0.15	(1,090)	(150)
Others	-	667,294	125	667,419	0.89	(14,075)	(220,300)
Subtotal	-	2,100,599	125	2,100,724	2.76	(26,062)	(613,549)
Total	₩ 23,643,174	₩ 46,840,320	₩ 5,804,518	₩ 76,288,012	100.00	₩ (364,854)	₩ (2,501,395)

2) Loans by industry as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

	Loans					Deferred loan origination fees	Allowances
	Loans in local currency	Loans in foreign currencies	Others	Total	Ratio (%)		
Manufacturing	₩ 12,800,359	₩ 24,571,341	₩ 791,091	₩ 38,162,791	47.71	₩ (176,107)	₩ (1,401,287)
Transportation	1,295,966	6,976,031	245,434	8,517,431	10.65	(37,475)	(137,338)
Financial institutions	8,289,003	5,583,824	2,845,411	16,718,238	20.90	(8,171)	(23,955)
Wholesale and retail	887,494	830,269	66,748	1,784,511	2.23	(2,303)	(14,175)
Real estate	-	331,210	527	331,737	0.41	(1,927)	(44,164)
Construction	365,842	1,534,289	2,371	1,902,502	2.38	(26,505)	(15,492)
Public sector and others	598,689	11,786,285	192,370	12,577,344	15.72	(115,721)	(529,092)
Total	₩ 24,237,353	₩ 51,613,249	₩ 4,143,952	₩ 79,994,554	100.00	₩ (368,209)	₩ (2,165,503)

(December 31, 2020)

	Loans					Deferred loan origination fees	Allowances
	Loans in local currency	Loans in foreign currencies	Others	Total	Ratio (%)		
Manufacturing	₩ 14,910,922	₩ 22,265,933	₩ 812,594	₩ 37,989,449	49.79	₩ (191,945)	₩ (1,856,758)
Transportation	1,479,886	5,929,875	282,513	7,692,274	10.08	(32,280)	(218,842)
Financial institutions	5,898,046	5,254,076	4,632,890	15,785,012	20.69	(3,227)	(14,095)
Wholesale and retail	594,874	808,517	44,806	1,448,197	1.90	(1,942)	(26,336)
Real estate	-	149,666	-	149,666	0.20	(1,680)	(1,868)
Construction	240,814	965,852	12,463	1,219,129	1.60	(11,652)	(46,831)
Public sector and others	518,632	11,466,401	19,252	12,004,285	15.74	(122,128)	(336,665)
Total	₩ 23,643,174	₩ 46,840,320	₩ 5,804,518	₩ 76,288,012	100.00	₩ (364,854)	₩ (2,501,395)

3) Concentration of credit risk of financial assets at FVTPL and financial investments (debt securities) by industry as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Dec. 31, 2021		Dec. 31, 2020	
	Amount	Ratio (%)	Amount	Ratio (%)
Financial Assets at FVTPL				
Government and government sponsored institutions	₩ 36,186	1.48	₩ 14,192	0.42
Banking and insurance	2,104,501	85.87	2,866,739	85.54
Others	310,130	12.65	470,256	14.04
Subtotal	2,450,817	100.00	3,351,187	100.00
Financial Assets at FVOCI				
Government and government sponsored institutions	1,766,442	63.63	1,097,762	56.75
Banking and insurance	607,725	21.89	375,565	19.41
Others	402,059	14.48	461,170	23.84
Subtotal	2,776,226	100.00	1,934,497	100.00
Securities at amortized cost				
Government and government sponsored institutions	594,569	63.83	331,116	65.44
Banking and insurance	124,797	13.40	133,108	26.31
Others	212,081	22.77	41,747	8.25
Subtotal	931,447	100.00	505,971	100.00
Hedging derivative assets				
Banking and insurance	561,911	100.00	1,499,766	100.00
Total	₩ 6,720,401		₩ 7,291,421	

4) Concentration of credit risk of financial assets at FVTPL and financial investments (debt securities) by country as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Dec. 31, 2021		Dec. 31, 2020	
	Amount	Ratio (%)	Amount	Ratio (%)
Financial Assets at FVTPL				
Korea	₩ 1,927,706	78.66	₩ 2,629,890	78.48
Others	523,111	21.34	721,297	21.52
Subtotal	2,450,817	100.00	3,351,187	100.00
Financial Assets at FVOCI				
Korea	1,377,709	49.63	1,230,720	63.62
Others	1,398,517	50.37	703,777	36.38
Subtotal	2,776,226	100.00	1,934,497	100.00
Securities at amortized cost				
Korea	295,671	31.74	213,250	42.15
Others	635,776	68.26	292,721	57.85
Subtotal	931,447	100.00	505,971	100.00
Hedging derivative assets				
Korea	180,630	32.15	451,793	30.12
Others	381,281	67.85	1,047,973	69.88
Subtotal	561,911	100.00	1,499,766	100.00
Total	₩ 6,720,401		₩ 7,291,421	

5) Credit enhancement and its financial effect as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

	Loans (*1)	Acceptances and guarantees	Unused loan commitments	Total	Ratio (%)
Maximum exposure to credit risk	₩ 77,460,842	₩ 40,231,483	₩ 32,101,482	₩ 149,793,807	100.00
Credit enhancement:					
Deposits and savings	370,372	92,230	20,650	483,252	0.32
Export guarantee insurance	377,225	-	2,270	379,495	0.25
Guarantee	1,869,125	2,438,289	79,876	4,387,290	2.93
Securities	116,172	54,379	3,000	173,551	0.12
Real estate	2,340,034	520,125	458,278	3,318,437	2.22
Ships	761,363	137,849	-	899,212	0.60
Others	42,743	-	-	42,743	0.02
Subtotal	5,877,034	3,242,872	564,074	9,683,980	6.46
Exposure to credit risk after deducting credit enhancement	₩ 71,583,808	₩ 36,988,611	₩ 31,537,408	₩ 140,109,827	93.54

(December 31, 2020)

	Loans (*1)	Acceptances and guarantees	Unused loan commitments	Total	Ratio (%)
Maximum exposure to credit risk	₩ 73,421,763	₩ 34,702,514	₩ 26,024,757	₩ 134,149,034	100.00
Credit enhancement:					
Deposits and savings	167,339	43,175	39,025	249,539	0.19
Export guarantee insurance	-	947,590	7,818	955,408	0.71
Guarantee	1,846,556	1,699,941	353,972	3,900,469	2.91
Securities	227,473	433,001	-	660,474	0.49
Real estate	2,632,355	476,773	19,210	3,128,338	2.33
Ships	697,744	175,893	41,237	914,874	0.68
Others	388,607	-	2,859	391,466	0.29
Subtotal	5,960,074	3,776,373	464,121	10,200,568	7.60
Exposure to credit risk after deducting credit enhancement	₩ 67,461,689	₩ 30,926,141	₩ 25,560,636	₩ 123,948,466	92.40

(*1) Loans exclude loans valuation adjustment related to fair value hedging.

4-3. Liquidity risk

(1) Overview of liquidity risk

Liquidity risk is the risk that the Bank is unable to meet its payment obligations arising from financial liabilities as they become due. The Bank discloses all financial asset, financial liabilities and off-balance-sheet items, such as loan commitments and analysis of the contractual maturity, which are related to liquidity risk, into seven categories. The cash flows disclosed in the maturity analysis are undiscounted contractual amounts, including principal and future interest, which resulted in disagreement with the discounted cash flows included in the separate statements of financial position. However, for derivatives, each discounted cash flow consisting of current fair value is presented.

(2) Principles of the liquidity risk management

1) Liquidity risk is managed with integration. The Bank measures, reports and controls liquidity risk by quantification with reasonable method.

2) Liquidity risk reflects financing plans and fund-using plans, and the Bank reports the liquidity risk with preciseness, timeliness and consistency.

3) The Bank establishes liquidity risk management strategy by analyzing liquidity maturity, liquidity gap structure and market environment.

(3) Liquidity risk management

Risk management department monitors changes by liquidity risk sources and compliance of risk limits. It notifies related departments to prepare countermeasures in case the measured liquidity risk is close to risk limits. Also, it analyzes crisis situations and effects of the crisis situations and reports to the Risk Management Committee on a regular basis. Each related department monitors changes of liquidity risk sources and compliance of risk limits by itself and if exposure to new risk is expected, it discusses the matter with the head of risk management department.

(4) Measurement of liquidity risk

The Bank measures liquidity ratio, liquidity gap ratio and others for local currency and foreign currencies and simulates analysis reflecting market environment, product features and the Bank's strategies.

(5) Analysis on remaining contractual maturity of financial liabilities and off-balance-sheet items

Remaining contractual maturity and amount of financial liabilities and off-balance-sheet items as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

	On demand	Within 1 month	1 to 3 months	3 to 6 months	6 to 12 months	1 year to 5 years	Over 5 years	Total
Financial liabilities:								
Financial liabilities at FVTPL	₩ 768,115	₩ -	₩ -	₩ -	₩ -	₩ -	₩ -	₩ 768,115
Hedging derivative liabilities	-	-	23,753	8,085	85,607	369,482	174,130	661,057
Borrowings	-	1,141,327	1,729,423	1,210,033	878,151	629,597	-	5,588,531
Debentures	-	2,726,529	4,083,166	6,716,159	14,114,830	43,283,095	11,094,508	82,018,287
Other financial liabilities	-	684,629	1,695	161	8,305	94,195	1,036,295	1,825,280
Total	₩ 768,115	₩ 4,552,485	₩ 5,838,037	₩ 7,934,438	₩ 15,086,893	₩ 44,376,369	₩ 12,304,933	₩ 90,861,270
Off-balance sheet items (*1):								
Commitments	₩ 32,101,482	₩ -	₩ -	₩ -	₩ -	₩ -	₩ -	₩ 32,101,482
Financial guarantee contracts	12,126,814	-	-	-	-	-	-	12,126,814
Total	₩ 44,228,296	₩ -	₩ -	₩ -	₩ -	₩ -	₩ -	₩ 44,228,296

(December 31, 2020)

	On demand	Within 1 month	1 to 3 months	3 to 6 months	6 to 12 months	1 year to 5 years	Over 5 years	Total
Financial liabilities:								
Financial liabilities at FVTPL	₩ 753,442	₩ -	₩ -	₩ -	₩ -	₩ -	₩ -	₩ 753,442
Hedging derivative liabilities	-	24,087	23,878	56,425	41,361	188,486	84,733	418,970
Borrowings	-	337,469	524,406	2,529,342	1,395,729	1,317,114	-	6,104,060
Debentures	-	2,530,630	5,546,667	6,642,817	12,260,797	37,380,189	12,202,465	76,563,565
Other financial liabilities	-	1,190,104	-	72	49,835	197,447	934,544	2,372,002
Total	₩ 753,442	₩ 4,082,290	₩ 6,094,951	₩ 9,228,656	₩ 13,747,722	₩ 39,083,236	₩ 13,221,742	₩ 86,212,039
Off-balance sheet items (*1):								
Commitments	₩ 26,024,757	₩ -	₩ -	₩ -	₩ -	₩ -	₩ -	₩ 26,024,757
Financial guarantee contracts	12,097,063	-	-	-	-	-	-	12,097,063
Total	₩ 38,121,820	₩ -	₩ -	₩ -	₩ -	₩ -	₩ -	₩ 38,121,820

(*1) Although financial guarantees and loan commitments provided by the Bank have maturities, the Bank should fulfill the obligation immediately when the counter party requests payments.

4-4. Market risk

(1) Overview of market risk

1) Definition of market risk

Market risk is the risk of possible losses that arise from the changes of market factors, such as interest rate, stock price, foreign exchange rate, commodity value. The Bank classifies exposures to market risk into either foreign exchange rate risk or interest rate risk. Foreign exchange risk is the possible losses on assets and liabilities denominated in foreign currencies due to changes of foreign exchange rate. Interest rate risk is the possible losses on assets and liabilities due to changes of interest rate.

2) Market risk management group

The Bank operates the Risk Management Committee and the Risk Management Council for managing risks and risk limits. The Risk Management Practices Committee assists the Risk Management Committee and the Risk Management Council for practical matters, such as managing adequate assets and liabilities by analyzing foreign exchange risk, interest rate risk, liquidity risk and effects by initiating new product. Market risk is managed by product and currency for minimizing segments exposed to changes of foreign exchange, interest rate and securities' price. Foreign exchange risk is measured by definite method. Interest rate risk is measured by IRRBB standards, definite method and probabilistic method and definite method is used for limits management. Meanwhile, the Bank performs financial crisis analysis supposing exceptional, but possible events for evaluating latent weakness. The analysis is used for important decision making, such as risk mitigation, emergency plan development and limit setup. The results of the analysis are reported to the board of directors and management on a quarterly basis.

(2) Foreign exchange risk

1) Management of foreign exchange risk

Foreign exchange risk management limit is set up and a risk management division head monitors changes of foreign exchange risk by source and compliance of risk limits regularly. A finance division head also monitors changes of foreign exchange risk by source and compliance of risk limits. The finance division head needs to cooperate with the risk management division head in case it is expected that the Bank will be exposed to a new risk. The risk management division head orders related divisions to prepare countermeasures in case it is apprehended that foreign exchange risk exceeds risk limit. If foreign exchange risk exceeds the risk limit, the risk management division head orders related divisions to prepare countermeasures and reports to Risk Management Committee after resolving the exceeded limit problem.

2) Measurement of foreign exchange risk

Foreign exchange risk is managed by foreign exchange VaR and foreign exchange position. Foreign exchange VaR is measured on a monthly basis and foreign exchange position is measured on a daily basis. It is measured separately by currency for assets and liabilities denominated in foreign currencies exceeding 5% of total assets and liabilities denominated in foreign currencies.

3) Measurement method

① Value at Risk (VaR)
The Bank uses a yearly VaR to measure market risk. The yearly VaR is a statistically estimated maximum amount of loss that could occur in one year under normal distribution of financial variables. The Bank calculates VaR using equal weighted-average method based on historical changes in market rates, prices and volatilities over the previous five years data and measures VaR at a 99% single tail confidence level. VaR is a commonly used market risk management technique. However, the method has some shortcomings.

VaR estimates possible losses over a certain period at a particular confidence level using past market movement data. Past market movement, however, is not necessarily a good indicator of future events, as there may be conditions and circumstances in the future that the model does not anticipate. As a result, the timing and magnitude of the actual losses can be different, depending on the assumptions made at the time of calculation. In addition, the time periods used for the model, generally one day or 10 days are assumed to be a sufficient holding period before liquidating the relevant underlying positions. If these holding periods are not sufficient, or too long, the VaR results may understate or overstate the potential loss.

② Stress testing
The stress testing is carried out to analyze the abnormal market situation reflecting intrinsic volatility of foreign exchange that has significant influent on the value of portfolio.

③ Results of measurement
Results of foreign exchange VaR as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Dec. 31, 2021				Dec. 31, 2020			
	Average	Minimum	Maximum	Ending	Average	Minimum	Maximum	Ending
Foreign exchange risk	₩ 30,800	₩ 11,568	₩ 56,546	₩ 11,568	₩ 55,957	₩ 10,811	₩ 91,200	₩ 10,811

(3) Interest rate risk

1) Management of interest rate risk
Interest rate risk management limit is set up and included in internal capital management limit. A risk management division head monitors changes of interest rate risk by source and compliance of risk limits regularly. A finance division head also monitors changes of interest rate risk by source and compliance of risk limits. The finance division head needs to cooperate with the risk management division head in case it is expected that the Bank will be exposed to a new risk. The risk management division head orders related divisions to prepare countermeasures in case it is apprehended that interest rate risk exceeds risk limit. If interest rate risk exceeds the risk limit, the risk management division head orders related divisions to prepare countermeasures and reports to Risk Management Committee after resolving the exceeded limit problem.

2) Measurement of interest rate risk
Interest rate risk is managed by measuring ΔNII (Change in Net Interest Income) and ΔEVE (Change in Economic Value of Equity) and uses interest rate sensitivity gap and duration gap as supplementary index. ΔNII and ΔEVE are measured on a monthly basis, and interest rate sensitivity gap and duration gap are measured on a daily basis. The Bank simulates analysis reflecting market environment, product features and the Bank's strategies.

3) Measurement method

① Change in Economic Value of Equity (ΔEVE)
The Bank uses a yearly ΔEVE to measure interest rate risk. The yearly ΔEVE is the maximum amount of loss that could occur in one year under normal distribution of financial variables. The Bank calculates the yearly ΔEVE by using variance-covariance method at a 99% single tail confidence level based on the previous five years data using equal weighted-average method.

ΔEVE estimates possible losses over a certain period at a particular confidence level using past market movement data. Past market movement, however, is not necessarily a good indicator of future events, as there may be conditions and circumstances in the future that the model does not anticipate. As a result, the timing and magnitude of the actual losses can be different depending on the assumptions made at the time of calculation.

② Stress testing

The stress testing is carried out to analyze the abnormal market situation reflecting intrinsic volatility of interest rate that has significant influence on the value of portfolio and is performed at least once in every quarter.

③ Results of measurement

Results of interest rate VaR as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Dec. 31, 2021				Dec. 31, 2020			
	Average	Minimum	Maximum	Ending	Average	Minimum	Maximum	Ending
Interest rate risk	₩ 29,584	₩ 9,393	₩ 75,882	₩ 36,540	₩ 29,669	₩ 15,452	₩ 47,859	₩ 38,356

(4) Interest rate risk management

The Bank is closely monitoring the outputs of various industry groups and markets that manage the transition to the new interest rate benchmark, including announcements by IBOR regulation authority and various consultative bodies related to the transition to alternative interest rate. In response to these announcements, The Bank has completed most of the transition and replacement according to IBOR transition programs and plans consisting of major business areas such as finance, accounting, tax, legal, IT, and risk. The program is under the control of the CFO and related matters are reported to the board of directors. The purpose of the plan is to identify the impacts and risks associated with the index interest rate benchmark reform within the business, and to prepare and implement an action plan to facilitate the transition to alternative indicator interest rate. The bank aims to finalize its response plan by 2022.

The carrying amount of financial instruments that have not been converted to alternative indicator interest rate as of December 31, 2021 is as follows (Korean won in millions):

	Exposure Amount(*1)			
Detail	USD	EUR	GBP	Others
Non-derivative financial assets				
Securities at FVTPL	₩ 100,422	₩ -	₩ -	₩ -
Securities at FVOCI	3,580	-	-	-
Loans at amortized cost	27,837,151	-	-	-
Acceptances and guarantee contracts(*2)	9,783,391	-	-	-
Derivative(*2)	43,657,624	-	523,226	-
Non-derivative financial liabilities				
Financial liabilities at amortized cost				
Borrowings	341,424	-	-	-

(*1) Exposure amount exclude financial instruments that will disappear before converting to alternative indicator interest rate.

(*2) Guarantees and derivatives are based on the nominal amount.

4-5. Capital risk

The Bank follows the standard of capital adequacy established by the Financial Services Commission. The standard is based on Basel III, which was established by Basel Committee on Banking Supervision in BIS. In Korea, this standard has been followed since December 2013. According to the standard, the Bank should maintain at least 8% or above of BIS capital ratio for risk-weighted asset, and quarterly report BIS capital ratio to the FSS.

According to Korean Banking Supervision rules for operations, the Bank's capitals are mainly divided into two categories:

1) Tier 1 capital (basic capital): Basic capital is composed of capital stock-common and other basic capital. Capital stock-common includes common stock satisfied with qualifications, capital surplus, retained earnings, accumulated other comprehensive income, other reserves and non-controlling interests among the common stock of consolidated subsidiaries. Other basic capital includes securities and capital surplus satisfied with qualifications

2) Tier 2 capital (supplementary capital): Supplementary capital is composed of the securities and capital surplus satisfied with qualifications, non-controlling interests among the securities of consolidated subsidiaries and the amounts of less than below 1.25% of credit risk-weighted asset like allowance for credit losses in respect of credits classified as normal or precautionary.

The risk-weighted asset includes intrinsic risks in total assets, errors of internal operation processes and loss risk from external events. It indicates a size of assets reflecting the level of risks that the Bank bears. The Bank computes the risk-weighted asset by risks (credit risk, market risk and operational risk) and uses it for calculation of BIS capital ratio.

5. FINANCIAL ASSETS AND FINANCIAL LIABILITIES:

5-1. Classification and fair value

(1) Carrying amounts and fair values of financial instruments as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Dec. 31, 2021		Dec. 31, 2020	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets:				
Cash and due from financial institutions	₩ 4,462,685	₩ 4,462,685	₩ 4,025,737	₩ 4,025,686
Financial assets at FVTPL	2,598,204	2,598,204	3,478,402	3,478,402
Hedging derivative assets	561,911	561,911	1,499,766	1,499,766
Loans at amortized cost	77,458,119	77,458,119	73,407,381	74,065,894
Financial assets at FVOCI	11,814,063	11,814,063	10,536,535	10,536,535
Securities at amortized cost	931,296	946,507	505,876	515,610
Other financial assets	838,645	838,645	792,202	792,202
Total	₩ 98,664,923	₩ 98,680,134	₩ 94,245,899	₩ 94,914,095
Financial liabilities:				
Financial liabilities at FVTPL	₩ 768,115	₩ 768,115	₩ 753,442	₩ 753,442
Hedging derivative liabilities	661,057	661,057	418,970	418,970
Borrowings	5,576,909	5,583,498	6,076,631	6,071,603
Debentures	76,486,053	77,379,590	72,641,777	73,332,650
Other financial liabilities	1,825,280	1,825,280	2,372,002	2,372,002
Total	₩ 85,317,414	₩ 86,217,540	₩ 82,262,822	₩ 82,948,667

Fair value is the amount at which the assets could be exchanged, or the liabilities could be settled in transection between knowledgeable and willing independent parties. For each class of financial assets and financial liabilities, the Bank discloses the fair value of that class of assets and liabilities in a way that permits them to be compared with their carrying amount at the end of each reporting period. The best estimated fair value is the published price quotation in an active market.

Methods for measuring fair value of financial instruments are as follows:

Financial instruments	Method of measuring fair value
Loans and receivables	As demand deposits and transferable deposits do not have maturity and are readily convertible to cash, the carrying amounts of these deposits approximate their fair values. Fair values of the deposits with the maturity of more than one year are determined by discounted cash flow model ("DCF model"). DCF model is also used to determine the fair value of loans. Fair value is determined by discounting the cash flows expected from each contractual period by applying the discount rates for each period.
Investment securities	Financial assets and liabilities at FVTPL and financial assets at FVOCI are measured at fair value using a quoted market price in an active market. If a quoted market price is not available, they are measured by using a price quoted by a third party, such as a pricing service or broker with the DCF model.
Derivatives	For exchange traded derivative, quoted price in active market is used to determine fair value and for OTC derivative, fair value is determined primarily using valuation techniques. The Bank uses internally developed valuation models using valuation techniques that are widely used by market participants to determine fair value of plain OTC derivatives including option, interest rate swap and currency swap based on observable market parameters. However, some complex financial instruments are valued using the results of independent pricing services, where part or all of the inputs are not observable in the market.
Borrowings	Fair value is determined using DCF model discounting contractual future cash flows by appropriate discount rate.
Debentures	Fair value of debentures denominated in local currency is determined by using the valuation of independent third-party pricing services in accordance with the market prices that are quoted in active markets. Fair value of debentures denominated in foreign currencies is determined by DCF model.

Fair values of financial assets and financial liabilities classified as fair value Level 3 of the fair value hierarchy are determined by using the valuation of independent third-party pricing services. Meanwhile, carrying amounts of other financial assets and financial liabilities are regarded as an approximation of fair values.

(2) Fair value hierarchy

1) The Bank classifies financial instruments as three level of fair value hierarchy as below:

Level 1: Financial instruments measured at quoted prices from active markets are classified as fair value Level 1. This level includes listed equity securities, derivatives, and government bonds traded in an active exchange market.
Level 2: Financial instruments measured using valuation techniques where all significant inputs are observable market data are classified as Level 2. This level includes the majority of debt and general OTC derivatives such as swap, futures and options
Level 3: Financial instruments measured using valuation techniques where one or more significant inputs are not based on observable market data are classified as Level 3. This level includes unlisted equity securities, structured bonds and OTC derivatives.

2) Fair value hierarchy of financial assets and liabilities, which are not measured at fair value as of December 31, 2021 and 2020, is as follows (Korean won in millions):

(December 31, 2021)

	Level 1	Level 2	Level 3	Total
Financial assets:				
Cash and due from financial Institutions	₩ 3,146,957	₩ -	₩ 1,315,728	₩ 4,462,685
Loans at amortized cost	-	-	77,458,119	77,458,119
Securities at amortized cost	-	946,507	-	946,507
Other financial assets	-	-	838,645	838,645
Total	₩ 3,146,957	₩ 946,507	₩ 79,612,492	₩ 83,705,956
Financial liabilities:				
Borrowings	₩ -	₩ 5,583,498	₩ -	₩ 5,583,498
Debentures	-	77,379,590	-	77,379,590
Other financial liabilities	-	-	1,825,280	1,825,280
Total	₩ -	₩ 82,963,088	₩ 1,825,280	₩ 84,788,368

(December 31, 2020)

	Level 1	Level 2	Level 3	Total
Financial assets:				
Cash and due from financial institutions	₩ 2,299,935	₩ -	₩ 1,725,751	₩ 4,025,686
Loans at amortized cost	-	-	74,065,894	74,065,894
Securities at amortized cost	-	515,610	-	515,610
Other financial assets	-	-	792,202	792,202
Total	₩ 2,299,935	₩ 515,610	₩ 76,583,847	₩ 79,399,392
Financial liabilities:				
Borrowings	₩ -	₩ 6,071,603	₩ -	₩ 6,071,603
Debentures	-	73,332,650	-	73,332,650
Other financial liabilities	-	-	2,372,002	2,372,002
Total	₩ -	₩ 79,404,253	₩ 2,372,002	₩ 81,776,255

3) Fair value hierarchy of financial assets and liabilities measured at fair value as of December 31, 2021, and 2020 are as follows (Korean won in millions):

(December 31, 2021)

	Level 1	Level 2	Level 3	Total
Financial assets:				
Financial assets at FVTPL	₩ -	₩ 1,745,970	₩ 852,234	₩ 2,598,204
Hedging derivative assets	-	546,296	15,615	561,911
Financial assets at FVOCI	125,625	2,776,225	8,912,213	11,814,063
	₩ 125,625	₩ 5,068,491	₩ 9,780,062	₩ 14,974,178
Financial liabilities:				
Financial liabilities at FVTPL	₩ -	₩ 516,985	₩ 251,130	₩ 768,115
Hedging derivative liabilities	-	527,610	133,447	661,057
	₩ -	₩ 1,044,595	₩ 384,577	₩ 1,429,172

(December 31, 2020)

	Level 1	Level 2	Level 3	Total
Financial assets:				
Financial assets at FVTPL	₩ -	₩ 2,954,301	₩ 524,101	₩ 3,478,402
Hedging derivative assets	-	1,425,219	74,547	1,499,766
Financial assets at FVOCI	168,171	1,934,498	8,433,866	10,536,535
	₩ 168,171	₩ 6,314,018	₩ 9,032,514	₩ 15,514,703
Financial liabilities:				
Financial liabilities at FVTPL	₩ -	₩ 687,389	₩ 66,053	₩ 753,442
Hedging derivative liabilities	-	366,212	52,758	418,970
	₩ -	₩ 1,053,601	₩ 118,811	₩ 1,172,412

4) The valuation techniques and input variables of Level 2 financial instruments subsequently not measured at fair value as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

		Fair value	Valuation techniques	Input variables
Financial assets				
Financial assets at amortized cost				
Debt securities	₩	946,507	DCF Model	Discount rate
Financial liabilities				
Borrowings		5,583,498	DCF Model	Discount rate
Debentures		77,379,590	DCF Model	Discount rate

(December 31, 2020)

		Fair value	Valuation techniques	Input variables
Financial assets				
Financial assets at amortized cost				
Debt securities	₩	515,610	DCF Model	Discount rate
Financial liabilities				
Borrowings		6,071,603	DCF Model	Discount rate
Debentures		73,332,650	DCF Model	Discount rate

5) The valuation techniques and input variables of Level 3 financial instruments subsequently not measured at fair value as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

		Fair value	Valuation techniques	Input variables
Financial assets				
Cash and due from financial Institutions	₩	1,315,718	DCF Model	Discount rate
Loans at amortized cost		77,458,119	DCF Model	Discount rate
Other financial assets		838,645	DCF Model	Discount rate
Financial liabilities				
Other financial liabilities		1,825,280	DCF Model	Discount rate

(December 31, 2020)

		Fair value	Valuation techniques	Input variables
Financial assets				
Cash and due from financial Institutions	₩	1,725,751	DCF Model	Discount rate
Loans at amortized cost		74,065,894	DCF Model	Discount rate
Other financial assets		792,202	DCF Model	Discount rate
Financial liabilities				
Other financial liabilities		2,372,002	DCF Model	Discount rate

6) The valuation techniques and input variables of Level 2 financial instruments subsequently measured at fair value, as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

		Fair value	Valuation techniques	Input variables
Financial assets				
Financial assets at FVTPL:				
Debt securities	₩	1,042,384	DCF Model	Discount rate
Derivative assets for trading		703,586	DCF Model	Discount rate
Hedging derivative assets		546,296	DCF Model	Discount rate
Financial assets at FVOCI:				
Debt securities		2,776,225	DCF Model	Discount rate
Financial liabilities				
Financial liabilities at FVTPL:				
Derivative liabilities for trading		516,985	DCF Model	Discount rate
Hedging derivative liabilities		527,610	DCF Model	Discount rate

(December 31, 2020)

		Fair value	Valuation techniques	Input variables
Financial assets				
Financial assets at FVTPL:				
Debt securities	₩	2,019,807	DCF Model	Discount rate
Derivative assets for trading		934,494	DCF Model	Discount rate
Hedging derivative assets		1,425,219	DCF Model	Discount rate
Financial assets at FVOCI:				
Debt securities		1,934,498	DCF Model	Discount rate
Financial liabilities				
Financial liabilities at FVTPL:				
Derivative liabilities for trading		687,389	DCF Model	Discount rate
Hedging derivative liabilities		366,212	DCF Model	Discount rate

7) The valuation techniques and significant unobservable input variables of Level 3 financial instruments subsequently measured at fair value as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

		Fair value (Korean won in million)	Valuation techniques	Significant unobservable input factors	Range	Relationship between unobservable input factors and fair value estimates
Financial assets at FVTPL:						
Unlisted stock	₩	7,957	NAV Methods	-	-	-
Beneficiary certificates		448,477				
Paid-in capital		139,430				
Loans		5,505	LSMC Simulation	Volatility	17.54%	If volatility is increased(decreased), fair value is increased (decreased).
Derivatives		250,865	Binomial Model Hull-White Model	Volatility Correlation	22.62% -0.8 ~ 1.0	If volatility is increased(decreased)/ if correlation is increased(decreased), fair value is increased (decreased).
Hedging derivative assets						
Derivatives	₩	15,615	Hull-White Model	Correlation	-0.8 ~ 1.0	If correlation is increased(decreased), fair value is increased (decreased).
Financial assets at FVOCI:						
Unlisted stock	₩	8,886,980	DCF Model Binomial Model CCA Methods NAV Methods	Discount rate Growth rate Volatility	7.69% ~ 15.41% 1% 22.62% ~ 25.09%	If discount rate is decreased (increased)/ if growth rate is increased (decreased)/ if volatility is increased(decreased), fair value is increased (decreased).
Paid-in capital		25,233	NAV Methods	-		-
Financial liabilities at FVTPL:						
Derivatives	₩	251,130	Binomial Model Hull-White Model	Volatility Correlation	22.62% -0.8 ~ 1.0	If volatility is increased(decreased)/ if correlation is increased(decreased), fair value is increased (decreased).
Hedging derivative liabilities						
Derivatives	₩	133,447	Hull-White Model	Correlation	-0.8 ~ 1.0	If correlation is increased(decreased), fair value is increased (decreased).

(December 31, 2020)

		Fair value (Korean won in million)	Valuation techniques	Significant unobservable input factors	Range	Relationship between unobservable input factors and fair value estimates
Financial assets at FVTPL:						
Unlisted stock	₩	8,669	NAV Methods	-	-	-
Beneficiary certificates		308,468				
Paid-in capital		118,546				
Loans		10,423	LSMC Simulation	Volatility	22.64%	If volatility is increased(decreased), fair value is increased (decreased).
Derivatives		77,995	Binomial Model Hull-White Model	Volatility Correlation	22.84% -0.8 ~ 1.0	If volatility is increased(decreased)/ if correlation is increased(decreased), fair value is increased (decreased).
Hedging derivative assets						
Derivatives	₩	74,547	Hull-White Model	Correlation	-0.8 ~ 1.0	If correlation is increased(decreased), fair value is increased (decreased).
Financial assets at FVOCI:						
Unlisted stock	₩	8,412,404	DCF Model Binomial Model CCA Methods NAV Methods	Discount rate Growth rate Volatility	7.82% ~ 15.29% 1% 22.84% ~ 32.60%	If discount rate is decreased (increased)/ if growth rate is increased (decreased)/ if volatility is increased(decreased), fair value is increased (decreased).
Paid-in capital		21,463	NAV Methods	-		-
Financial liabilities at FVTPL:						
Derivatives	₩	66,053	Binomial Model Hull-White Model	Volatility Correlation	22.84% -0.8 ~ 1.0	If volatility is increased(decreased)/ if correlation is increased(decreased), fair value is increased (decreased).
Hedging derivative liabilities						
Derivatives	₩	52,758	Hull-White Model	Correlation	-0.8 ~ 1.0	If correlation is increased(decreased), fair value is increased (decreased).

① Changes in Level 3 financial assets that are measured at fair value for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

(2021)

	Beginning balance	Profit (Loss)	Other comprehen-sive income (loss)	Purchases / Issues	Sales / Settlements	Transfers into Level 3 / Transfers out of Level 3	Ending balance
Financial assets							
Securities at FVTPL	₩ 435,683	₩ 23,294	₩ -	₩ 174,683	₩ (37,796)	₩ -	₩ 595,864
Loans at FVTPL	10,423	505	-	5,000	(10,423)	-	5,505
Derivative assets for trading	77,995	84,501	-	89,495	(1,126)	-	250,865
Hedging derivative assets	74,547	(45,424)	-	-	(13,508)	-	15,615
Financial assets at FVOCI	8,433,866	-	170,286	380,521	(72,460)	-	8,912,213
Total	₩ 9,032,514	₩ 62,876	₩ 170,286	₩ 649,699	₩ (135,313)	₩ -	₩ 9,780,062
Financial liabilities							
Derivative liabilities for trading	₩ 66,053	₩ 96,708	₩ -	₩ 89,495	₩ (1,126)	₩ -	₩ 251,130
Hedging derivative liabilities	52,758	58,888	-	21,801	-	-	133,447
Total	₩ 118,811	₩ 155,596	₩ -	₩ 111,296	₩ (1,126)	₩ -	₩ 384,577

(2020)

	Beginning balance	Profit (Loss)	Other comprehen-sive income (loss)	Purchases / Issues	Sales / Settlements	Transfers into Level 3 / Transfers out of Level 3	Ending balance
Financial assets							
Securities at FVTPL	₩ 329,105	₩ 1,474	₩ -	₩ 157,057	₩ (51,953)	₩ -	₩ 435,683
Loans at FVTPL	11,074	191	-	-	(842)	-	10,423
Derivative assets for trading	195,338	(52,212)	-	18,250	(83,381)	-	77,995
Hedging derivative assets	22,686	51,861	-	-	-		74,547
Financial assets at FVOCI	7,957,930	-	267,138	208,798	-	-	8,433,866
Total	₩ 8,516,133	₩ 1,314	₩ 267,138	₩ 384,105	₩ (136,176)	₩ -	₩ 9,032,514
Financial liabilities							
Derivative liabilities for trading	₩ 190,902	₩ (59,718)	₩ -	₩ 18,250	₩ (83,381)	₩ -	₩ 66,053
Hedging derivative liabilities	58,298	(5,945)	-	14,976	(14,571)	-	52,758
Total	₩ 249,200	₩ (65,663)	₩ -	₩ 33,226	₩ (97,952)	₩ -	₩ 118,811

② In relation to changes in Level 3 of the fair value hierarchy, total gains or losses recognized in profit or loss for the year and total gains or losses for financial instruments held at the end of the reporting period in the separate statement of comprehensive income for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	Net gain (loss) from financial investments	
	2021	2020
Total gains (losses) on financial assets held at the end of year	₩ 62,876	₩ 1,314
Total gains (losses) on financial liabilities held at the end of year	155,596	(65,663)
Total gains (losses) included in profit or loss for the year	₩ 218,472	₩ (64,349)

③ The sensitivity of fair value analysis for the Level 3 financial instruments

The Bank performed the sensitivity analysis for the Level 3 financial instruments for which fair value would be measured differently upon reasonably possible alternative assumptions. The Bank classified the effect from changes upon the alternative assumptions into favorable effect and unfavorable effect and presented the most favorable effect or the most unfavorable effect in the table hereunder. Stocks are the financial instruments subject to sensitivity analysis, which are classified as Level 3 and of which changes in fair value are recognized as other comprehensive income. Meanwhile, equity instruments, which are recognized as cost among the financial instruments and are classified as Level 3 are excluded from the sensitivity analysis.

Sensitivity analysis details per market risk variable of each Level 3 financial instrument held and measured at fair value as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

Details(*1)	Profit (loss)		Other comprehensive income (loss)	
	Favorable	Unfavorable	Favorable	Unfavorable
Financial assets:				
Loans at FVTPL (*2)	₩ -	₩ -	₩ -	₩ -
Derivative assets for trading (*2)	53	(57)	-	-
Financial assets at FVOCI (*2,3)	-	-	24,258	(21,722)
Total	₩ 53	₩ (57)	₩ 24,258	₩ (21,722)
Financial liabilities:				
Derivative liabilities for trading (*2)	₩ 15	₩ (14)	₩ -	₩ -

(December 31, 2020)

Details(*1)	Profit (loss)		Other comprehensive income (loss)	
	Favorable	Unfavorable	Favorable	Unfavorable
Financial assets:				
Loans at FVTPL (*2)	₩ 43	₩ (30)	₩ -	₩ -
Derivative assets for trading (*2)	4	(4)	-	-
Financial assets at FVOCI (*2,3)	-	-	32,469	(28,467)
Total	₩ 47	₩ (34)	₩ 32,469	₩ (28,467)
Financial liabilities:				
Derivative liabilities for trading (*2)	₩ 257	₩ (254)	₩ -	₩ -

(*1) The above level 3 financial instruments exclude which are practically impossible to perform sensitivity analysis effected by input variables amounting to ₩(649,942) million and ₩(267,920)million as of December 31, 2021 and 2020, respectively.
(*2) Changes in fair value are computed by increasing or decreasing the volatility of the underlying asset by 10%, which are unobservable inputs.
(*3) Changes in fair value of stocks are computed by increasing or decreasing growth rate by 0.5% and discount rate by 1%, which are unobservable inputs.

5-2. Classification by category of financial instruments

The carrying amounts of each category of financial assets and financial liabilities as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

	Financial assets at FVTPL	Financial assets at amortized cost	Financial assets at FVOCI	Hedging derivative assets	Total
Financial assets:					
Cash and due from financial institutions	₩ -	₩ 4,462,685	₩ -	₩ -	₩ 4,462,685
Financial assets at FVTPL	2,598,204	-	-	-	2,598,204
Hedging derivative assets	-	-	-	561,911	561,911
Loans at amortized cost	-	77,458,119	-	-	77,458,119
Financial investments	-	931,296	11,814,063	-	12,745,359
Other financial assets	-	838,645	-	-	838,645
Total	₩ 2,598,204	₩ 83,690,745	₩ 11,814,063	₩ 561,911	₩ 98,664,923

	Financial liabilities at FVTPL	Financial liabilities at amortized cost	Hedging derivative liabilities	Total
Financial liabilities:				
Financial liabilities at FVTPL	₩ 768,115	₩ -	₩ -	₩ 768,115
Hedging derivative liabilities	-	-	661,057	661,057
Borrowings	-	5,576,909	-	5,576,909
Debentures	-	76,486,053	-	76,486,053
Other financial liabilities	-	1,825,280	-	1,825,280
Total	₩ 768,115	₩ 83,888,242	₩ 661,057	₩ 85,317,414

(December 31, 2020)

	Financial assets at FVTPL	Financial assets at amortized cost	Financial assets at FVOCI	Hedging derivative assets	Total
Financial assets:					
Cash and due from financial institutions	₩ -	₩ 4,025,737	₩ -	₩ -	₩ 4,025,737
Financial assets at FVTPL	3,478,402	-	-	-	3,478,402
Hedging derivative assets	-	-	-	1,499,766	1,499,766
Loans at amortized cost	-	73,407,381	-	-	73,407,381
Financial investments	-	505,876	10,536,535	-	11,042,411
Other financial assets	-	792,202	-	-	792,202
Total	₩ 3,478,402	₩ 78,731,196	₩ 10,536,535	₩ 1,499,766	₩ 94,245,899

	Financial liabilities at FVTPL	Financial liabilities at amortized cost	Hedging derivative liabilities	Total
Financial liabilities:				
Financial liabilities at FVTPL	₩ 753,442	₩ -	₩ -	₩ 753,442
Hedging derivative liabilities	-	-	418,970	418,970
Borrowings	-	6,076,631	-	6,076,631
Debentures	-	72,641,777	-	72,641,777
Other financial liabilities	-	2,372,002	-	2,372,002
Total	₩ 753,442	₩ 81,090,410	₩ 418,970	₩ 82,262,822

5-3. Offset of financial instruments

The Bank holds the financial instruments, receivable and payable spot exchange which grant it the rights to offset in case of default, insolvency, or bankruptcy of the counterparties though it does not meet the criteria for offsetting of K-IFRS No. 1032. Cash collaterals do not meet the offsetting criteria in K-IFRS No. 1032, but they can be set off with net amounts of financial instruments, receivable and payable spot exchange.

The effects of netting agreements as of December 31, 2021 and 2020 are as follow (Korean won in millions):

(December 31, 2021)

	Gross amounts of recognized financial assets (liabilities)	Gross amounts of recognized financial liabilities (assets) to be setoff	Net amounts of financial assets (liabilities) presented in the separate statements of financial position	Amount that is not offset in the separate statements of financial position		Net amount
				Financial instruments	Cash collateral	
Financial assets:						
Derivatives	₩ 1,515,937	₩ -	₩ 1,515,937	₩ (551,646)	₩ (267,064)	₩ 697,227
Receivable spot exchange	619,798	-	619,798	(590,003)	-	29,795
Total	₩ 2,135,735	₩ -	₩ 2,135,735	₩ (1,141,649)	₩ (267,064)	₩ 727,022
Financial liabilities:						
Derivatives	₩ 1,428,482	₩ -	₩ 1,428,482	₩ (551,646)	₩ (261,248)	₩ 615,588
Payable spot exchange	590,003	-	590,003	(590,003)	-	-
Total	₩ 2,018,485	₩ -	₩ 2,018,485	₩ (1,141,649)	₩ (261,248)	₩ 615,588

(December 31, 2020)

	Gross amounts of recognized financial assets (liabilities)	Gross amounts of recognized financial liabilities (assets) to be setoff	Net amounts of financial assets (liabilities) presented in the separate statements of financial position	Amount that is not offset in the separate statements of financial position		Net amount
				Financial instruments	Cash collateral	
Financial assets:						
Derivatives	₩ 2,510,945	₩ -	₩ 2,510,945	₩ (699,981)	₩ (878,186)	₩ 932,778
Receivable spot exchange	10,860	-	10,860	(10,860)	-	-
Total	₩ 2,521,805	₩ -	₩ 2,521,805	₩ (710,841)	₩ (878,186)	₩ 932,778
Financial liabilities:						
Derivatives	₩ 1,170,290	₩ -	₩ 1,170,290	₩ (699,981)	₩ (115,544)	₩ 354,765
Payable spot exchange	10,860	-	10,860	(10,860)	-	-
Total	₩ 1,181,150	₩ -	₩ 1,181,150	₩ (710,841)	₩ (115,544)	₩ 354,765

5-4. Transfer of financial assets

The Bank continues to recognize the financial assets related to repurchase agreements on the statement of financial position since those transactions are not qualified for derecognition even though the Bank transfers the financial assets. Financial asset is sold under a repurchase agreements to repurchase some asset at fixed price. Thus, the Bank retains substantially all the risks and rewards of ownership of the financial asset. . Details of carrying amount of assets transferred and relevant liabilities as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Dec. 31, 2021		Dec. 31, 2020	
	Carrying amount of transferred assets	Carrying amount of relevant liabilities	Carrying amount of transferred assets	Carrying amount of relevant liabilities
Securities sold under repurchase agreement	₩ 619,798	₩ 590,003	₩ -	₩ -

6. OPERATING SEGMENT:

Though the Bank conducts business activities related to financial services, in accordance with relevant laws, such as the Export-Import Bank of Korea Act, it does not report separate segment information, as management considers the Bank to be operating under one core business. As the Bank's originating location for all transactions is in Korea, the geographical information for revenue and non-current assets is omitted.

7. CASH AND DUE FROM FINANCIAL INSTITUTIONS:

(1) Cash and cash equivalents as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Detail	Dec. 31, 2021	Dec. 31, 2020
Due from financial institutions in local currency	₩ 550,348	₩ 1,176,870
Due from financial institutions in foreign currencies	3,912,337	2,848,867
Subtotal	4,462,685	4,025,737
Restricted due from financial institutions	(770,103)	(554,502)
Due from financial institutions with original maturities of more than three months at acquisition date	(545,625)	(400,000)
Subtotal	(1,315,728)	(954,502)
Total (*1)	₩ 3,146,957	₩ 3,071,235

(*1) Equal to the cash and cash equivalents as presented on the separate statements of cash flows.

(2) Details of due from financial institutions as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Dec. 31, 2021		Dec. 31, 2020	
Detail	Amount	Interest (%)	Amount	Interest (%)
Due from financial institutions in local currency:				
Demand deposits	₩ 1,076	-	₩ 1,061	-
Time deposits	490,000	0.89~2.08	948,301	0.72~0.94
Certificate of deposits	55,625	1.10	223,000	0.84
Others	3,500	0.85	3,500	0.35
Margin for derivatives	147	-	1,008	-
Subtotal	550,348		1,176,870	
Due from financial institutions in foreign currencies:				
Demand deposits	463,732	0.10~3.00	250,863	0.00~3.00
On demand	2,570,107	1.50~4.50	1,928,442	1.00~7.80
Offshore demand deposits	108,542	-	116,068	-
Others	302,748	-	190,940	-
Margin for derivatives	467,208	-	362,554	-
Subtotal	3,912,337		2,848,867	
Total	₩ 4,462,685		₩ 4,025,737	

(3) Restricted due from financial institutions as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Detail	Financial Institution	Dec. 31, 2021	Dec. 31, 2020	Reason for restriction
Others	DEUTSCHE BANK TRUST COMPANY AMERICAS and others	₩ 770,103	₩ 554,502	Credit Support Annex (CSA) for derivative transactions

8. FINANCIAL ASSETS AT FVTPL:

Details of financial assets at FVTPL as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Dec. 31, 2021	Dec. 31, 2020
Debt securities in local currency		
Paid-in capital	₩ 128,230	₩ 107,377
Beneficiary certificates	1,264,654	2,133,661
Subtotal	1,392,884	2,241,038
Debt securities in foreign currencies		
Bonds	-	5,314
Paid-in capital	11,200	11,169
Beneficiary certificates	226,207	189,300
Subtotal	237,407	205,783
Equity securities in foreign currency stocks		
Stocks	7,957	8,669
Loans at FVTPL		
Private placement corporate bonds	5,505	10,423
Derivative assets for trading		
Equity related	425	1,310
Interest rates related	578,475	529,715
Foreign currencies related	375,551	481,464
Subtotal	954,451	1,012,489
Total	₩ 2,598,204	₩ 3,478,402

9. FINANCIAL INVESTMENTS:

Details of financial investments as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Dec. 31, 2021	Dec. 31 2020
Financial assets at FVOCI		
Debt securities in local currency		
National bond	₩ 1,043,724	₩ 1,052,310
Equity securities in local currency		
Stocks	9,012,604	8,580,575
Paid-in capital	25,233	21,463
Subtotal	9,037,837	8,602,038
Debt securities in foreign currencies		
Corporate bonds and etc. (*1)	1,732,502	882,187
Securities at amortized cost		
Debt securities in local currencies		
National bond	100,349	100,732
Debt securities in foreign currencies		
Corporate bonds and etc. (*1)	830,947	405,144
Total	₩ 12,745,359	₩ 11,042,411

(*1) It includes debt securities, which are pledged as collateral amounting to ₩796,269 million and ₩125,457 million as of December 31, 2021 and 2020, respectively.

10. LOANS AT AMORTIZED COST:

Loans as presented below exclude loan valuation adjustment related to fair value hedging amounting to ₩(2,723) million and ₩(14,382) million as of December 31, 2021 and 2020, respectively.

(1) Details of loans as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Detail	Dec. 31, 2021	Dec. 31, 2020
Loans in local currency	Loans for export	₩ 15,845,235	₩ 14,961,693
	Loans for foreign investments	2,684,185	2,648,893
	Loans for import	4,704,973	3,929,944
	Troubled Debt Restructuring	838,370	1,812,100
	Others	164,590	290,544
	Subtotal	24,237,353	23,643,174
Loans in foreign currencies	Loans for export	23,126,917	22,022,802
	Loans for foreign investments	26,718,798	22,624,489
	Loans for rediscounted trading notes	71,130	467,840
	Loans for import	1,074,175	1,206,460
	Overseas funding loans	595,170	492,471
	Others	27,059	26,258
	Subtotal	51,613,249	46,840,320
Others	Domestic usance bills	342,594	195,732
	Foreign-currency bills bought	966,183	1,407,927
	Advance payments on acceptances and guarantees	190,325	42,266
	Call loans	1,337,100	2,649,600
	Interbank loans in foreign currency	1,066,950	1,206,593
	Private placement corporate bonds in local currency	240,800	302,400
	Subtotal	4,143,952	5,804,518
	Total	79,994,554	76,288,012
Net deferred loan origination fees and costs		(368,209)	(364,854)
Allowance for loan losses		(2,165,503)	(2,501,395)
	Total	₩ 77,460,842	₩ 73,421,763

(2) Loans classified by type of customers as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

	Detail	Loans in local currency	Loans in foreign currencies	Others	Total	Ratio (%)
Customer	Large enterprise	₩ 9,260,632	₩ 32,241,314	₩ 898,326	₩ 42,400,272	61.73
	Small and medium sized enterprise	6,722,318	6,074,773	249,534	13,046,625	18.99
	Public sector and others	4,099,434	8,996,424	150,681	13,246,539	19.28
	Subtotal	20,082,384	47,312,511	1,298,541	68,693,436	100.00
	Net deferred loan origination fees and costs	(7,812)	(358,586)	-	(366,398)	
	Allowance for loan losses	(514,718)	(1,447,794)	(190,211)	(2,152,723)	
	Subtotal	19,559,854	45,506,131	1,108,330	66,174,315	
Financial institution	Bank	4,154,969	1,395,090	1,613,104	7,163,163	63.38
	Others	-	2,905,648	1,232,307	4,137,955	36.62
	Subtotal	4,154,969	4,300,738	2,845,411	11,301,118	100.00
	Net deferred loan origination fees and costs	-	(1,811)	-	(1,811)	
	Allowance for loan losses	(334)	(11,685)	(761)	(12,780)	
	Subtotal	4,154,635	4,287,242	2,844,650	11,286,527	
	Total	₩ 23,714,489	₩ 49,793,373	₩ 3,952,980	₩ 77,460,842	

(December 31, 2020)

	Detail	Loans in local currency	Loans in foreign currencies	Others	Total	Ratio (%)
Customer	Large enterprise	₩ 11,187,035	₩ 28,144,549	₩ 919,613	₩ 40,251,197	62.18
	Small and medium sized enterprise	6,892,693	5,269,741	243,374	12,405,808	19.17
	Public sector and others	2,738,841	9,320,521	8,641	12,068,003	18.65
	Subtotal	20,818,569	42,734,811	1,171,628	64,725,008	100.00
	Net deferred loan origination fees and costs	(7,075)	(356,206)	-	(363,281)	
	Allowance for loan losses	(1,041,301)	(1,404,259)	(45,460)	(2,491,020)	
	Subtotal	19,770,193	40,974,346	1,126,168	61,870,707	
Financial institution	Bank	2,824,605	1,742,053	3,223,937	7,790,595	67.38
	Others	-	2,363,456	1,408,953	3,772,409	32.62
	Subtotal	2,824,605	4,105,509	4,632,890	11,563,004	100.00
	Net deferred loan origination fees and costs	-	(1,573)	-	(1,573)	
	Allowance for loan losses	(248)	(9,595)	(532)	(10,375)	
	Subtotal	2,824,357	4,094,341	4,632,358	11,551,056	
	Total	₩ 22,594,550	₩ 45,068,687	₩ 5,758,526	₩ 73,421,763	

(3) Changes in allowance for loan losses for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

(2021)

	12 months expected credit losses	Lifetime expected credit losses	Credit-impaired financial assets	Total
Beginning balance	₩ 321,298	₩ 1,116,426	₩ 1,063,671	₩ 2,501,395
- Transfer to 12 months expected credit losses	60,430	(657)	(59,773)	-
- Transfer to lifetime expected credit losses	(9,586)	59,601	(50,015)	-
- Transfer to credit-impaired financial assets	(3,255)	(212,903)	216,158	-
Written-off	-	-	(13,459)	(13,459)
Collection of written-off loans	-	-	13,711	13,711
Loan-for-equity swap	-	-	(463,894)	(463,894)
Others	(28,201)	(398,336)	-	(426,537)
Unwinding effect	-	-	(9,775)	(9,775)
Foreign exchange translation	10,049	40,174	25,167	75,390
Additional provisions	(20,717)	(6,420)	515,809	488,672
Ending balance	₩ 330,018	₩ 597,885	₩ 1,237,600	₩ 2,165,503

(2020)

	12 months expected credit losses	Lifetime expected credit losses	Credit-impaired financial assets	Total
Beginning balance	₩ 286,290	₩ 758,393	₩ 1,131,277	₩ 2,175,960
- Transfer to 12 months expected credit losses	4,272	(4,272)	-	-
- Transfer to lifetime expected credit losses	(12,303)	27,636	(15,333)	-
- Transfer to credit-impaired financial assets	(1,826)	(80,629)	82,455	-
Written-off	-	-	(218,764)	(218,764)
Collection of written-off loans	51,904	-	207	52,111
Loan-for-equity swap	-	-	(8,403)	(8,403)
Others	(26,808)	-	-	(26,808)
Unwinding effect	(69)	(582)	(13,198)	(13,849)
Foreign exchange translation	(5,684)	(37,818)	(13,259)	(56,761)
Additional provisions	25,522	453,698	118,689	597,909
Ending balance	₩ 321,298	₩ 1,116,426	₩ 1,063,671	₩ 2,501,395

11. INVESTMENTS IN ASSOCIATES AND SUBSIDIARIES:

(1) Details of investments in associates and subsidiaries as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

Company	Detail	Location	Business	Year-end	Ownership (%)	Net asset (*1)	Carrying amount
KEXIM Bank UK Limited	Subsidiary	United Kingdom	Financial service	December	100.00	₩ 152,401	₩ 138,312
KEXIM Vietnam Leasing Co.	Subsidiary	Vietnam	Financial service	December	100.00	70,499	57,755
PT.KOEXIM Mandiri Finance	Subsidiary	Indonesia	Financial service	December	85.00	22,338	25,270
KEXIM Asia Limited	Subsidiary	Hong Kong	Financial service	December	100.00	198,150	167,839
EXIM PLUS Co., Ltd.	Subsidiary	Korea	Service	December	100.00	1,180	950
Credit Guarantee and Investment Fund (*2)	Associate	Philippines	Financial service	December	15.07	230,767	197,820
KTB Newlake Global Healthcare PEF	Associate	Korea	Financial service	December	25.00	7,677	8,463
Korea Aerospace Industries. Ltd.	Associate	Korea	Manufacturing	December	26.41	335,227	968,744
Daewoo Shipbuilding & Marine Engineering Co., Ltd (*4)	Associate	Korea	Shipbuilding	December	-	-	-
Total							₩ 1,565,153

(December 31, 2020)

Company	Detail	Location	Business	Year-end	Ownership (%)	Net asset (*1)	Carrying amount
KEXIM Bank UK Limited	Subsidiary	United Kingdom	Financial service	December	100.00	₩ 144,182	₩ 138,312
KEXIM Vietnam Leasing Co.	Subsidiary	Vietnam	Financial service	December	100.00	63,446	57,755
PT.KOEXIM Mandiri Finance	Subsidiary	Indonesia	Financial service	December	85.00	20,890	25,270
KEXIM Asia Limited	Subsidiary	Hong Kong	Financial service	December	100.00	180,097	167,839
EXIM PLUS Co., Ltd.	Subsidiary	Korea	Service	December	100.00	1,016	950
Korea Asset Management Corporation	Associate	Korea	Financial service	December	23.41	473,327	380,520
Credit Guarantee and Investment Fund (*2)	Associate	Philippines	Financial service	December	13.39	184,173	171,359
DAESUN Shipbuilding & Engineering Co., Ltd. (*3)	Associate	Korea	Shipbuilding	December	83.03	(333,211)	-
KTB Newlake Global Healthcare PEF	Associate	Korea	Financial service	December	25.00	7,992	8,463
Korea Aerospace Industries. Ltd.	Associate	Korea	Manufacturing	December	26.41	315,473	968,744
Daewoo Shipbuilding & Marine Engineering Co., Ltd (*4)	Associate	Korea	Shipbuilding	December	-	-	-
Total							₩ 1,919,212

(*1) In cases of associates, the amounts represent net asset after considering percentage of ownership.
(*2) As of December 31, 2021 and 2020, this entity is classified into an associate because the Bank has significant influence in the way of representation on the board of directors or equivalent governing body of the investee.
(*3) This entity was under the creditor-led work out programs. The Bank should have at least 75% of the total creditor's loans to have a substantive control based on the creditor's agreement. As the Bank had only 70.60% of the total creditor's loans, this was classified into associates.
(*4) This entity is not an associate with the current ownership; however, considering potential voting rights, the Bank has classified the entity as an associate. The Bank holds convertible bonds issued by the entity amounting to KRW 2,332,832 million.

(2) Changes in investments in associates and subsidiaries for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

(2021)

Company	Detail	Beginning balance	Acquisitions	Disposals (*1)	Impairment loss	Ending balance
KEXIM Bank UK Limited	Subsidiary	₩ 138,312	₩ -	₩ -	₩ -	₩ 138,312
KEXIM Vietnam Leasing Co.	Subsidiary	57,755	-	-	-	57,755
PT.KOEXIM Mandiri Finance	Subsidiary	25,270	-	-	-	25,270
KEXIM Asia Limited	Subsidiary	167,839	-	-	-	167,839
EXIM PLUS Co., Ltd.	Subsidiary	950	-	-	-	950
Korea Asset Management Corporation	Associate	380,520	-	(380,520)	-	-
Credit Guarantee and Investment Fund	Associate	171,359	26,461	-	-	197,820
KTB Newlake Global Healthcare PEF	Associate	8,463	-	-	-	8,463
Korea Aerospace Industries. Ltd.	Associate	968,744	-	-	-	968,744
Daewoo Shipbuilding & Marine Engineering Co., Ltd.	Associate	-	-	-	-	-
Total		₩ 1,919,212	₩ 26,461	₩ (380,520)	₩ -	₩ 1,565,153

(*1) As the Bank did not participate in the Korea Asset Management Corporation's paid-in capital increase and lost its significant influence over the Korea Asset Management Corporation for the year ended December 31, 2021 accordingly, it was reclassified from investments in associates to financial assets at FVOCI.

(2020)

Company	Detail	Beginning balance	Acquisition	Disposals	Impairment loss	Ending balance
KEXIM Bank UK Limited	Subsidiary	₩ 48,460	₩ 89,852	₩ -	₩ -	₩ 138,312
KEXIM Vietnam Leasing Co.	Subsidiary	10,275	47,480	-	-	57,755
PT.KOEXIM Mandiri Finance	Subsidiary	25,270	-	-	-	25,270
KEXIM Asia Limited	Subsidiary	49,139	118,700	-	-	167,839
EXIM PLUS Co., Ltd.	Subsidiary	950	-	-	-	950
Korea Asset Management Corporation	Associate	380,520	-	-	-	380,520
Credit Guarantee and Investment Fund	Associate	143,220	28,139	-	-	171,359
DAESUN Shipbuilding & Engineering Co., Ltd.	Associate	-	-	-	-	-
KTB Newlake Global Healthcare PEF	Associate	10,045	-	(1,582)	-	8,463
KBS-KDB Private Equity Fund	Associate	6,032	-	(6,032)	-	-
Korea Aerospace Industries. Ltd.	Associate	1,110,990	-	-	(142,246)	968,744
Daewoo Shipbuilding & Marine Engineering Co., Ltd.	Associate	-	-	-	-	-
Total		₩ 1,784,901	₩ 284,171	₩ (7,614)	₩ (142,246)	₩ 1,919,212

(3) Summarized financial information of associates and subsidiaries as of and for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

Company		Assets		Liabilities		Operating income (loss)		Profit (Loss) for the period		Total comprehensive income (loss)
KEXIM Bank UK Limited	₩	616,064	₩	463,664	₩	2,651	₩	(22)	₩	8,281
KEXIM Vietnam Leasing Co.		252,008		181,509		1,614		1,400		7,133
PT.KOEXIM Mandiri Finance		167,815		145,477		590		(86)		1,449
KEXIM Asia Limited		735,531		537,381		5,756		4,515		18,221
EXIM PLUS Co., Ltd.		2,004		824		179		164		164
Credit Guarantee and Investment Fund		1,646,972		115,668		35,749		33,329		116,076
KTB Newlake Global Healthcare PEF		30,806		97		(99)		(99)		(99)
Korea Aerospace Industries. Ltd.		5,866,555		4,569,344		57,795		53,040		82,427
Daewoo Shipbuilding & Marine Engineering Co., Ltd.		10,623,210		8,405,626		(1,754,651)		(1,699,829)		(1,699,829)

(December 31, 2020)

Company		Assets		Liabilities		Operating income (loss)		Profit (Loss) for the year		Total comprehensive income (loss)
KEXIM Bank UK Limited	₩	499,074	₩	354,892	₩	1,805	₩	2,748	₩	3,647
KEXIM Vietnam Leasing Co.		204,020		140,574		1,841		1,962		(3,314)
PT.KOEXIM Mandiri Finance		160,964		140,074		(1,437)		(5,948)		(7,623)
KEXIM Asia Limited		544,995		364,898		4,224		3,547		(10,741)
EXIM PLUS Co., Ltd.		1,950		934		166		162		162
Korea Asset Management Corporation		5,844,961		3,823,061		53,888		60,496		66,506
Credit Guarantee and Investment Fund		1,470,605		95,156		27,655		7,367		(38,711)
DAESUN Shipbuilding & Engineering Co., Ltd.		385,557		786,871		(14,586)		(21,702)		(21,702)
KTB Newlake Global Healthcare PEF		32,273		305		1,334		1,334		1,334
Korea Aerospace Industries. Ltd.		5,137,550		3,904,310		141,988		71,274		88,098
Daewoo Shipbuilding & Marine Engineering Co., Ltd.		10,320,775		6,451,804		153,437		86,573		114,107

12. TANGIBLE ASSETS:

(1) Details of tangible assets as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

Detail	Acquisition cost	Accumulated depreciation	Government grants	Carrying amount
Lands	₩ 190,807	₩ -	₩ -	₩ 190,807
Buildings	100,778	(42,116)	(17)	58,645
Leasehold improvements	1,409	(261)	-	1,148
Vehicles	4,251	(3,118)	(4)	1,129
Furniture and fixture	56,296	(39,200)	-	17,096
Construction in progress	1,542	-	-	1,542
Total	₩ 355,083	₩ (84,695)	₩ (21)	₩ 270,367

(December 31, 2020)

Detail	Acquisition cost	Accumulated depreciation	Government grants	Carrying amount
Lands	₩ 190,807	₩ -	₩ -	₩ 190,807
Buildings	100,778	(40,191)	(17)	60,570
Leasehold improvements	218	(46)	-	172
Vehicles	4,535	(3,277)	-	1,258
Furniture and fixture	45,448	(35,623)	-	9,825
Construction in progress	455	-	-	455
Total	₩ 342,241	₩ (79,137)	₩ (17)	₩ 263,087

(2) Changes in tangible assets for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

(2021)

Detail	Beginning balance	Acquisitions	Disposals	Depreciation	Others	Ending balance
Lands	₩ 190,807	₩ -	₩ -	₩ -	₩ -	₩ 190,807
Buildings	60,570	-	-	(1,925)	-	58,645
Leasehold improvements	172	1,192	-	(216)	-	1,148
Vehicles	1,258	323	-	(447)	(5)	1,129
Furniture and fixture	9,825	11,793	(54)	(4,468)	-	17,096
Construction in progress	455	1,087	-	-	-	1,542
Total	₩ 263,087	₩ 14,395	₩ (54)	₩ (7,056)	₩ (5)	₩ 270,367

(2020)

Detail	Beginning balance	Acquisitions	Disposals	Depreciation	Ending balance
Lands	₩ 190,807	₩ -	₩ -	₩ -	₩ 190,807
Buildings	62,496	-	-	(1,926)	60,570
Leasehold improvements	145	60	-	(33)	172
Vehicles	783	858	-	(383)	1,258
Furniture and fixture	10,885	4,034	(2)	(5,092)	9,825
Construction in progress	-	455	-	-	455
Total	₩ 265,116	₩ 5,407	₩ (2)	₩ (7,434)	₩ 263,087

13. INTANGIBLE ASSETS:

(1) Details of intangible assets as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

Detail	Acquisition cost	Accumulated depreciation	Accumulated Impairment losses	Carrying amount
Computer software	₩ 34,750	₩ (23,361)	₩ -	₩ 11,389
System development fees	65,192	(45,785)	-	19,407
Memberships	3,822	-	(166)	3,656
Total	₩ 103,764	₩ (69,146)	₩ (166)	₩ 34,452

(December 31, 2020)

Detail	Acquisition cost	Accumulated depreciation	Accumulated Impairment losses	Carrying amount
Computer software	₩ 28,084	₩ (19,600)	₩ -	₩ 8,484
System development fees	54,729	(38,787)	-	15,942
Memberships	3,822	-	(166)	3,656
Total	₩ 86,635	₩ (58,387)	₩ (166)	₩ 28,082

(2) Changes in intangible assets for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

(2021)

Detail	Beginning balance	Acquisitions	Disposals	Amortization	Reversal of (Additional) impairment	Ending balance
Computer software	₩ 8,484	₩ 6,665	₩ -	₩ (3,760)	₩ -	₩ 11,389
System development fees	15,942	10,463	-	(6,998)	-	19,407
Memberships	3,656	-	-	-	-	3,656
Total	₩ 28,082	₩ 17,128	₩ -	₩ (10,758)	₩ -	₩ 34,452

(2020)

Detail	Beginning balance	Acquisitions	Disposals	Amortization	Reversal of (Additional) impairment	Ending balance
Computer software	₩ 10,756	₩ 1,632	₩ (1)	₩ (3,903)	₩ -	₩ 8,484
System development fees	19,970	3,488	-	(7,516)	-	15,942
Memberships	3,656	-	-	-	-	3,656
Total	₩ 34,382	₩ 5,120	₩ (1)	₩ (11,419)	₩ -	₩ 28,082

14. OTHER ASSETS:

(1) Details of other assets as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Dec. 31, 2021		Dec. 31, 2020	
Other financial assets:				
Guarantee deposits	₩	47,909	₩	39,874
Accounts receivable		34,738		53,102
Accrued income		763,984		728,740
Receivable spot exchange		48		78
Allowances for loan losses on other assets		(8,034)		(29,592)
Subtotal		838,645		792,202
Other assets:				
Advance payments		57		-
Prepaid expenses		9,863		11,440
Current income tax asset		8,782		2,570
Sundry assets		9,351		7,574
Subtotal		28,053		21,584
Total	₩	866,698	₩	813,786

(2) Changes in allowances for loan losses on other assets for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021		2020	
Beginning balance	₩	29,592	₩	7,888
Collection		71		116
Additional provisions (Reversal of provisions)		(22,356)		21,980
Others		727		(392)
Ending balance	₩	8,034	₩	29,592

15. BORROWINGS:

(1) Details of borrowings as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

Detail	Lender	Interest rate (%)	Amount
Call money:			
call money dominated in foreign currencies	WOORI BANK and others	0.19 ~0.25	₩ 652,025
Offshore call money dominated in foreign currencies	KEB HANA BANK	0.27	118,550
Subtotal			770,575
Sales of repurchase agreement:			
Sales of repurchase agreement	STANDARD CHARTERED BANK (HONG KONG) LIMITED	0.11	590,003
Borrowings in foreign currencies:			
Borrowings from the Government	MINISTRY OF ECONOMY AND FINANCE	LIBOR 3M+0.64 ~ LIBOR 3M+0.78	947,309
Long term borrowings from foreign financial institutions	BANK OF AMERICA, N.A, SEOUL BR. (US) and others	LIBOR 3M+0.47 ~ LIBOR 3M+0.55	474,200
Discount on borrowings			
Commercial papers denominated in foreign currencies	CITIBANK N.A., HONG KONG(US) and others	0.21 ~ 0.35	1,689,338
Offshore commercial papers denominated in foreign currencies	CITIBANK N.A., HONG KONG(US) and others	(-)0.57 ~ 0.25	305,785
Others (Foreign banks)	DBS BANK LTD and others	0.05 ~ 0.35	342,594
Others (CSA)	BANK OF AMERICA (VM) and others	0.07	457,105
Subtotal			4,216,331
Total			₩ 5,576,909

(December 31, 2020)

Detail	Lender	Interest rate (%)	Amount
Borrowings in foreign currencies:			
Borrowings from the Government	MINISTRY OF ECONOMY AND FINANCE	LIBOR 3M+0.64 ~ LIBOR 3M+0.78	₩ 1,176,216
Short term borrowings from foreign financial institutions	THE BANK OF TOKYO-MITSUBISHI UFJ, LTD, SEOUL BRANCH	LIBOR 3M+0.38	537,252
Long term borrowings from foreign financial institutions	CREDIT AGRICOLE CIB and others	LIBOR 3M+0.32 ~ LIBOR 3M+0.85	1,686,400
Discount on borrowings			(131)
Commercial papers denominated in foreign currencies	MIZUHO SECURITIES ASIA LTD and others	0.21 ~ 2.33	911,744
Offshore commercial papers denominated in foreign currencies	CITIBANK N.A., HONG KONG And others	(-)0.46 ~ 0.28	225,107
Others (Foreign banks)	DBS BANK LTD and others	0.06 ~ 0.20	195,732
Others (CSA)	BANK OF AMERICA (VM) and others	0.09	1,344,311
Total			₩ 6,076,631

(2) Details of the borrowings from other financial institutions as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

Type	Call-money	Sales of repurchase agreement	Borrowings in foreign currencies	Total
Commercial banks	₩ 770,575	₩ 590,003	₩ 3,269,022	₩ 4,629,600

(December 31, 2020)

Type	Call-money	Borrowings in foreign currencies	Total
Commercial banks	₩ -	₩ 4,900,546	₩ 4,900,546

The above borrowings excluded the present value discounting effect.

16. DEBENTURES:

Details of debentures as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Dec. 31, 2021		Dec. 31, 2020	
Detail	Interest rate (%)	Amount	Interest rate (%)	Amount
Local currencies:				
Floating rate	31-Day+ CD0.06~ 31-Day CD+0.12	₩ 3,100,000	31-Day CD-0.01~ 31-Day CD+0.12	₩ 1,340,000
Fixed rate	0.75~4.70	19,810,000	0.67~4.70	21,465,000
Subtotal		22,910,000		22,805,000
Fair value hedging adjusting		(63,620)		(31,803)
Discount on debentures		(47,322)		(47,141)
Subtotal		22,799,058		22,726,056
Foreign currencies:				
Floating rate	Libor3M+0.20~ Libor3M+1.35	9,766,115	Libor3M+0.30~ Libor3M+1.35	10,543,268
Fixed rate	0.00 ~ 11.09	43,801,187	0.00 ~ 8.50	38,057,286
Subtotal		53,567,302		48,600,554
Fair value hedging adjusting		205,544		1,393,009
Discount on debentures		(85,851)		(77,842)
Subtotal		53,686,995		49,915,721
Total		₩ 76,486,053		₩ 72,641,777

17. PROVISIONS:

(1) Details of provisions as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Dec. 31, 2021		Dec. 31, 2020	
Provisions for acceptances and guarantees	₩	380,983	₩	387,027
Provisions for unused loan commitments		239,482		239,584
Other provisions		1,002		-
Total	₩	621,467	₩	626,611

(2) Changes in provisions for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

(2021)

	Acceptances and guarantees							
	12 months expected credit losses		Lifetime expected credit losses		Credit-impaired financial assets		Total	
Beginning balance	₩	42,507	₩	272,431	₩	72,089	₩	387,027
- Transfer to 12 months expected credit losses		11,480		(6,935)		(4,545)		-
- Transfer to lifetime expected credit losses		(10)		10		-		-
- Transfer to credit-impaired financial assets		(717)		-		717		-
Foreign exchange translation		2,349		12,463		626		15,438
Additional provisions (Reversal of provisions)		(2,625)		33,322		(52,179)		(21,482)
Ending balance	₩	52,984	₩	311,291	₩	16,708	₩	380,983

	Unused loan commitments							
	12 months expected credit losses		Lifetime expected credit losses		Credit-impaired financial assets		Total	
Beginning balance	₩	34,073	₩	188,718	₩	16,793	₩	239,584
- Transfer to 12 months expected credit losses		15,000		-		(15,000)		-
- Transfer to lifetime expected credit losses		-		-		-		-
- Transfer to credit-impaired financial assets		(2)		-		2		-
Foreign exchange translation		1,026		-		41		1,067
Additional provisions (Reversal of provisions)		(12,457)		11,071		217		(1,169)
Ending balance	₩	37,640	₩	199,789	₩	2,053	₩	239,482

(2020)

	Acceptances and guarantees			
	12 months expected credit losses	Lifetime expected credit losses	Credit-impaired financial assets	Total
Beginning balance	₩ 48,514	₩ 209,840	₩ 48,087	₩ 306,441
- Transfer to 12 months expected credit losses	187	(187)	-	-
- Transfer to lifetime expected credit losses	(4,107)	4,107	-	-
- Transfer to credit-impaired financial assets	(40)	-	40	-
Foreign exchange translation	(1,369)	(10,113)	(997)	(12,479)
Additional provisions (Reversal of provisions)	(678)	68,784	24,959	93,065
Ending balance	₩ 42,507	₩ 272,431	₩ 72,089	₩ 387,027

	Unused loan commitments			
	12 months expected credit losses	Lifetime expected credit losses	Credit-impaired financial assets	Total
Beginning balance	₩ 23,771	₩ 200,695	₩ 8,474	₩ 232,940
- Transfer to 12 months expected credit losses	2,268	(2,268)	-	-
- Transfer to lifetime expected credit losses	(45)	474	(429)	-
- Transfer to credit-impaired financial assets	(1)	-	1	-
Foreign exchange translation	(382)	(28)	(38)	(448)
Additional provisions (Reversal of provisions)	8,462	(10,155)	8,785	7,092
Ending balance	₩ 34,073	₩ 188,718	₩ 16,793	₩ 239,584

18. RETIREMENT BENEFIT PLAN:

The Bank operates both defined benefit plan and defined contribution plan.

(1) Defined benefit plan

The Bank operates defined benefit plans, which have the following characteristics:

- The entity has the obligation to pay the agreed benefits to all its current and past employees.
- The entity is liable for actuarial risk (excess of actual payment against expected amount) and investment risk.

The present value of the defined benefit obligation recognized in the separate statements of financial position is calculated annually by independent actuaries in accordance with actuarial valuation method. The present value of the defined benefit obligation is calculated using the projected unit credit method ("PUC"). The data used in the PUC, such as interest rates, future salary increase rate, mortality rate, consumer price index and expected return on plan asset, are based on observable market data and historical data, which are annually updated.

Actuarial assumptions may differ from actual results due to change in the market, economic trend and mortality trend, which may affect defined benefit obligation liabilities and future payments. Actuarial gains and losses arising from changes in actuarial assumptions are recognized in the period incurred through other comprehensive income or loss.

(2) Details of net defined benefit liabilities (assets) as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Dec. 31, 2021		Dec. 31, 2020	
Present value of defined benefit obligations	₩	119,697	₩	111,011
Fair value of plan assets		(133,302)		(115,812)
Net defined benefit liabilities (assets)	₩	(13,605)	₩	(4,801)

(3) Changes in net defined benefit obligations for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

(2021)

	Present value of the defined benefit obligations	Plan assets	Net defined benefit liabilities (assets)
Beginning balance	₩ 111,011	₩ (115,812)	₩ (4,801)
Contributions from the employer	-	(20,500)	(20,500)
Current-service cost	11,407	-	11,407
Interest expense (income)	3,465	(3,640)	(175)
Actuarial gains and losses arising from changes in demographic assumptions	512	-	512
Actuarial gains and losses arising from changes in financial assumptions	(8,839)	1,603	(7,236)
Actuarial gains and losses arising from experience adjustments	(2,524)	-	(2,524)
Past-service cost	9,502	-	9,502
Management fees on plan assets	-	206	206
Benefits paid	(4,837)	4,841	4
Ending balance	₩ 119,697	₩ (133,302)	₩ (13,605)

(2020)

	Present value of the defined benefit obligations	Plan assets	Net defined benefit liabilities (assets)
Beginning balance	₩ 100,628	₩ (103,871)	₩ (3,243)
Contributions from the employer	-	(14,700)	(14,700)
Current-service cost	11,100	-	11,100
Interest expense (income)	3,045	(3,156)	(111)
Actuarial gains and losses arising from changes in demographic assumptions	1,945	-	1,945
Actuarial gains and losses arising from changes in financial assumptions	(834)	1,235	401
Actuarial gains and losses arising from experience adjustments	885	-	885
Management fees on plan assets	-	190	190
Benefits paid	(5,758)	4,490	(1,268)
Ending balance	₩ 111,011	₩ (115,812)	₩ (4,801)

(4) Details of fair value of plan assets as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Dec. 31, 2021	Dec. 31, 2020
Cash and cash equivalent	₩ 49,707	₩ 14,600
Others	83,595	101,212
Total	₩ 133,302	₩ 115,812

(5) Actuarial assumptions used in retirement benefit obligations assessment as of December 31, 2021 and 2020 are as follows:

	Dec. 31, 2021	Dec. 31, 2020
Discount rate	3.64%	3.19%
Expected wage growth rate	1.40%	1.63%

(6) Assuming that all the other assumptions remain unchanged, the effect of changes in the significant actuarial assumptions which were made within the reasonable limit on retirement benefit obligations as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

Detail	1%p Increase	1%p Decrease
Change of discount rate	₩ (11,774)	₩ 13,924
Change of future salary increase rate	14,036	(11,162)

(December 31, 2020)

Detail	1%p Increase	1%p Decrease
Change of discount rate	₩ (11,748)	₩ 13,979
Change of future salary increase rate	14,009	(12,032)

The above sensitivity analysis does not present any actual changes in the retirement benefit obligations as there is no change in actuarial assumptions which is independently made due to the correlation among the assumptions. In addition, the actuarial present value of promised retirement benefits in the sensitivity analysis is determined using the projected unit credit method, which is used in the calculation of the retirement benefit obligations in the separate financial statements.

(7) Retirement benefit cost incurred from the defined contribution plan for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Retirement benefits	₩ 2,977	₩ 753

19. OTHER LIABILITIES:

(1) Details of other liabilities as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Dec. 31, 2021	Dec. 31, 2020
Other financial liabilities:		
Financial guarantee contract liabilities	₩ 1,140,299	₩ 1,182,101
Foreign exchanges payable	8	543,678
Accounts payable	23,806	24,639
Accrued expenses	660,814	621,424
Guarantee deposit received	353	160
Subtotal	1,825,280	2,372,002
Other liabilities:		
Allowance for credit loss in derivatives	39,670	37,765
Unearned income	101,831	148,608
Current tax payable	-	11,426
Sundry liabilities	18,339	33,357
Subtotal	159,840	231,156
Total	₩ 1,985,120	₩ 2,603,158

(2) Changes in financial guarantee contract liabilities for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Beginning balance	₩ 1,182,101	₩ 1,109,018
Foreign exchange translation	58,185	(39,192)
Additional financial guarantee contract liabilities (Reversal of financial guarantee contract liabilities)	(75,587)	117,983
Others(*1)	(24,400)	(5,708)
Ending balance	₩ 1,140,299	₩ 1,182,101

(*1) Others are the effects of the change due to newly occurrence and the arrival of maturity of financial guarantee contracts evaluated by fair value the first time and the changes in discount rates.

20. DERIVATIVES:

The Bank operates derivatives both for trading and hedging purposes. Derivatives held for trading purpose are included in financial assets and liabilities at FVTPL.

(1) Fair value hedge

Fair value hedge is a hedge of the exposure to changes in fair value of a recognized asset or liability or an unrecognized firm commitment, or an identified portion of such an asset, liability or firm commitment, that is attributable to a particular risk and could affect profit or loss. When applying fair value hedge, the gain or loss on the hedged item attributable to the hedged risk shall adjust the carrying amount of the hedged item and be recognized in profit or loss.

The Bank shall discontinue prospectively the fair value hedge if the hedging instrument expires or is sold, terminated or exercised, the hedge no longer meets the criteria for hedge accounting or the Bank revokes the designation. Any adjustment arising from the gain or loss on the hedged item attributable to the hedged risk to the carrying amount of a hedged financial instrument for which the effective interest method is used shall be amortized to profit or loss.

The Bank uses interest rate swaps for hedging changes of fair values in hedged items arising from changes in interest rates. The Bank also uses currency swaps for hedging changes of fair values in hedged items arising from changes in foreign exchange rates

(2) Cash flow hedge

Cash flow hedge is a hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with a recognized asset or liability (such as all or some future interest payments on variable rate debt) or a highly probable forecast transaction and could affect profit or loss. When applying cash flow hedge, the portion of the gain or loss on the hedging instrument that is determined to be an effective hedge shall be recognized in other comprehensive income; and the ineffective portion of the gain or loss on the hedging instrument are recognized in profit or loss. If a hedge of a forecast transaction subsequently results in the recognition of a financial asset or a financial liability, the associated gains or losses that were recognized in other comprehensive income are reclassified from equity to profit or loss as a reclassification adjustment in the same period or periods during which the hedged forecast cash flows affect profit or loss.

The Bank shall discontinue prospectively the cash flow hedge if hedging instrument expires or is sold, terminated or exercised, the hedge no longer meets the criteria for hedge accounting or the Bank revokes the designation. The forecasted transaction is no longer expected to occur, any related cumulative gain or loss on the hedging instrument that has been recognized in other comprehensive income from the period when the hedge was effective are reclassified from equity to profit or loss as a reclassification adjustment.

The Bank uses interest rate swaps for hedging changes of cash flows in hedged items arising from changes in interest rates. The Bank also uses currency swaps for hedging changes of cash flows in hedged items arising from changes in foreign exchange.

(3) Details of derivative assets and liabilities as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

Detail		Notional amount	Derivative assets							
			Fair value hedge		Cash flow hedge		Trading		Total	
Interest:										
Interest rate swaps	₩	47,235,133	₩	275,487	₩	-	₩	578,475	₩	853,962
Currency:										
Currency forwards		5,871,649		-		-		57,739		57,739
Currency swaps		26,112,779		282,508		3,916		317,812		604,236
Subtotal		31,984,428		282,508		3,916		375,551		661,975
Stock:										
Stock options		46,952		-		-		425		425
Total	₩	79,266,513	₩	557,995	₩	3,916	₩	954,451	₩	1,516,362

Detail		Notional amount	Derivative liabilities							
			Fair value hedge		Cash flow hedge		Trading		Total	
Interest:										
Interest rate swaps	₩	47,235,133	₩	147,373	₩	-	₩	367,018	₩	514,391
Currency:										
Currency forwards		5,871,649		-		-		40,909		40,909
Currency swaps		26,112,779		513,684		-		359,498		873,182
Subtotal		31,984,428		513,684		-		400,407		914,091
Stock:										
Stock options		46,952		-		-		690		690
Total	₩	79,266,513	₩	661,057	₩	-	₩	768,115	₩	1,429,172

(December 31, 2020)

Detail	Notional amount	Derivative assets: Fair value hedge	Cash flow hedge	Trading	Total
Interest:					
Interest rate swaps	₩ 39,330,211	₩ 636,346	₩ -	₩ 529,715	₩ 1,166,061
Currency:					
Currency forwards	5,110,583	-	-	96,037	96,037
Currency swaps	27,596,486	863,420	-	385,427	1,248,847
Subtotal	32,707,069	863,420	-	481,464	1,344,884
Stock:					
Stock options	46,952	-	-	1,310	1,310
Total	₩ 72,084,232	₩ 1,499,766	₩ -	₩ 1,012,489	₩ 2,512,255

Detail	Notional amount	Derivative liabilities: Fair value hedge	Cash flow hedge	Trading	Total
Interest:					
Interest rate swaps	₩ 39,330,211	₩ 54,003	₩ -	₩ 237,316	₩ 291,319
Currency:					
Currency forwards	5,110,583	-	-	157,331	157,331
Currency swaps	27,596,486	364,967	-	356,672	721,639
Subtotal	32,707,069	364,967	-	514,003	878,970
Stock:					
Stock options	46,952	-	-	2,123	2,123
Total	₩ 72,084,232	₩ 418,970	₩ -	₩ 753,442	₩ 1,172,412

(4) Gains and losses from fair value hedging instruments and hedged items attributable to the hedged risk for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Fair value hedge – hedged items	₩ 1,231,752	₩ (774,976)
Fair value hedge – hedging instruments	₩ (1,556,335)	₩ 1,793,684

(5) As a result of cash flow hedge, the Bank recognized ₩3,913 million and ₩4 million as other comprehensive income (loss) (before tax effect) for the years ended December 31, 2021 and 2020 and there is no ineffectiveness recognized in relation to cash flow hedge for the years ended December 31, 2021 and 2020.

(6) Hedge accounting

1) Purpose and strategy of hedge accounting

The Bank transacts with derivative financial instruments to hedge its interest rate risk and currency risk arising from the assets and liabilities of the Bank. The Bank applies the fair value hedge accounting for the changes in the market interest rates of the financial debentures in Korean won and foreign currency and the loans in foreign currency; and cash flow hedge accounting for interest rate swaps to hedge cash flow risk due to interest rates of the debentures in Korean won.

2) Nominal amount and average hedge ratio for derivatives as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

	Within 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	Over 5 years	Total
Fair value hedges							
Nominal amount of hedged items	₩ 6,662,420	₩ 6,872,921	₩ 9,069,369	₩ 7,143,818	₩ 5,552,558	₩ 7,382,156	₩ 42,683,242
Nominal amount of hedging instruments	6,649,848	6,872,921	9,072,215	6,254,693	5,552,558	7,433,170	41,835,405
Average hedge ratio	99.81%	100.00%	100.03%	87.55%	100.00%	100.69%	98.01%
Cash flow hedges							
Nominal amount of hedged items	₩ 59,275	₩ -	₩ -	₩ -	₩ -	₩ -	₩ 59,275
Nominal amount hedging instruments	59,275	-	-	-	-	-	59,275
Average hedge ratio	100.00%	-	-	-	-	-	100.00%

(December 31, 2020)

	Within 1 year	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	Over 5 years	Total
Fair value hedges							
Nominal amount of hedged items	₩ 9,451,404	₩ 5,781,962	₩ 5,665,046	₩ 5,243,700	₩ 6,531,111	₩ 9,246,375	₩ 41,919,598
Nominal amount of hedging instruments	9,038,034	5,770,424	5,662,797	5,243,700	5,727,209	9,288,553	40,730,717
Average hedge ratio	95.63%	99.80%	99.96%	100.00%	87.69%	100.46%	97.16%
Cash flow hedges							
Nominal amount of hedged items	₩ 80,000	₩ -	₩ -	₩ -	₩ -	₩ -	₩ 80,000
Nominal amount hedging instruments	80,000	-	-	-	-	-	80,000
Average hedge ratio	100.00%	-	-	-	-	-	100.00%

3) Effect of hedge accounting on financial statement, statement of comprehensive income, statement of changes in equity

① Effect of hedging instruments on statement financial position, statement of comprehensive income, statement of changes in equity as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

Detail	Nominal amount	Carrying amount of assets	Carrying amount of liabilities	Changes of fair value in the year
Fair value hedges				
Interest swap	₩ 28,537,438	₩ 275,487	₩ 147,373	₩ (797,378)
Currency swap	13,297,967	282,508	513,684	(791,844)
Subtotal	41,835,405	557,995	661,057	(1,589,222)
Cash flow hedges	59,275	3,916	-	3,916
Total	₩ 41,894,680	₩ 561,911	₩ 661,057	₩ (1,585,306)

(December 31, 2020)

Detail	Nominal amount	Carrying amount of assets	Carrying amount of liabilities	Changes of fair value in the year
Fair value hedges				
Interest swap	₩ 26,354,678	₩ 636,346	₩ 54,003	₩ 704,102
Currency swap	14,376,039	863,420	364,967	853,656
Subtotal	40,730,717	1,499,766	418,970	1,557,758
Cash flow hedges	80,000	-	-	4
Total	₩ 40,810,717	₩ 1,499,766	₩ 418,970	₩ 1,557,762

② Effect of fair value hedged items on statement financial position, statement of comprehensive income, statement of changes in equity as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

Detail	Statement financial position		Accumulated adjustment of fair value hedging		Changes of fair value in the year
	Loan	Debenture	Asset	Liability	
Interest:					
Discontinuation of risk hedging Loans in foreign currencies	₩ 32,243	₩ -	₩ 1,533	₩ -	₩ (1,268)
Debentures in local currency	-	680,000	-	(63,620)	31,817
Debentures in foreign currencies	-	28,930,459	-	215,758	816,305
Subtotal	32,243	29,610,459	1,533	152,138	846,854
Currency:					
Loans in foreign currencies	148,898	-	(4,156)	-	(4,156)
Discontinuation of risk hedging Loans in foreign currencies	14,402	-	(100)	-	(16)
Debentures in foreign currencies	-	12,923,885	-	(8,277)	287,476
Discontinuation of risk hedging Debentures in foreign currencies	-	16,190	-	(1,937)	(98)
Subtotal	163,300	12,940,075	(4,256)	(10,214)	283,206
Total	₩ 195,543	₩ 42,550,534	₩ (2,723)	₩ 141,924	₩ 1,130,060

(December 31, 2020)

Detail	Statement financial position: Loan	Statement financial position: Debenture	Accumulated adjustment of fair value hedging: Asset	Accumulated adjustment of fair value hedging: Liability	Changes of fair value in the year
Interest:					
Loans in foreign currencies	₩ 39,281	₩ -	₩ 1,589	₩ -	₩ (1,213)
Discontinuation of risk hedging					
Loans in foreign currencies	24,605	-	1,578	-	(661)
Debentures in local currency	-	650,000	-	(31,803)	8,756
Debentures in foreign currencies	-	26,903,460	-	1,094,920	(663,846)
Subtotal	63,886	27,553,460	3,167	1,063,117	(656,964)
Currency:					
Loans in foreign currencies	439,992	-	(17,549)	-	(17,549)
Debentures in foreign currencies	-	13,886,865	-	299,833	(122,052)
Discontinuation of risk hedging					
Debentures in foreign currencies	-	55,555	-	(1,744)	242
Subtotal	439,992	13,942,420	(17,549)	298,089	(139,359)
Total	₩ 503,878	₩ 41,495,880	₩ (14,382)	₩ 1,361,206	₩ (796,323)

③ Effect of cash flow hedged items on statement financial position, statement of comprehensive income, statement of changes in equity as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

Detail	Statements of Financial position	Accumulated adjustment of cash flow hedging	Changes of fair value in the year
Currency:			
Loans in foreign currencies	₩ 59,275	₩ 2,968	₩ (4,024)

(December 31, 2020)

Detail	Statements of Financial position	Accumulated adjustment of cash flow hedging	Changes of fair value in the year
Currency:			
Loans in foreign currencies	₩ 80,000	₩ 3	₩ (6)

4) Gains (losses) on hedged items and hedging instruments attributable to the hedged ineffectiveness for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

(2021)

	Losses on hedged items		Gains on hedging instruments		Hedge ineffectiveness recognized in profit (loss)	
Fair value hedges	₩	1,131,161	₩	(1,091,127)	₩	40,034
Cash flow hedges		(4,024)		3,916		-
Total	₩	1,127,137	₩	(1,087,211)	₩	40,034

(2020)

	Losses on hedged items		Gains on hedging instruments		Hedge ineffectiveness recognized in profit (loss)	
Fair value hedges	₩	(795,904)	₩	845,556	₩	49,652
Cash flow hedges		(6)		4		-
Total	₩	(795,910)	₩	845,560	₩	49,652

(7) Interest Rate Benchmark Reform

The hedging relationship to which the Bank applies fair value hedge and cash flow hedge is affected by the interest rate benchmark reform. The interest rate benchmarks that the hedging relationship is exposed to, are as follows (Korean won in millions):

Interest rate benchmark	Carrying amount of hedged items (assets)		Carrying amount of hedged items (liabilities)		Nominal amount of hedging instruments	
KRW CD 3M	₩	-	₩	119,500	₩	130,000
KRW CMS 10Y		-		98,603		110,000
USD LIBOR 3M(*1)		144,741		22,926,839		21,942,709
USD LIBOR 6M(*1)		-		4,958,508		5,035,344
EUR LIBOR 3M		-		200,851		201,351
EUR LIBOR 6M		-		4,261,367		4,027,020
EUR CMS 20Y		-		229,920		250,000
EUR CMS 30Y		-		168,357		190,000
GBP LIBOR 6M Fallback		-		102,022		122,735
BBSW 3M		-		1,198,117		1,202,446
HKD LIBOR 3M		-		111,011		110,982
Total	₩	144,741	₩	34,375,095	₩	33,322,587

(*1) Hedged items and hedging instruments due before June 30, 2023, when the LIBOR interest rate will be ceased being published, are excluded.

21. CAPITAL STOCK:

As of December 31, 2021, the authorized capital and paid-in capital of the Bank are ₩15,000,000 million and ₩12,748,254 million, respectively. The Bank does not issue share certificates.

Changes in capital stock for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Beginning balance	₩ 12,449,456	₩ 11,871,143
Paid-in capital increase	298,798	578,313
Ending balance	₩ 12,748,254	₩ 12,449,456

22. OTHER COMPONENTS OF EQUITY:

(1) Details of other components of equity as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Dec. 31, 2021	Dec. 31, 2020
Gain (Loss) on equity securities at FVOCI	₩ 842,816	₩ 773,104
Gain (Loss) on debt securities at FVOCI	18,020	18,355
Gain (Loss) on valuation of cash flow hedge	2,968	3
Remeasurement of net defined benefit liabilities	18,865	11,855
Total	₩ 882,669	₩ 803,317

(2) Changes in other components for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

(2021)

	Beginning Balance	Increase (Decrease)	Tax effect	Ending balance
Gain (Loss) on equity securities at FVOCI	₩ 773,104	₩ 91,968	₩ (22,256)	₩ 842,816
Gain (Loss) on debt securities at FVOCI	18,355	(442)	107	18,020
Gain (Loss) on valuation of cash flow hedge	3	3,913	(948)	2,968
Remeasurement of net defined benefit liabilities	11,855	9,248	(2,238)	18,865
Total	₩ 803,317	₩ 104,687	₩ (25,335)	₩ 882,669

(2020)

	Beginning Balance	Increase (Decrease)	Tax effect	Ending balance
Gain (Loss) on equity securities at FVOCI	₩ 573,088	₩ 263,872	₩ (63,856)	₩ 773,104
Gain (Loss) on debt securities at FVOCI	6,226	16,001	(3,872)	18,355
Gain (Loss) on valuation of cash flow hedge	-	4	(1)	3
Remeasurement of net defined benefit liabilities	15,094	(4,272)	1,033	11,855
Total	₩ 594,408	₩ 275,605	₩ (66,696)	₩ 803,317

23. RETAINED EARNINGS:

(1) Details of retained earnings as of as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Dec. 31, 2021	Dec. 31, 2020
Legal reserve (*1)	₩ 446,237	₩ 435,996
Voluntary reserve(*2)	712,729	471,964
Regulatory reserve for loan losses	149,219	338,574
Unappropriated retained earnings	547,539	102,410
Total	₩ 1,855,724	₩ 1,348,944

(*1) Pursuant to the EXIM Bank Act, the Bank appropriates 10% of separate profit for the year as legal reserve, until the accumulated reserve equals to its paid-in capital.
(*2) The Bank appropriates profit for the year, net of the regulatory reserve for loan losses and the dividends, as voluntary reserve.

(2) Changes in retained earnings for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Beginning balance	₩ 1,348,944	₩ 1,355,571
Profit for the year	547,539	102,410
Dividends	(40,759)	(109,037)
Ending balance	₩ 1,855,724	₩ 1,348,944

(3) Details of dividends for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
The Government	₩ 27,711	₩ 72,430
Bank of Korea	3,814	10,701
Korea Development Bank	9,234	25,906
Total	₩ 40,759	₩ 109,037

(4) Statements of appropriations of retained earnings for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021 (Expected date of appropriation: Mar. 31, 2022)		2020 (Date of appropriation: Mar. 31, 2021)	
I. Retained earnings before appropriations:		₩ 547,539		₩ 102,410
1. Unappropriated retained earnings carried over from prior years	-		-	
2. Profit for the year	547,539		102,410	
II. Other reserve transferred		-		189,355
III. Appropriations:		547,539		291,765
1. Legal reserve	54,754		10,241	
2. Dividend	191,256		40,759	
3. Other reserve	211,038		240,765	
4. Regulatory reserve for loan losses	90,491		-	
IV. Unappropriated retained earnings at the end of the year		-		-

(5) Regulatory reserve for loan losses

Regulatory reserve for loan losses is calculated and disclosed according to Article 29 (1) and (2), Regulation on Supervision of Banking Business. In accordance with Regulation on Supervision of Banking Business, etc., if the estimated allowance for credit loss determined by K-IFRS for the accounting purpose is lower than those for the regulatory purpose required by Regulation on Supervision of Banking Business, the Bank should reserve such difference as the regulatory reserve for loan losses. Due to the fact that regulatory reserve for loan losses is a voluntary reserve, the amounts that exceed the existing regulatory reserve for loan losses over the compulsory regulatory reserve for loan losses at the year-end date are reversed in profit. In case of accumulated deficit, the Bank should recommence setting aside regulatory reserve for loan losses at the time when accumulated deficit is reduced to zero.

1) Regulatory reserve for loan losses

Details of regulatory reserve for loan losses as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Dec. 31, 2021		Dec. 31, 2020	
Accumulated regulatory reserve for loan losses	₩	149,219	₩	338,574
Expected (reversal of) regulatory reserve for loan losses		90,491		(189,355)
Regulatory reserve for loan losses	₩	239,710	₩	149,219

2) Provision for regulatory reserve for loan losses and profit for the year after adjusting regulatory reserve for loan losses.

Details of regulatory reserve for loan losses and profit for the year after adjusting the reserve for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021		2020	
Profit for the year	₩	547,539	₩	102,410
Provision for (Reversal of) regulatory reserve for loan losses		90,491		(189,355)
Profit after adjusting the regulatory reserve for loan losses (*1)	₩	457,048	₩	291,765

(*1) Adjusted profit for the year considering reserve for loan losses as above is calculated by assuming that the provision in regulatory reserve for loan losses before income tax is reflected in profit for the year.

24. NET INTEREST INCOME:

Net interest income is the amount after deduction of interest expenses from interest income, and the details are as follows:

(1) Details of interest income for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Interest of due from financial institutions:		
Due from financial institutions in local currency	₩ 7,519	₩ 9,674
Due from financial institutions in foreign currencies	6,537	24,779
Subtotal	14,056	34,453
Interest of financial assets at FVTPL:		
Interest of securities at FVTPL	82	96
Interest of loans at FVTPL	565	150
Subtotal	647	246
Interest of financial investments:		
Interest of securities at FVOCI	33,932	22,274
Interest of securities at amortized cost	12,292	14,516
Subtotal	46,224	36,790
Interest of loans at amortized cost:		
Interest of loans in local currency	537,619	578,214
Interest of loans in foreign currencies	1,128,663	1,599,940
Interest of bills bought	11,961	13,671
Interest of advances for customers	987	215
Interest of call loans	2,291	19,820
Interest of interbank loans	2,658	4,533
Subtotal	1,684,179	2,216,393
Other interest income	404	843
Total	₩ 1,745,510	₩ 2,288,725

(2) Details of interest expenses for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Interest of borrowings:		
Interest of borrowings in foreign currencies	₩ 27,742	₩ 117,040
Interest of sales of repurchase agreement	582	-
Subtotal	28,324	117,040
Interest of call-money	744	4,954
Interest of debentures:		
Interest of debentures in local currency	268,912	296,331
Interest of debentures in foreign currencies	542,099	986,040
Subtotal	811,011	1,282,371
Other interest expense	1,028	3,645
Total	₩ 841,107	₩ 1,408,010

25. NET COMMISSION INCOME:

Net commission income is the amount after deduction of commission expenses from commission income, and the details are as follows.

(1) Details of commission income for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Commission income in local currency:		
Commission income on management of EDCF	₩ 20,820	₩ 20,243
Commission income on management of IKCF	2,200	2,250
Other commission income in local currency	1,973	894
Subtotal	24,993	23,387
Commission income in foreign currencies:		
Commission income on letters of credit	2,669	2,137
Commission income on confirmation on export letter of credit	13	256
Commission income on loan commitments	28,242	24,863
Management fees	71	991
Arrangement fees	2,399	2,353
Advisory fees	220	55
Prepayment fees	4,503	14,980
Sundry commission income on foreign exchange	313	119
Structuring fees	50	34,561
Brokerage fee for foreign currencies exchange funds	176	498
Other commission income in foreign currencies	5,443	1,371
Subtotal	44,099	82,184
Others:		
Other commission income	10,896	11,421
Guarantee fees in foreign currencies:		
Guarantee fees in foreign currencies	129,926	145,200
Premium for guarantee	100,033	113,302
Subtotal	229,959	258,502
Total	₩ 309,947	₩ 375,494

(2) Details of commission expenses for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Commission expenses in local currency:		
Commission expenses on domestic transactions	₩ 519	₩ 481
Commission expenses in foreign currencies:		
Service fees paid to credit-rating agency	3,312	2,698
Sundry commission expenses on foreign exchange	3,975	4,315
Subtotal	7,287	7,013
Others:		
Other commission expenses	13,299	6,441
Total	₩ 21,105	₩ 13,935

26. DIVIDEND INCOME:

Details of dividend income for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Financial assets at FVOCI	₩ 49,889	₩ 47,184

27. GAIN (LOSS) ON FINANCIAL ASSETS AT FVTPL:

Details of gain (loss) on financial assets at FVTPL for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Securities at FVTPL:		
Gain on valuation	₩ 18,846	₩ 14,943
Loss on valuation	(12,951)	(4,892)
Gain on disposal	9,885	12,924
Loss on disposal	(1,936)	(5,288)
Others	15,816	15,332
Subtotal	29,660	33,019
Loans at FVTPL:		
Gain on valuation	505	191
Loss on disposal	(423)	(30)
Subtotal	82	161
Trading derivatives:		
Gain on valuation	856,142	834,315
Loss on valuation	(996,182)	(715,444)
Gain on transaction	909,941	917,389
Loss on transaction	(672,656)	(945,985)
Subtotal	97,245	90,275
Total	₩ 126,987	₩ 123,455

28. GAIN (LOSS) ON HEDGING DERIVATIVES:

Details of gain (loss) on hedging derivatives for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021		2020	
Gain on hedging instruments	₩	189,053	₩	1,996,002
Loss on hedging instruments		(1,745,324)		(202,321)
Total	₩	(1,556,271)	₩	1,793,681

29. GAIN (LOSS) ON FINANCIAL INVESTMENTS:

Details of gain (loss) on financial investments for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021		2020	
Financial assets at FVOCI:				
Gain on disposals	₩	3,381	₩	990
Loss on disposals		-		(6)
Total	₩	3,381	₩	984

30. OTHER OPERATING INCOME (EXPENSES):

Details of other operating income (expenses) for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021		2020	
Other operating income:				
Gain on sale of loans at amortized cost	₩	2,709	₩	-
Gain on redemption of loans at amortized cost		337		18
Gain on fair value hedged items		1,242,036		164,126
Others		-		18
Subtotal		1,245,082		164,162
Other operating expenses:				
Loss on fair value hedged items		(10,284)		(939,102)
Contribution to miscellaneous funds		(4,751)		(5,053)
Loss on redemption of bonds		-		(64)
Transfer of other provisions		(28,917)		-
Others		(9,947)		(17,467)
Subtotal		(53,899)		(961,686)
Total	₩	1,191,183	₩	(797,524)

31. IMPAIRMENT LOSS (REVERSAL) ON CREDIT:

Details of impairment loss (reversal) on credit for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021(*1)	2020(*1)
Loans at amortized cost	₩ 488,672	₩ 597,909
Other financial assets	(22,356)	21,980
Guarantees	(21,482)	93,065
Unused loan commitments	(1,169)	7,092
Financial guarantee contract	(75,587)	117,981
Financial assets at FVOCI	340	452
Securities at amortized cost	51	6
Total	₩ 368,469	₩ 838,485

(*1) It includes additional impairment loss on credit ₩69,178 million and ₩16,008 million to cope with the economic downturn caused by the spread of the COVID-19 for the years ended December 31, 2021 and 2020 respectively.

32. GENERAL AND ADMINISTRATIVE EXPENSES:

Details of general and administrative expenses for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	Detail	2021	2020
General and administrative	Short-term salaries	₩ 116,996	₩ 113,029
Other expenses in financing department	Office expenses	73,592	63,187
	Subtotal	190,588	176,216
Office expenses of EDCF		1,331	1,038
General and administrative - Others	Retirement benefits (defined contributions)	2,977	753
	Retirement benefits (defined benefits)	20,940	11,178
	Depreciation of tangible assets	7,056	7,434
	Amortization of intangible assets	10,759	11,419
	Taxes and dues	17,195	21,040
	Donations and contributions	2,000	3,000
	Subtotal	60,927	54,824
	Total	₩ 252,846	₩ 232,078

33. NON-OPERATING INCOME (EXPENSES):

Details of non-operating income (expenses) for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	Detail	2021	2020
Gain (Loss) on investments in associates and subsidiaries	Dividend income	₩ 10,931	₩ 16,913
	Impairment loss	-	(142,246)
	Gain (loss) on disposal	-	(1)
	Subtotal	10,931	(125,334)
Other incomes	Gain on disposals of tangible assets	119	119
	Rental income	129	138
	Damages paid for breach of contracts	-	79
	Interest on other loans	75	109
	Revenue on research project	6,602	6,466
	Other miscellaneous income	450	1,230
	Subtotal	7,375	8,141
Other expenses	Loss on disposal of tangible assets	(51)	(1)
	Donations and contributions	(7,159)	(6,173)
	Court cost	(1,018)	(814)
	Expenses on research project	(6,320)	(6,074)
	Other miscellaneous expenses	(435)	(207)
	Subtotal	(14,983)	(13,269)
	Total	₩ (7,608)	₩ (5,128)

34. INCOME TAX EXPENSE:

(1) Details of income tax expenses for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Current income tax payable	₩ (5,776)	₩ 9,220
Adjustment recognized in the current period for tax payable of prior periods	(74)	(9,308)
Changes in deferred income taxes due to temporary differences	232,271	104,893
Changes in deferred income taxes directly recognized in equity	(27,836)	(67,083)
Income tax expense	₩ 198,585	₩ 37,722

(2) Changes in temporary differences and deferred income tax assets (liabilities) for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

(2021)

Detail	Temporary differences: Beginning balance	Temporary differences: Increase (Decrease)	Temporary differences: Ending balance	Deferred tax assets (liabilities) - ending balance
Depreciation	₩ 106	₩ 6	₩ 112	₩ 27
Fair value hedging income (loss)	1,375,588	(1,230,942)	144,646	35,004
Financial guarantee contract liability	1,050,102	(78,906)	971,196	235,030
Loans	(42,621)	35,876	(6,745)	(1,632)
Allowance for loan losses	984,662	(527,601)	457,061	110,609
Unused commitment provisions	239,584	(102)	239,482	57,955
Net deferred loan origination fees and costs	364,854	3,355	368,209	89,107
Long-term income in advance	(2,689)	-	(2,689)	(651)
Provisions for acceptances and guarantees	387,027	(6,044)	380,983	92,198
Loan-for-equity swap	1,176,609	57,705	1,234,314	298,704
Loss on valuation of derivatives	142,212	(395,619)	(253,407)	(61,324)
Gain on valuation of derivatives	(1,352,817)	1,258,619	(94,198)	(22,796)
Defined benefit liability	-	(6,492)	(6,492)	(1,571)
Accrued interest receivables and payables related to swap transaction	(316,122)	11,132	(304,990)	(73,808)
Tangible assets	(173,653)	(1,440)	(175,093)	(42,372)
Others	1,882,441	25,578	1,908,019	461,739
Subtotal	₩ 5,715,283	₩ (854,875)	₩ 4,860,408	₩ 1,176,219
Deferred income tax assets (liabilities) directly adjusted in equity				(301,120)
Total				₩ 875,099

(2020)

Detail	Temporary differences: Beginning balance	Increase (Decrease)	Ending balance	Deferred tax assets (liabilities) - ending balance
Depreciation	₩ 107	₩ (1)	₩ 106	₩ 26
Fair value hedging income (loss)	597,679	777,909	1,375,588	332,892
Financial guarantee contract liability	989,685	60,417	1,050,102	254,125
Loans	(69,322)	26,701	(42,621)	(10,314)
Allowance for loan losses	605,777	378,885	984,662	238,288
Unused commitment provisions	232,940	6,644	239,584	57,979
Net deferred loan origination fees and costs	399,621	(34,767)	364,854	88,295
Long-term income in advance	(3,528)	839	(2,689)	(651)
Provisions for acceptances and guarantees	306,441	80,586	387,027	93,661
Loan-for-equity swap	2,031,381	(854,772)	1,176,609	284,739
Loss on valuation of derivatives	(787,945)	930,157	142,212	34,415
Gain on valuation of derivatives	384,594	(1,737,411)	(1,352,817)	(327,382)
Defined benefit liability	19,492	(19,492)	-	-
Accrued interest receivables and payables related to swap transaction	(331,176)	15,054	(316,122)	(76,502)
Tangible assets	(175,296)	1,643	(173,653)	(42,024)
Others	1,675,440	207,001	1,882,441	456,118
Subtotal	₩ 5,875,890	₩ (160,607)	₩ 5,715,283	₩ 1,383,665
Deferred income tax assets (liabilities) directly adjusted in equity				(276,295)
Total				₩ 1,107,370

(3) Details of the reconciliation between profit before income tax and income tax expense (benefit) for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Profit before income tax	₩ 746,124	₩ 140,132
Income tax calculated at statutory tax rate (11% up to 200 million, 22% over 200 million to 20 billion, 24.2% over 20 billion to 300 billion, and 27.5% over 300billion)	194,822	33,450
Adjustments:		
Effect on non-taxable income	(27,471)	(23,566)
Effect on non-deductible expense	24,516	20,210
Effect on tax deduction	-	(3,514)
Others	6,792	20,451
Subtotal	3,837	13,581
Adjustment recognized as current tax for the prior periods	(74)	(9,309)
Income tax expense	₩ 198,585	₩ 37,722
Effective tax rate from operations	26.62%	26.92%

(4) Details of deferred tax relating to items that are recognized directly in equity as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Detail	Dec. 31, 2021		Dec. 31, 2020	
Loss on valuation of financial investments	₩	(297,161)	₩	(272,509)
Gain on valuation of cash flow hedge		(948)		(1)
Remeasurement of net defined benefit liability		(6,023)		(3,785)
Total	₩	(304,132)	₩	(276,295)

(5) Unrecognized deferred tax assets and liabilities

The Bank does not recognize deferred tax liabilities for taxable temporary difference of ₩52,608 million related to investments in associates and subsidiaries as of December 31, 2021 because the Bank 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 Bank also does not recognize deferred tax assets for deductible temporary differences of ₩4,469 million related to impairment loss of financial investments as of December 31, 2021 because the realizable period has already passed.

35. STATEMENTS OF CASH FLOWS:

(1) Details of non-cash flow transactions for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Detail	2021		2020	
Written-off	₩	13,459	₩	218,764
Transfer to financial investments from the investments in associates		380,520		-
Investment in kind		101,864		-
Remeasurement of net defined benefit liability		9,248		4,272

(2) Changes in liabilities arising from financing activities for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

(2021)

Detail	Borrowings		Debentures		Total	
Beginning balance	₩	6,076,631	₩	72,641,777	₩	78,718,408
Change in cash flows		(1,005,804)		1,585,728		579,924
Amortization		135		119,042		119,177
Foreign exchange transaction		505,947		3,275,006		3,780,953
Change in fair value hedged items		-		(1,135,500)		(1,135,500)
Ending balance	₩	5,576,909	₩	76,486,053	₩	82,062,962

(2020)

Detail	Borrowings		Debentures		Total	
Beginning balance	₩	6,796,372	₩	67,137,591	₩	73,933,963
Change in cash flows		(115,372)		6,861,920		6,746,548
Loss on redemption of bonds		-		64		64
Amortization		268		201,079		201,347
Foreign exchange transaction		(604,637)		(2,315,090)		(2,919,727)
Change in fair value hedged items		-		756,213		756,213
Ending balance	₩	6,076,631	₩	72,641,777	₩	78,718,408

36. CONTINGENT LIABILITIES AND COMMITMENTS:

(1) Details of contingent liabilities and commitments as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Detail	Dec. 31, 2021		Dec. 31, 2020	
Guarantees	Confirmed	₩	30,068,697	₩	27,960,939
	Unconfirmed		10,162,786		6,741,575
	Subtotal		40,231,483		34,702,514
Loan commitments	Local currency, foreign currencies loan commitments		30,217,694		24,247,153
	Others		2,399,537		2,184,291
	Subtotal		32,617,231		26,431,444
	Total	₩	72,848,714	₩	61,133,958

(2) Details of guarantees that have been provided for others as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Detail	Dec. 31, 2021		Dec. 31, 2020	
Confirmed guarantees	Local currency:				
	Performance of contracts	₩	75,088	₩	75,088
	Repayment of advances		76,183		88,958
	Others		38,742		49,814
	Subtotal		190,013		213,860
	Foreign currencies:				
	Performance of contracts		7,214,218		7,065,461
	Repayment of advances		9,117,665		6,882,321
	Acceptances of imported goods		1,902		1,005
	Acceptances of import letter of credit outstanding		237,980		217,388
	Foreign liabilities		10,009,388		9,580,093
	Others		3,297,531		4,000,811
	Subtotal		29,878,684		27,747,079
Unconfirmed guarantees	Foreign liabilities		1,040,401		1,401,148
	Repayment of advances		9,047,096		5,126,848
	Performance of contracts		75,254		207,315
	Underwriting of import credit		-		6,229
	Others		35		35
	Subtotal		10,162,786		6,741,575
	Total	₩	40,231,483	₩	34,702,514

(3) Details of guarantees classified by country as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

Detail		Confirmed guarantees		Unconfirmed guarantees		Total	
		Amount	Ratio (%)	Amount	Ratio (%)	Amount	Ratio (%)
Asia	Korea	₩ 18,382,248	61.13	₩ 9,121,271	89.75	₩ 27,503,519	68.36
	China	174,668	0.58	-	-	174,668	0.43
	Saudi Arabia	1,226,580	4.08	-	-	1,226,580	3.05
	India	587,733	1.95	-	-	587,733	1.46
	Indonesia	716,448	2.38	304,695	3.00	1,021,143	2.54
	Vietnam	1,100,647	3.66	433,889	4.27	1,534,536	3.81
	Australia	207,027	0.69	-	-	207,027	0.51
	Qatar	218,227	0.73	-	-	218,227	0.54
	Singapore	135,957	0.45	-	-	135,957	0.34
	Oman	506,487	1.68	37,498	0.37	543,985	1.35
	Uzbekistan	330,123	1.10	-	-	330,123	0.82
	Others	1,694,809	5.65	134,339	1.32	1,829,148	4.56
	Subtotal	25,280,954	84.08	10,031,692	98.71	35,312,646	87.77
Europe	United Kingdom	57,793	0.19	-	-	57,793	0.14
	France	249,712	0.83	-	-	249,712	0.62
	Others	1,816,658	6.04	77,274	0.76	1,893,932	4.71
	Subtotal	2,124,163	7.06	77,274	0.76	2,201,437	5.47
America	United States	966,069	3.22	13,041	0.13	979,110	2.43
	Brazil	400,481	1.33	-	-	400,481	1.00
	Mexico	406,125	1.35	-	-	406,125	1.01
	Bermuda	-	-	-	-	-	-
	Others	509,126	1.69	40,779	0.40	549,905	1.37
	Subtotal	2,281,801	7.59	53,820	0.53	2,335,621	5.81
Africa	Madagascar	87,636	0.29	-	-	87,636	0.22
	Others	294,143	0.98	-	-	294,143	0.73
	Subtotal	381,779	1.27	-	-	381,779	0.95
	Total	₩ 30,068,697	100.00	₩ 10,162,786	100.00	₩ 40,231,483	100.00

(December 31, 2020)

Detail		Confirmed guarantees		Unconfirmed guarantees		Total	
		Amount	Ratio (%)	Amount	Ratio (%)	Amount	Ratio (%)
Asia	Korea	₩ 16,207,650	57.97	₩ 5,330,002	79.06	₩ 21,537,652	62.06
	China	200,663	0.72	-	-	200,663	0.58
	Saudi Arabia	1,283,479	4.59	-	-	1,283,479	3.70
	India	554,211	1.98	-	-	554,211	1.60
	Indonesia	715,347	2.56	332,780	4.94	1,048,127	3.02
	Vietnam	988,464	3.53	405,658	6.02	1,394,122	4.02
	Australia	226,478	0.81	-	-	226,478	0.65
	Qatar	225,804	0.81	-	-	225,804	0.65
	Singapore	127,444	0.46	-	-	127,444	0.37
	Oman	439,393	1.57	88,691	1.31	528,084	1.52
	Uzbekistan	330,221	1.18	18,033	0.27	348,254	1.00
	Others	1,444,279	5.16	243,038	3.60	1,687,317	4.86
	Subtotal	22,743,433	81.34	6,418,202	95.20	29,161,635	84.03
Europe	United Kingdom	485,635	1.74	-	-	485,635	1.40
	France	281,363	1.00	-	-	281,363	0.81
	Others	1,510,303	5.40	184,871	2.74	1,695,174	4.89
	Subtotal	2,277,301	8.14	184,871	2.74	2,462,172	7.10
America	United States	1,166,979	4.18	11,968	0.18	1,178,947	3.40
	Brazil	371,831	1.33	-	-	371,831	1.07
	Mexico	397,508	1.42	-	-	397,508	1.14
	Bermuda	259,434	0.93	-	-	259,434	0.75
	Others	288,838	1.03	126,534	1.88	415,372	1.20
	Subtotal	2,484,590	8.89	138,502	2.06	2,623,092	7.56
Africa	Madagascar	161,761	0.58	-	-	161,761	0.46
	Others	293,854	1.05	-	-	293,854	0.85
	Subtotal	455,615	1.63	-	-	455,615	1.31
	Total	₩ 27,960,939	100.00	₩ 6,741,575	100.00	₩ 34,702,514	100.00

(4) Details of guarantees classified by industry as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

Detail	Confirmed guarantees Amount	Confirmed guarantees Ratio (%)	Unconfirmed guarantees Amount	Unconfirmed guarantees Ratio (%)	Total Amount	Total Ratio (%)
Manufacturing	₩ 15,695,679	52.20	₩ 8,938,321	87.95	₩ 24,634,000	61.22
Transportation	2,226,005	7.40	-	-	2,226,005	5.53
Financial institution	904,286	3.01	1,114	0.01	905,400	2.25
Wholesale and retail	734,150	2.44	43,915	0.43	778,065	1.93
Real estate business	42,562	0.14	48,556	0.48	91,118	0.23
Construction	5,250,974	17.46	78,279	0.77	5,329,253	13.25
Public sector and others	5,215,041	17.35	1,052,601	10.36	6,267,642	15.59
Total	₩ 30,068,697	100.00	₩ 10,162,786	100.00	₩ 40,231,483	100.00

(December 31, 2020)

Detail	Confirmed guarantees Amount	Confirmed guarantees Ratio (%)	Unconfirmed guarantees Amount	Unconfirmed guarantees Ratio (%)	Total Amount	Total Ratio (%)
Manufacturing	₩ 13,914,707	49.76	₩ 5,388,964	79.94	₩ 19,303,671	55.63
Transportation	2,004,642	7.17	42,821	0.64	2,047,463	5.90
Financial institution	1,412,167	5.05	13,033	0.19	1,425,200	4.11
Wholesale and retail	514,662	1.84	31,114	0.46	545,776	1.57
Real estate business	43,962	0.16	48,408	0.72	92,370	0.27
Construction	5,270,863	18.85	377,321	5.60	5,648,184	16.28
Public sector and others	4,799,936	17.17	839,914	12.45	5,639,850	16.24
Total	₩ 27,960,939	100.00	₩ 6,741,575	100.00	₩ 34,702,514	100.00

(5) Global Medium-Term Note Program and CP programs

The Bank has been establishing the following programs regarding the issue of foreign currencies bonds and CPs:

1) Established on August 1, 1991, initially, and annually renewed, U.S. Shelf Registration to issue foreign bonds under the Securities and Exchange Commission rule of the United States of America with an issuance limit of USD 55 billion.

2) Established on May 14, 1997, and May 16, 1997, initially, and annually renewed, CP program to issue CPs with issuance limits of USD 6 billion and USD 2 billion, respectively.

3) Established on November 6, 1997, initially, and annually renewed, Global Medium-Term Note Program to issue mid-to-long-term foreign currencies bonds with an issuance limit of USD 27.5 billion.

4) Established on February 2, 2012, initially, and annually renewed, MYR MTN program to issue Malaysian Ringgit-denoted bonds with issuance limits of MYR 1 billion.

5) Established in 1995, initially, and renewed every two years, Yen Shelf Registration to issue Samurai bond with an issuance limit of JPY 500 billion.

6) Established on May 31, 2010, Australian Domestic Debt Issuance Program to issue Kangaroo bond with limit of AUD 6 billion.

7) Established on January 17, 2011, and renewed every two years, Uridashi Shelf Registration to issue Uridashi bond with an issuance limit of JPY 500 billion.

(6) Litigations

As of December 31, 2021, 10 lawsuits (aggregated claim amount: ₩68,302 million) were filed as a plaintiff and 11 pending litigations as a defendant were filed (aggregated claim amount: ₩44,121 million). The Bank's management expects that there is no significant impact on the financial statements due to these lawsuits, but it is possible to make additional loss to the Bank due to the results of future litigation.

(7) Written-off loans

The Bank manages written-off loans that have claims on debtors due to the statute of limitations, uncollected after write-off, etc. The written-off loans as of December 31, 2021 and 2020 are ₩2,053,343 million and ₩1,982,456 million, respectively.

(8) COVID-19

The proliferation of COVID-19 has had a negative impact on the global economy, which may have a greater impact than the expected credit loss and potential impairment of assets in a particular portfolio, negatively impacting the profit generation capability of the Bank as follows:

- Uncertainty may arise about the credit risk of a borrower that could be affected by COVID-19.
- Uncertainty may arise about forward-looking macroeconomic information related to expected credit losses.
- Korean won may depreciate against major foreign currencies. This may result in an increase in principal and interest payments on liabilities denominated in foreign currencies, and losses on foreign exchange transactions.
- Possible significant decrease in the fair value of an entity affected by COVID-19 pandemic, in which the bank invested, may occur.

Meanwhile, the impact of COVID-19 on expected credit losses is described in note 31. Impairment loss (Reversal) on credit.

(9) Related to Ukraine crisis occurred in February 2022, international sanctions are being imposed to Russia. The sanctions may affect companies, industries, or economies which do business directly or indirectly with Russia, but the impact on the Bank's financial position and operation has yet to be observed. The Bank consistently monitors and controls the effects of Ukraine crisis.

37. TRANSACTIONS AND BALANCES WITH RELATED PARTIES:

Related parties consist of entities related to the Bank, postemployment benefits, a key management personnel and a close member of that person's family, an entity controlled or jointly controlled and an entity influenced significantly.

(1) Details of related parties as of December 31, 2021 are as follows:

Detail	Relationship	Ownership-percentage (%)
Parent:		
Korean government	Parent	68.74
Subsidiaries and Associates:		
KEXIM Bank UK Limited	Subsidiary	100.00
PT.KOEXIM Mandiri Finance	Subsidiary	85.00
KEXIM Vietnam Leasing Co.	Subsidiary	100.00
KEXIM Asia Limited	Subsidiary	100.00
EXIM PLUS Co., Ltd.	Subsidiary	100.00
Credit Guarantee and Investment Fund	Associate	15.07
KTB Newlake Global Healthcare PEF	Associate	25.00
Korea Aerospace Industries. Ltd.	Associate	26.41
Daewoo Shipbuilding & Marine Engineering Co., Ltd	Associate	-

(2) Significant balances of receivables, payables and guarantees with the related parties

1) Significant balances of receivables and payables with the related parties as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

Detail	Receivables	Allowance / Provisions	Payables
Subsidiaries:			
KEXIM Bank UK Limited	₩ 177,709	₩ -	₩ -
PT.KOEXIM Mandiri Finance	143,543	267	-
KEXIM Vietnam Leasing Co.	144,256	315	1
KEXIM Asia Limited	129,953	81	-
Subtotal	595,461	663	1
Associates:			
Daewoo Shipbuilding & Marine Engineering Co., Ltd.	2,524,098	433,756	-
Total	₩ 3,119,559	₩ 434,419	₩ 1

(December 31, 2020)

Detail	Receivables	Allowance / Provisions	Payables
Subsidiaries:			
KEXIM Bank UK Limited	₩ 133,159	₩ -	₩ -
PT.KOEXIM Mandiri Finance	137,198	250	-
KEXIM Vietnam Leasing Co.	108,059	263	14
KEXIM Asia Limited	124,126	156	-
Subtotal	502,542	669	14
Associates:			
DAESUN Shipbuilding & Engineering Co., Ltd.	522,111	515,596	44
Daewoo Shipbuilding & Marine Engineering Co., Ltd.	2,518,836	370,637	1,838
Subtotal	3,040,947	886,233	1,882
Total	₩ 3,543,489	₩ 886,902	₩ 1,896

2) Guarantees provided to the related parties as of December 31, 2021 and 2020 are as follows (Korean won in millions):

(December 31, 2021)

Detail	Confirmed guarantees	Unconfirmed guarantees	Loan commitments	Other commitments
Subsidiaries:				
KEXIM Bank UK Limited	₩ -	₩ -	₩ 232,365	₩ -
PT.KOEXIM Mandiri Finance	-	-	34,380	-
KEXIM Vietnam Leasing Co.	-	1,114	89,888	-
KEXIM Asia Limited	-	-	192,153	-
Subtotal	-	1,114	548,786	-
Associates:				
Daewoo Shipbuilding & Marine Engineering Co., Ltd.	2,822,425	2,379,492	1,450,000	1,665,958
Total	₩ 2,822,425	₩ 2,380,606	₩ 1,998,786	₩ 1,665,958

(December 31, 2020)

Detail	Confirmed guarantees	Unconfirmed guarantees	Loan commitments	Other commitments
Subsidiaries:				
KEXIM Bank UK Limited	₩ -	₩ -	₩ 210,800	₩ -
PT.KOEXIM Mandiri Finance	-	-	26,112	-
KEXIM Vietnam Leasing Co.	-	4,195	107,829	-
KEXIM Asia Limited	-	-	132,192	-
Subtotal	-	4,195	476,933	-
Associates:				
DAESUN Shipbuilding & Engineering Co., Ltd.	65,010	75,574	15,000	-
Daewoo Shipbuilding & Marine Engineering Co., Ltd.	2,795,481	1,615,016	1,450,000	-
Subtotal	2,860,491	1,690,590	1,465,000	-
Total	₩ 2,860,491	₩ 1,694,785	₩ 1,941,933	₩ -

(3) Profit and loss transactions with related parties

Profit and loss transactions with related parties for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

(2021)

	Revenue	Bad debt expenses	Expenses
Subsidiaries:			
KEXIM Bank UK Limited	₩ 395	₩ -	₩ -
PT.KOEXIM Mandiri Finance	598	17	-
KEXIM Vietnam Leasing Co.	561	49	-
KEXIM Asia Limited	810	(76)	-
EXIM PLUS Co., Ltd.	-	-	-
Subtotal	2,364	(10)	-
Associates:			
DAESUN Shipbuilding & Engineering Co., Ltd.(*1)	6,489	(114,648)	228
Daewoo Shipbuilding & Marine Engineering Co., Ltd.	50,092	45,260	-
Subtotal	56,581	(69,388)	228
Total	₩ 58,945	₩ (69,398)	₩ 228

(*1) Profit and loss transactions before being excluded from the related parties for the years ended December 31, 2021.

(2020)

	Revenue	Bad debt expenses	Expenses
Subsidiaries:			
KEXIM Bank UK Limited	₩ 1,686	₩ -	₩ 45
PT.KOEXIM Mandiri Finance	2,367	(22)	1
KEXIM Vietnam Leasing Co.	1,804	11	1
KEXIM Asia Limited	2,005	82	1
EXIM PLUS Co., Ltd.	-	-	5,879
Subtotal	7,862	71	5,927
Associates:			
HSG SUNGDONG Shipbuilding Co., Ltd.	-	-	-
DAESUN Shipbuilding & Engineering Co., Ltd.	7,012	92,185	16
Daewoo Shipbuilding & Marine Engineering Co., Ltd.	31,604	60,595	14,458
Subtotal	38,616	152,780	14,474
Total	₩ 46,478	₩ 152,851	₩ 20,401

(4) Loan transactions with related parties

Loan transactions with related parties for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

(2021)

Detail	Financing transaction	
	Loan	Collection
Subsidiaries:		
KEXIM Bank UK Limited	₩ 353,591	₩ 354,388
PT.KOEXIM Mandiri Finance	288,237	294,080
KEXIM Vietnam Leasing Co.	273,001	252,213
KEXIM Asia Limited	110,055	153,988
Associates:		
DAESUN Shipbuilding & Engineering Co., Ltd.(*1)	84,259	506,111
Total	₩ 1,109,143	₩ 1,560,780

(*1) Loan transactions before being excluded from the related parties for the years ended December 31, 2021.

(2020)

Detail	Financing transaction	
	Loan	Collection
Subsidiaries:		
KEXIM Bank UK Limited	₩ 366,724	₩ 381,663
PT.KOEXIM Mandiri Finance	558,838	567,054
KEXIM Vietnam Leasing Co.	567,377	590,328
KEXIM Asia Limited	415,372	451,482
Associates:		
HSG SUNGDONG Shipbuilding Co., Ltd.	18,290	189,052
DAESUN Shipbuilding & Engineering Co., Ltd.	41,500	37,500
Total	₩ 1,968,101	₩ 2,217,079

(5) Details of compensation for key executives for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

Detail	2021	2020
Salaries	₩ 3,562	₩ 3,106
Severance and retirement benefits	404	314
Total	₩ 3,966	₩ 3,420

38. APPROVAL OF FINANCIAL STATEMENTS:

The financial statements of the Bank were approved by Board of Directors on March 15, 2022 and were finally approved by the Operations Committee on March 29, 2022.

THE ISSUER

Hanwha Energy USA Holdings Corporation
1209 Orange Street
Corporation Trust Center
Wilmington, Delaware 19801
United States

THE GUARANTOR

The Export-Import Bank of Korea
38, Eunhaeng-ro
Yeongdeungpo-gu
Seoul 07242, Korea

LEGAL ADVISERS

To the Issuer as to U.S. and English Law

Paul Hastings LLP
33/F West Tower Mirae Asset Center1
26,Eulji-ro 5gil, Jung-gu
Seoul 04539, Korea

To the Guarantor as to Korean Law

Kim & Chang
30, Sajik-ro 8-gil, Jongno-gu
Seoul 03170, Korea

To the Joint Lead Managers as to U.S. and English Law

Linklaters LLP
22/F East Tower, Mirae Asset Center 1
26 Eulji-ro 5-gil, Jung-gu
Seoul 04539, Korea

AGENTS

Fiscal Agent

Citicorp International Limited
20/F, Citi Tower, One Bay East
83 Hoi Bun Road
Kwun Tong, Kowloon
Hong Kong

Registrar, Paying Agent and Transfer Agent

Citibank, N.A., London Branch
c/o 1 North Wall Quay,
Dublin 1
Ireland

SINGAPORE LISTING AGENT

Shook Lin & Bok LLP
1 Robinson Road
#18-00 AIA Tower
Singapore 048542