# **IMPORTANT NOTICE**

#### THIS DOCUMENT IS AVAILABLE ONLY TO INVESTORS WHO ARE OUTSIDE OF THE UNITED STATES.

IMPORTANT: You must read the following before continuing. If you are not the intended recipient of this message, please do not distribute or copy the information contained in this e-mail, but instead, delete and destroy all copies of this e-mail including all attachments. The following applies to the pricing supplement following this page which supplements and should be read together with the offering circular dated July 27, 2021 following the pricing supplement (collectively, the "offering circular"), and you are therefore advised to read this carefully before reading, accessing or making any other use of the offering circular. In accessing the offering circular, you agree to be bound by the following terms and conditions, including any modifications to them any time you receive any information from us as a result of such access.

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

THE FOLLOWING OFFERING CIRCULAR MAY NOT BE FORWARDED OR DISTRIBUTED TO ANY OTHER PERSON AND MAY NOT BE REPRODUCED IN ANY MANNER WHATSOEVER. ANY FORWARDING, DISTRIBUTION OR REPRODUCTION OF THIS DOCUMENT IN WHOLE OR IN PART IS UNAUTHORIZED. FAILURE TO COMPLY WITH THIS DIRECTIVE MAY RESULT IN A VIOLATION OF THE SECURITIES ACT OR THE APPLICABLE LAWS OF OTHER JURISDICTIONS. ANY INVESTMENT DECISION SHOULD BE MADE ON THE BASIS OF THE FINAL TERMS AND CONDITIONS OF THE RELEVANT SECURITIES. IF YOU HAVE GAINED ACCESS TO THIS TRANSMISSION CONTRARY TO ANY OF THE FOREGOING RESTRICTIONS, YOU ARE NOT AUTHORIZED AND WILL NOT BE ABLE TO PURCHASE ANY OF THE SECURITIES DESCRIBED THEREIN.

Confirmation of your representation: In order to be eligible to view the following offering circular or make an investment decision with respect to the securities, investors must be outside of the United States. By accepting the e-mail and accessing the following offering circular, you shall be deemed to have represented to us that (1) you and any customers you represent are outside of the United States, (2) the electronic mail address that you gave us and to which this e-mail has been delivered is not located in the United States, its territories or possessions and, to the extent you purchase the securities, you will be doing so pursuant to Regulation S under the Securities Act, and (3) you consent to the delivery of such offering circular by electronic transmission.

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

The materials relating to the offering do not constitute, and may not be used in connection with, an offer or solicitation in any place where offers or solicitations are not permitted by law. If a jurisdiction requires that the offering be made by a licensed broker or dealer and any of Citigroup Global Markets Limited, The Hongkong and Shanghai Banking Corporation Limited and UBS AG Hong Kong Branch (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 following offering circular has been sent to you in an electronic form. You are reminded that documents transmitted via this medium may be altered or changed during the process of electronic transmission and consequently, none of the Joint Lead Managers nor any person who controls any of the Joint Lead Managers or any director, officer, employee or agent 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.

You should not reply by e-mail to this announcement, and you may not purchase any securities by doing so. Any reply e-mail communications, including those you generate by using the "Reply" function on your e-mail software, will be ignored or rejected. You are responsible for protecting against viruses and other destructive items. Your use of this e-mail is at your own risk and it is your responsibility to take precautions to ensure that it is free from viruses and other items of a destructive nature.



# KOREA MIDLAND POWER CO., LTD.

# Issue of U.S.\$300,000,000 1.250% Notes due 2026 under the U.S.\$3,000,000,000 Euro Medium Term Note Program

THE NOTES TO WHICH THIS PRICING SUPPLEMENT RELATES (THE "NOTES") HAVE NOT BEEN 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, UNLESS SO REGISTERED, MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES, 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. ACCORDINGLY, THE NOTES WILL BE OFFERED AND SOLD ONLY OUTSIDE THE UNITED STATES IN OFFSHORE TRANSACTIONS IN RELIANCE ON REGULATION S UNDER THE SECURITIES ACT AND IN COMPLIANCE WITH APPLICABLE LAWS, REGULATIONS AND DIRECTIVES.

IN CONNECTION WITH THIS ISSUE, EACH OF THE STABILIZING MANAGERS (OR ANY PERSON ACTING ON BEHALF OF SUCH STABILIZING MANAGER) (EACH ACTING ON ITS OWN BEHALF ONLY) MAY OVER-ALLOT OR EFFECT TRANSACTIONS WITH A VIEW TO SUPPORTING THE MARKET PRICE OF THE NOTES AT A LEVEL HIGHER THAN THAT WHICH MIGHT OTHERWISE PREVAIL FOR A LIMITED PERIOD AFTER THE ISSUE DATE. HOWEVER, THERE MAY BE NO OBLIGATION ON ANY OF THE STABILIZING MANAGERS (OR ANY PERSON ACTING ON BEHALF OF SUCH STABILIZING MANAGER) TO UNDERTAKE STABILIZATION ACTION. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME, AND MUST BE BROUGHT TO AN END AFTER A LIMITED PERIOD. SUCH STABILIZING SHALL BE IN COMPLIANCE WITH ALL APPLICABLE LAWS, REGULATIONS AND RULES.

Joint Lead Managers

Citigroup

HSBC

UBS

## KOREA MIDLAND POWER CO., LTD.

## Issue of U.S.\$300,000,000 1.250% Notes due 2026 under the U.S.\$3,000,000,000 Euro Medium Term Note Program

Any person making or intending to make an offer of the Notes may only do so in circumstances in which no obligation arises for the Issuer or any Dealer to publish a prospectus pursuant to Article 3 of the Prospectus Directive or supplement a prospectus pursuant to Article 16 of the Prospectus Directive, in each case, in relation to such offer.

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

**UK MIFIR PRODUCT GOVERNANCE** – Solely for the purposes of each UK MIFIR manufacturer's product approval process, the target market assessment in respect of the Notes has led to the conclusion that: (i) the target market for the Notes is eligible counterparties, as defined in the FCA Handbook Conduct of Business Sourcebook ("COBS") and professional clients, as defined in Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 ("UK MIFIR"); and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Notes (a "UK MIFIR distributor") should take into consideration each UK MIFIR manufacturer's target market assessment; however, a distributor subject to the FCA Handbook Product Intervention and Product Governance Sourcebook (the "UK MIFIR Product Governance Rules") will be responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the target market assessment) and determining the appropriate distribution channels.

THE NOTES HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE FINANCIAL INVESTMENT SERVICES AND CAPITAL MARKET ACT OF KOREA. ACCORDINGLY, THE NOTES MAY NOT BE OFFERED, SOLD OR DELIVERED IN KOREA OR TO ANY RESIDENT THEREOF (AS DEFINED IN THE FOREIGN EXCHANGE TRANSACTION LAW OF KOREA AND THE REGULATIONS THEREUNDER) OR TO ANY OTHER PERSON FOR OFFER, RESALE OR REDELIVERY DIRECTLY OR INDIRECTLY IN KOREA OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, ANY RESIDENT OF KOREA, EXCEPT AS OTHERWISE PERMITTED BY APPLICABLE KOREAN LAWS AND REGULATIONS. IN ADDITION, WITHIN ONE YEAR FOLLOWING THE ISSUE OF THE NOTES, 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 DEFINED UNDER THE FOREIGN EXCHANGE TRANSACTIONS LAW OF KOREA AND THE REGULATIONS THEREUNDER) OTHER THAN A "QUALIFIED INSTITUTIONAL BUYER" (A "KOREAN QIB," AS DEFINED IN THE REGULATION ON ISSUANCE, PUBLIC DISCLOSURE, ETC. OF SECURITIES OF KOREA) WHO IS REGISTERED WITH THE KOREA FINANCIAL INVESTMENT ASSOCIATION (THE "KOFIA") AS A KOREAN QIB, PROVIDED THAT THE AMOUNT OF THE NOTES ACQUIRED BY SUCH KOREAN QIBS IN THE PRIMARY MARKET IS LIMITED TO NO MORE THAN 20% OF THE AGGREGATE ISSUE AMOUNT OF THE NOTES.

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

# PART A – CONTRACTUAL TERMS

Terms used herein shall be deemed to be defined as such for the purposes of the Terms and Conditions of the Notes (the "Conditions") set forth in the Offering Circular dated July 27, 2021 (the "Offering Circular"). This Pricing Supplement is supplemental to and must be read in conjunction with such Offering Circular.

1.	(i)	Issuer:	Korea Midland Power Co., Ltd.				
			(Legal Entity Identifier: 988400Z1HCY1QUPS1W65)				
2.	(i)	Series Number:	4				
	(ii)	Tranche Number:	1				
	(iii)	Date on which the Notes become fungible:	Not applicable				
3.	Spec	cified Currency or Currencies:	United States Dollars (U.S.\$)				
4.	Agg	regate Nominal Amount:	U.S.\$300,000,000				
	(i)	Series:	U.S.\$300,000,000				
	(ii)	Tranche:	U.S.\$300,000,000				
5.	(i)	Issue Price:	99.730% of the Aggregate Nominal Amount				
	(ii)	Net Proceeds:	U.S.\$298,490,000				
6.	(i)	Specified Denominations:	U.S.\$200,000 and integral multiples of U.S.\$1,000 in excess thereof				
	(ii)	Calculation Amount:	U.S.\$1,000				
7.	(i)	Issue Date:	August 9, 2021				
	(ii)	Interest Commencement Date:	August 9, 2021				
	(iii)	Trade Date:	August 2, 2021				
8.	Matu	urity Date:	August 9, 2026				
9. Interest Basis:		rest Basis:	1.250% Fixed Rate				
			(further particulars specified below)				
10. Redemption/Payment Basis:		emption/Payment Basis:	Subject to any purchase and cancellation or early redemption, the Notes will be redeemed on the Maturity Date at 100% of their nominal amount.				
11. Change of Interest or Redemption/Payment Basis:			Not applicable				
12. Put/Call Options:		Call Options:	Not applicable				
13. Listing:		ing:	Singapore Exchange Securities Trading Limited				
14.	(i)	Status of the Notes:	Senior				
	(ii)	Date of Board approval for issuance of Notes obtained:	June 25, 2021				
15. Method of distribution:		hod of distribution:	Syndicated				

# PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE

16. Fixed Rate Note Provisions	Applicable				
(i) Rate(s) of Interest:	1.250% per annum payable semi-annually in arrears on each Interest Payment Date				
(ii) Interest Payment Date(s):	February 9 and August 9 in each year up to and including the Maturity Date, commencing on February 9, 2022				
(iii) Fixed Coupon Amount(s):	U.S.\$6.250 per Calculation Amount				
(iv) Broken Amount(s):	Not applicable				
(v) Day Count Fraction:	30/360, unadjusted				
(vi) Determination Date(s):	Not applicable				
(vii) Other terms relating to the method of calculating for Fixed Rate Notes:	None				
17. Floating Rate Note Provisions	Not applicable				
18. Zero Coupon Note Provisions	Not applicable				
PROVISIONS RELATING TO REDEMP	TION				
19. Call Option	Not applicable				
20. Put Option	Not applicable				
21. Final Redemption Amount of each Note	Par per Calculation Amount				
22. Early Redemption Amount					
Early Redemption Amount(s) per Calculation Amount payable on redemption for taxation reasons or on event of default or other early redemption:	Not applicable				
GENERAL PROVISIONS APPLICABLE TO THE NOTES					
23. Form of Notes:	Registered Notes (Regulation S Global Note)				
24. New Global Note:	No				
25. Additional Financial Center(s) or other special provisions relating to payment dates:	Seoul, London and New York City				
26. Talons for future Coupons to be attached to Definitive Notes (and dates on which such Talons mature):	No				
27. Use of proceeds:	As described in the Offering Circular				

# **PART B – OTHER INFORMATION**

## 1. LISTING AND ADMISSION TO TRADING

Application will be made to the Singapore Exchange Securities Trading Limited (the "Singapore Stock Exchange") for the listing and quotation of the Notes on the Singapore Stock Exchange. The Singapore Stock Exchange assumes no responsibility for the correctness of any of the statements made, opinions expressed or reports contained in this Pricing Supplement. Approval-inprinciple from, admission to the Official List of, and listing and quotation of the Notes on, the Singapore Stock Exchange are not to be taken as an indication of the merits of the Issuer, the Program or the Notes.

# 2. OPERATIONAL INFORMATION

3.

ISIN:	XS2367816076		
Common code:	236781607		
Delivery	Delivery against payment		
Names and addresses of additional Paying Agent(s) (if any):	None		
DISTRIBUTION			
(i) Method of distribution:	Syndicated		
(ii) If syndicated:			
(a) Names of Joint Lead Managers:	Citigroup Global Markets Limited The Hongkong and Shanghai Banking Corporation Limited UBS AG Hong Kong Branch		
(b) Date of subscription agreement:	August 2, 2021		
(c) Stabilizing Manager(s):	Each of the Joint Lead Managers (each acting on its own behalf only)		
(iii) If non-syndicated, name of Manager:	Not applicable		
(iv) US selling restrictions	Reg. S Compliance Category 1; TEFRA not applicable		
(Categories of potential investors to which the Notes are offered):			
<ul><li>(v) Prohibition of sales to EEA or UK retail investors:</li></ul>	Not applicable		
(vi) Additional selling restrictions:	Not applicable		

# LISTING APPLICATION

This Pricing Supplement comprises the final terms required to list the issue of Notes described herein pursuant to the U.S.\$3,000,000,000 Euro Medium Term Note Program of Korea Midland Power Co., Ltd. The Singapore Stock Exchange assumes no responsibility for the correctness of any of the statements made, opinions expressed or reports contained in this Pricing Supplement. Approval in-principle from, admission to the Official List of, and listing and quotation of the Notes on, the Singapore Stock Exchange are not to be taken as an indication of the merits of the Issuer, the Program or the Notes.

## RESPONSIBILITY

The Issuer accepts responsibility for the information contained in this Pricing Supplement, which, when read together with the Offering Circular, contains all information that is material in the context of the issue of the Notes.



# KOREA MIDLAND POWER CO., LTD.

(incorporated with limited liability under the laws of the Republic of Korea)

#### U.S.\$3,000,000,000 Euro Medium Term Notes Program

This Offering Circular replaces and supersedes the offering circular dated January 11, 2019 describing the Program (as defined below). Any Notes (as defined below) issued under the Program on or after the date of this Offering Circular are issued subject to the provisions described herein. This does not affect any Notes issued prior to the date of this Offering Circular.

Under this U.S.\$3,000,000 Euro Medium Term Note Program (the "Program"), Korea Midland Power Co., Ltd. (the "Issuer") may from time to time issue notes in bearer and/or registered form (respectively, "Bearer Notes" and "Registered Notes" and, together, the "Notes") denominated in any currency agreed between the Issuer and the relevant Dealer (as defined below).

The maximum aggregate nominal amount of all Notes from time to time outstanding under the Program will not exceed U.S.\$3,000,000,000 (or its equivalent in other currencies calculated as described herein). The Notes may be issued on a continuing basis to one or more of the dealers specified under "Summary of the Program" and any additional dealer appointed under the Program from time to time, which appointment may be for a specific issue or on an ongoing basis (each a "Dealer" and together the "Dealers"). References in this Offering Circular to the "relevant Dealer" shall, in the case of an issue of Notes being (or intended to be) subscribed by more than one Dealer, be to all Dealers agreeing to purchase such Notes.

Approval in-principle has been received from the Singapore Exchange Securities Trading Limited (the "Singapore Stock Exchange") in connection with the Program and application will be made for the listing and quotation of Notes that may be issued pursuant to the Program and which are agreed at or prior to the time of issue thereof to be so listed on the Singapore Stock Exchange. Such permission will be granted when such Notes have been admitted for listing and quotation on the Singapore Stock Exchange. The Singapore Stock Exchange 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 any of the Notes on, the Singapore Stock Exchange are not to be taken as an indication of the merits of the Issuer, the Program or the Notes. Notice of the aggregate nominal amount of Notes, interest (if any) payable in respect of Notes, the issue price of Notes and any other terms and conditions not contained herein which are applicable to each tranche of Notes will be set out in a pricing supplement (the "Pricing Supplement"), a copy of which, with respect to Notes to be listed on the Singapore Stock Exchange, will be submitted to the Singapore Stock Exchange before the date of listing of the Notes of such tranche.

The Program provides that the Notes may be listed or admitted to trading on such other or further stock exchange(s) as may be agreed between the Issuer and the relevant Dealer. The Issuer may also issue unlisted Notes.

The Notes 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 or sold within the United States (as defined in Regulation S under the Securities Act ("Regulation S")) except pursuant to an exemption from the registration requirements of the Securities Act. Bearer Notes are subject to U.S. tax law requirements and may not be offered, sold or delivered within the United States (as defined in the U.S. Internal Revenue Code of 1986, as amended, and regulations thereunder (the "Code")). For a description of these and other restrictions on transfer, see "Subscription and Sale – Selling Restrictions."

The Issuer may agree with any Dealer that Notes may be issued in a form not contemplated by the Terms and Conditions of the Notes herein, in which event a supplementary Offering Circular, if appropriate, will be made available which will describe the effect of the agreement reached in relation to such Notes.

See "Risk Factors" beginning on page 9 for a discussion of certain factors to be considered in connection with an investment in the Notes.

Arranger

Citigroup

Dealers

Citigroup

HSBC

UBS

The date of this Offering Circular is July 27, 2021.

You should rely only on the information contained in this Offering Circular or to which we have referred you. We have not authorized anyone to provide you with information that is different. This Offering Circular may only be used where it is legal to sell these securities. The information in this Offering Circular may only be accurate on the date of this Offering Circular.

IN CONNECTION WITH ANY OFFERING, TO THE EXTENT PERMITTED BY, AND IN ACCORDANCE WITH, APPLICABLE LAWS AND REGULATIONS, THE ARRANGER OR THE DEALERS (IF ANY) NAMED AS THE STABILIZING MANAGER(S) (OR PERSONS ACTING ON BEHALF OF THE STABILIZING MANAGER) (THE "STABILIZING MANAGER") MAY OVERALLOT 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 STABILIZING MANAGER (OR PERSONS ACTING ON BEHALF OF THE STABILIZING 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 NOTES IS MADE AND, IF BEGUN, MAY BE ENDED AT ANY TIME, BUT IT MUST END NO LATER THAN THE EARLIER OF 30 DAYS AFTER THE ISSUE DATE OF THE NOTES AND 60 DAYS AFTER THE DATE OF THE ALLOTMENT OF THE NOTES.

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

No person has been authorized in connection with any offering of the Notes to give any information or make any representation other than as contained in this Offering Circular and, if given or made, that information or representation must not be relied upon as having been authorized by us or by the Dealers (as defined in "Subscription and Sale"). This Offering Circular does not constitute an offer to sell or a solicitation of an offer to buy any Notes by any person except in compliance with all applicable laws and regulations. No representation or warranty, express or implied, is made, and no responsibility or liability is accepted, by the Dealers or any of their directors, employees, 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 Dealers or their directors, employees, affiliates or advisers or their directors, employees, affiliates or any sale made in connection with this Offering Circular shall under any circumstances imply that the information in this Offering Circular is correct as of any date subsequent to the date of this Offering Circular or constitute a representation that there has been no change or development reasonably likely to involve a material adverse change in our affairs since the date of this Offering Circular.

We, having made all reasonable inquiries, confirm that this Offering Circular contains all information with respect to us and the Notes which is material in the context of the issue and offering of the Notes, that the information contained in this Offering Circular is true and accurate in all material respects and is not misleading in any material respect, that the opinions and intentions expressed in this Offering Circular are

honestly held and have been reached after considering all relevant circumstances and are based on reasonable assumptions, and that there are no other facts, the omission of which would, in the context of the issue and offering of the Notes, make this Offering Circular as a whole or any information or the expression of any opinions or intentions expressed in this Offering Circular misleading in any material respect. We accept responsibility accordingly.

This Offering Circular is based on information provided by us and by other sources that we believe is reasonable. No representation, warranty or undertaking, express or implied, is made and no responsibility or liability is accepted by the Dealers as to the authenticity, origin, validity, accuracy or completeness of the information contained or incorporated by reference in this Offering Circular or any supplement hereto or any other information provided by us in connection with the Program or any other statement, made or purported to be made by any Dealer or on its behalf in connection with us, the Program or the issue and offering of the Notes. To the fullest extent permitted by law, no Dealer accepts any liability (and accordingly disclaims all liability whether arising in tort or contract or otherwise) in relation to the information contained or incorporated by reference in this Offering Circular, or any other information provided by us in connection with us, the Program or the issue and offering to the with the Program or any other statement, made or purported to be made by any Dealer or on its behalf in contract or otherwise) in relation to the information contained or incorporated by reference in this Offering Circular, or any other information provided by us in connection with us, the Program or the issue and offering of the Notes. Each Dealer or on its behalf in connection with us, the Program or the issue and offering of the Notes. Each Dealer and its affiliates accordingly disclaims all and any liability whether arising in tort or contract or otherwise which it might otherwise have in respect of this Offering Circular or any such information.

Neither this Offering Circular nor any other information supplied in connection with the Program or any Notes (i) is intended to provide the basis of any credit, taxation or other evaluation or (ii) should be considered as a recommendation or to constitute an invitation or offer by us or any of the Dealers to any of its recipients to purchase any Notes. Each investor contemplating purchasing any Notes should make its own independent investigation of the financial condition and affairs, and its own appraisal of the creditworthiness, of us. Neither this Offering Circular nor any other information supplied in connection with the Program or the issue of any Notes constitutes an offer or invitation by or on behalf of us or any of the Dealers to any person to subscribe for or to purchase any Notes.

Neither the delivery of this Offering Circular nor the offering, sale or delivery of any Notes shall in any circumstances imply that the information contained herein concerning us is correct at any time subsequent to the date hereof or that any other information supplied in connection with the Program is correct as of any time subsequent to the date indicated in the document containing the same. The Dealers expressly do not undertake to review the financial condition or affairs of us during the life of the Program or to advise any investor in the Notes of any information coming to their attention. Investors should review the most recently published documents incorporated by reference in this Offering Circular when deciding whether or not to purchase any Notes.

The Notes in bearer form are subject to U.S. tax law requirements and may not be offered, sold or delivered within the United States or its possessions or to United States persons, except in certain transactions permitted by U.S. tax regulations. Terms used in this paragraph have the meanings given to them by the Code and the regulations promulgated thereunder.

This Offering Circular does not constitute, and may not be used for purposes of, an offer, invitation or solicitation by anyone in any jurisdiction or in any circumstances in which such offer, invitation or solicitation is not authorized or to any person to whom it is unlawful to make such offer, invitation or solicitation. The distribution of this Offering Circular and the offering of the Notes in certain jurisdictions may be restricted by law. Neither we nor any of the Dealers represent that this Offering Circular may be lawfully distributed, or that any Notes may be lawfully offered, in compliance with any applicable registration or other requirements in any such jurisdiction, or pursuant to an exemption available thereunder, or assume any responsibility for facilitating any such distribution or offering. In particular, no action has been taken by us or the Dealers which would permit a public offering of any Notes or distribution of this document in any jurisdiction where action for that purpose is required. Accordingly, no Notes may be offered or sold, directly or indirectly, and neither this Offering Circular nor any advertisement or other offering material may be distributed or published in any jurisdiction, except under circumstances that will result in compliance with any applicable laws and regulations. Persons into whose possession this Offering Circular may come are required by us and the Dealers to inform themselves about and to observe the relevant restrictions. For a description of certain restrictions on offers and sales of the Notes and distribution of this Offering Circular, see "Subscription and Sale." No action is being taken in any jurisdiction to permit an offering to the general public of Notes or the distribution of this Offering Circular in any jurisdiction where action would be required for those purposes.

The final terms (or the Pricing Supplement, as the case may be) in respect of any Series (as defined under "Terms and Conditions of the Notes") of Notes may include information entitled "MiFID II Product Governance," which will outline the target market assessment in respect of the Notes of any such Series and which channels for distribution of the Notes are appropriate. If such information is included, any person subsequently offering, selling or recommending the Notes (a "distributor") should take into consideration the target market assessment; however, a distributor subject to Directive 2014/65/EU (as amended, "MiFID II") will be responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the target market assessment) and determining the appropriate distribution channels.

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

The final terms (or the Pricing Supplement, as the case may be) in respect of any Series (as defined under "Terms and Conditions of the Notes") of Notes may include information entitled "UK MiFIR Product Governance" which will outline the target market assessment in respect of the Notes of any such Series and which channels for distribution of the Notes are appropriate. If such information is included, any person subsequently offering, selling or recommending the Notes (a "UK MiFIR distributor") should take into consideration the target market assessment; however, a UK MiFIR distributor subject to the FCA Handbook Product Intervention and Product Governance Sourcebook (the "UK MiFIR Product Governance Rules") will be responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the target market assessment) and determining the appropriate distribution channels.

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

**IMPORTANT – EEA RETAIL INVESTORS –** If the final terms (or the Pricing Supplement, as the case may be) in respect of any Series of Notes includes a legend entitled "Prohibition of Sales to EEA Retail Investors," the Notes of any such Series are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the EEA. For these purposes: (a) the expression "retail investor" means a person who is one (or more) of the following: (i) a retail client as defined in point (11) of Article 4(1) of MiFID II; (ii) a customer within the meaning of Directive (EU) 2016/97 (as amended, the "Insurance Distribution Directive"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (iii) not a qualified investor as defined in the Prospectus Regulation (as defined below); and (b) the expression "offer" includes the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes. Consequently, no key information document required by Regulation (EU) No 1286/2014 (the "PRIIPs Regulation") for offering or selling the Notes or otherwise making them available to retail investors in the EEA will be prepared and therefore, offering or selling the Notes or otherwise making them available to retail investor in the EEA may be unlawful under the PRIIPs Regulation.

For the purposes of the foregoing paragraph, the expression "Prospectus Regulation" means Regulation (EU) 2017/1129.

**IMPORTANT** – **UK RETAIL INVESTORS** – If the final terms (or the Pricing Supplement, as the case may be) in respect of any Series of Notes includes a legend entitled "Prohibition of Sales to UK Retail Investors," the Notes of any such Series are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the UK. For these purposes: (a) the expression "retail investor" means a person who is one (or more) of the following: (i) a retail client as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 ("EUWA"); (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act ("FSMA") and any rules or

regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA; or (iii) not a qualified investor as defined in Article 2 of the Prospectus Regulation as it forms part of domestic law by virtue of the EUWA; and (b) the expression "offer" includes the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes. Consequently, no key information document required by the PRIIPs Regulation as it forms part of domestic law by virtue of the EUWA (the "UK PRIIPs Regulation") for offering or selling the Notes or otherwise making them available to retail investors in the UK has been prepared and therefore, offering or selling the Notes or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.

This Offering Circular is only being distributed to and is only directed at (i) persons who are outside the UK, or (ii) persons having professional experience in matters relating to investments who are investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order"), or (iii) high net worth entities, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order or (iv) other persons to whom an invitation or inducement to engage in investment activity (within the meaning of the FSMA) in connection with the issue or sale of any notes may otherwise be lawfully communicated (all such persons in (i), (ii), (iii) and (iv) together being referred to as "Relevant Persons"). Any Notes will only be available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such Notes will be engaged in only with, Relevant Persons. Any person who is not a Relevant Person should not act or rely on this Offering Circular or any of its contents.

In making an investment decision, prospective investors must rely on their own examination of us and the terms of the offering of the Notes, including the merits and risks involved. The Notes have not been registered with or approved or disapproved by the United States Securities and Exchange Commission, any state securities commission or other regulatory authority, nor have any of the foregoing authorities approved this Offering Circular or confirmed the accuracy or determined the adequacy of the information contained in this Offering Circular. Any representation to the contrary is unlawful.

Neither we nor the Dealers make any representation to any investor in the Notes regarding the legality of its investment under any applicable laws. Any investor in the Notes should be able to bear the economic risk of an investment in the Notes for an indefinite period of time.

# SINGAPORE INFORMATION

Notification under Section 309B(1)(c) of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA") – Unless otherwise stated in the Pricing Supplement in respect of any Notes, the Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A(1) of the SFA), that the Notes to be issued under the Program 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).

# CERTAIN DEFINED TERMS AND CONVENTIONS

We have prepared this Offering Circular using a number of conventions that should be considered when reading the information contained in this Offering Circular. All references to "Korea" or the "Republic" herein are references to The Republic of Korea. All references to the "Government" herein are references to the Government of The Republic of Korea. All references to "KOMIPO" or the "Issuer" herein are references to Korea Midland Power Co., Ltd. All references to "we" or "us" herein are references to the Issuer and its subsidiaries, as the context requires.

In this Offering Circular, references to "Won" or "W" are to the currency of Korea and all references to "U.S. dollars," "Dollars," "\$" or "U.S.\$" are to the currency of the United States of America. We maintain our accounts in Won. This Offering Circular contains translations of certain Won amounts into U.S. dollars at specified rates solely for the convenience of the reader. These translations should not be construed as representations that the Won amounts actually represent such U.S. dollar amounts or could have been or could be converted into U.S. dollars at any particular rate, or at all. Unless otherwise specified, all conversions of Won into U.S. dollars were made at the market average exchange rate announced by Seoul Money Brokerage Services, Ltd. in Seoul between Won and the U.S. dollars (the "Market Average Exchange Rate"). Where applicable, the translations from Won to U.S. dollars herein indicated were made at the rate of W1,133.5 to U.S.\$1.00, which was the Market Average Exchange Rate in effect as of March 31, 2021. The exchange rate between the U.S. dollar and the Won may be highly volatile from time to time and the U.S. dollar amounts referred to in this report should not be relied upon as an accurate reflection of our results of operations. See "Exchange Rates."

Any discrepancies in the tables included in this Offering Circular between the listed amounts and totals thereof are due to rounding.

# **ENFORCEABILITY OF CIVIL LIABILITIES**

We are a corporation with limited liability organized under the laws of Korea. All of our directors and officers and certain other persons named in this Offering Circular reside in Korea, and all or a significant portion of the assets of the directors and officers and certain other persons named in this Offering Circular and substantially all of our assets are located in Korea. As a result, it may not be possible for you to effect service of process outside Korea upon us or such persons, or to enforce judgments against us or such persons obtained in courts outside Korea predicated upon civil liabilities of us or our directors and officers under laws other than Korean law, including any judgment predicated upon United States federal securities laws. We have been advised by Shin & Kim, our counsel as to matters of Korean law, that there is doubt as to the enforceability in Korea in original actions or in actions for enforcement judgments of United States.

## PRESENTATION OF FINANCIAL INFORMATION

Our audited consolidated financial statements as of and for the years ended December 31, 2019 and 2020, included in this Offering Circular, have been prepared in accordance with the Rules for Accounting Affairs of Public Corporations and Quasi-governmental Institutions ("Government Accounting Standards"), and where accounting provisions have not been specified under the Government Accounting Standards, we have also applied Korean International Financial Reporting Standards ("K-IFRS"), which may differ in certain respects from International Financial Reporting Standards ("IFRS") applied in other countries, and our unaudited interim condensed consolidated financial statements as of March 31, 2021 and for the three months ended March 31, 2020 and 2021 have been prepared in accordance with K-IFRS No. 1034 Interim Financial Reporting. In making an investment decision, investors must rely upon their own independent examination of us, the terms of any offering and the most recent financial information, including the risks involved. Potential investors should consult their own professional advisers for an understanding of the differences between K-IFRS and IFRS, and how these differences affect the financial information contained in this Offering Circular. This Offering Circular should not be considered as a recommendation by any of the Dealers that any recipient of this Offering Circular should purchase the Notes.

All financial information in this Offering Circular has been presented on a consolidated basis unless otherwise specified or the context otherwise requires.

### FORWARD-LOOKING STATEMENTS

Certain statements in this Offering Circular constitute "forward-looking statements," as defined in Section 27A of the Securities Act, and Section 21E of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act"), including statements regarding our expectations and projections for future operating performance and business prospects. The words "believe," "expect," "anticipate," "estimate," "project," "will," "aim," "will likely result," "will continue," "intend," "plan," "contemplate," "seek to," "future," "objective," "goal," "should," "will pursue" and similar expressions or variations of these expressions identify forward-looking statements. In addition, all statements other than statements of historical facts included in this Offering Circular, including, without limitation, those regarding our financial position and results, business strategy, plans and objectives of management for future operations, including development plans and objectives relating to our products and services, are forward-looking statements. Such forward-looking statements and any other projections contained in this Offering Circular (whether made by us or any third party) involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements to be materially different from the future results, performance or achievements expressed or implied by forward-looking statements. Such forward-looking statements are based on current beliefs, assumptions, expectations, estimates and projections regarding our present and future business strategies and the environment in which we will operate in the future. Among the important factors that could cause some or all of those assumptions not to occur or cause our actual results, performance or achievements to differ materially from those in the forward-looking statements include, among other things, our ability to successfully implement our business strategy and our safety policies, the condition of and changes in the Korean, Asian or global economies, the our growth and expansion, including whether we succeed in our capital investment program to increase our installed capacity, changes in interest rates and exchange rates and changes in government regulation and licensing of our businesses in Korea and in other jurisdictions where we may operate, and the change in the price of electricity sold by us. Additional factors that could cause our actual results, performance or achievements to differ materially include, but are not limited to, those discussed under "Risk Factors." Any forward-looking statements contained in this Offering Circular speak only as of the date of this Offering Circular. Each of the us and the Dealers expressly disclaims any obligation or undertaking to release, publicly or otherwise, any updates or revisions to any forward-looking statement contained herein to reflect any change in our expectations with regard thereto or any change in events, conditions, assumptions or circumstances on which any such statement was based.

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# SUMMARY

# The Issuer

We were established on April 2, 2001 as one of six generation subsidiaries (the "Generation Subsidiaries") of Korea Electric Power Corporation ("KEPCO"). The Generation Subsidiaries generate over 80% of the electricity in Korea. As of March 31, 2021, we had a domestic generation capacity of 9,733 megawatts, or approximately 7.5% of the total electricity generation capacity in Korea (excluding plants generating electricity primarily for private or emergency use). Based on our internal data, in 2019, 2020 and the three months ended March 31, 2021, we sold 43,342, 46,265 and 11,292 gigawatt hours of electricity, respectively, to KEPCO through the Korea Power Exchange (the "KPX"). KEPCO is currently the sole electricity transmission and distribution company in Korea.

Total demand for electricity in Korea increased by 3.6% in 2018 but decreased by 1.1% in 2019 and 2.2% in 2020, in each case, year on year, according to KEPCO, and the consumption of electric power is expected to increase by 1.6% per year from 2020 to 2034, according to the Government's Ninth Basic Plan. We plan to continue to make substantial capital expenditures to expand our generation capacity and enhance our generating systems in the future, particularly with respect to the generation of renewable energy.

Based on our vision of being a "global energy leader enhancing the value of life," we aspire to enhance our customers' lives by building trust and adding value to the environment, economy and society. As of March 31, 2021, we had a total installed generation capacity of 9,733 megawatts, of which 5,318 megawatts, 4,310 megawatts and 105 megawatts were attributable to our coal and oil thermal units, LNG-combined cycle units and renewable energy units, respectively. We generated sales of Won 4,547 billion, Won 4,358 billion, Won 1,248 billion and Won 1,173 billion in 2019, 2020 and the three months ended March 31, 2020 and 2021, respectively. Our loss for the year was Won 6 billion in 2019 and Won 3 billion in 2020. Our profit for the period was Won 61 billion for the three months ended March 31, 2020 and Won 61 billion for the three months ended March 31, 2020.

We are a corporation incorporated with limited liability under the laws of Korea. Our registered office is located at 160, Boryeongbuk-ro, Boryeong-si, Chungcheongnam-do 33439, Korea. Our website address is *www.komipo.co.kr*.

# The Program

The following summary does not purport to be complete and is taken from, and is qualified in its entirety by, the remainder of this Offering Circular and, in relation to the terms and conditions of any particular Tranche of Notes, the applicable Pricing Supplement. Words and expressions defined in "Form of the Notes" and "Terms and Conditions of the Notes" below or elsewhere in this Offering Circular have the same meanings in this summary.

Issuer	Korea Midland Power Co., Ltd.
	(Legal Entity Identifier: 988400Z1HCY1QUPS1W65)
Program Size	Up to U.S.\$3,000,000,000 (or the equivalent in other currencies calculated as described in the Dealer Agreement) outstanding at any time. The Issuer may increase the amount of the Program in accordance with the terms of the Dealer Agreement.
Risk Factors	Investing in Notes issuable under the Program involves certain risks. The principal risk factors that may affect the abilities of the Issuer to fulfil its obligations in respect of the Notes are discussed under the section "Risk Factors" below.
Arranger	Citigroup Global Markets Limited
Dealers	Citigroup Global Markets Limited, The Hongkong and Shanghai Banking Corporation Limited, UBS AG, Hong Kong Branch and any other Dealer appointed from time to time by the Issuer either generally in respect of the Program or in relation to a particular Series of the Notes.
Fiscal Agent, CMU Lodging and Paying Agent and Registrar	Citicorp International Limited
Paying Agent and Transfer Agent	Citibank, N.A., London Branch
	Citibank, N.A., London Branch The Notes will be issued on a syndicated or non-syndicated basis. The Notes will be issued in series (each a "Series") having one or more issue dates and on terms otherwise identical, the Notes of each Series being intended to be interchangeable with all other Notes of that Series. Each Series may be issued in tranches (each a "Tranche") on the same or different issue dates. The specific terms of each Tranche (which will be completed, where necessary, with the relevant terms and conditions and, save in respect of the issue date, issue price, first payment date of interest, nominal amount of the Tranche, will be identical to the terms of other Tranches of the same Series) will be completed in the Pricing Supplement.

Form of the Notes ...... Notes may be issued in bearer form or in registered form. Registered Notes will not be exchangeable for Bearer Notes and vice versa. No single Series or Tranche may comprise both Bearer Notes and Registered Notes.

> Each Tranche of Bearer Notes will initially be represented by a Temporary Global Note or a Permanent Global Note, as specified in the relevant Pricing Supplement, which, in each case, may be deposited on the issue date with a common depositary for Euroclear, Clearstream or any other agreed alternative clearance system.

> Each Temporary Global Note will be exchangeable for a Permanent Global Note or, if so specified in the relevant Pricing Supplement, for Definitive Notes. Each Permanent Global Note will be exchangeable for Definitive Notes in accordance with its terms. Definitive Notes will, if interest-bearing, have Coupons attached and, if appropriate, a Talon for further Coupons. Any interest in a Temporary Global Note or a Permanent Global Note will be transferable only in accordance with the rules and procedures for the time being of Euroclear, Clearstream, the CMU Service and/or any other agreed clearance system, as appropriate.

> Bearer Notes will be issued in compliance with applicable U.S. tax rules. Bearer Notes will be issued in compliance with rules in substantially the same form as U.S. Treasury Regulations 1.163-5(c)(2)(i)(D) for purposes of Section 4701 of the U.S. Internal Revenue Code (the "D Rules") unless (i) the relevant Pricing Supplement states that the Bearer Notes are issued in compliance with rules in substantially the same form as U.S. Treasury Regulation §1.163-5(2)(i)(C) for purposes of Section 4701 of the U.S. Internal Revenue Code (the "C Rules") or (ii) the Bearer Notes are issued other than in compliance with the D Rules or the C Rules but in circumstance in which the Notes will not constitute "registration required obligations" for U.S. federal income tax purposes, which circumstance will be referred to in the relevant Pricing Supplement. Bearer Notes that are issued in compliance with the D Rules must be initially represented by a Temporary Global Note. If the D Rules are specified in the relevant Pricing Supplement as applicable, certification as to non-U.S. beneficial ownership will be a condition precedent to any exchange of an interest in a Temporary Global Note or receipt of any payment of interest in respect of a Temporary Global Note.

> Each Tranche of Registered Notes will, unless otherwise specified in the relevant Pricing Supplement, be represented by a Global Note Certificate (as defined in the "Form of the Notes"), which will be deposited on or about its issue date with a common depositary for, and registered in the name of a nominee of, Euroclear and Clearstream or, in respect of CMU Notes, a sub-custodian for the CMU Service operated by the HKMA. With respect to all offers or sales by a Dealer of an unsold allotment or subscription, beneficial interests in a Global Note Certificate of such Tranche may be held only through Euroclear, Clearstream or the CMU Service.

	Application will be made to have the Global Notes or the Global Note Certificates of any Tranche accepted for clearance and settlement through the facilities of Euroclear, Clearstream and/or the CMU Service, as appropriate.
Currencies	Notes may be denominated in any currency or currencies, agreed between the Issuer and the relevant Dealer(s) subject to compliance with all applicable legal and/or regulatory and/or central bank requirements. Payments in respect of the Notes may, subject to such compliance, be made in and/or linked to, any currency or currencies other than the currency in which such Notes are denominated.
Denominations	Notes will be issued in such denominations as may be specified in the relevant Pricing Supplement, subject to compliance with all applicable legal and/or regulatory and/or central bank requirements.
Status of the Notes	The Notes constitute direct, general, unsubordinated and unconditional obligations of the Issuer which will at all times rank pari passu without any preference or priority among themselves and at least pari passu with all other present and future unsecured and unsubordinated obligations of the Issuer, save for such obligations as may be preferred by provisions of law that are both mandatory and of general application. See "Terms and Conditions of the Notes – Status."
Issue Price	Notes may be issued at their nominal amount or at a discount or premium to their nominal amount. Partly paid notes may be issued, the issue price of which will be payable in two or more instalments.
Maturities	Any maturity, subject, in relation to specific currencies, to compliance with all applicable legal and/or regulatory and/or central bank requirements.
	Where Notes have a maturity of less than one year and either (a) the issue proceeds are received by the Issuer in the United Kingdom or (b) the activity of issuing the Notes is carried on from an establishment maintained by the Issuer in the United Kingdom, such Notes must: (i) have a minimum redemption value of £100,000 (or its equivalent in other currencies) and be issued only to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses; or (ii) be issued in other circumstances which do not constitute a contravention of section 19 of the Finance Services and Markets Act 2000 ("FSMA") by the Issuer.
<b>Redemption</b>	Unless previously redeemed, or purchased and cancelled, the Notes will be redeemed at their Final Redemption Amount on the Maturity Date of the relevant Tranche as described in Condition $9(a)$ (Scheduled redemption).

Optional Redemption	Notes may be redeemed before their stated maturity at the option of the Issuer (either in whole or in part) as described in Condition $9(c)$ (Redemption at the option of the Issuer) and/or the Noteholders to the extent (if at all) specified in the Condition $9(e)$ (Redemption at the option of Noteholders).
Tax Redemption	The Notes may be redeemed at the option of the Issuer in whole, but not in part for tax reasons as described in Condition 9(b) (Redemption for tax reasons).
Interest	Notes may be interest bearing or non-interest bearing. Interest (if any) may accrue at a fixed rate or a floating rate or other variable rate and the method of calculating interest may vary between the issue date and the maturity date of the relevant Tranche. All such information will be set out in the relevant Pricing Supplement.
Negative Pledge	The Issuer is subject to certain negative pledge as further described in Condition 5 (Negative Pledge).
Events of Default	Events of Default for the Notes are set out in Condition 13 (Events of Default), which includes certain Events of Defaults relating to the Issuer.
Cross-Default	The Notes will contain a cross-default provision as further described in Condition 13(d) (Cross-default of Issuer or Subsidiary).
Taxation	All payments in respect of the Notes and/or the Coupons will be made free and clear of withholding taxes imposed by any taxing jurisdiction, subject as provided in Condition 12 (Taxation).
	In the event that any such deduction is made, the Issuer will, save in certain limited circumstances provided in Condition 12, be required to pay additional amounts to cover the amounts so deducted.
Listing	Approval in-principle has been received from the Singapore Stock Exchange in connection with the Program and application will be made for the listing and quotation of any Notes that may be issued pursuant to the Program and which are agreed at or prior to the time of issue thereof to be so listed on the Singapore Stock Exchange. Such permission will be granted when such Notes have been admitted for listing and quotation on the Singapore Stock Exchange. The Notes may also be listed on such other or further stock exchange(s) as may be agreed between the Issuer and the relevant Dealer in relation to each Series. For so long as any Notes are listed on the Singapore Stock Exchange and the rules of the Singapore Stock Exchange, will be traded in a minimum board lot size of S\$200,000 (or its equivalent in foreign currencies). Unlisted Notes may also be issued. The applicable Pricing Supplement will state whether or not the relevant Notes are to be listed and, if so, on which stock exchange(s).

- Governing Law ..... The Notes, the Agency Agreement, and the Deed of Covenant and any non-contractual obligations arising out of or in connection with the Notes, the Agency Agreement and the Deed of Covenant will be governed by English law. Selling Restrictions ..... For a description of certain restrictions on offers, sales and deliveries of the Notes and on the distribution of offering materials in the United States, the European Economic Area, the United Kingdom, Japan, Hong Kong, Singapore and Korea, see "Subscription and Sale." In connection with the offering and sale of a particular Tranche, additional restrictions may be imposed which will be set out in the relevant Pricing Supplement. Initial Delivery of the Notes .... On or before the issue date for each Series, the Global Note representing Bearer Notes or the Global Note Certificate representing Registered Notes may be deposited with a common
  - representing Registered Notes may be deposited with a common depositary for Euroclear and Clearstream or a sub-custodian for the CMU Service. Global Notes or Certificates may also be deposited with any other clearing system or may be delivered outside any clearing system; provided that the method of such delivery has been agreed in advance by the Issuer, the Fiscal Agent, the CMU Lodging and Paying Agent, the Registrars and the relevant Dealer. Registered Notes that are to be credited to one or more clearing systems on issue will be registered in the name of, or in the name of a nominee or a sub-custodian for, such clearing systems.

# Summary Financial and Other Data

The following tables present summary financial and other data as of and for the years ended December 31, 2019 and 2020 and as of March 31, 2021 and for the three months ended March 31, 2020 and 2021. The summary financial information and other data set forth below have been derived from and should be read in conjunction with our audited consolidated financial statements and notes thereto as of and for the years ended December 31, 2019 and 2020 and our unaudited interim condensed consolidated financial statements and notes thereto as of March 31, 2021 and for the three months ended March 31, 2020 and 2021 are included elsewhere in this Offering Circular.

Our consolidated financial statements as of and for the years ended December 31, 2019 and 2020 have been prepared in accordance with K-IFRS. Our consolidated interim financial statements as of March 31, 2021 and for the three months ended March 31, 2020 and 2021 have been prepared in accordance with K-IFRS No. 1034 Interim Financial Reporting.

Our results of operations for the nine months ended March 31, 2021 may not be indicative of our results of operations for any future interim period or for the full year 2021.

	For the Year Ended December 31,		For the Three Months Ended March 31,	
	2019	2020	2020	2021
	(in billi	ons of Won, ex	cept per share	data)
Consolidated Statement of Comprehensive Income (Loss) Data:				
Sales	₩ 4,547 (4,331)	₩ 4,358 (4,116)	₩ 1,248 (1,069)	₩ 1,173 (1,015)
Gross profit	217	241	179	158
Selling and administrative expenses	(126)	(139)	(28)	(33)
Operating profit	91	102	151	125
Other non-operating incomeOther non-operating expensesOther profit (loss), netFinance incomeFinance costsShare of profit of associates and joint	9 (28) (13) 85 (228)	7 (11) (51) 140 (226)	2 (1) (3) 63 (147)	$     \begin{array}{r}       1 \\       (0) \\       2 \\       43 \\       (101)     \end{array} $
ventures, net	13	32	9	5
Profit (loss) before income tax	(71)	(6)	74	76
Income tax benefit (expense)	65	3	(13)	(15)
Profit (loss) for the year/period	₩ (6)	₩ (3)	₩ 61	₩ 61
Other comprehensive loss for the year/period, net of tax	(10)	(35)	(26)	(1)
Total comprehensive income (loss) for the year/period	₩ (16)	₩ (38)	₩ 36	₩ 60

	As of Decen	nber 31,	As of March 31,
-	2019	2020	2021
-	(in	billions of Wo	n)
Consolidated Statement of Financial Position Data:			
Assets:			
Cash and cash equivalents	₩ 125	₩ 254	₩ 293
Other current assets <sup>(1)</sup>	1,603	1,232	1,353
Property, plant and equipment	10,358	10,917	10,871
Other non-current assets <sup>(2)</sup>	1,005	1,022	1,008
Total assets	₩13,093	₩13,426	₩13,525
Liabilities and shareholder's equity:			
Short-term borrowings	₩ 350	₩ 200	₩ 140
Current portion of long-term borrowings	13	12	11
Current portion of bonds	400	566	919
Other current liabilities <sup>(3)</sup>	775	699	791
Bonds	6,398	6,796	6,469
Long-term borrowings	192	177	178
Other non-current liabilities <sup>(4)</sup>	1,127	1,176	1,157
Total liabilities	₩ 9,256	₩ 9,627	₩ 9,666
Total equity.	₩ 3,837	₩ 3,799	₩ 3,859
Total liabilities and equity	₩13,093	₩13,426	₩13,525
Net working capital (deficit) <sup>(5)</sup>	₩ 191	₩ 9	₩ (216)

	For the Year Ended December 31,		For the Thre Ended Ma	
	2019	2020	2020	2021
		(in billions	of Won)	
<b>Consolidated Other Financial Data:</b>				
Capital expenditures <sup>(6)</sup>	₩ 1,636	₩ 1,064	₩ 215	₩ 202
Depreciation and amortization <sup>(7)</sup>	749	763	176	180
Cash flows provided by operating				
activities	761	894	656	406
Cash flows used in investing activities	(1,621)	(1,095)	(374)	(292)
Cash flows provided by (used in)				
financing activities	906	336	(296)	(81)
<b>Consolidated Operating Information:</b>				
Total power sold (gigawatt hours)	43,342	46,265	11,051	11,292
Total installed capacity (megawatts)	10,691	10,733	10,727	9,733

Notes:

<sup>(1)</sup> Other current assets consist of current financial assets, trade and other receivables, inventories, current tax assets and current non-financial assets.

<sup>(2)</sup> Other non-current assets consist of non-current financial assets, non-current trade and other receivables, intangible assets, investments in associates and joint ventures, deferred tax assets and non-current non-financial assets.

<sup>(3)</sup> Other current liabilities consist of trade and other payables, derivative liabilities, current tax liabilities, current non-financial liabilities and current provisions.

<sup>(4)</sup> Other non-current liabilities consist of non-current trade and other payables, derivative liabilities, non-current non-financial liabilities, employee benefit obligations, deferred tax liabilities and non-current provisions.

<sup>(5)</sup> Net working capital (deficit) means total current assets minus total current liabilities.

<sup>(6)</sup> Capital expenditures represent the sum of acquisition of property, plant and equipment, construction-in-progress and intangible assets in our statements of cash flows.

<sup>(7)</sup> In respect of cost of sales only, and not selling and administrative expenses.

# **RISK FACTORS**

Prospective purchasers of the Notes should carefully consider all of the information contained in this Offering Circular, including our financial statements and related notes, in addition to the following risk factors. In particular, investors should pay attention to the fact that we are subject to the legal and regulatory environment of Korea, which in many respects differs from that which prevails in other countries.

## **Risks Relating to Our Business**

# The Government may adopt policy measures to substantially restructure the Korean electric power industry or our operational structure, which may have a material adverse effect on our business, operations and profitability.

Since our establishment, the Government has introduced successive policy initiatives to foster efficiency in the Korean electric power industry and has adopted policy measures that have substantially modified our business and operations. However, these policy initiatives have not always been fully implemented as originally planned and in some cases have been amended or replaced by new initiatives, among others, due to economic or policy considerations or a change in administration. There can be no assurance that the initiatives and plans announced by the Government will be implemented as planned or at all, or that the implementation of any such plans will not have a negative effect on our business, results of operations or financial condition.

In June 2016, the Government announced plans to reform state-owned enterprises in the energy and resources development sector, including KEPCO, our parent company, and the electric power industry in general. The Government plan involves, among other things, the gradual liberalization of the electric power industry with respect to the distribution market, as well as the initial public offering of the Generation Subsidiaries, including us, in conjunction with the sale of minority interests (20% to 30%) in such subsidiaries. See "The Korean Electricity Industry – Restructuring of the Electricity Industry in Korea."

Following his election in May 2017, President Moon Jae-In ordered the (i) suspension of coal-fired generation units that have been in service for more than 30 years for the month of June 2017 and staggered, if not suspended, operations of such old coal-fired generation units during the spring season in 2018 and beyond when yellow dust storms are more frequent, (ii) accelerated decommissioning of such old coal-fired generation units and (iii) suspension of construction of new coal-fired generation units and reevaluation of coal-fired generation projects less than 10% into construction.

As of March 31, 2021, approximately 52% in aggregate of our total installed capacity was attributable to our coal-fired generation units. As such, the continued implementation of the above measures may reduce our sales and increase our costs, including capital expenditures, relating to our generation of electricity using coal as the main fuel source. See "– Our capacity expansion plans, which are based on Government projections on long-term supply and demand of electricity in Korea, may prove to be inadequate."

## Environmental regulations may adversely affect our operations.

We are required to comply with numerous laws and regulations relating to the protection of the environment and land use in Korea. See "Business – Environment." These laws and regulations are constantly changing. While we believe we are in compliance with applicable environmental laws and regulations in all material respects and that we have obtained all material environmental approvals currently required to own and operate our facilities, we may incur significant costs as a result of these requirements.

Starting January 2012, the Government has enforced the Renewable Portfolio Standard ("RPS"), under which each generation company, including us, is required to supply 10% of the total energy generated from such generation company in the form of renewable energy by 2022, with interim annual targets for the intervening years. Any generation company failing to do so in the prescribed timeline is subject to penalties. We have met the RPS targets of 6.0% for 2019 and 7.0% for 2020 and thus have not been levied any penalties for non-compliance with respect to such years. While we intend to continue increasing the proportion of generation capacity from renewable energy relative to generation capacity from non-renewable energy in order to meet our future RPS targets, there is no assurance that we will be able to do

so quickly enough to meet such targets. Furthermore, while we expect that additional capital expenditures to increase generation capacity from renewable energy will be covered by a corresponding increase in electricity tariff levied on end-users, which will in turn increase the amount payable to us by KEPCO, there is no assurance that the Government will in fact raise the electricity tariff to a level sufficient to fully cover such additional capital expenditures or at all.

In addition, in 2015, the Government implemented a carbon emission trading system in order to reduce the emission of greenhouse gases by 37% from 2030 business-as-usual levels in accordance with the Act on Allocation and Trading of Greenhouse Gas Emission Allowances. Under the Government's emission trading system, the Government allocates emission allowance units to companies in certain industries, including generation companies, and such companies are allowed to emit levels of greenhouse gases based on the number of allowance units that have been allocated to them. If a company emits more than the amount of allowance units that have been allocated to it, the company must purchase additional allowance units on the emission trading system. In 2020, we emitted approximately 34 million tons of carbon equivalents, which was more than the 30 million tons in allowance units that had been allocated to us for that year, and as a result, we purchased 3.8 million tons in allowance units on the emission trading system and incurred an additional cost of Won 90 billion. Our continued adherence to such annual emission reduction targets is expected to result in our incurring significant compliance costs.

In December 2016, the Ministry of Trade, Industry and Energy (the "MOTIE") and the five non-nuclear Generation Subsidiaries, including us, entered into an agreement to reduce fine dust and pollutant emissions from coal-fired generation units. The agreement calls for the Generation Subsidiaries to invest a total of Won 11.6 trillion in pollution reduction equipment in existing and new coal-fired generation units, as well as the decommissioning of old coal-fired generation units, pursuant to which our Boryeong units no. 1 and 2 were decommissioned in 2020.

Korean environmental laws establish emissions standards relating to, among other things, sulfur oxides ("Sox"), nitrogen oxides ("NOx") and dust. Such standards have become more stringent in recent years to reduce the amount of permitted emissions, including through the enactment of the Special Act on the Improvement of Air Quality in Air Control Zones in April 2019. Pursuant to the regulations under such act, which became effective in April 2020, all our generation facilities, other than our Jeju Power Plant Complex and Wonju Clean Power Plant Complex, became subject to annual emission allowance targets and trading systems of emission allowance units with respect to SOx, NOx and fine dust starting in 2020, similar to those targets and trading systems relating to greenhouse gas emissions. Adhering to such annual emission reduction targets may result in our incurring significant compliance costs.

Failure to comply with environmental laws and regulations could have a material adverse effect on us, including closure of individual facilities not in compliance, as well as the imposition of civil or criminal liability and the imposition of liens, penalties or fines, and expenditures to bring facilities into compliance.

# The introduction of the vesting contract system has been indefinitely suspended and may not achieve the desired benefits when fully implemented.

On May 20, 2014, the Electricity Business Act was amended to introduce a vesting contract system to determine the price and quantity of electricity to be sold and purchased through the KPX between the purchaser of electricity (currently, KEPCO) and the sellers of electricity (namely, the Generation Subsidiaries (including us) and independent power producers ("IPPs")).

Under the vesting contract system, electricity generators using low-cost base load fuels (such as nuclear, coal, hydro and by-product gas) at a particular generation unit were to be required to enter into a contract with the purchaser of electricity (currently, KEPCO), which would specify, among other things, the quantity of electricity to be generated and sold from such generation unit and the price at which such electricity would be sold, subject to certain adjustments.

The introduction of the vesting contract system was intended principally to prevent excessive profit-taking by producers of electricity using low-cost base load fuels (such as nuclear, coal, hydro and by-product gas) by replacing the adjusted coefficient as the basis for determining the guaranteed return to generation companies, as well as to enhance the stability of electricity supply by requiring long-term contractual arrangements for the purchase and sale of electricity and promote cost savings, productivity enhancements and operational efficiency by providing incentives and penalties depending on the degree to which the generation companies could supply electricity at costs below the contracted electricity prices.

In order to minimize undue shock to the electricity trading market in Korea, the vesting contract system was to be implemented in phases starting with by-product gas-based electricity in 2015. The rollout of the vesting contract system was further studied by a task force consisting of representatives from the Government, the KPX and generation companies. Following such study, the Government announced in June 2016 that, due to changes in the electricity business environment (including an increase in generation capacity relative to peak usage, reduced fuel costs following a decline in oil prices and greater environmental concerns related to coal-fired electricity generation), it will indefinitely suspend any further rollout of the vesting contract system beyond by-product gas-based electricity, and retain the adjusted coefficient-based electricity pricing adjustment mechanism. No assurance can be given that such system, if re-introduced, will not adversely affect our business, results of operation or financial condition in the future. See "The Korean Electricity Industry – Vesting Contract System."

# Our capacity expansion plans, which are based on Government projections on long-term supply and demand of electricity in Korea, may prove to be inadequate.

We make plans for expanding or upgrading our generation capacity based on the Government's Basic National Energy Plan, as well as the Power Supply and Demand Basic Plan (the "Basic Plan"). The Basic Plan is announced and revised generally every two years by the Government.

In June 2019, the Government announced the Third Basic National Energy Plan, which is a comprehensive plan that covers the entire spectrum of energy industries in Korea from 2019 to 2040. The Third Basic National Energy Plan focuses on the following five key tasks: (i) innovating the structure of energy consumption by strengthening the energy demand management of various sectors such as industrial, building and transportation, and streamlining pricing systems with the aim of improving the efficiency of energy consumption by 38% by 2040 and reducing energy demand by 18.6% by 2040, (ii) transitioning to a clean and safe mix of energy through increasing the share of renewable energy by 30~35% while reducing the share of nuclear and coal energy, (iii) expanding decentralized and participatory energy systems by increasing the share of distributed energy resources (such as renewable energy and fuel cells) in areas with demand and strengthening regional management by expanding the roles and responsibilities of local governments, (iv) bolstering the global competitiveness of Korea's energy industries, as well as through adding value to existing traditional energy industries, and (v) laying the foundation for conversion to clean and safe energy by improving the electricity, gas and heat market systems and building an energy big data platform to promote the creation of new industries.

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. Pursuant to such plans, we plan to retire our Boryeong units no. 5 and 6 and convert them to LNG fuel use by 2025.

We cannot assure you that the Third Basic National Energy Plan, the Ninth Basic Plan or any future plans to be subsequently adopted will successfully achieve their intended goals, the foremost of which is to ensure, through carefully calibrated capacity expansion and other means, balanced overall electricity supply and demand in Korea at affordable rates to end users while promoting efficiency and environmental friendliness in the consumption and production of electricity. If there is a significant variance between the projected electricity supply and demand considered in planning our capacity expansions and the actual electricity supply and demand, or if these plans otherwise fail to meet their intended goals or have other unintended consequences, this may result in inefficient use of our capital, mispricing of electricity and undue financing costs on our part, which may have a material adverse effect on our results of operations, financial condition and cash flows.

# We are dependent on fuel imported from overseas suppliers in currencies other than Won under contracts with varying quantities and durations, and any increases in fuel costs, if not fully passed through to KEPCO, could adversely affect our results of operations.

Raw materials used included in our cost of sales, which primarily consist of fuel costs, constituted 67.5%, 63.4%, 61.9% and 61.2% of our sales, and 70.9%, 67.1%, 72.2% and 70.7% of our cost of sales, in 2019, 2020 and each three-month period ended March 31, 2020 and 2021, respectively. A substantial majority of our fuel costs are incurred to purchase bituminous coal from sources outside of Korea at prices determined in part by prevailing market prices in currencies other than Won, primarily the U.S. dollar. In addition, we purchase a significant portion of our fuel requirements under contracts with limited quantity and duration. See "Business – Fuel."

Substantially all of our bituminous coal requirements are imported from approximately 26 suppliers located in Australia, Indonesia, the United States, Russia, Colombia, Canada and South Africa under long-term or spot contracts. Approximately 88%, 88%, 92% and 91% of our bituminous coal requirements were purchased under long-term contracts in 2019, 2020 and the three months ended March 31, 2020 and 2021, respectively, with the remaining requirements being purchased on the spot market. Approximately 53%, 23%, 8%, 7%, 6%, 2% and 1% of our annual bituminous coal requirements were imported from Australia, Indonesia, the United States, Russia, Colombia, Canada and South Africa, respectively, in the three months ended March 31, 2021. We purchase a substantial portion of our domestic LNG requirements from Korea Gas Corporation ("KOGAS") under a long-term supply contract.

In recent years, the prices of fuel, including bituminous coal, oil and LNG, have fluctuated significantly. If fuel prices increase sharply within a short span of time, we may be unable to secure requisite fuel supplies at prices that we were able to obtain during prior periods. In addition, any significant interruption or delay in the supply of fuel (bituminous coal and LNG in particular) from any of our suppliers could cause us to purchase fuel on the spot market at prices higher than the prices available under existing supply contracts, resulting in an increase in fuel cost.

While increases in our fuel costs are fully passed through to KEPCO in its purchase of electricity from us under the current cost-based pool system, such pass-through is subject to a two-month time lag, and accordingly, fuel cost increases, including cost increases resulting from the depreciation of the Won against the U.S. dollar or other currencies, could adversely affect our results of operations if the price of electricity payable to us by KEPCO does not timely capture such fuel cost increases for the relevant financial reporting period. Furthermore, in determining the adjusted coefficient for the marginal price component of the price of electricity sold by us to KEPCO by way of KPX, the Cost Evaluation Committee, a committee composed of representatives from the Government, KEPCO and the Generation Subsidiaries, including us, considers various factors, including the market prices of fuels, electricity tariff rates and their impact on the relative fair investment returns for KEPCO and the Generation Subsidiaries, including us, among others. Therefore, in the event of a sustained or rapid rise in fuel costs which impact is not sufficiently offset by a corresponding rise in electricity tariff rates in a timely manner and as a result would significantly hurt KEPCO's profitability, the adjusted coefficient may be set at a level which would have the effect of lowering the fair investment return for the Generation Subsidiaries, including us, and, in turn, the overall profitability of our operations. For instance, in March 2013, the Cost Evaluation Committee imposed a price cap on the marginal price of electricity sold by us to KEPCO. Such price cap has affected those generation units using relatively more expensive fuel types, such as our LNG and oil units, which accounted for approximately 44.9% in aggregate of our installed capacity as of March 31, 2021. The price cap has had and may have a material adverse effect on our results of operation and financial condition. See "The Korean Electricity Industry - Power Purchase - Cost-based Pool System -Marginal Price."

# We anticipate substantial capital expenditures, which will require additional debt incurrence in the future.

We anticipate that substantial capital expenditures will be required in the future for construction of additional generation facilities as discussed in "Business – Capital Investment Program." Our capital expenditures, which represent the sum of acquisition of property, plant and equipment, construction-in-progress and intangible assets in our statements of cash flows, were Won 1,636 billion in 2019, Won 1,064 billion in 2020, Won 215 billion for the three months ended March 31, 2020 and Won 202 billion for the three months ended March 31, 2021. We have budgeted Won 917 billion (including amounts already

expended in 2021), Won 1,105 billion, Won 1,345 billion and Won 1,366 billion for capital expenditures for 2021, 2022, 2023 and 2024, respectively. The budgeted amounts may vary from the actual amounts of our capital expenditures for a variety of reasons, including changes in the number of units to be constructed and the timing of such construction, changes in rates of exchange between the Won and foreign currencies, changes in interest rates, changes in the Government's policy objectives and other factors. For example, in December 2017, the Government announced its plans to increase the portion of renewable energy generated in Korea to 20% of the total energy generated in Korea by 2030, which calls for the Generation Subsidiaries, including us, to make significant investments in the construction and operation of power plants fueled by renewable energy. In response to such policy objective, we have set an internal target to increase the portion of renewable energy to 30% of our total power generation by 2030. Although we plan to fund a substantial portion of our capital expenditures with net cash from operating activities, no assurance can be given that we will be able to do so. We expect that a portion of our future capital expenditures will need to be financed through foreign currency borrowings in the international capital markets, as well as borrowings of Korean Won in the domestic capital market, which may lead to an increase in our overall debt levels as well as our debt ratio. It is also possible that the required financing may not be available to us or that the cost at which such financing may be available may not be acceptable to us. In addition to funding requirements relating to our capital investment program, payments of principal and interest on indebtedness will require considerable capital resources. If we are unable to obtain debt financing at acceptable rates on a timely basis, or at all, we may be unable to meet our funding requirements or debt repayment obligations, which could have a material adverse impact on our business and results of operations and could lead to a decline in the market value of the Notes.

In recent years, in light of the previous policy guidelines of the Government for public enterprises (including us) in general to reduce their respective overall debt levels, we implemented various measures to reduce our debt levels, including by way of disposing of equity interests in unprofitable subsidiaries and other non-core assets. If the Government reprises such policy guidelines in the future, we cannot provide assurance that we will be able to successfully reduce our debt to a level contemplated by the Government or to a level that would be optimal for our capital structure. If we fail to reduce our debt to a level contemplated by the Government or the measures taken by us to reduce debt levels have unintended adverse consequences, such developments may have an adverse effect on our business, results of operation and financial condition.

# Unexpected events, including natural disasters and health epidemics, including the ongoing COVID-19 pandemic, may increase our cost of doing business or disrupt our operations.

The occurrence of one or more unexpected events, including fires, tornadoes, tsunamis, hurricanes, earthquakes, floods and other forms of severe weather, as well as severe health epidemics such as the current global pandemic of a novel strain of coronavirus (referred to as "COVID-19") in Korea or in other countries where we operate or where our suppliers or customers are located could adversely affect our operations and financial performance. In addition, the normal operations of our existing facilities or the construction of our new facilities may be interrupted by accidents caused by operating hazards, power supply disruptions, equipment failures, natural disasters or other events or by disruptions due to health epidemics. Although we have not had any material instances of such interruptions in recent years, any interruption (partial or complete) to our operations at our facilities as a result of any such accidents or otherwise, including a prolonged outbreak of COVID-19, could materially and adversely affect our business, financial condition and results of operations. There can be no assurance that such events will not occur in the future or that our production capacity will not be materially and adversely impacted as a result of such events.

In particular, COVID-19, an infectious disease caused by severe acute respiratory syndrome coronavirus 2 that is known to have been first transmitted to humans in November 2019 and has spread globally, has materially and adversely affected the global economy and financial markets in recent months. The World Health Organization declared the COVID-19 as a pandemic in March 2020.

Risks associated with a prolonged outbreak of COVID-19 or other types of widespread infectious diseases include:

- disruption in the normal operations of our industrial and commercial customers, which in turn may decrease in demand for electricity for such uses;
- an increase in unemployment among, and/or decrease in disposable income of, Korean consumers, which may decrease demand for electricity for residential use and the products and services of our industrial and commercial customers, thereby also leading to a decrease in demand in electricity for such uses;
- disruption in the supply of fuel and equipment from our suppliers;
- disruptions or delays in the construction of new generation facilities or maintenance and refurbishment of existing generation facilities;
- disruption in the normal operations of our business resulting from contraction of COVID-19 by our employees, which may necessitate our employees to be quarantined and/or our generation facilities or offices to be temporarily shut down;
- disruption resulting from the necessity for social distancing, including implementation of temporary adjustment of work arrangements requiring employees to work remotely, which may lead to a reduction in labor productivity;
- depreciation of the Won against major foreign currencies, which in turn may increase the cost of imported raw materials and equipment;
- unstable global and Korean financial markets, which may adversely affect our ability to meet our funding needs on a timely and cost-effective basis;
- significant or extended decline in the prices of LNG, which may lead to the replacement of thermal generation with LNG-combined cycle generation; and
- impairments in the fair value of our investments in companies that may be adversely affected by the pandemic.

It is not possible to predict the duration or full magnitude of harm from COVID-19. In the event that COVID-19 or other types of widespread infectious diseases cannot be effectively and timely contained, our business, financial condition and results of operations may be materially adversely affected.

# The movement of the Won against the U.S. dollar and other currencies may have a material adverse effect on us.

The Won has fluctuated significantly against major currencies from time to time, including recently in light of the ongoing COVID-19 outbreak in Korea and globally. Depreciation of the Won against the U.S. dollar and other foreign currencies typically results in a material increase in the cost of fuel and equipment purchased by us from overseas since the prices for substantially all of the fuel and a significant portion of the equipment we purchase are denominated in currencies other than the Won, generally in U.S. dollars. Changes in foreign exchange rates may also impact the cost of servicing our foreign currency-denominated debt. As of March 31, 2021, 10.7% of our long-term debt (borrowings and bonds excluding current portion and net of discount), before accounting for swap transactions, was denominated in foreign currencies, principally U.S. dollars. In addition, as is the case with LNG purchased from KOGAS, even if we make payments in Won for certain sources of fuel and equipment, some of these sources of fuel may originate from other countries and their prices may be affected accordingly by the exchange rates between the Won and foreign currencies, especially the U.S. dollar. Since substantially all of our sales are denominated in Won, we must generally obtain foreign currencies through foreign currency-denominated financings or from foreign currency exchange markets to make such purchases or service such debt. As a result, any significant depreciation of the Won against the U.S. dollar or other major foreign currencies may have a material adverse effect on our profitability and results of operations.

## Our risk management procedures may not prevent losses in debt and foreign currency positions.

We manage interest rate exposure in our debt positions by limiting our variable-rate and fixed-rate exposures to percentages of total debt and by monitoring the effects of market changes in interest rates. We also actively manage the risks inherent in our foreign currency positions, which incorporate both our foreign currency-denominated assets and debt. For example, we enter into foreign currency contracts to hedge all of our imported bituminous coal requirements purchased in U.S. dollars, which is our primary foreign currency exposure. In addition, we hedge all of our U.S. dollar debt exposure through foreign currency swap contracts. We measure the potential loss using risk analysis software and enter into derivatives to hedge the exposure when the possible loss reaches a certain percentage of our total capitalization. To the extent we have unhedged positions or our hedging and other risk management procedures do not work as planned, our results of operations and financial condition could be adversely affected.

### Our insurance coverage may not be sufficient.

We have obtained a general commercial insurance policy to insure against fire, natural disasters and mechanical accidents up to Won 16.9 trillion as well as construction insurance on certain new projects in Shin Seocheon up to Won 950 billion. We also have marine cargo insurance in respect of imported fuel and procurement with insurance coverage of Won 1.5 trillion, as well as general vehicle insurance. We also maintain directors' and officers' liability insurance.

While we believe that we carry insurance coverage meeting the expected standards in our industry, our insurance and indemnity policies do not cover all of the assets that we own and operate and do not cover all types or amounts of loss which could arise in connection with the ownership and operation of our power plants. We do not maintain insurance for business interruptions, terrorist attacks or war. As a result, significant accidents with damages over our "per occurrence" amount limitations that affect our assets, or other events for which we are not insured, such as an act of terrorism, could have a material adverse impact on our business and results of operations and could lead to a decline in the market value of the Notes. See "Business – Insurance."

# An increase in consumption tax on our fuel sources may have a material adverse effect on our business, operations and profitability.

Effective July 2014, largely based on policy considerations of tax equity among different types of fuel sources as well as environmental concerns, the Government applied consumption tax to bituminous coal, which previously had not been subject to consumption tax unlike other types of fuel such as LNG and bunker oil. Pursuant to the amended Individual Consumption Tax Act, effective as of June 9, 2021, the base tax rate (which is subject to certain adjustments) is Won 46 per kilogram for bituminous coal; however, due to concerns on the potential adverse effect on industrial activities, the applicable tax rate is applied differently based on the net heat generation amount. The currently applicable tax rate for bituminous coal is Won 43 per kilogram for net heat generation of less than 5,000 kilocalories, Won 46 per kilogram for net heat generation of 5,500 kilocalories or more. In contrast, the currently applicable tax rate for LNG for power generation is Won 12 per kilogram, while the currently applicable tax rate for LNG for uses other than power generation is Won 60 per kilogram, subject to certain exceptions.

Bituminous coal is a significant fuel source for our electricity generation in terms of electricity output, as electricity sales from such fuel sources accounted for 80%, 72%, 66% and 61% of our total electricity sales in 2019, 2020 and the three months ended March 31, 2020 and 2021, respectively. We paid Won 615 billion, Won 658 billion, Won 107 billion and Won 117 billion in consumption taxes with respect to the use of bituminous coal in 2019, 2020 and the three months ended March 31, 2020 and 2021, respectively. While we expect that additional fuel costs due to any further increase in consumption tax on our fuel sources, bituminous coal, oil and LNG in particular, will be covered by a corresponding increase in the system marginal price of electricity sold by us to KEPCO, there is a time lag between our purchase of coal and our sale of electricity, which may adversely affect our cash flow, results of operation and financial condition.

## Labor unrest may adversely affect our operations.

As of March 31, 2021, approximately 37% of our employees were members of the Korea Midland Power Labor Union, which membership comprises entirely of our employees, and approximately 16% of our employees were members of the Korean Power Plant Industry Union and approximately 9% of our employees were members of the Power Generation Union. Other non-nuclear Generation Subsidiaries are also members of such labor unions. In 2002, the Government's plan to restructure and privatize KEPCO's non-nuclear Generation Subsidiaries resulted in a six-week strike by the labor unions of the non-nuclear Generation Subsidiaries to protest the Government's plan. Although the strike did not materially disrupt the supply of electricity or have a material adverse impact on our business and results of operations, and a large-scale strike has not happened since then, we cannot assure you that a large-scale strike will not occur again in the future, that such labor unrest will be satisfactorily resolved or that such labor unrest will not materially disrupt the supply of electricity or have a material adverse effect on our business or results of operations. While we believe that we have trained a sufficient number of alternative staff and employees to run our operations in the event of a strike, there can be no assurances that this would prove to be successful. Labor unrest may adversely affect our results of operations by disrupting the power supply.

# Our business may be materially and adversely affected by legal claims and regulatory actions against us.

We are subject to the risk of legal claims and regulatory actions in the ordinary course of business (including with respect to sanctions, anti-corruption and anti-money laundering, among others), which may expose us to substantial monetary damages and legal costs, injunctive relief, criminal and civil penalties, sanctions against our management and employees and regulatory restrictions on our operations, as well as reputational harm. See "– We may be exposed to potential claims made by former employees relating to unpaid wages and may also incur increased labor costs as a result of the expansion of the scope of ordinary wages."

We are unable to predict the final outcome of many of the proceedings and other lawsuits, arbitration proceedings and regulatory actions in which we are involved. An adverse determination in any such proceedings may result in monetary damages, regulatory sanctions and financial liability as well as reputational harm to us, which in turn may have a material adverse effect on our business, results of operations and financial condition.

# We may be exposed to potential claims made by current or former employees relating to unpaid wages and benefits and may also incur increased labor costs as a result of the expansion of the scope of applicable wages and benefits.

From time to time, we have been subject to various lawsuits involving our current and former employees seeking compensation for unpaid wages based on interpretations of relevant labor laws in Korea. For example, under the Labor Standards Act and Labor Severance Payment Security Act of Korea, the amount of compensation to which an employee is legally entitled, such as overtime allowance for night shifts or work performed outside of working hours as well as severance pay, is determined by the definition of "ordinary wage." After a decision by the Supreme Court of Korea in 2013 that provided a standard rule for determining what kinds of payments should be included as part of ordinary wage, we became subject to a number of lawsuits involving hundreds of our current and former employees for unpaid ordinary wages and related retirement benefits, which were decided in the plaintiffs' favor. Pursuant to such decisions, we have made an aggregate payment of approximately Won 6 billion to cover the amounts claimed by the plaintiffs, as well as to address substantially all of the other current and former employees that would have had similar claims.

Separately from such prior cases involving ordinary wages, we are currently subject to three lawsuits which were filed in 2019 involving hundreds of our current and former employees seeking compensation for allegedly unpaid retirement benefits in relation to certain employee bonuses based on our institutional performance, based on a decision by the Supreme Court of Korea in 2018 that such bonuses should be a part of "average wage" that determines the applicable amount of retirement benefits. All of the three lawsuits are currently pending before the trial court, and the aggregate claim amount of such lawsuits is approximately Won 3 billion. We have set aside a reserve of Won 514 million to cover any potential future payments of additional retirement benefits in relation to the related lawsuits.

We cannot presently assure you that there will not be further lawsuits seeking additional wages or benefits based on current or future interpretations of applicable laws and regulations, or that the foregoing amount of provisions will be sufficient to cover payments of any additional wages, retirement benefits or other compensation and damages arising from the present or future litigation relating to claims for additional wages and benefits.

# We may face greater competition in the future.

We compete with other non-nuclear Generation Subsidiaries and, to a lesser extent, with IPPs for the sale of electricity in Korea. According to KEPCO, the IPPs accounted for 26.7% and 26.1% of total power sold in terms of volume in 2019 and 2020, respectively. As of March 31, 2021, there were 14 principal IPPs in Korea according to data from the KPX.

Under the Electricity Business Act, the Community Energy System ("CES") enables regional districts to source electricity from IPPs without having to undergo the cost-based pool system used by us to distribute electricity nationwide. A supplier of electricity under the CES must obtain a license from the MOTIE following deliberation by the Korea Electricity Regulatory Commission (the "KOREC"). The purpose of this system is to decentralize electricity supply and thereby reduce transmission costs and improve the efficiency of energy use. These entities do not supply electricity on a national level but are licensed to supply electricity on a limited basis to their respective districts under the CES. Wider adoption of the CES would likely erode our market position in the generation of electricity in Korea and may have a material adverse effect on our business, growth, sales and profitability.

While high initial investment costs are an effective barrier to entry for newcomers in the industry, our existing competitors are planning to make substantial investments in expanding their power generation capacity. If such capacity expansion outpaces the general demand for electricity in Korea, the price of electricity in Korea may decrease, which may have a material adverse effect on our results of operations.

# We may not be successful in implementing new business strategies.

As part of our overall business strategy, we plan to undertake new, or expand existing, projects such as expanding generation capacity under the applicable Basic Plan, strengthening our renewable energy generation capabilities under the RPS initiative and expanding in overseas markets, particularly in the construction and operation of power plants which may lead to increased potential liabilities.

Due to their inherent uncertainties, such new and expanded strategic initiatives expose us to a number of risks and challenges, including the following:

- unanticipated capital expenditures and additional compliance requirements;
- less growth or profit than we currently anticipate with no assurance that such business activities will become profitable;
- failure to identify and enter into alternative business areas in a timely fashion, putting us at a disadvantage vis-a-vis competitors, particularly in overseas markets; and
- failure to hire or retain personnel who are able to supervise and conduct the relevant business activities.

As part of our business strategy, particularly in relation to overseas expansion, fuel sources procurement and renewable energy development, we may also, on a selective basis, seek, evaluate or engage in potential acquisitions, mergers, combinations or other similar opportunities, including with existing or future joint ventures and strategic alliances. The prospects of these initiatives are uncertain, and there can be no assurance that we will be able to successfully implement or grow new ventures, and these ventures may prove more difficult or costly than we presently expect. In addition, we regularly review the profitability and growth potential of our businesses. As a result of such review, we may decide to exit from or reduce the resources that we allocate to new business ventures in the future. There is a risk that these ventures may not achieve profitability or operational efficiencies to the extent that we presently expect and we may fail to recover investments or expenditures we have already made. Any of the foregoing may have a material adverse effect on our reputation, business, financial condition, results of operations and cash flows.

# We plan to pursue international expansion opportunities that may subject us to different or greater risk from those associated with our domestic operations.

While our operations have, to date, been primarily based in Korea, we plan to expand, on a selective basis, our overseas operations in the future. In particular, we plan to further diversify the geographic focus of our operations from Asia to the rest of the world, including North America. We also plan to expand our project portfolio, which has to date involved technical advice and development of energy fuels, to include the construction and operation of power plants as well as generation business using biomass and other renewable energy sources pursuant to the Clean Development Mechanism ("CDM"). The CDM is defined in the Kyoto Protocol and allows industrialized countries to meet their emission reduction commitments with reduced impact on their economies by investing in emission reductions wherever it is relatively cheaper and accessible globally.

Overseas operations generally carry risks that are different from those we face in our domestic operations. These risks include:

- challenges of complying with multiple foreign laws and regulatory requirements, including tax laws and laws regulating our operations and investments;
- volatility of overseas economic conditions, including fluctuations in foreign currency exchange rates;
- difficulties in enforcing creditors' rights in foreign jurisdictions;
- risk of expropriation and exercise of sovereign immunity where the counterparty is a foreign government;
- difficulties in establishing, staffing and managing foreign operations;
- differing labor regulations;
- political and economic instability, natural calamities, war and terrorism;
- lack of familiarity with local markets and competitive conditions;
- changes in applicable laws and regulations in Korea that affect foreign operations; and
- obstacles to the repatriation of earnings and cash.

Any failure by us to recognize or respond to these differences may adversely affect the success of our operations in those markets, which in turn could materially and adversely affect our business and results of operations.

## Changes in accounting standards could impact our results of operations and financial condition.

The accounting standard setters and other regulatory bodies periodically change the financial accounting and reporting standards that govern the preparation of our consolidated financial statements. For example, K-IFRS 1116, which has been adopted for financial reporting periods beginning on or after January 1, 2019, changes the accounting method for leases by lessees. Under K-IFRS 1116, a lessee is required to recognize a right-of-use asset representing its right to use the underlying leased asset and a lease liability representing its obligation to make lease payments, while previously, lease payments were recognized as an expense. Due to such recognition of leases as financial liabilities, we have experienced a corresponding increase in our debt levels. For the impact of the adoption of K-IFRS 1116, see Note 3 to our audited annual consolidated financial statements as of and for the years ended December 31, 2020 and 2019 and Note 3 to our unaudited interim condensed consolidated financial statements as of and for the three months ended March 31, 2021 and 2020. Such changes made to accounting standards can materially impact how we record and report our results of operations and, in turn, can adversely affect our financial condition.

# **Risks Relating to Korea**

# If economic conditions in Korea deteriorate, our current business and future growth could be materially and adversely affected.

We are incorporated in Korea and a significant portion of our assets are located in Korea. As a result, we are subject to political, economic, legal and regulatory risks specific to Korea, and our performance and successful execution of our operational strategies are dependent on the overall Korean economy. The economic indicators in Korea in recent years have shown mixed signs of growth and uncertainty, and future growth of the Korean economy is subject to many factors beyond our control, including developments in the global economy.

In particular, the on-going COVID-19 pandemic has had an adverse impact on the Korean economy. Following the Government's announcement of the first confirmed case of COVID-19 in Korea in January 2020, it has implemented a number of measures in order to contain the spread of COVID-19, including a nationwide order for social distancing, implementation of strict self-isolation and quarantine measures for those who may be infected, and the temporary closure of all school and other public facilities. In addition, the Government has undertaken a series of actions to mitigate the adverse impact of the COVID-19 pandemic on the Korean economy, including (i) lowering of The Bank of Korea's policy rates, (ii) execution of a bilateral currency swap agreement with the U.S. Federal Reserve, (iii) provision of loans, guarantees and maturity extensions to eligible financial institutions, small- and medium business enterprises and self-employed business owners facing liquidity crises, and (iv) offering emergency relief payments for those impacted by the COVID-19 pandemic. However, the impact of the on-going COVID-19 pandemic to the Korean economy in 2021 and for the foreseeable future remains highly uncertain.

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

- declines in consumer confidence and a slowdown in consumer spending;
- the occurrence of additional severe health epidemics;
- adverse conditions or uncertainty in the economies of countries and regions that are important export markets for Korea, such as China, the United States, Europe and Japan, or in emerging market economies in Asia or elsewhere, including as a result of the ongoing COVID-19 pandemic, deteriorating relations between the United States and China and increased uncertainties resulting from 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;
- 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 (such as the removal of Korea from Japan's "white list" of preferred trading nations in August 2019 and the controversy between Korea and China regarding the deployment of a Terminal High Altitude Area Defense System in Korea by the United States in March 2017 and the ensuing economic and other retaliatory measures by China against Korea during the remainder of 2017);
- increased sovereign default risk in select countries and the resulting adverse effects on the global financial markets;
- deterioration in the financial condition or performance of small- and medium-sized enterprises and other companies in Korea due to the Government's policies to increase minimum wages and limit working hours of employees;
- 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;
- the economic impact of any pending or future free trade agreements or of any changes to existing free trade agreements;

- social and labor unrest;
- substantial decreases in the market prices of Korean real estate;
- a substantial decrease in tax revenues and a substantial increase in the Government's expenditures for fiscal stimulus measures, unemployment compensation and other economic and social programs, in particular in light of the Government's ongoing efforts to provide emergency relief payments to households and emergency loans to corporations in need of funding in light of COVID-19, which, together, would likely lead to a national budget deficit as well as an increase in the Government's debt;
- financial problems or lack of progress in the restructuring of Korean business groups, other large troubled companies, their suppliers or the financial sector;
- loss of investor confidence arising from corporate accounting irregularities and corporate governance issues concerning certain Korean companies;
- increases in social expenditures to support an aging population in Korea or decreases in economic productivity due to the declining population size in Korea;
- geopolitical uncertainty and risk of further attacks by terrorist groups around the world;
- 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 (including a potential escalation of hostilities between the United States and Iran) and Northern Africa and any material disruption in the global supply of oil or sudden increase in the price of oil;
- natural or man-made disasters that have a significant adverse economic or other impact on Korea or its major trading partners; and
- an increase in the level of tensions or an outbreak of hostilities between North Korea and Korea or the United States.

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

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

- North Korea renounced its obligations under the Nuclear Non-Proliferation Treaty in January 2003 and conducted six rounds of nuclear tests since October 2006, including claimed detonations of hydrogen bombs and warheads that can be mounted on ballistic missiles. Over the years, North Korea has continued to conduct a series of missile tests, including ballistic missiles launched from submarines and intercontinental ballistic missiles that it claims can reach the United States mainland. In response, the Government has repeatedly condemned the provocations and flagrant violations of relevant United Nations Security Council resolutions. In February 2016, the Government also closed the inter-Korea Gaesong Industrial Complex in response to North Korea's fourth nuclear test in January 2016. Internationally, the United Nations Security Council has passed a series of resolutions condemning North Korea's actions and significantly expanding the scope of sanctions applicable to North Korea, most recently in December 2017 in response to North Korea's intercontinental ballistic missile test in November 2017. Over the years, the United States and the European Union have also expanded their sanctions applicable to North Korea.
- In March 2010, a Korean naval vessel was destroyed by an underwater explosion, killing many of the crewmen on board. The Government formally accused North Korea of causing the sinking, while North Korea denied responsibility. Moreover, in November 2010, North Korea fired more than 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 the two Koreas in April, May and September 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 tensions affecting the Korean peninsula will not escalate in the future. Any increase in tensions, which may occur, for example, if North Korea experiences a leadership crisis, high-level contacts between Korea and North Korea break down or military hostilities occur, could have a material adverse effect on the Korean economy and on our business, financial condition and results of operations and the price of the Notes, including a downgrade in our credit rating or of the Notes.

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

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

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

In addition, our audited consolidated financial statements and unaudited interim condensed consolidated financial statements included in this Offering Circular are presented in accordance with the Rules for Accounting Affairs of Public Corporations and Quasi-governmental Institutions ("Government Accounting Standards"), and where accounting provisions have not been specified under the Government Accounting Standards, we have also applied K-IFRS. Our future financial statements will be prepared in accordance with Government Accounting Standards or K-IFRS, which differ in certain respects from accounting principles applicable to companies in certain other countries, including the United States. There may also be less publicly available information about Korean companies, such as us, than is regularly made available by companies in other countries. In making an investment decision, investors must rely upon their own examination of us, the terms of the offering and the financial and other information contained in this Offering Circular.

## **Risks Relating to the Notes**

## The Notes are unsecured obligations.

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

- we enter into bankruptcy, liquidation, reorganization or other winding-up proceedings;
- there is a default in payment under our secured indebtedness or other unsecured indebtedness; or
- there is an acceleration of any of our indebtedness.

If any of these events were to occur, our assets and any amounts received from the sale of such assets may not be sufficient to pay amounts due on the Notes.

#### The Notes are subject to transfer restrictions.

The Notes will not be registered under the Securities Act or any state securities laws and may not be offered or sold within the United States, except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and in accordance with applicable state securities laws. For a further discussion of the transfer restrictions applicable to the Notes, see "Terms and Conditions of the Notes" and "Subscription and Sale."

The Notes have not been and will not be registered with the Financial Services Commission (the "FSC") under the Financial Investment Services and Capital Markets Act, as amended (the "FSCMA"), and accordingly the Notes may not be offered, sold, delivered or transferred, directly or indirectly, in Korea or to, or for the account or benefit of, any Korean resident (as such term is defined in the Foreign Exchange Transaction Act of Korea and the Enforcement Decree thereof) for a period of one year from the date of issuance of the Notes, except (i) if Article 2-2-2, Paragraph 2, Item 3 of the Regulation on the Issuance of Securities and Public Disclosure, etc. of Korea is applicable, the Notes may be offered, sold or delivered to Korean Qualified Institutional Investors as specified in Article 2-2, Paragraph 2, Item 4 of the above-mentioned regulation, provided that at least 80% of the aggregate issuance amount of the Notes shall be allocated to non-residents of Korea (as such term is defined in the Foreign Exchange Transaction Act of Korea and the Enforcement Decree thereof) (which applies only to the Notes acquired from the Issuer or any underwriter at the time of issuance of the Notes), and the other requirements as set forth in Article 2-2-2, Paragraph 2, Item 3 above are satisfied, or (ii) as otherwise permitted by applicable Korean laws and regulations.

# The Notes are subject to prescription regulations in Korea.

Failure to exercise a right of action for more than a certain period of time may operate as a bar to exercise of such right. Under Korean laws, claims against the issuer in respect of the payment of principal of notes or bonds are prescribed upon the expiry of ten years, and claims for payment of interest in respect of notes or bonds are prescribed upon the expiry of five years, in each case, from the relevant due date as adjusted by any acceleration or otherwise, in respect thereof. If the Note holders fail to exercise his or her right of payment for more than the period set forth above, the Korean courts may not enforce a claim for payment for principal or interest in respect of the Notes.

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

The Notes constitute a new issue of securities for which there is no existing market. Approval in principle has been received from the Singapore Stock Exchange in connection with the Program and application will be made for the listing and quotation of Notes that may be issued pursuant to the Program and which are agreed at or prior to the time of issue thereof to be so listed on the Singapore Stock Exchange. The offer and sale of the Notes is not conditioned on obtaining a listing of the Notes on the Singapore Stock Exchange. Although the Initial Purchasers have advised us that they currently intend to make a market in the Notes, they are not obligated to do so, and any market-making activity with respect to the Notes, if commenced, may be discontinued at any time without notice in their sole discretion. For a further discussion of the Initial Purchasers' planned market-making activities, see "Plan of Distribution."

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

- prevailing interest rates;
- our results of operations and financial condition;
- the rate of exchange between Won and the currency of the Notes;
- political and economic developments in and affecting Korea and other regions;
- the market conditions for similar securities; and
- the financial condition and stability of the Korean financial and other sectors.

#### The Notes are not protected by restrictive covenants.

The Notes and the Fiscal Agency Agreement relating to the Notes do not contain restrictive financial or operating covenants or restrictions on the payment of dividends, the incurrence of indebtedness, the sale of assets or the issuance or repurchase of securities by us.

# Uncertainties regarding the possible discontinuation of the London Interbank Offered Rate ("LIBOR") or any other interest rate benchmark could have adverse consequences for market participants, including us.

In March 2021, the U.K. Financial Conduct Authority (the "FCA"), which has regulatory authority with respect to LIBOR, announced that it will no longer require panel banks to submit quotes for LIBOR settings other than overnight and 12-month U.S. dollar LIBOR after December 31, 2021 and for any U.S. dollar LIBOR settings after June 30, 2023. It is possible that panel banks will continue to provide rate submissions, and that the ICE Benchmark Administration, the administrator of LIBOR, will continue to determine and announce LIBOR, on the current basis after such announced deadlines, if they are willing and able to do so. However, there is no guarantee that LIBOR will be determined and announced after such announced deadlines on the current basis or at all.

Given the extensive use of LIBOR across financial markets, the transition away from LIBOR presents various risks and challenges to financial markets and institutions, including the Company.

If not sufficiently planned for, the discontinuation of LIBOR or any other interest rate benchmark could result in increased financial, operational, legal, reputational and/or compliance risks. For example, a significant challenge will be managing the impact of the LIBOR transition on the contractual mechanics of LIBOR-based financial instruments and contracts that mature after the announced deadlines. Certain of these instruments and contracts may not provide for alternative reference rates, and even if such instruments and contracts provide for alternative reference rates, such alternative reference rates are likely to differ from the prior benchmark rates and may require the Company to pay interest at higher rates on the related obligations, which could adversely impact its interest expense, results of operations and cash flows. While there are a number of international working groups focused on transition plans and the provision of fallback contract language that seek to minimize market disruption, replacement of LIBOR or any other benchmark with a new benchmark rate could adversely impact the value of and return on existing instruments and contracts. Moreover, replacement of LIBOR or other benchmark rates could result in market dislocations and have other adverse consequences for market participants, including the potential for increased costs, and litigation risks stemming from potential disputes with customers and counterparties regarding the interpretation and enforceability of fallback contract language in the LIBOR-based financial instruments and contracts. Accordingly, the Company's failure to adequately prepare for the potential discontinuation of LIBOR could have a material adverse impact on its business, reputation, results of operations and financial condition.

For risks relating to the our Floating Rate Notes based on LIBOR, see "– Any future discontinuation of LIBOR and the application of a successor or alternative benchmark reference rate may adversely affect the value of and return on the Notes that are Floating Rate Notes."

# Any future discontinuation of LIBOR and the application of a successor or alternative benchmark reference rate may adversely affect the value of and return on the Notes that are Floating Rate Notes.

In the case of the Notes that are Floating Rate Notes, LIBOR may be the benchmark reference rate used to calculate the rate of interest applicable to such Notes ("LIBOR-based Floating Rate Notes") for each interest period. LIBOR for different periods and currencies is determined and announced on a daily basis by the ICE Benchmark Administration based on rate submissions provided by groups of panel banks for the relevant currencies. In March 2021, the FCA announced that it will no longer require panel banks to submit quotes for LIBOR settings other than overnight and 12-month U.S. dollar LIBOR after December 31, 2021 and for any U.S. dollar LIBOR settings after June 30, 2023. See "– Uncertainties regarding the possible discontinuation of the London Interbank Offered Rate ("LIBOR") or any other interest rate benchmark could have adverse consequences for market participants, including the Company."

Upon the occurrence of a Benchmark Transition Event (as defined in Condition 7(e) of the Terms and Conditions of the Notes) with respect to LIBOR, including a public statement or publication of information by or on behalf of the FCA or the ICE Benchmark Administration announcing that the latter has ceased or will cease to provide LIBOR permanently or indefinitely, the Benchmark Replacement (as defined in Condition 7(e) of the Terms and Conditions of the Notes) as determined by the Company or its designee will replace LIBOR for all purposes relating to outstanding LIBOR-based Floating Rate Notes. Among other alternatives, the Secured Overnight Financing Rate ("SOFR"), which has been identified by the Alternative Reference Rates Committee convened by the Board of Governors of the U.S. Federal Reserve System and the Federal Reserve Bank of New York as the preferred alternative benchmark reference rate for LIBOR, together with any necessary spread adjustment, may be determined as the Benchmark Replacement to be used to calculate the rate of interest applicable to outstanding LIBOR-based Floating Rate Notes. Any such Benchmark Replacement determined by the Company or its designee will, in the absence of manifest error, be conclusive and binding on the applicable Noteholders. See "Terms and Conditions of the Notes - 7(e) Effect of Benchmark Transition Event." Accordingly, if a Benchmark Transition Event occurs with respect to LIBOR prior to the maturity of any LIBOR-based Floating Rate Notes, the method of calculation and rate of interest payable on such Notes will change. There is no guarantee that any Benchmark Replacement will be similar to, or behave in the same manner as, LIBOR, or that the rate of interest calculated based on any such Benchmark Replacement will not be lower than the rate of interest that would have applied to any LIBOR-based Floating Rate Notes for any interest period if LIBOR had continued to be used as the benchmark reference rate.

Uncertainty regarding the continued availability of LIBOR, as well as the rate of interest that would be applicable to LIBOR-based Floating Rate Notes if LIBOR is discontinued or ceases to be published, may negatively affect the trading market for and trading price of such Notes. Currently, it is not possible to predict future developments with respect to LIBOR or their timing or impact. Any such developments, including as a result of international, national or other initiatives for reform or the adoption of successor or alternative benchmark reference rates in the international debt capital markets, could have a material adverse effect on the value of and return on LIBOR-based Floating Rate Notes.

# **USE OF PROCEEDS**

The net proceeds from each issue of Notes will be applied by the Issuer for its general corporate purposes or such other purposes as may be specified in the applicable Pricing Supplement, and such proceeds will not be used for a purpose related to any efforts and activities pertaining to the construction of new coal fired generation units.

# **EXCHANGE RATES**

The following table sets forth, for the periods and dates indicated, certain information concerning the Market Average Exchange Rate in Won per U.S.\$1.00. No representation is made that the Won or the U.S. dollar amounts referred to herein could have been or could be converted into U.S. dollars or Won, as the case may be, at any particular rate or at all.

Year Ended December 31,	At End of Period	Average <sup>(1)</sup>	High	Low
		(Won per U	.S.\$1.00)	
2016	1,208.5	1,160.5	1,240.9	1,093.2
2017	1,071.4	1,130.8	1,208.5	1,071.4
2018	1,118.1	1,100.3	1,142.5	1,057.6
2019	1,157.8	1,165.7	1,218.9	1,111.6
2020	1,088.0	1,180.1	1,280.1	1,082.7
2021 (through July 26)	1,149.5	1,120.9	1,151.0	1,083.1
January.	1,114.6	1,097.5	1,114.6	1,083.1
February	1,108.4	1,111.7	1,124.0	1,099.7
March.	1,133.5	1,131.0	1,141.1	1,121.3
April	1,107.4	1,119.4	1,132.6	1,107.4
May	1,116.0	1,123.3	1,133.1	1,109.6
June	1,130.0	1,121.3	1,135.8	1,107.0
July (through July 26)	1,149.5	1,142.3	1,151.0	1,129.5

Source: Seoul Money Brokerage Services, Ltd.

Note:

(1) Annual averages are calculated from month-end rates. Monthly averages are calculated using the average of the daily rates during the relevant period.

# CAPITALIZATION

The following table sets forth our capitalization as derived from our unaudited interim condensed consolidated financial statements as of March 31, 2021 included in this Offering Circular.

The table below should be read in connection with our unaudited interim condensed consolidated financial statements as of March 31, 2021 included in this Offering Circular.

	As of March 31, 2021 <sup>(1)</sup> (in billions of Won and millions of U.S. dollars)		
Long-term debt: Borrowings (excluding current portion), net of discount Bonds (excluding current portion), net of discount	₩ 178 6,469	U.S.\$ 157 5,707	
Total long-term debt	₩ 6,647	U.S.\$5,864	
Equity: Share capital of ₩5,000 par value; Authorized – 100,000,000 shares; Issued and outstanding – 28,581,320 shares Share premium	₩ 143 1,128	U.S.\$ 126 995	
Retained earnings:	78	69	
Legal reserves	1,876 863	1,655 761	
Other components of equity: Accumulated other comprehensive income Other equity	33 (300)	29 (265)	
Equity attributable to owner of the Company	₩ 3,820 39	U.S.\$3,370 34	
Total equity	₩ 3,859	U.S.\$3,404	
Total capitalization <sup>(2)(3)</sup>	₩10,506	U.S.\$9,268	

Notes:

<sup>(1)</sup> Translated Won and dollar amounts at the Market Average Exchange Rate of Won 1,133.5 to US\$1.00 on March 31, 2021.

<sup>(2)</sup> Total capitalization is defined as total long-term debt plus total equity.

<sup>(3)</sup> Except for the notes issued by the Company in April 2021 in the amount of Won 90 billion, in April 2021 in the amount of Won 190 billion, in May 2021 in the amount of Won 150 billion and in July 2021 in the amount of Won 160 billion and as disclosed herein, there has been no material change in our capitalization since March 31, 2021.

# THE KOREAN ELECTRICITY INDUSTRY

# BACKGROUND

Total demand for electricity in Korea increased by 3.6% in 2018 but decreased by 1.1% in 2019 and by 2.2% in 2020, in each case, year on year, according to KEPCO. The consumption of electric power is expected to increase by 1.6% per year from 2020 to 2034, according to the Ninth Basic Plan.

Historically, KEPCO and the Generation Subsidiaries have made substantial expenditures for the construction of power plants and other facilities to meet increased demand for electric power. Subject to the Restructuring Plan as defined and discussed in "– Restructuring of the Electricity Industry in Korea" below, KEPCO and the Generation Subsidiaries plan to continue to make substantial expenditures to expand and enhance their generation, transmission and distribution system in the future.

The Korean electric utility industry traces its origin to the establishment of the first electric utility company in Korea in 1898. On July 1, 1961, the industry was reorganized by the merger of Korea Electric Power Company, Seoul Electric Company and South Korea Electric Company, which resulted in the formation of Korea Electric Company. From 1976 to 1981, the Government acquired the private minority shareholdings in Korea Electric Company. After the Government had acquired all of the outstanding shares of Korea Electric Company, Korea Electric Company dissolved, and KEPCO was incorporated in 1981, assuming the assets and liabilities of Korea Electric Company. KEPCO ceased to be wholly owned by the Government in 1989 when the Government sold 21.0% of its common stock. As of March 31, 2021, the Government owned 51.1% (including indirect holdings by Korea Development Bank, which is wholly owned by the Government) of the outstanding shares of KEPCO's common stock.

The Korea Electric Power Corporation Act requires that the Government own at least 51% of KEPCO's capital stock. Direct or indirect ownership of more than 50% of KEPCO's outstanding common stock enables the Government to control the approval of certain corporate matters which require a stockholders' resolution, including approval of dividends. The rights of the Government and Korea Development Bank as holders of KEPCO's common stock are exercised by the MOTIE in consultation with the Ministry of Economy and Finance (the "MOEF"). To our knowledge, the Government currently has no plan to cease to own, directly or indirectly, at least 51% of KEPCO's outstanding common stock.

Prior to the corporate reorganization effected on April 2, 2001, which created six generation subsidiaries wholly owned by KEPCO (including us), KEPCO was the principal electricity generation company in Korea. KEPCO continues to be the principal electricity transmission and distribution company in Korea, subject to the implementation of the Restructuring Plan.

# **RESTRUCTURING OF THE ELECTRICITY INDUSTRY IN KOREA**

On January 21, 1999, the MOTIE published a plan to restructure the electricity industry (the "Restructuring Plan"). The overall objectives of the Restructuring Plan were to:

- introduce competition and thereby increase efficiency in the Korean electricity industry,
- ensure a long-term, inexpensive and stable electricity supply, and
- promote consumer convenience through the expansion of consumer choice.

The following is a description of the Restructuring Plan and the Government's position relating to the Restructuring Plan.

# Phase I

During Phase I, which was the preparation stage for Phase II and lasted from January 1, 1999 to April 2, 2001, KEPCO continued to be the principal electricity generator, with several IPPs supplying electricity to it under existing power purchase agreements. On February 23, 2001, KEPCO's board of directors approved a plan to split its non-nuclear and non-hydroelectric generation capacity into five separate wholly owned generation subsidiaries, namely, Korea South-East Power Co., Ltd. ("KOSEP"), Korea

Southern Power Co., Ltd. ("KOSPO"), Korea Western Power Co., Ltd. ("KOWEPO"), Korea East-West Power Co., Ltd. ("EWP") and us, each with its own management structure, assets and liabilities. KEPCO's hydroelectric and nuclear generation capacity was transferred into a separate wholly owned generation subsidiary, Korea Hydro & Nuclear Power Co., Ltd. ("KHNP"). On March 16, 2001, KEPCO's shareholders approved the plan to establish the Generation Subsidiaries effective as of April 2, 2001.

The Government's objectives in dividing the power generation capacity into separate generation subsidiaries were principally to:

- introduce competition and thereby increase efficiency in the electricity generation industry in Korea, and
- ensure the stable supply of electricity in Korea.

Following the implementation of Phase I, KEPCO retained, until the adoption of the CES in July 2004, its monopoly position with respect to the transmission and distribution of electricity in Korea.

While KEPCO's ownership percentage of the non-nuclear and non-hydroelectric generation subsidiaries was to be decided by the ultimate form of the Restructuring Plan approved by the Government, to our knowledge, KEPCO plans to continue to retain 100% ownership of both KHNP and the transmission and distribution business.

# Phase II

Phase II of the Restructuring Plan began on April 2, 2001. For Phase II, the Government introduced a competitive or bidding pool system under which KEPCO purchases power from the Generation Subsidiaries and other companies for transmission and distribution to customers. Such competitive bidding pool system, which is a cost-based system, was established on April 2, 2001. For a further description of the pool system, see "– Power Purchase – Cost-based Pool System" below.

Pursuant to the Electricity Business Act amended on December 23, 2000, the Government established the KPX on April 2, 2001 to deal with the sale of electricity and implement regulations governing the electricity market to allow for electricity distribution through a competitive bidding process. The Government also established the KOREC on April 27, 2001 to regulate the restructured Korean electricity industry and to ensure fair competition. As part of this process, the KPX established the Electricity Market Rules relating to the operation of the bidding pool system. To amend the Electricity Market Rules, the KPX must have the proposed amendment reviewed by the KOREC and then obtain the approval of the MOTIE.

The KOREC's main functions include implementation of necessary standards and measures for electricity market operation and review of matters relating to licensing participants in the Korean electricity industry. The KOREC also acts as an arbitrator in disputes involving utility rates and participants in the Korean electricity industry and consumers and investigates illegal or deceptive activities of the participants in the Korean electricity industry.

#### Privatization of Non-nuclear Generation Subsidiaries

In April 2002, the MOTIE released the basic privatization plan for the five non-nuclear Generation Subsidiaries, including us. KEPCO commenced the process for selling its interest in KOSEP in 2002. According to the original plan, this process was, in principle, to take the form of a sale of management control, potentially supplemented by an initial public offering as a way of broadening the investor base.

#### Suspension of the Plan to Form and Privatize Distribution Subsidiaries

In September 2003, the Tripartite Commission, which included, among others, representatives from the Government and the leading businesses and labor unions in Korea, established the Joint Study Group on Reforming Electricity Distribution Network to propose a methodology of introducing competition within the industry for distribution of electricity. In June 2004, based on a report published by this Joint Study Group, the Tripartite Commission issued a resolution that recommended halting the plan to form and privatize the distribution subsidiaries, and in lieu thereof, creating independent business divisions within

KEPCO, namely, the "strategy business units," as a way of improving operational efficiency and internal competition among the district divisions. This resolution was adopted by the MOTIE in June 2004, and KEPCO subsequently commissioned a third party consultant to conduct a study on implementing plans related to the creation of the strategy business units and solicited comments on the study from various parties, including labor unions and the Government. Based on this study and the related comments, in September 2006, KEPCO established nine strategy business units (which, together with KEPCO's other business units, were subsequently restructured into 14 business units in February 2012) having a separate management structure with limited autonomy and separate financial accounting and performance evaluation criteria. Based on whether the strategy business units successfully achieve their intended goals of improving operational efficiency and internal competition, KEPCO may expand the use of strategy business units.

#### Introduction of Market-based Public Enterprise System

On August 25, 2010, the Government announced an electricity industry development plan through which the Government aims to increase efficiency through fostering competition and strengthen the autonomy of public companies. Pursuant to this plan, in December 2010, the MOTIE announced guidelines for a cooperative framework between KEPCO and the Generation Subsidiaries, and in January 2011, the five non-nuclear Generation Subsidiaries formed a "joint cooperation unit" and transferred their pumped-storage hydroelectric business units to KHNP. Furthermore, in January 2011, the six Generation Subsidiaries were officially designated as "market-oriented public enterprises," whereupon the president of each such subsidiary is required to enter into a management contract directly with the minister of the MOTIE, performance evaluation of such subsidiaries is conducted by the Public Enterprise Management Evaluation Commission, and the president and the statutory auditor of each such subsidiary are appointed by the President of Korea while the selection of outside directors is subject to approval by the minister of the MOEF. Previously, the president of each such subsidiaries was conducted by KEPCO's evaluation committee, and the president and the statutory auditor of each such subsidiary were appointed by, and the selection of outside directors was subject to approval by, KEPCO's president.

#### **POWER PURCHASE**

#### **Cost-based Pool System**

Since April 2001, the purchase and sale of electricity in Korea is generally required to be made through the KPX, which is a statutory not-for-profit organization established under the Electricity Business Act responsible for setting the price of electricity, handling the trading and collecting relevant data for the electricity market in Korea. The suppliers of electricity in Korea primarily consist of the Generation Subsidiaries, including us, which were spun-off from KEPCO in April 2001, and IPPs. KEPCO distributes electricity purchased through the KPX to end users.

The price of electricity in the Korean electricity market is determined principally based on the cost of generating electricity using a system known as the "cost-based pool" system, under which the Generation Subsidiaries, including us, fully pass through changes in fuel costs to KEPCO in its purchase through KPX of electricity from the Generation Subsidiaries, including us. Under the cost-based pool system, the price of electricity has two principal components, namely the marginal price (representing, in principle, the variable cost of generating electricity) and the capacity price (representing, in principle, the fixed cost of generating electricity).

# Marginal Price

The primary purpose of the marginal price is to compensate the generation companies for fuel costs, which represents the principal component of the variable costs of generating electricity. Such marginal price is referred to as the "system marginal price." The concept of marginal price under the cost-based pool system has undergone several changes in recent years in large part due to the sharp fluctuations in fuel prices. For example, prior to December 31, 2006, the marginal price operated on a two-tiered structure, namely, a "base load" marginal price applicable to electricity generated from nuclear fuels and coals, which tend to be less expensive per unit of electricity than electricity generated from LNG, oil and hydroelectric power to which a "non-base load" marginal price applied. The base load marginal price and the non-base load marginal price were generally set at levels so that electricity generated from cheaper fuels could be utilized

first while ensuring a relatively fair rate of return to all generation units. However, when the price of coal rose sharply beginning in the second half of 2006, the pre-existing base load marginal price was abolished and a market cap by the name of "regulated market price" was introduced in its stead for electricity generated from base load fuels, with the regulated market price being set at a level higher than the pre-existing base load marginal price in order to compensate the Generation Subsidiaries for the rapid rise in the price of coal. However, when the price of coal continued to rise sharply above the level originally assumed in setting the regulated market price, this had the effect of undercutting KEPCO's profit margin as the purchaser of electricity from the Generation Subsidiaries, although the Generation Subsidiaries were able to maintain a better margin under the regulated market price regime than under the pre-existing base load marginal price regime. Accordingly, on May 1, 2008, the regulated market price regime was abolished, and the current system of "system marginal price" was introduced in order to set the marginal price in a more flexible way by using the concept of an "adjusted coefficient" tailored to each fuel type.

Under the system marginal price regime currently in effect, the marginal price of electricity at which the Generation Subsidiaries sell electricity to KEPCO is determined using the following formula:

Marginal Price = Variable Cost + [System Marginal Price – Variable Cost] \* Adjusted Coefficient

The system marginal price represents, in effect, the marginal price of electricity at a given hour at which the projected demand for electricity and the projected supply of electricity for such hour intersect, as determined by the merit order system, which is a system used by the KPX to allocate which generation units will supply electricity for which hour and at what price. The projected demand for electricity for a given hour is determined by the KPX based on a forecast made one day prior to trading, and such forecast takes into account, among others, historical statistics relating to demand for electricity nationwide by day and by hour, after taking into account, among others, seasonality and peak-hour versus non-peak hour demand analysis. The projected supply of electricity at a given hour is determined as the aggregate of the available capacity of all generation units that have submitted bids to supply electricity for such hour. These bids are submitted to the KPX one day prior to trading.

Under the merit order system, the generation unit with the lowest variable cost of producing electricity among all the generation units that have submitted a bid for a given hour is first awarded a purchase order for electricity up to the available capacity of such unit as indicated in its bid. The generation unit with the next lowest variable cost is then awarded a purchase order up to its available capacity in its bid, and so forth, until the projected demand for electricity for such hour is met. The variable cost of the generation unit that is the last to receive the purchase order for such hour is referred to as the system marginal price, which also represents the most expensive price at which electricity can be supplied at a given hour based on the demand and supply for such hour. Generation units whose variable costs exceed the system marginal price for a given hour do not receive purchase orders to supply electricity for such hour. The variable cost of each generation unit is determined by the Cost Evaluation Committee on a monthly basis and reflected in the following month based on the fuel costs as of two months prior to such determination. The final allocation of electricity supply, however, is further adjusted on the basis of other factors, including the proximity of a generation unit to the geographical area to which power is being supplied, network and fuel constraints and the amount of power loss.

The purpose of the merit order system is to encourage generating units to reduce their electricity generation costs by making their generation process more efficient, sourcing fuels from more cost-effective sources or adopting other cost savings programs. The additional adjustment mechanism is designed to improve the overall cost-efficiency in the distribution and transmission of electricity to the end-users by adjusting for losses arising from the distribution and transmission process.

Under the merit order system, the electricity purchase allocation, the system marginal price and the final allocation adjustment are automatically determined based on an objective formula. The adjusted coefficient, the capacity price and the variable costs are determined in advance of trading by the Cost Evaluation Committee. Accordingly, a supplier of electricity cannot exercise control over the merit order system or its operations to such supplier's strategic advantage.

An adjusted coefficient applies in principle to all generation units operated by the Generation Subsidiaries and the coal-fired generation units operated by IPPs. The adjusted coefficient applicable to the generation units operated by the Generation Subsidiaries is determined based on considerations of, among others, electricity tariff rates, the differential generation costs for different fuel types and the relative fair returns on investment in respect of KEPCO compared to the Generation Subsidiaries. The purpose of the adjusted coefficient here is to prevent electricity trading from resulting in undue imbalances as to the relative financial results among the Generation Subsidiaries as well as between KEPCO (as the purchaser of electricity) and the Generation Subsidiaries (as sellers of electricity). Such imbalances may arise from excessive profit taking by base load generators (on account of their inherently cheaper fuel cost structure compared to non-base load generators) as well as from fluctuations in fuel prices (it being the case that during times of rapid and substantial rises in fuel costs which are not offset by corresponding rises in electricity tariff rates charged by KEPCO to end-users, on a non-consolidated basis, the profitability of KEPCO will decline compared to that of the Generation Subsidiaries since the Generation Subsidiaries are entitled to sell electricity to KEPCO at cost plus a guaranteed margin). In comparison, the adjusted coefficient applicable to the coal-fired generation units operated by IPPs is determined to enable such IPPs to recover the total costs of building and operating such units.

The adjusted coefficient applicable to the Generation Subsidiaries is currently set at the highest level for the marginal price of electricity generated using LNG and oil, followed by coal and nuclear fuel. The differentiated adjusted coefficients reflect the Government's prevailing energy policy objectives and have the effect of setting priorities in the fuel types to be used in electricity generation.

The adjusted coefficient is determined by the Cost Evaluation Committee in principle on an annual basis, although in exceptional cases driven by external or structural factors such as rapid and substantial changes in fuel costs, adjustments to electricity tariff rates or changes in the electricity pricing structure, the adjusted coefficient may be adjusted on a quarterly basis.

Previously, it was contemplated that the vesting contract system would gradually replace the application of the adjusted coefficient. However, since the implementation of the vesting contract system has been suspended indefinitely, it is unlikely to impact the application of the adjusted coefficient in the foreseeable future.

# Capacity Price

In addition to payment in respect of the variable cost of generating electricity, the Generation Subsidiaries receive payment in the form of capacity price, the purpose of which is to compensate them for the costs of constructing generation facilities and to provide incentives for new construction. The capacity price is determined annually by the Cost Evaluation Committee based on the construction costs and maintenance costs of a standard generation unit and is paid to each generation company for the amount of available capacity indicated in the bids submitted the day before trading. From time to time, the capacity price is adjusted in ways to soften the impact of changes in the marginal price over time based on the expected rate of return for the Generation Subsidiaries. The reference capacity price and the time-of-the-day capacity coefficient are determined annually before the end of December for the subsequent 12-month period. The reserve capacity factor and the fuel switching factor are determined annually before the end of June for the subsequent 12-month period. Currently, the capacity price is determined using the following formula:

Capacity Price = Reference Capacity Price \* Reserve Capacity Factor \* Time of the Day Capacity Factor \* Fuel Switching Factor

As of March 31, 2021, the capacity price of our generation units ranged from 3.98/kWh to 17.56/kWh depending on the type of generation unit.

The reference capacity price refers to the Korean Won amount per kilowatt-hour payable annually for annualized available capacity indicated in the bids submitted the day before trading (provided that such capacity is actually available on the relevant day of trading), and is determined based on the construction costs and maintenance costs of a standard generation unit and related transmission access facilities, and a base rate for loading electricity. Prior to October 2016, the same reference capacity price applied uniformly to all generation units. Since October 2016, the reference capacity price applies differentially to each generation unit depending on the start year of its commercial operation.

The reserve capacity factor relates to the requirement to maintain a standard capacity reserve margin in the range of 15% in order to prevent excessive capacity build-up as well as induce optimal capacity investment at the regional level. The capacity reserve margin is the ratio of peak demand to the total available capacity. Under this system, generation units in a region where available capacity is insufficient to meet demand for electricity, as evidenced by a failure to meet the standard capacity reserve margin, receive an increased capacity price. Conversely, generation units in a region where available capacity exceeds demand for electricity, as evidenced by exceeding the standard capacity reserve margin, receive a reduced capacity price. Since October 2016, the reserve capacity factor also factors in the transmission loss per generation unit in order to favor transmission of electricity from a nearby generation unit.

The time-of-the-day capacity coefficient allows hourly and seasonal adjustments in order to incentivize the Generation Subsidiaries to operate their generation facilities at full capacity during periods of highest demand. For example, the capacity price paid differs depending on whether the relevant hour is an "on-peak" hour, a "mid-peak" hour or an "off-peak" hour (the capacity price being highest for the on-peak hours and lowest for the off-peak hours) and the capacity price paid is highest during the months of January, July and August when electricity usage is highest due to weather conditions.

The fuel switching factor, which was introduced in October 2016 to promote environmental sensitivities to climate change, seeks to encourage reduced carbon emission by penalizing generation units (mostly coal-fired units) for excessive carbon emission.

Other than subject to the aforementioned variations, the same capacity pricing mechanism applies to all generation units regardless of fuel types used.

# Vesting Contract System

On May 20, 2014, the Electricity Business Act was amended, with effect from November 21, 2014, to introduce a vesting contract system to determine the price and quantity of electricity to be sold and purchased through the KPX between the purchaser of electricity (currently, KEPCO) and the sellers of electricity (namely, the Generation Subsidiaries (including us) and IPPs). The application of the adjusted coefficient under the cost-based pool system is planned to be gradually replaced by the vesting contract system.

Under the vesting contract system, electricity generators using low-cost base load fuels (such as nuclear, coal, hydro and by-product gas) at a particular generation unit were to be required to enter into a contract with the purchaser of electricity (currently, KEPCO), which would specify, among other things, the quantity of electricity to be generated and sold from such generation unit and the price at which such electricity would be sold, subject to certain adjustments.

The introduction of the vesting contract system was intended principally to prevent excessive profit-taking by producers of electricity using low-cost base load fuels (such as nuclear, coal, hydro and by-product gas) by replacing the adjusted coefficient as the basis for determining the guaranteed return to generation companies, as well as to enhance the stability of electricity supply by requiring long-term contractual arrangements for the purchase and sale of electricity and promote cost savings, productivity enhancements and operational efficiency by providing incentives and penalties depending on the degree to which the generation companies could supply electricity at costs below the contracted electricity prices.

In order to minimize undue shock to the electricity trading market in Korea, the vesting contract system was to be implemented in phases starting with by-product gas-based electricity in 2015. The rollout of the vesting contract system was further studied by a task force consisting of representatives from the Government, the KPX and generation companies. Following such study, the Government announced in June 2016 that, due to changes in the electricity business environment (including an increase in generation capacity relative to peak usage, reduced fuel costs following a decline in oil prices and greater environmental concerns related to coal-fired electricity generation), it will indefinitely suspend any further rollout of the vesting contract system beyond by-product gas-based electricity, and retain the adjusted coefficient-based electricity pricing adjustment mechanism.

# **RENEWABLE PORTFOLIO STANDARD**

In order to expand the utilization of renewable energy resources for generating electrical energy, to reduce greenhouse gas emission and to protect the environment, the Government adopted the RPS in December 2010, under which 10% of all electricity generated by the power generation companies in Korea will be required to be sourced from renewable energy by 2022. Generation companies receive Renewable Energy Certificates ("RECs"), based on a weighted scheme, for energy generated from an eligible renewable energy source, which can be used to satisfy their own RPS requirements or traded on the KPX to other generation companies to satisfy their RPS requirements. Penalties are levied on any generation company with generation capacities of 500 MW or more that fails to do so in the prescribed timeline.

# THIRD BASIC NATIONAL ENERGY PLAN

On June 4, 2019, the MOTIE adopted the Third Basic National Energy Plan following consultations with representatives from civic groups, the power industry and academia. The Third Basic National Energy Plan, which is a comprehensive plan that covers the entire spectrum of energy industries in Korea, covers the period from 2019 to 2040 (compared to 2013 to 2035 under the Second Basic National Energy Plan) and focuses on the following five key tasks: (i) innovating the structure of energy consumption by strengthening the energy demand management of various sectors such as industrial, building and transportation, and streamlining pricing systems with the aim of improving the efficiency of energy consumption by 38% by 2040 and reducing energy demand by 18.6% by 2040, (ii) transitioning to a clean and safe mix of energy through increasing the share of renewable energy by 30~35% while reducing the share of nuclear and coal energy, (iii) expanding decentralized and participatory energy systems by increasing the share of distributed energy resources (such as renewable energy and fuel cells) in areas with demand and strengthening regional management by expanding the roles and responsibilities of local governments, (iv) bolstering the global competitiveness of Korea's energy industry by fostering future energy industries such as renewable energy, hydrogen and efficiency-enhancing industries, as well as through adding value to existing traditional energy industries, and (v) laying the foundation for conversion to clean and safe energy by improving the electricity, gas and heat market systems and building an energy big data platform to promote the creation of new industries.

# NINTH BASIC PLAN RELATING TO THE LONG-TERM SUPPLY AND DEMAND OF ELECTRICITY

In December 2020, the Government released the Ninth Basic Plan which serves as the guideline for stable medium and long-term supply of electric power. The Ninth Basic Plan replaced and superseded the Eighth Basic Plan, which covered the period from 2017 to 2031 and focused on, among other things, (i) increasing efforts to address environmental and safety concerns, including reducing greenhouse gas emission and yellow dust, (ii) decreasing the portion of electricity supplied using nuclear and coal energy sources, (iii) increasing the portion of electricity supplied from renewable energy, in particular solar and wind power and (iv) promoting the replacement of coal with LNG as an energy source by reducing the gap in expenses incurred in using the respective fuel types, for example, by adjusting the consumption tax rates applicable to the respective fuel types.

The objectives of the Ninth Basic Plan include, 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. Pursuant to such plans, we plan to retire our Boryeong units no. 5 and 6 and convert them to LNG fuel use by 2025.

# PLAN TO REFORM STATE-OWNED ENTERPRISES IN THE ENERGY AND RESOURCES DEVELOPMENT SECTOR

On June 14, 2016, the Government announced broad plans to overhaul state-owned enterprises in the energy and resources development sector, including KEPCO, in response to reported losses and inefficiencies among state-owned enterprises. The Government aimed to streamline overlapping energy and resources development roles and functions among the state-owned enterprises by divesting from businesses not essential to the core purpose for which a stated-owned enterprise was established, while also encouraging competition by gradually opening up the energy and resources development industry to the private sector. With respect to the electric power industry, the plans call for, among other things, (i) KEPCO's divesture of its overseas businesses to the Generation Subsidiaries, (ii) the designation and specialization among the Generation Subsidiaries on the areas of business to pursue overseas, (iii) the gradual liberalization of the electricity distribution market and (iv) the initial public offering of the Generation Subsidiaries, including us, in conjunction with the sale of minority interests (20% to 30%) in such subsidiaries, by 2020. Pursuant to such plans, KEPCO considered a sale in the public market of a minority stake of its shares in the Generation Subsidiaries. However, to our knowledge, the planned sales have been put on hold. In any event, we believe that KEPCO plans to maintain a controlling interest in each of the Generation Subsidiaries.

# BUSINESS

# **OVERVIEW**

We were established on April 2, 2001 as one of six generation subsidiaries (the "Generation Subsidiaries") of Korea Electric Power Corporation ("KEPCO"). The Generation Subsidiaries generate over 80% of the electricity in Korea. As of March 31, 2021, we had a domestic generation capacity of 9,733 megawatts, or approximately 7.5% of the total electricity generation capacity in Korea (excluding plants generating electricity primarily for private or emergency use). Based on our internal data, in 2019, 2020 and the three months ended March 31, 2021, we sold 43,342, 46,265 and 11,292 gigawatt hours of electricity, respectively, to KEPCO through the Korea Power Exchange (the "KPX"). KEPCO is currently the sole electricity transmission and distribution company in Korea.

Total demand for electricity in Korea increased by 3.6% in 2018 but decreased by 1.1% in 2019 and 2.2% in 2020, in each case, year on year, according to KEPCO, and the consumption of electric power is expected to increase by 1.6% per year from 2020 to 2034, according to the Government's Ninth Basic Plan. We plan to continue to make substantial capital expenditures to expand our generation capacity and enhance our generating systems in the future, particularly with respect to the generation of renewable energy.

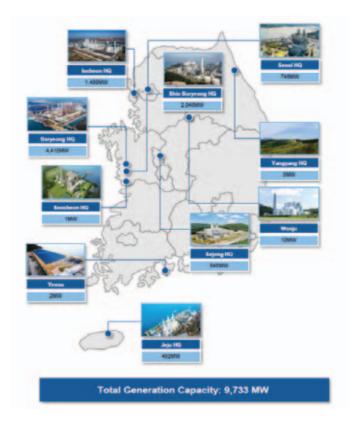
Based on our vision of being a "global energy leader enhancing the value of life," we aspire to enhance our customers' lives by building trust and adding value to the environment, economy and society. As of March 31, 2021, we had a total installed generation capacity of 9,733 megawatts, of which 5,318 megawatts, 4,310 megawatts and 105 megawatts were attributable to our coal and oil thermal units, LNG-combined cycle units and renewable energy units, respectively. We generated sales of Won 4,547 billion, Won 4,358 billion, Won 1,248 billion and Won 1,173 billion in 2019, 2020 and the three months ended March 31, 2020 and 2021, respectively. Our loss for the year was Won 6 billion in 2019 and Won 3 billion in 2020. Our profit for the period was Won 61 billion for the three months ended March 31, 2020 and Won 61 billion for the three months ended March 31, 2020.

We are a corporation incorporated with limited liability under the laws of Korea. Our registered office is located at 160, Boryeongbuk-ro, Boryeong-si, Chungcheongnam-do 33439, Korea. Our website address is *www.komipo.co.kr*.

#### POWER GENERATION

As of March 31, 2021, we owned and operated 8 bituminous coal-fired thermal generation units at our power plant complexes located in Boryeong and Shin Boryeong, two oil-fired thermal generation units at our power plant complex located in Jeju, 29 LNG-combined cycle units at our power plant complexes located in Boryeong and Jeju and two oil-fired internal combustion engine units at our power plant complex located in Jeju. Our thermal units produce electricity using steam turbine generators and include units fired by coal or oil. Our combined-cycle units produce electricity using gas turbine generators and steam turbine generators fired by LNG.

We have also invested in the generation of renewable energy. We have a number of photovoltaic, mini-hydropower and wind power units. Our photovoltaic units utilize solar cells to directly convert sunlight into electricity. Our wind power units convert wind energy into electricity using wind turbines that generate electricity by the rotation of its blades that are connected to a power generator. Our mini-hydropower units utilize the coolant water discharged from our thermal generation units to spin water turbines to produce electricity. The following map shows the geographic locations of our major power plant complexes as of March 31, 2021 in Korea.



The table below sets forth for each domestic plant type and location, the weighted average age of units, installed capacity, the average capacity factor and the average fuel cost based upon the net amount of electricity generated as of March 31, 2021:

	Weighted Average Age of Units	Installed Capacity <sup>(1)</sup>	Average Capacity Factor <sup>(2)</sup>	Average Fuel Cost
	(years)	(megawatts)	(%)	(Won/kWh)
Thermal: Bituminous coal: <sup>(3)</sup>				
Boryeong units no. 3, 4, 5, 6, 7, 8	22.6	3,050	61.1	45.43
Shin Boryeong units no. 1, 2	3.6	2,038	71.1	42.43
Oil:				
Jeju units no. 2, 3	20.6	150	27.9	184.30
Jeju internal combustion no. 1, 2	13.8	80	33.5	131.28
Total thermal	15.1	5,318	63.6	49.49
Combined cycle:				
LNG:				
Boryeong gas turbine ("GT") units				
no. 1, 2, 3, 4, 5, 6; steam turbine				
("ST") units no. 1, 2, 3	21.9	1,350	16.6	78.92
Incheon GT units no. 1, 2, 3, 4, 5, 6;				
ST units no. 1, 2, 3	12.1	1,462	38.6	78.54
Jeju GT units no. 1, 2; ST units	• •			
no. 1, 2	2.8	229	56.0	80.66
Seoul GT units no. 1, 2; ST units	1.6	720	70.0	70.50
no. 1, 2	1.6	738	78.0	70.50
Sejong GT units no. 1, 2; ST unit	7.2	520	04.0	67 11
no. 1	7.3	530	84.9	67.44
Total combined cycle	12.3	4,310	45.1	76.03

	Weighted Average Age of Units	Installed Capacity <sup>(1)</sup>	Average Capacity Factor <sup>(2)</sup>	Average Fuel Cost
	(years)	(megawatts)	(%)	(Won/kWh)
Renewable:				
Photovoltaic units	5.5	15	9.6	-
Mini-hydropower units	7.5	12	22.4	-
Wind power unit	5.9	33	14.7	-
Biomass	5.9	10	80.8	-
Misc. <sup>(5)</sup>	1.5	35	84.2	
Total renewable	4.7	105	42.0	
Total	13.8	9,733	51.9	61.37

#### Notes:

(1) Installed capacity represents the level of output that may be sustained continuously without significant risk of damage to plant and equipment.

(2) Average capacity factor represents the total number of kilowatt hours of electricity generated in the period divided by the total number of kilowatt hours that would have been generated assuming continuous operation of generation units at installed capacity expressed as a percentage.

- (3) Bituminous units are fueled by bituminous coal supplemented by wood pellets.
- (4) Consists of LNG fuel cell and solid recovered fuel units.

As of March 31, 2021, we had an aggregate domestic installed capacity of 9,733 megawatts. In 2019, 2020 and the three months ended March 31, 2021, the average capacity factor of our generation units was 49.2%, 51.8% and 51.9%, respectively. In 2019, 2020 and the three months ended March 31, 2021, our power generation (excluding electricity produced by units before the commencement of their commercial operations) amounted to 45,682, 48,785 and 11,824 gigawatt hours of electricity, respectively.

The useful life of each type of units without substantial refurbishment is approximately 25 to 30 years for thermal, combined cycle and internal combustion engine units. Substantial refurbishment can extend the useful lives of such units by an additional 10 years or more. See "– Capital Investment Program."

The maintenance cycle for our power generation units is 24 months for thermal units and range from 2,000 to 27,000 equivalent operating hours (EOHs) for other types of units depending on the type and installed capacity of units. The duration of maintenance depends on the nature and degree of maintenance involved and may last from three to 55 days depending on the unit. In 2019, 2020 and the three months ended March 31, 2020 and 2021, our total repairs and maintenance expenses were Won 153 billion, Won 177 billion, Won 28 billion and Won 26 billion, respectively. Our forced (unplanned) outage factor, which is a percentage of total forced (unplanned) outage time over total available operating time, was 0.02%, 0.04%, 0.13% and 0.20% in 2019, 2020 and the three months ended March 31, 2020 and 2021, respectively. We have received ISO 37001, 27001 and 45001 certifications for our anti-bribery, information security and occupational health and safety management systems, respectively.

Efficient operation of generation units requires that such units be run continuously at relatively constant energy output levels. As electricity output cannot be stored in significant amounts, generation must be continuously managed to match demand. Within each day there is a certain level below which demand does not fall. This minimum level of demand throughout the day is known as "base load" while "peak load" refers to the maximum level of demand during the course of a day and "intermediate load" refers to the level of demand between base load and peak load. Base load generation units are those that can generate power in dependable amounts to consistently meet demand. Electricity demand, however, constantly fluctuates by time and region. Accordingly, peak and intermediate load power plants are also coordinated into our system in order to meet such changing demand for power. Base load power plants, which are typically fueled by coal, produce continuous, reliable and efficient power at low cost. They often take a relatively long time to start up and are relatively inefficient in terms of cost-to-output ratio when operated at less than full output. Base load plants run at all times throughout the year except in the case of repairs or scheduled maintenance. Their reliability to provide the base demand helps keep their operation costs low and offers stable, attractive pricing through long-term agreements. Peak load power plants provide power during times of peak demand. These plants can speedily respond to changes in electricity demand as they can be started up relatively quickly and vary the quantity of electrical output by the minute and therefore, are principally used to meet short-term surges in demand. Peak load power plants, which are typically fueled by LNG, are expensive to operate relative to the amount of power they produce and the cost of fuel to power them. Intermediate load plants, which are typically fueled by and plants. Coal-fired units in our Boryeong and Shin Boryeong complexes operate at base load, while our oil-fired units, LNG-combined cycle units and internal combustion oil engine units in our Boryeong, Incheon, Sejong and Jeju complexes operate at intermediate to peak load.

The table below sets forth our installed capacity at the end of each period and peak and average load in the periods indicated below.

	As of and for the year ended December 31,		As of and for the three months ended March 3		
	2019	2020	2020	2021	
	(megawatts)				
Installed capacity	10,711	10,738	10,738	10,756	
Peak-load <sup>(1)</sup>	9,181	9,578	8,054	9,400	
Average load <sup>(2)</sup>	5,215	5,569	5,554	5,474	

#### Notes:

(1) Peak load represents the highest load in the relevant period.

(2) Average load represents the total number of megawatts of electricity generated in the period divided by the total number of hours in that period.

#### FUEL

Raw materials used in our cost of sales, which primarily consist of fuel costs, constituted 67.5%, 63.4%, 61.9% and 61.2% of our sales 70.9%, 67.1%, 72.2% and 70.7% of our cost of sales, in 2019, 2020 and each three-month period ended March 31, 2020 and 2021, respectively. The table below sets forth the total fuel costs for the periods indicated on a separate basis.

	For the year ended December 31,						ne months larch 31,	
	2019		2020		2020		2021	
	(billions of Won)	(%)	(billions of Won)	(%)	(billions of Won)	(%)	(billions of Won)	(%)
Bituminous coal	1,821	59.6	1,537	55.9	363	47.3	303	42.4
Oil <sup>(1)</sup>	155	5.1	124	4.5	28	3.6	27	3.8
$LNG^{(2)}$	781	25.6	944	34.3	339	44.1	354	49.5
$Others^{(3)}$	298	9.7	147	5.3	38	5.0	31	4.3
Total raw materials used <sup>(4)</sup>	3,055	100.0	2,752	100.0	768	100.0	715	100.0

#### Notes:

(1) Represents bunker-C oil used for our oil-fired thermal and internal combustion oil engine units. Excludes diesel oil to initially start up our thermal units.

(2) LNG is used as fuel for our combined cycle units and fuel cell units.

- (3) Represents (i) cost of storing and managing fuel stocks at our units, (ii) fuel for our renewable units (excluding LNG for our fuel cell units), (iii) fuel to initially start up our units (primarily diesel oil) and other miscellaneous fuel related costs. Fuel storage and management costs amounted to Won 140 billion, Won 138 billion, Won 35 billion and Won 28 billion in 2019, 2020 and the three months ended March 31, 2019 and 2020. The cost of diesel oil amounted to Won 158 billion, Won 9 billion, Won 3 billion and Won 3 billion in 2019, 2020 and the three months ended March 31, 2019, 2020 and the three months ended March 31, 2020 and 2021, respectively.
- (4) On a consolidated basis, our total raw materials used in our cost of sales, which primarily consist of fuel costs, were Won 3,071 billion, Won 2,763 billion, Won 772 billion and Won 718 billion in 2019, 2020 and the three months ended March 31, 2020 and 2021, respectively.

In order to ensure stable supplies of fuel, we enter into long-term contracts with various suppliers, and supplement such supplies with purchases of fuel on the spot market. Substantially all of the fuel we use comes from sources outside Korea, and the fuel cost is impacted by the exchange rates between the Won and the relevant foreign currency in which prices are set. See "Risk Factors – Risks Relating to Our Business – We are dependent on fuel imported from overseas suppliers in currencies other than Won under contracts with varying quantity and duration, and rising fuel costs could adversely affect our results of operations."

Cost increases resulting from the depreciation of the Won against the U.S. dollar or other currencies, or supply disruptions have adversely affected our results of operations in the past and may do so in the future. In recent years, we have reduced the cost of fuel procurement while maintaining a stable fuel supply through a centralized inventory management control tower system that utilizes big data to forecast our supply needs. Generally, we pay for fuel on a cash-on-delivery basis and finance such payments in part with bank usance or on a letter of credit basis.

# Coal

As of March 31, 2021, 52% of our total installed generation capacity was represented by thermal units burning bituminous coal. We ceased to operate anthracite coal thermal units with the decommissioning of our Seocheon units in June 2017.

In 2019, 2020 and the three months ended March 31, 2020 and 2021, we purchased 13.7 million tons, 13.9 million tons, 2.7 million tons and 2.8 million tons of bituminous coal, amounting to Won 1,821 billion, Won 1,537 billion, Won 363 billion and Won 303 billion, respectively. Substantially all of our bituminous coal requirements are imported from approximately 26 suppliers located in Australia, Indonesia, the United States, Russia, Colombia, Canada and South Africa under long-term or spot contracts. Approximately 88%, 88%, 92% and 91% of our bituminous coal requirements were purchased under long-term contracts in 2019, 2020 and the three months ended March 31, 2020 and 2021, respectively, with the remaining requirements being purchased on the spot market. See "Risk Factors – Risks Relating to Our Business – We are dependent on fuel imported from overseas suppliers in currencies other than Won under contracts with varying quantity and duration, and rising fuel costs could adversely affect our results of operations."

Pursuant to the terms of our long-term supply contracts, prices may be adjusted monthly, quarterly or annually depending on market conditions. In the case of term contracts, the obligation to purchase contracted annual amounts of fuel automatically terminates at the end of the year if the parties cannot reach an agreement in respect of price. Depending on the type of contract, we are able to increase or decrease the quantity of bituminous coal under the relevant supply contract by up to approximately 100%. In addition, under the long-term contracts, we have the option to reduce the required annual purchase quantity in the event of a revision in plant construction schedule, fluctuations in spot market prices, suspension of plant operation and alteration of the power generation plan as a result of an accident or an unavoidable cause. The average cost of bituminous coal per ton purchased by us was approximately Won 132,181, Won 112,898, Won 122,274 and Won 110,081 in 2019, 2020 and the three months ended March 31, 2020 and 2021, respectively. We may, if necessary, augment our supplies by entering into new short-term import contracts or by making spot purchases. We estimate that the delivery time for bituminous coal imported from Australia, Indonesia, Russia and the United States is approximately 14 days, 8 days, 4 days and 16 days, respectively. Currently, we maintain a reserve of bituminous coal of approximately 20 days.

# Oil

We purchased approximately 90,000 liters, 30,000 liters, 1,000 liters and 12,000 liters of bunker-C fuel oil in 2019, 2020 and the three months ended March 31, 2020 and 2021, amounting to Won 52 billion, Won 17 billion, Won 0.8 billion and Won 8 billion, respectively. While bunker-C fuel oil has historically been the primary source of our oil requirements, in recent years, we have increased our purchases of bio-heavy oil, which contains lower levels of sulfur and nitrogen contents compared to bunker-C fuel oil and is thus more environment-friendly. In 2019, 2020 and the three months ended March 31, 2020 and 2021, we purchased approximately 189.6 thousand kiloliters, 170.8 thousand kiloliters, 44.5 thousand kiloliters and 25.7 thousand kiloliters of bio-heavy oil, amounting to Won 102 billion, Won 106 billion, Won 27 billion and Won 19 billion, respectively.

We purchase oil through a competitive open bidding process with other bidders, including Korean refiners, on the spot market. Purchase prices, including taxes and other expenses, of oil are based on the spot market in Singapore. The average cost of bunker-c fuel oil per kiloliter was approximately Won 602,350, Won 689,730, Won 740,279 and Won 684,229 in 2019, 2020 and the three months ended March 31, 2020 and 2021, respectively, and the average cost of bio-heavy oil per kiloliter was approximately Won 540,060, Won 621,927, Won 608,589 and Won 751,231 in 2019, 2020 and the three months ended March 31, 2020 and 2021, respectively. We estimate that oil purchased from oil refineries in Korea and Singapore takes approximately two days and 10 days, respectively, to be delivered to our power plant complexes. Currently, we maintain a reserve of bunker-C fuel oil of approximately 23 days and 15 days for bio-heavy oil.

# LNG

In 2019, 2020 and the three months ended March 31, 2020 and 2021, we purchased approximately 1.0 million tons, 1.8 million tons, 0.5 million tons and 0.6 million tons of LNG, amounting to Won 781 billion, Won 944 billion, Won 339 billion and Won 354 billion, respectively.

We purchase a substantial portion of our domestic LNG requirements from KOGAS, a Korean corporation of which KEPCO owns 20.47%, under a 20-year LNG supply contract (the "LNG Contract") with KOGAS, which is scheduled to expire in 2039. Under the terms of the LNG Contract, our purchase quantity is determined through negotiations with KOGAS, subject to Government's approval. We are under an obligation to purchase LNG quantities within a 10% to 20% plus or minus range from our previously agreed purchase quantity. If we purchase LNG outside this range, we are required to pay a penalty to KOGAS. To date, all our purchases have been within such range. The purchase price for LNG is determined monthly, subject to approval by the MOTIE. KOGAS imports LNG primarily from Australia, Indonesia, Malaysia, Oman, Qatar, Russia and the United States and supplies LNG to us, other Generation Subsidiaries and other Korean gas companies.

We also purchase LNG directly from suppliers other than KOGAS. Approximately 35%, 46% and 36% of our LNG requirements were imported directly by us in 2019, 2020 and the three months ended March 31, 2021 mainly from Malaysia, Indonesia, Russia, Oman and the United States.

The average cost per ton of LNG was approximately Won 744,356, Won 528,097, Won 637,110 and Won 569,249 in 2019, 2020 and the three months ended March 31, 2020 and 2021, respectively.

# SALES AND PURCHASE OF POWER

#### Generation Companies' Combined Sales of Electricity

Pursuant to Article 31 of the Electricity Business Act of Korea, we sell all of the electricity we generate to KEPCO through the KPX. KEPCO is currently the only company engaged in the transmission and distribution of electricity in Korea. The results of power trading, as effected through the KPX, for the Generation Subsidiaries, including us, and IPPs for the years ended December 31, 2019 and 2020 and the three months ended March 31, 2020 and 2021 are as follows:

	For the year ended December 31, 2019						
	Volume <sup>(1)(2)</sup>	Percentage of Total Volume	Sales <sup>(1)</sup>	Percentage of Total Sales	Unit Price		
	(GWh)	(%)	(in billions of Won)	(%)	(Won/kWh)		
<b>Generation Companies:</b>							
KHNP	142,949	27.0	8,608	18.1	60.22		
KOSEP	60,361	11.4	5,354	11.2	88.70		
КОМІРО	43,342	8.2	4,435	9.3	102.33		
KOWEPO	44,178	8.4	4,354	9.1	98.56		
KOSPO	48,932	9.2	4,987	10.5	101.91		
EWP	48,144	9.1	4,658	9.8	96.75		
$Others^{(3)}$	141,168	26.7	15,290	32.1	108.31		
Total	529,075	100.0	47,686	100.0	90.13		
Energy Sources:							
Nuclear	138,607	26.2	8,094	17.0	58.39		
Bituminous coal	215,012	40.6	18,808	39.4	87.47		
Anthracite coal	2,331	0.4	240	0.5	102.85		
Oil	4,011	0.8	918	1.9	228.79		
LNG combined-cycle	138,655	26.2	16,519	34.6	119.13		
Hydro	2,193	0.4	236	0.5	107.83		
Pumped storage	3,444	0.7	419	0.9	121.62		
Renewables <sup>(1)</sup>	22,575	4.3	2,242	4.7	99.30		
Others	2,247	0.4	211	0.4	94.01		
Total	529,075	100.0	47,686	100.0	90.13		

#### Source: KEPCO

Notes:

- (1) Excludes sale of RECs by generation companies.
- (2) Includes volume from CES projects.
- (3) Includes, among others, POSCO, OCI Company Ltd., LG Petrochemical Co., Ltd. and Korea Petrochemical IND. Co., Ltd.

For the year ended December 31, 2020						
Volume <sup>(1)(2)</sup>	Percentage of Total Volume	Sales <sup>(1)</sup>	Percentage of Total Sales	Unit Price		
(GWh)	(%)	(in billions of Won)	(%)	(Won/kWh)		
156,726	30.4	9,554	23.0	60.96		
48,677	9.4	4,047	9.7	83.14		
46,265	9.0	4,154	10.0	89.79		
37,684	7.3	3,502	8.4	92.94		
41,434	8.0	3,946	9.5	95.23		
43,027	8.4	3,982	9.6	92.56		
141,390	27.4	12,382	29.8	87.57		
515,203	100.0	41,567	100.0	80.68		
152,328	29.6	9,093	21.9	59.69		
185,179	35.9	15,209	36.6	82.13		
1,876	0.4	153	0.4	81.48		
2,184	0.4	422	1.0	193.12		
140,866				98.81		
3,156				81.72		
				113.07		
		· · ·		79.70		
6,156	1.2	536	1.3	87.03		
515,203	100.0	41,567	100.0	80.68		
	(GWh) 156,726 48,677 46,265 37,684 41,434 43,027 141,390 515,203 152,328 185,179 1,876 2,184 140,866 3,156 3,257 20,202 6,156	$\begin{tabular}{ c c c c c } \hline Percentage of Total \\ \hline of Total \\ \hline Volume \\ \hline (GWh) & (\%) \\ \hline 156,726 & 30.4 \\ 48,677 & 9.4 \\ 46,265 & 9.0 \\ 37,684 & 7.3 \\ 41,434 & 8.0 \\ 43,027 & 8.4 \\ 141,390 & 27.4 \\ \hline 515,203 & 100.0 \\ \hline \\ \hline 152,328 & 29.6 \\ 185,179 & 35.9 \\ 1,876 & 0.4 \\ 2,184 & 0.4 \\ 140,866 & 27.3 \\ 3,156 & 0.6 \\ 3,257 & 0.6 \\ 20,202 & 3.9 \\ 6,156 & 1.2 \\ \hline \end{tabular}$	$\begin{tabular}{ c c c c c c } \hline Percentage of Total volume of Total volume of Total volume of Won of Won$	$\begin{tabular}{ c c c c c c c } \hline Percentage of Total of Total volume of Total volume of Won of W$		

# Source: KEPCO

Notes:

(1) Excludes sale of RECs by generation companies.

(2) Includes volume from CES projects.

(3) Includes, among others, POSCO, OCI Company Ltd., LG Petrochemical Co., Ltd. and Korea Petrochemical IND. Co., Ltd.

	For the three months ended March 31, 2020					
	Volume <sup>(1)(2)</sup>	Percentage of Total Volume	Sales <sup>(1)</sup>	Percentage of Total Sales	Unit Price	
	(GWh)	(%)	(in billions of Won)	(%)	(Won/kWh)	
<b>Generation Companies:</b>						
KHNP	38,315	28.6	2,402	19.7	62.68	
KOSEP	12,917	9.6	1,231	10.1	95.30	
КОМІРО	11,100	8.3	1,177	9.7	106.04	
KOWEPO	10,251	7.7	1,032	8.5	100.68	
KOSPO	10,120	7.6	1,137	9.3	112.34	
EWP	11,221	8.4	1,095	9.0	97.57	
$Others^{(3)}$	39,947	29.8	4,105	33.7	102.77	
Total	133,869	100.0	12,179	100.0	90.97	
Energy Sources:						
Nuclear	37,169	27.8	2,251	18.5	60.57	
Bituminous coal	45,826	34.2	4,216	34.6	91.99	
Anthracite coal	489	0.4	46	0.4	93.13	
Oil	449	0.3	93	0.8	207.00	
LNG combined-cycle	41,819	31.2	4,761	39.1	113.84	
Hydro	496	0.4	53	0.4	106.86	
Pumped storage	931	0.7	127	1.0	136.73	
	4,823	3.6	458	3.8	95.03	
Others	1,865	1.4	174	1.4	93.17	
Total	133,869	100.0	12,179	100.0	90.97	

#### Source: KEPCO

Notes:

- (1) Excludes sale of RECs by generation companies.
- (2) Includes volume from CES projects.
- (3) Includes, among others, POSCO, OCI Company Ltd., LG Petrochemical Co., Ltd. and Korea Petrochemical IND. Co., Ltd.

	For the three months ended March 31, 2021					
	Volume <sup>(1)(2)</sup>	Percentage of Total Volume	Sales <sup>(1)</sup>	Percentage of Total Sales	Unit Price	
	(GWh)	(%)	(in billions of Won)	(%)	(Won/kWh)	
<b>Generation Companies:</b>						
KHNP	39,765	29.3	2,894	23.7	72.78	
KOSEP	11,377	8.4	1,022	8.4	89.84	
KOMIPO	11,292	8.3	1,105	9.0	97.86	
KOWEPO	10,470	7.7	1,062	8.7	101.45	
KOSPO	10,382	7.7	1,102	9.0	106.10	
EWP	10,624	7.8	1,094	9.0	102.99	
$Others^{(3)}$	41,599	30.7	3,938	32.2	94.66	
Total	135,509	100.0	12,217	100.0	90.16	
Energy Sources:						
Nuclear	38,651	28.5	2,761	22.6	71.42	
Bituminous coal	42,917	31.7	3,899	31.9	90.85	
Anthracite coal	461	0.3	40	0.3	87.10	
Oil	565	0.4	109	0.9	192.26	
LNG combined-cycle	45,001	33.2	4,692	38.4	104.27	
Hydro	433	0.3	42	0.3	96.69	
Pumped storage	937	0.7	117	1.0	124.60	
Renewables <sup>(1)</sup>	5,944	4.4	509	4.2	85.64	
Others	599	0.4	48	0.4	80.82	
Total	135,509	100.0	12,217	100.0	90.16	

# Source: KEPCO

Notes:

- (1) Excludes sale of RECs by generation companies.
- (2) Includes volume from CES projects.
- (3) Includes, among others, POSCO, OCI Company Ltd., LG Petrochemical Co., Ltd. and Korea Petrochemical IND. Co., Ltd.

#### **Our Sales of Electricity**

The tables below set forth our electricity sales, depending on the energy sources and a breakdown of base load and non-base load electricity sales in 2019, 2020 and the three months ended March 31, 2020 and 2021 based on our internal data.

	For the year ended December 31, 2019					
	Volume	Percentage of Total Volume	Sales to KEPCO <sup>(1)</sup>	Percentage of Total Sales	Unit Price	
	(GWh)	(%)	(in billions of Won)	(%)	(Won/kwh)	
Energy Sources:						
Bituminous coal	34,326	79.1	3,002	68.5	87.5	
Oil	1,631	3.8	396	9.1	243.8	
LNG	7,229	16.7	965	22.0	133.5	
Renewable	205	0.5	21	0.5	100.2	
Total	43,391	100.0	4,385	100.0	101.1	
Load:						
Base load	34,326	79.1	3,002	68.5	87.5	
Non-base load	9,065	20.9	1,383	31.5	152.6	
Total	43,391	100.0	4,385	100.0	101.1	

Note:

(1) The information regarding sales in the table above differs from the amount of our electricity sales recorded by KEPCO due to the exclusion of (i) amounts paid by KEPCO relating to our trading of RECs, (ii) amounts paid by KEPCO relating to our trading of additional emission allowance units on the emission trading system and (iii) sales of electricity produced by units before their commencement of commercial operations (which are excluded from our sales).

	For the year ended December 31, 2020					
	Volume	Percentage of Total Volume	of Total Sales to	Percentage of Total Sales	Unit Price	
	(GWh)	(%)	(in billions of Won)	(%)	(Won/kwh)	
Energy Sources:						
Bituminous coal	33,315	71.9	2,712	65.1	81.4	
Oil	666	1.4	164	3.9	246.5	
LNG	11,994	25.9	1,264	30.3	105.4	
Renewable	373	0.8	26	0.6	69.3	
Total	46,348	100.0	4,166	100.0	89.9	
Load:						
Base load	33,315	71.9	2,712	65.1	81.4	
Non-base load	13,033	28.1	1,454	34.9	111.6	
Total	46,348	100.0	4,166	100.0	89.9	

Note:

<sup>(1)</sup> The information regarding sales in the table above differs from the amount of our electricity sales recorded by KEPCO due to the exclusion of (i) amounts paid by KEPCO relating to our trading of RECs, (ii) amounts paid by KEPCO relating to our trading of additional emission allowance units on the emission trading system and (iii) sales of electricity produced by units before their commencement of commercial operations (which are excluded from our sales).

	For the three months ended March 31, 2020					
	Volume	Percentage of Total Volume	Sales to KEPCO <sup>(1)</sup>	Percentage of Total Sales	Unit Price	
	(GWh)	(%)	(in billions of Won)	(%)	(Won/kwh)	
Energy Sources:						
Bituminous coal	7,361	66.3	705	59.9	95.8	
Oil	147	1.3	39	3.4	269.2	
LNG	3,518	31.7	425	36.1	120.8	
Renewable	79	0.7	7	0.6	85.8	
Total	11,104	100.0	1,176	100.0	105.9	
Load:						
Base load	7,360	66.3	705	59.9	95.8	
Non-base load	3,744	33.7	471	40.1	125.9	
Total	11,104	100.0	1,176	100.0	105.9	

Note:

(1) The information regarding sales in the table above differs from the amount of our electricity sales recorded by KEPCO due to the exclusion of (i) amounts paid by KEPCO relating to our trading of RECs, (ii) amounts paid by KEPCO relating to our trading of additional emission allowance units on the emission trading system and (iii) sales of electricity produced by units before their commencement of commercial operations (which are excluded from our sales).

	For the three months ended March 31, 2021					
	Volume	Percentage of Total Volume	Sales to KEPCO <sup>(1)</sup>	Percentage of Total Sales	Unit Price	
	(GWh)	(%)	(in billions of Won)	(%)	(Won/kwh)	
Energy Sources:						
Bituminous coal	6,967	61.7	623	56.4	89.37	
Oil	136	1.2	28	2.5	202.7	
LNG	4,094	36.2	446	40.4	109.1	
Renewable	103	0.9	8	0.7	78.1	
Total	11,301	100.0	1,105	100.0	97.8	
Load:						
Base load	6,967	61.7	623	56.4	89.4	
Non-base load	4,334	38.3	482	43.6	111.3	
Total	11,301	100.0	1,105	100.0	97.8	

Note:

<sup>(1)</sup> The information regarding sales in the table above differs from the amount of our electricity sales recorded by KEPCO due to the exclusion of (i) amounts paid by KEPCO relating to our trading of RECs, (ii) amounts paid by KEPCO relating to our trading of additional emission allowance units on the emission trading system and (iii) sales of electricity produced by units before their commencement of commercial operations (which are excluded from our sales).

#### **Cost-Based Pool System**

Currently, other than in limited circumstances under the CES and certain exceptional transactions stipulated under the Enforcement Decree of the Electricity Business Act, the purchase and sale of electricity in Korea is required to be made through the KPX. The pricing of electricity in the Korean electricity market is based on the "cost-based pool" system and is determined principally based on the variable cost of generating electricity, adjusted by an adjustment factor that varies depending on fuel sources. See "The Korean Electricity Industry – Power Purchase – Cost-based Pool System."

#### **Demand Trends in Korea**

The rapid growth in Korea's economy since the early 1960s has resulted in substantial growth in the demand for electricity. Consumption levels, particularly during periods of peak demand, continue to press the limits of available supply.

According to KEPCO, demand for electricity in Korea grew at a compounded average rate of 1.1% per annum for the five years ended December 31, 2020, and total demand for electricity in Korea decreased by 1.1% in 2019 and 2.2% in 2020, in each case, year on year. The GDP growth rate at chained 2015 year prices was 2.0% in 2019 and 1.0% in 2020, in each case, year on year based on preliminary data from the Bank of Korea.

The table below sets forth, for the periods indicated, the annual rate of growth in Korea's GDP as published by the Bank of Korea and the annual rate of growth in electricity demand (measured in total annual electricity consumption) as published by KEPCO.

	For the year ended December 31.				
	2016	2017	2018	2019	2020
Growth in GDP (at chained 2015 year prices) Growth (decrease) in electricity	2.9%	3.2%	2.9%	2.0%	(1.0)%
consumption	2.8%	2.2%	3.6%	(1.1)%	(2.2)%

#### Source: KEPCO; Bank of Korea

The demand for electricity varies depending on the season and the time of day. Demand is generally higher during the summer and winter seasons due to the use of air conditioners and heaters, respectively, and during daylight hours due to commercial and industrial activity. Variations in weather conditions may also cause significant variations in demand for electricity.

#### **Demand by Class of Customer**

The table below sets forth the consumption of electric power by class of customer for the periods indicated.

	For the year ended December 31,				% of Total	
	2016	2017	2018	2019	2020	2020
	(gigawatt hours)					(%)
Industrial	278,828	285,970	292,999	289,240	278,660	54.7
Public & Service	108,617	111,298	116,934	116,227	113,639	22.3
Residential	68,057	68,544	72,895	72,639	76,303	15.0
Agricultural	16,580	17,251	18,504	18,882	19,029	3.7
$Others^{(1)}$	24,958	24,684	24,818	23,511	21,639	4.2
Total	497,039	507,746	526,149	520,499	509,270	100.0

#### Source: KEPCO

Note:

(1) Consists of consumption for education, street lighting and overnight power.

The industrial sector represents the largest segment of electricity consumption in Korea. While demand from the industrial sector has generally increased historically as a result of a general increase in industrial production, it decreased by 3.7% to 278,660 gigawatt hours in 2020 compared to 2019, mainly due to a contraction in the Korean manufacturing industries as a result of the ongoing global outbreak of the COVID-19 pandemic.

Demand from the public and service sector has also generally increased historically. The continued expansion of the service sector of the Korean economy has resulted in increased office building construction, office automation and use of air conditioners. Growth in the public and service sector was also attributable to the construction industry and the expansion of the leisure and distribution industries. However, demand from the public and service sector decreased by 2.2% to 113,639 gigawatt hours in 2020 compared to 2019, primarily due to a contraction in the Korean economy as a result of the ongoing global outbreak of the COVID-19 pandemic.

Increase in demand from the residential sector in recent years was due primarily to increased use of air conditioners and other electrical appliances. Demand from the residential sector increased by 5.0% to 76,303 gigawatt hours in 2020 compared to 2019, which was mainly attributable to the enlarged home-based workforce combined with an increase in the number of unemployed workers as a result of the ongoing global outbreak of the COVID-19 pandemic.

# POWER DEVELOPMENT

In June 2019, the Government announced the Third Basic National Energy Plan, which is a comprehensive plan that covers the entire spectrum of energy industries in Korea from 2019 to 2040. The Third Basic National Energy Plan focuses on the following five key tasks: (i) innovating the structure of energy consumption by strengthening the energy demand management of various sectors such as industrial, building and transportation, and streamlining pricing systems with the aim of improving the efficiency of energy consumption by 38% by 2040 and reducing energy demand by 18.6% by 2040, (ii) transitioning to a clean and safe mix of energy by increasing the share of renewable energy by 30~35% while reducing the share of nuclear and coal energy, (iii) expanding decentralized and participatory energy systems by increasing the share of distributed energy resources (such as renewable energy and fuel cells) in areas with demand and strengthening regional management by expanding the roles and responsibilities of local governments, (iv) bolstering the global competitiveness of Korea's energy industry by fostering future energy industries such as renewable energy, hydrogen and efficiency-enhancing industries, as well as through adding value to existing traditional energy industries, and (v) laying the foundation for conversion to clean and safe energy by improving the electricity, gas and heat market systems and building an energy big data platform to promote the creation of new industries.

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. Pursuant to such plans, we plan to retire our Boryeong units no. 5 and 6 and convert them to LNG fuel use by 2025.

# CAPITAL INVESTMENT PROGRAM

According to the Ninth Basic Plan, the ratio of reserve power required to peak power demand at any future point in time is set at 17% from 2020 to 2024, 18% from 2025 to 2028 and 22% from 2029 to 2034, and the total nominal capacity of all generating facilities in Korea in 2034 is expected to be 193 gigawatts, of which nuclear power plants are expected to contribute 10.1%, coal-fired plants 15.0%, LNG plants 30.6%, renewable energy plants 40.3% and other plants 4.0%. In accordance with the objectives of the Ninth Basic Plan, we intend to add new installed capacity, primarily in renewable energy.

The table below sets forth information as to the currently estimated year of completion and installed capacity of material generation units to be completed by us.

<b>Expected Year</b>		<b>Installed</b> Capacity
of Completion	<b>Description of Material Projects</b>	(megawatts)
2025	Conversion of Boryeong units no. 5 and 6 to LNG fuel use	1,100

Our capital expenditures, which represent the sum of acquisition of property, plant and equipment, construction-in-progress and intangible assets in our statements of cash flows, were Won 1,636 billion in 2019, Won 1,064 billion in 2020, Won 215 billion for the three months ended March 31, 2020 and Won 202 billion for the three months ended March 31, 2021. We are planning to increase our investments in renewable energy generation in order to meet our annual RPS obligations. We are also planning to invest in CES projects.

The actual number and capacity of generation units we construct and the timing of such construction will depend upon a variety of factors, including demand growth projections, availability and cost of financing, changes in fuel prices and availability of fuel, ability to acquire necessary plant sites, environmental considerations, community opposition and other factors.

# Power Plant Refurbishment and Recommissioning

We supplement power generation capacity through refurbishing or recommissioning our power plant units, which includes installation of anti-pollution devices, modification of control systems and overall rehabilitation of existing equipment. Ensuring the reliability of our equipment is critical to our operations.

The useful life of each type of units without substantial refurbishment is approximately 25 to 30 years for thermal, combined cycle and internal combustion engine units. Substantial refurbishment can extend the useful lives of such units by an additional 10 years or more.

# INDEPENDENT POWER PRODUCER AND COMMUNITY ENERGY SYSTEM PROJECTS

Based on our more than 30 years of experience in operating and maintaining power plants, we have become involved in a number of domestic and overseas IPP projects in recent years, both as an investor and plant operator.

We collaborate with a number of IPPs that specialize in the construction and operation of power plants fueled by renewable energy. For example, we hold a 15% equity interest in Gangwon Wind Power Plant in Pyeongchang, Gangwon-do, the largest wind farm in Korea with an aggregate capacity of 98 megawatts consisting of 49 units.

We expect to leverage our expertise in other IPP projects in the future. We believe that such activities will help us to diversify our revenue streams and leverage our operational experience gathered from overseeing our power plants. Please see "– Overseas Activities" for a description of our overseas IPP projects.

We also participate in CES projects through local IPPs. For example, Wonju Green Combined Heat and Power Plant, in which participants also include Korea Institute of Energy Research, Korea Institute of Machinery & Materials and POSCO, commenced operations in May 2015 and uses refuse derived fuel (RDF) and general solid refuse fuel (SRF) produced in Wonju.

#### **OVERSEAS ACTIVITIES**

We are actively engaged in a number of overseas IPP and resources development projects. Our overseas IPP projects help us apply our operational experience and add new revenue streams, while our overseas resources development activities help us establish strategic relationships with companies that are supplying or may supply fuel to us. The table and descriptions set forth below summarize the material overseas projects that we were pursuing as of March 31, 2021.

Project Description	<b>Project Period</b>	Project Type	Invested Capital as of March 31, 2021
Tanjung Jati B Coal-fired	Jan. 2012~Jan. 2032	O&M <sup>(1)</sup>	U.S.\$5.1 million
Power Plant, Indonesia Cirebon Coal-fired Power Plant, Indonesia	Jul. 2012~Jul. 2042	BOO <sup>(2)</sup>	U.S.\$70.1 million
Wampu Hydro Power Plant, Indonesia	Apr. 2016~Apr. 2046	BOO	U.S.\$20 million
Tanggamus Hydro Power Plant, Indonesia	Jul. 2018~Jul. 2048	BOO	U.S.\$25 million
Bayan, Indonesia	2016~	Resources development	₩80.5 billion
Bylong, Australia	2016~	Resources development	AUD70.3 million

#### Notes:

(1) Operation and maintenance project.

(2) Build, own and operate project.

#### **IPP Projects**

- We operate unit no. 3 and 4 of Tanjung Jati B coal-fired power plant, which have an aggregate installed capacity of 1,320 megawatts, in Indonesia through our subsidiary PT KPJB. As of March 31, 2021, we held a 51% equity interest in PT KPJB.
- We operate the Cirebon coal-fired power plant, which has an installed capacity of 600 megawatts, in Indonesia though our subsidiary PT Cirebon Power Service. As of March 31, 2021, we held a 27.5% equity interest in PT Cirebon Power Service.
- We operate the Wampu hydro power plant, which has an installed capacity of 45 megawatts, in Indonesia. As of March 31, 2021, we held a 46.0% equity interest in the power plant.
- We operate the Tanggamus hydro power plant, which has an installed capacity of 54 megawatts, in Indonesia. As of March 31, 2021, we held a 59.0% equity interest in the power plant.

#### **Resources Development Projects**

- In December 2016, pursuant to the June 2016 Government Plan, KEPCO divested its 20% equity interest in PT Bayan Resources Tbk ("Bayan") and sold a 4% equity interest for Won 80.5 billion to each of the five non-nuclear Generation Subsidiaries, including us. Bayan is a leading coal producer in Indonesia.
- In January 2008, we and three other non-nuclear Generation Subsidiaries and KEPCO were part of a Korean consortium that acquired a 10% interest in a coal mine project located in Moolarben, New South Wales, Australia. The Moolarben project began production of bituminous coal in May 2010. In December 2016, pursuant to the June 2016 Government Plan, KEPCO divested its 1% interest in the Moolarben project and sold 0.25% to each of the four Generation Subsidiaries, including us, raising each of our interests to 1.25%. The four Generation Subsidiaries have a coal off-take agreement for 2.5 million tons of bituminous coal per annum.

• In December 2016, pursuant to the June 2016 Government Plan, KEPCO sold a 2% equity interest in KEPCO Bylong Australia Pt., Ltd., a KEPCO subsidiary developing the Bylong coal mines located in New South Wales, Australia, to each of the five non-nuclear Generation Subsidiaries, including us, for AUD 70.3 million each. The Bylong project is still in the developmental stage.

# ENVIRONMENT

The Environment Policy Basic Act and other related legislation and regulations (the "Environment Acts"), which are principally administered by the Ministry of Environment, regulate atmospheric emissions, waste water and other emissions from our generation units. See "Risk Factors – Environmental regulations may adversely affect our operations." We believe that our generation units are currently in substantial compliance with the requirements of the Environment Acts.

Atmospheric emissions from generation plants burning fossil fuels include, among other things, sulfur dioxides ("SOx"), nitrogen oxides ("NOx") and dust. The Environment Acts establish emissions standards relating to, among other things, SOx, NOx and dust. Such standards have become more stringent in recent years to reduce the amount of permitted emissions, including pursuant to the enactment of the Special Act on the Improvement of Air Quality in Air Control Zones in April 2019. Currently, Flue Gas Desulfurization ("FGD") systems are installed in 12 units at our Boryeong, Shin Boryeong and Jeju power plant complexes to reduce sulfur oxide emissions. We have installed Electrostatic Precipitation systems in 10 units at our Boryeong and Shin Boryeong power plant complexes to reduce dust emissions and minimize the unintended dispersion of powderized coal. We have also installed Selective Catalytic Reduction systems, which reduce NOx emissions, in 14 units at our Boryeong, Shin Boryeong and Jeju power plant complexes. In addition, we have installed DeNOx systems, such as the Low NOx Burner and Over Fired Air systems, in all units at our Boryeong, Shin Boryeong and Jeju power plant complexes. The installation of such emissions control equipment may also result in increased operating costs. The actual costs of installation and operation of such equipment will depend upon a variety of factors, including, among other things, modifications to emissions limits and the amount of power such equipment will consume. In order to comply with current and expected environmental standards and address related legal and social concerns, we intend to continue to install additional equipment and make related capital expenditures.

The Environment Acts also prescribe maximum permissible levels of pollutants that can be contained in waste water. We operate waste water purification facilities so that the level of waste water discharged from our power plant complexes fall within permissible levels. All waste materials discharged from our power plant complexes are collected, separated and temporarily stored until they are safely transported to appropriate waste sites. In addition, all of our coal-fired units are equipped with ash-ponds to store coal ashes.

In order to minimize the level of noise and vibration pollution, we have erected sound barrier walls at strategic locations and installed silencers and vibration mufflers on certain equipment.

To ensure compliance with the requirements of the Environment Acts, we have installed automatic computerized monitoring systems at strategic locations at our power plant complexes. These monitoring systems constantly measure the level of pollutants being discharged from our power plant complexes and transmit such information via modem to a main server, which then further transmits such information to our headquarters and the relevant governmental agencies through the Internet.

Prior to the construction of a power generation unit, we must perform an environmental impact assessment which is designed to evaluate public hazards, damage to the environment and concerns of local residents. A report reflecting this evaluation and proposed measures to address the problems identified must be submitted to and approved by the Ministry of Environment prior to the construction of the unit. We are then required to implement the measures reflected in the approved report.

We have received ISO 14001 certification for our environmental management system. We are also taking steps to ensure compliance with the Kyoto Protocol and the Paris Agreement, including planned constructions of biomass power, wind power, photovoltaic power, fuel cell, bio-dual fuel and carbon capture and electricity storage system units.

# COMPETITION

The electricity industry is in the process of liberalization and deregulation, beginning with the establishment of the Generation Subsidiaries, including us, in April 2001, in accordance with the Restructuring Plan. In 2020, over 73% of electricity demand in Korea was supplied by us and the other Generation Subsidiaries. We compete principally with the four other non-nuclear Generation Subsidiaries and, to a lesser extent, as described below, KHNP. In addition, we compete with IPPs on a limited basis. As of March 31, 2021, there were 14 principal IPPs in Korea based on data from the KPX.

High initial investment costs are an effective barrier to entry for newcomers in the industry. Cost and service quality are the most important determining factors in respect of competition in the Korean electricity generation industry. For the respective market shares of the Generation Subsidiaries, including us, in terms of sales to KEPCO based on trading results on the KPX in 2019, 2020 and the three months ended March 31, 2020 and 2021, see "– Sales and Purchase of Power – Sales to KEPCO." Historically, demand for electricity has grown at a rate exceeding the growth of Korea's GDP. However, the rate of growth in demand for electricity has slowed in recent years as Korean economy has matured, and we expect that competition for the sale of electricity generated will become more intense as the other Generation Subsidiaries and the IPPs ramp up their installed capacity of LNG and renewable energy generation in their product mix in accordance with the Ninth Basic Plan.

Among KEPCO's non-nuclear subsidiaries, we have the advantage of proximity to major metropolitan areas, in particular, Seoul. Our major power plant complexes, namely Boryeong, Shin Boryeong and Incheon, are located near large cities and/or large industrial complexes, in particular, the Seoul metropolitan area. We believe that the addition of two combined-cycle power units with an aggregate installed capacity of 800 megawatts in Seoul in 2019 and a bituminous coal-fired unit with an installed capacity of 1,000 megawatts in Shin Seocheon in 2021 will enhance our generation capacity and further strengthen our competitiveness.

We believe that we and the other non-nuclear Generation Subsidiaries do not compete directly with KHNP due to the inherent difference in cost structures between non-nuclear Generation Subsidiaries and the nuclear Generation Subsidiary. In general, the cost of generating power is lower for the nuclear Generation Subsidiary than for non-nuclear Generation Subsidiaries.

#### DEREGULATION

The Korean electricity industry has been undergoing deregulation since 1999. For a description of the deregulation process, see "The Korean Electricity Industry – Restructuring of the Electricity Industry in Korea."

Pursuant to the Electricity Business Act, the Government established the KOREC in April 2001 to regulate the Korean electricity industry and to ensure fair competition. All of the Generation Subsidiaries, including us, are under the general supervision of the KOREC.

The Electricity Business Act administered by the MOTIE requires that licenses be obtained in relation to the generation of electricity for sale to others, with limited exceptions. Each of the Generation Subsidiaries, including us, is deemed to possess an electricity generation license and other governmental approvals (which KEPCO possessed prior to April 2, 2001, pursuant to the Law on Promotion of Restructuring of Electricity Power Industry).

Our operations are subject to a number of laws and regulations relating to environmental protection and safety. See "– Environment" above.

# **RESEARCH AND DEVELOPMENT**

We maintain a research and development ("R&D") program concentrated on developing self-reliant core technology and, in cooperation with KEPCO, leading national technology advancement in the electric power generation business.

Our R&D activities and those of the other Generation Subsidiaries are principally carried out by the Korea Electric Power Research Institute ("KEPRI"), KEPCO's research center in Daejeon, Korea. Similar to the other Generation Subsidiaries, we supervise and finance R&D activities being performed by KEPRI, including joint studies co-sponsored by the other Generation Subsidiaries.

In 2019, 2020 and the three months ended March 31, 2021, we were involved in 82, 89 and 92 R&D projects, respectively. In 2021, we plan to undertake 99 R&D projects, which will involve improving technologies relating to power generation, among others.

Our total ordinary development expenses, which includes R&D expenses, were Won 38 billion, Won 37 billion, Won 11 billion and Won 8 billion, constituting 0.8%, 0.8%, 0.9% and 0.6% of our sales, in 2019, 2020 and each three-month period ended March 31, 2020 and 2021, respectively. In 2021, we plan to invest approximately Won 19 billion in R&D.

# PATENTS, UTILITY AND TRADEMARK

As of March 31, 2021, we owned 261 patents and 9 utility model rights, including co-owned patents and utility model rights, and had 52 patent applications pending in Korea. Most of the patents and utility model rights relate to generation processes and generator maintenance tools. We believe that our patents and utility model rights are vital to our power generation and R&D activities.

The period of protection offered under current Korean legislation (i) with respect to a patent commences upon registration thereof and ends 20 years from the filing date, (ii) with respect to a utility model right commences upon registration thereof and ends ten years from the filing date and (iii) with respect to a trademark is ten years from registration with the option to renew for an additional ten years indefinitely.

# INSURANCE

We have obtained a general commercial insurance policy to insure against fire, natural disasters and mechanical accidents up to Won 16.9 trillion as well as construction insurance on certain new projects in Shin Seocheon up to Won 950 billion. We also have marine cargo insurance in respect of imported fuel and procurement with insurance coverage of Won 1.5 trillion, as well as general vehicle insurance. We also maintain directors' and officers' liability insurance.

Our insurance and indemnity policies do not cover all of the assets that we own and operate and do not cover all types or amounts of loss which could arise in connection with the ownership and operation of our power plants, and material financial consequences could result from a significant accident. We also do not carry insurance for business interruptions. In addition, we do not carry insurance against terrorist attacks. As a result, significant accidents with damages over our "per occurrence" limit, or the occurrence of events for which we are not insured, may have a material adverse impact on our financial condition and results of operations.

# PROPERTY, PLANT AND EQUIPMENT

Our property consists mainly of power generation equipment and facilities in Korea. See "– Power Generation" and "– Capital Investment Program." As of March 31, 2021, the net book value of our property, plant and equipment was Won 10,871 billion. No significant portion of our properties is leased.

In June 2005, the Korean government announced its policy to relocate the headquarters of select government-invested enterprises, including KEPCO and the Generation Subsidiaries, from their current locations in the Seoul metropolitan area to other provinces in Korea. Pursuant to this policy, we relocated our headquarters to Boryeong in Chungcheongnam-do in 2015.

# LEGAL AND REGULATORY PROCEEDINGS

We are subject to the risk of legal claims and regulatory actions in the ordinary course of our business, which may expose us to substantial monetary damages and legal costs, injunctive relief, criminal and civil penalties, sanctions against our management and employees and regulatory restrictions on our operations, as well as reputational harm. As of March 31, 2021, we have been named as a defendant in 19 lawsuits for claimed damages of approximately Won 19 billion in the aggregate.

We are currently subject to a number of class action lawsuits involving thousands of our current and former employees based on claims for retirement benefits. We have set aside a reserve on a consolidated basis in the aggregate amount of Won 0.5 billion to cover any potential future payments that may result from these and related lawsuits. For a further description, see "Risk Factors – We may be exposed to potential claims made by current or previous employees for unpaid wages and may also incur increased labor costs as a result of the expansion of the scope of ordinary wages."

The outcome of these proceedings cannot presently be determined. We cannot presently assure you that there will not be further lawsuits in relation to aforementioned matters or that the reserve amount that we have set aside will be sufficient to cover any compensation or damages arising from the present or future litigation. However, our management believes that the ultimate disposition of these cases will not have a materially adverse impact on our operations or financial position.

#### Employees

As of March 31, 2021, we had 2,744 regular employees, which include full-time and part-time employees, and five temporary employees. The following table sets forth the number of our employees at our various work locations as of March 31, 2021.

Location	Number of Employees
Headquarters in Boryeong	444
Boryeong Power Plant Complex	829
Shin Boryeong Power Plant Complex	261
Incheon Power Plant Complex.	239
Sejong Power Plant Complex	133
Jeju Power Plant Complex	277
Seoul Power Construction Site	205
Seocheon Power Plant Complex	231
Human Resources Development Institute	46
Overseas	41
Other	38
Total	2,744

We grant our employees annual increases in basic wages and quarterly bonuses in accordance with the wage guidelines set by the Government. Under the guidelines applicable to Public Enterprises pursuant to the Act on the Management of Public Institutions, we may increase average wages up to 0.9% on a year-on-year basis for 2021. Although we are not obligated to follow these Government-issued guidelines, it is our policy to increase our budget for labor cost within these guidelines. Wages increased by an average of 1.8% in 2019 and 2.6% in 2020 in accordance with the Government guidelines then in effect.

We provide our employees with the national pension plan and medical insurance. With respect to the national pension plan, we generally match our employees' contributions in the amount of 4.5% of each employee's salary, and with respect to medical insurance, we match our employees' contributions in the amount of 3.4% of each employee's salary. In addition, we provide other benefits such as company housing, low-interest housing loans and university tuition support.

As of March 31, 2021, approximately 37% of our employees were members of the Korea Midland Power Labor Union, which membership comprises entirely of our employees, and approximately 16% of our employees were members of the Korean Power Plant Industry Union and approximately 9% of our employees were members of the Power Generation Union. Other non-nuclear Generation Subsidiaries are also members of such labor unions. We negotiate a collective bargaining agreement every two years, except for wages, which are negotiated every year, with the representatives of each labor union. The current collective bargaining agreement was entered into in January 2021.

Pursuant to applicable Korean law, an Employee-Employer Cooperation Committee, which is composed of three to ten representatives of management and three to ten union employee representatives, is required to be, and has been, established. The Committee meets periodically to discuss various labor issues.

The Restructuring Plan and the privatization plan for the Generation Subsidiaries have generated labor unrest. Labor unions to which our employees belong have voiced their opposition to the Restructuring Plan from its inception, in particular with respect to the prospect of our privatization and the privatization of the other Generation Subsidiaries. On February 25, 2002, employees belonging to labor unions of the non-nuclear Generation Subsidiaries, including us, commenced a strike, which lasted six weeks, to protest the Government's plans to privatize us and the other Generation Subsidiaries. The Korean Confederation of Trade Unions ("KCTU"), the largest governing body of labor unions in Korea with over 800,000

members, negotiated with the Government on behalf of the labor unions. After prolonged negotiations with the Government, KCTU directed the labor unions of the non-nuclear Generation Subsidiaries to end their strike on April 2, 2002. We cannot assure you that a large-scale strike or any other work stoppages will not occur again in the future or that any such labor unrest will be satisfactorily resolved. Labor unrest may adversely affect our results of operations by severely disrupting the power supply as well as substantially hinder the implementation of the Government's plans.

# **RELATED PARTY TRANSACTIONS**

For our sale of electricity to KEPCO through KPX, see "- Sales and Purchase of Power" above.

As of March 31, 2021, we had a 7.1% ownership of KPX, which represents our capital contribution to KPX in the amount of Won 16.0 billion.

We employ KEPCO KPS Co., Ltd., KEPCO E&C Inc. and KEPCO KDN Co., Ltd., affiliates of KEPCO, for maintenance services for all our power generation facilities, design for power plant construction and data processing services.

For transactions and related account balances with related parties, including KEPCO and its subsidiaries, see Note 37 to our audited consolidated financial statements as of and for the years ended December 31, 2020 and 2019 and Note 37 to our unaudited interim condensed consolidated financial statements as of and for the three months ended March 31, 2021 and 2020.

We have an LNG purchase contract with KOGAS, a related party, with the quantity to be determined by mutual agreement. In addition, we have several contracts with Korea Coal Corporation and others with the quantity to be set by the Korean government.

We also provide housing and tuition loans to our employees, the aggregate amount of which was Won 34 billion as of March 31, 2021.

# SHARE OWNERSHIP

The following table sets forth certain information relating to our shareholder as of March 31, 2021 and as of the date hereof:

Title of Class	Identity of Person or Group	Shares Owned	Percentage
Common stock	Korea Electric Power Corporation	28,581,320	100.0%

None of our directors and members of the administrative, supervisory or management bodies owns any share of our common stock.

# MANAGEMENT

#### DIRECTORS AND SENIOR MANAGEMENT

In January 2011, the Public Enterprise Management Commission of the MOEF passed a resolution under which the six generation subsidiaries of KEPCO were designated as "market-oriented public enterprises." We have revised our articles of incorporation to accommodate such designation according to the Act on the Management of Public Institutions.

Under our articles of incorporation, our board of directors, consisting of not more than 15 directors, including the President, is vested with the power of management. The directors are classified into two categories: standing directors and non-standing directors. The number of standing directors must be less than one-half the number of directors, including the President. The standing directors also presently constitute its executive officers. Previously, we had a statutory auditor, who was a full time employee responsible for monitoring our business affairs and accounts, was entitled to attend and to express opinions at the meeting of the board of directors, but was not entitled to vote. Under our articles of incorporation, an audit committee was established under the board of directors and replaced the statutory auditor when the statutory auditor's term of office expired. The audit committee consists of three directors, at least two of whom must be non-standing directors. At least one of the audit committee members must be an accounting or financial expert. Under our articles of incorporation, the representative director, who acts as our President, is appointed by the President of Korea through the following nomination process: the recommendation of two or more candidates by the officer recommendation committee, followed by the resolution of the Committee for Management of Public Institutions established under the Act on the Management of Public Institutions, followed by the resolution of our shareholders at the general meeting, followed by the nomination by the Minister of the MOTIE. The standing directors, other than the President, are appointed by the President following the resolution of shareholders at a general meeting, except that any standing director who is to become a member of the audit committee must be appointed by the President of Korea following the nomination of two or more candidates by the officer recommendation committee, the resolution by the Committee for Management of Public Institutions, the resolution by our shareholders and the nomination by the Minister of the MOEF. The non-standing directors are appointed by the Minister of the MOEF following the nomination of two or more candidates by the officer recommendation committee, the resolution by the Committee for Management of Public Institutions and the resolution by our shareholders. The President serves as our chief executive officer, represents us and administers our day-to-day business in all matters not specifically designated as responsibilities of the board of directors.

The term of office of the President is three years, and the term of office of a director is two years. Officers may be reappointed each year to one-year terms in accordance with the Act on the Management of Public Institutions. If an officer is reappointed, the recommendation of the officer recommendation committee is not required. If the President is re-elected, the management contract set forth in Article 35-2(3) of our articles of incorporation must be re-executed, but the discussion of the officer recommendation committee required under Article 35-2(2) of our articles of incorporation is not required.

The names, titles, and outside occupations, if any, of the directors as of March 31, 2021, and the respective dates on which they took office are set forth below.

Name	Age	Title	Outside Occupation	Position Held Since
Ho Bin Kim	60	President & Chief Executive Officer	None	04/2021
Dong Hwan Han	64	Executive Auditor	None	09/2018
Shin Hyung Kim	62	Executive Vice President of Planning & Administration Division	None	09/2018
Young Kyu Park	60	Executive Vice President of Engineering & Safety Division	None	07/2021

Name	Age	Title	<b>Outside Occupation</b>	Position Held Since
Eun A Ko	48	Non-standing Director	The head of Daejeon Environmental Education Center	07/2018
Jinu Park	60	Non-standing Director	CEO and Accountant, Beyul Accounting Corporation	11/2019
Jaeyeon Hwang	68	Non-standing Director	Member of Tax Commission, National Tax Service Incheon Regional Office	11/2019
Hobum Yim	56	Non-standing Director	Managing partner, Taeseung law firm	11/2020
Jongsu Lee	49	Non-standing Director	Professor, Graduate School of Engineering Practice, Seoul National University	11/2020

The presence at board meetings of a majority of the board members constitutes a voting quorum and resolutions can be passed by a majority of the board members.

Ho Bin Kim has served as our president and chief executive officer since April 2021. Mr. Kim received a master's degree and a bachelor's degree in mechanical design engineering from Seoul National University. He also served as the team head of our new growth engine department and the head of our engineering & safety division.

Dong Hwan Han has served as our executive auditor since September 2018. Mr. Han received a master's degree in Korean history and a bachelor's degree in philosophy from Kangwon National University. Currently, he is also serving as the director of Chuncheon International Water Forum. He also served as the director of education of Presidential Committee for Balanced National Development.

Shin Hyung Kim has served as the executive vice president of planning & administration division since September 2018. Mr. Kim received a master's degree in business administration from Birmingham University and a bachelor's degree in business administration from Yonsei University. He also served as the head of our planning & strategy department and the head of our power plant in Sejong.

Young Kyu Park has served as the executive vice president of engineering & safety division since July 2021. Mr. Park received a master's degree in English literature from Korea University and a bachelor's degree in English literature from Kyonggi University. He also served as the head of our Seoul construction site division and as the resident director of PT. Wampu Electric Power.

Eun A Ko has served as a non-standing director since July 2018. Ms. Ko received a bachelor's degree in environmental engineering from Daejeon University. Currently, she is the head of operations of Daejeon Environmental Education Center.

Jinu Park has served as a non-standing director since November 2019. Mr. Park received a master's degree in accounting and a bachelor's degree in economics from Korea University. Currently, he is the chief executive officer and an accountant at Beyul Accounting Corporation. He previously served as the head of the audit division at Samil PricewaterhouseCoopers.

Jaeyeon Hwang has served as a non-standing director since November 2019. Mr. Hwang received a master's degree in business administration from Chung Ang University and a bachelor's degree in civil engineering from Chung Ang University. Currently, he is serving as a member of the tax commission at the National Tax Service Incheon Regional Office. He previously served as a professor of tax accounting at Hallym Polytechnic University.

Hobum Yim has served as a non-standing director since November 2020. Mr. Yim received a bachelor's degree in law from Kyung Hee University. Currently, he is the managing partner at the law firm, Taeseung.

Jongsu Lee has served as a non-standing director since November 2020. Mr. Lee received a doctorate in engineering, a master's degree in energy economics and a bachelor's degree in energy resources engineering from Seoul National University. He previously served as a member of the policy subcommittee for the Government's Ninth Basic Plan on Power Supply and Demand.

The business address of our directors is 160, Boryeongbuk-ro, Boryeong-si, Chungcheongnam-do 33437, Korea.

## COMPENSATION OF DIRECTORS AND EXECUTIVE OFFICERS

For the year ended December 31, 2020 and the three months ended March 31, 2021, the aggregate amount of salaries paid to the key members of management of the group was Won 476 million and Won 122 million, respectively. The aggregate amount we set aside during 2020 and the three months ended March 31, 2021 to provide retirement benefits for the key members of management of the group was Won 43 million and Won 10 million, respectively.

### **Board Practices**

Our articles of incorporation provide for the establishment of the audit committee, the officer recommendation committee and other committees as deemed necessary by our board of directors. Currently, other than the audit committee and the officer recommendation committee, we maintain a number of "expert committees" whose members are non-standing directors tasked with advising on certain specialized matters regarding our management.

The President's management contract provides for benefits upon termination of his employment. The President is only eligible for retirement and severance pay after more than one year of continuous service. For each year's employment, the payment amount for retirement and severance pay is equal to the average income for one month.

The terms for retirement and severance pay for standing directors (including the President) are determined in accordance with the internal regulations for executive benefits. Standing directors are only eligible for retirement and severance pay after retirement or upon death following one year of continuous service. The amount for retirement and severance pay is calculated by multiplying (i) the annual base income divided by twelve by (ii) the number of years of service.

# TERMS AND CONDITIONS OF THE NOTES

The following is the text of the terms and conditions which, as completed by the relevant Pricing Supplement, will be endorsed on each Note in definitive form issued under the Program. To the extent permitted by applicable law and/or regulation, the Pricing Supplement in respect of any Tranche of Notes may supplement, amend or replace any information in this Offering Circular.

The terms and conditions applicable to any Note in global form will differ from those terms and conditions which would apply to the Note were it in definitive form to the extent described under "Summary of Provisions Relating to the Notes while in Global Form."

# 1. INTRODUCTION

- (a) *Program*: Korea Midland Power Co., Ltd. (the "Issuer") has established a Euro Medium Term Note Program (the "Program") for the issuance of up to U.S.\$3,000,000,000 in aggregate principal amount of notes (the "Notes").
- (b) Pricing Supplement: Notes issued under the Program are issued in series (each a "Series") and each Series may comprise one or more tranches (each a "Tranche") of Notes. Each Tranche is the subject of a pricing supplement (the "Pricing Supplement") which supplements these terms and conditions (the "Conditions"). The terms and conditions applicable to any particular Tranche of Notes are these Conditions as supplemented, amended and/or replaced by the relevant Pricing Supplement. In the event of any inconsistency between these Conditions and the relevant Pricing Supplement, the relevant Pricing Supplement shall prevail.
- (c) Agency Agreement: The Notes are the subject of an issue and paying agency agreement dated October 20, 2017 among the Issuer, The Bank of New York Mellon, London Branch as fiscal agent (the "Fiscal Agent," which expression includes any successor fiscal agent appointed from time to time in connection with the Notes), The Bank of New York Mellon, Hong Kong Branch as CMU lodging and paying agent and CMU registrar (the "CMU Lodging and Paying Agent" and the "CMU Registrar," respectively, which expression includes any successor CMU lodging and paying agent and CMU registrar appointed from time to time in connection with Notes cleared through the CMU Service), The Bank of New York Mellon SA/NV, Luxembourg Branch as registrar (the "Registrar," which expression includes any successor registrar appointed from time to time in connection with the Notes cleared through a clearing system other than the CMU Service, and together with the CMU Registrar, the "Registrars" and each, a "relevant Registrar"), the paying agents named therein (together with the Fiscal Agent, the "Paying Agents," which expression includes any successor or additional paying agents appointed from time to time in connection with the Notes) and the transfer agents named therein (together with the Registrars, the "Transfer Agents," which expression includes any successor or additional transfer agents appointed from time to time in connection with the Notes), as supplemented by the supplemental agency agreement dated June 15, 2021 among the Issuer, The Bank of New York Mellon, London Branch as original fiscal agent, original paying agent and original calculation agent, The Bank of New York Mellon SA/NV, Luxembourg Branch as original registrar and original transfer agent, The Bank of New York Mellon, Hong Kong Branch as original CMU lodging and paying agent, original CMU registrar, original CMU transfer agent and original CMU calculation agent, Citicorp International Limited as new fiscal agent, new CMU lodging and paying agent, new CMU registrar, new CMU transfer agent, new CMU calculation agent and registrar and Citibank, N.A., London Branch as new paying agent, new calculation agent and new transfer agent (the "Agency Agreement"). In these Conditions references to the "Agents" are to the Paying Agents and the Transfer Agents and any reference to an "Agent" is to any one of them.
- (d) *Deed of Covenant:* The Notes may be issued in bearer form ("Bearer Notes"), or in registered form ("Registered Notes"). Registered Notes are constituted by a deed of covenant dated October 20, 2017 (the "Deed of Covenant") entered into by the Issuer.
- (e) *The Notes*: All subsequent references in these Conditions to "Notes" are to the Notes which are the subject of the relevant Pricing Supplement. Copies of the relevant Pricing Supplement are available for viewing during normal business hours at the Specified Offices of the Paying Agents.

(f) Summaries: Certain provisions of these Conditions are summaries of the Agency Agreement and the Deed of Covenant and are subject to their detailed provisions. Noteholders and the holders of the related interest coupons, if any, (the "Couponholders" and the "Coupons," respectively) are bound by, and are deemed to have notice of, all the provisions of the Agency Agreement and the Deed of Covenant applicable to them. Copies of the Agency Agreement and the Deed of Covenant are available upon prior written request, for inspection by Noteholders during normal business hours at the Specified Offices of each of the Agents, the initial Specified Offices of which are set out below.

# 2. INTERPRETATION

(a) *Definitions*: In these Conditions the following expressions have the following meanings:

"Accrual Yield" has the meaning given in the relevant Pricing Supplement;

"Additional Business Center(s)" means the city or cities specified as such in the relevant Pricing Supplement;

"Additional Financial Center(s)" means the city or cities specified as such in the relevant Pricing Supplement;

"Business Day" means:

- (1) in relation to any sum payable in euro, a TARGET Settlement Day and a day (other than a Saturday, Sunday or public holiday) on which commercial banks and foreign exchange markets settle payments generally in each (if any) Additional Business Center; and
- (2) in relation to any sum payable in a currency other than euro or Renminbi, a day (other than a Saturday, Sunday or public holiday) on which commercial banks and foreign exchange markets settle payments generally in London, in the Principal Financial Center of the relevant currency and in each (if any) Additional Business Center;
- (3) in relation to any sum payable in Renminbi:
  - (i) if cleared through the CMU Service, a day (other than a Saturday, Sunday or public holiday) on which commercial banks in Hong Kong are generally open for business and settlement of Renminbi payments in Hong Kong; and
  - (ii) if cleared through Euroclear and Clearstream a day (other than a Saturday, Sunday or public holiday) on which commercial banks and foreign exchange markets settle payments in London.;

"Business Day Convention," in relation to any particular date, has the meaning given in the relevant Pricing Supplement and, if so specified in the relevant Pricing Supplement, may have different meanings in relation to different dates and, in this context, the following expressions shall have the following meanings:

- (1) "Following Business Day Convention" means that the relevant date shall be postponed to the first following day that is a Business Day;
- (2) "Modified Following Business Day Convention" or "Modified Business Day Convention" means that the relevant date shall be postponed to the first following day that is a Business Day unless that day falls in the next calendar month in which case that date will be the first preceding day that is a Business Day;
- (3) "Preceding Business Day Convention" means that the relevant date shall be brought forward to the first preceding day that is a Business Day;

- (4) "FRN Convention," "Floating Rate Convention" or "Eurodollar Convention" means that each relevant date shall be the date which numerically corresponds to the preceding such date in the calendar month which is the number of months specified in the relevant Pricing Supplement as the Specified Period after the calendar month in which the preceding such date occurred provided, however, that:
  - (i) if there is no such numerically corresponding day in the calendar month in which any such date should occur, then such date will be the last day which is a Business Day in that calendar month;
  - (ii) if any such date would otherwise fall on a day which is not a Business Day, then such date will be the first following day which is a Business Day unless that day falls in the next calendar month, in which case it will be the first preceding day which is a Business Day; and
  - (iii) if the preceding such date occurred on the last day in a calendar month which was a Business Day, then all subsequent such dates will be the last day which is a Business Day in the calendar month which is the specified number of months after the calendar month in which the preceding such date occurred; and
- (5) "No Adjustment" means that the relevant date shall not be adjusted in accordance with any Business Day Convention;

"Calculation Agent" means the Fiscal Agent or such other Person specified in the relevant Pricing Supplement as the party responsible for calculating the Rate(s) of Interest and Interest Amount(s) and/or such other amount(s) as may be specified in the relevant Pricing Supplement;

"Calculation Amount" has the meaning given in the relevant Pricing Supplement;

"Coupon Sheet" means, in respect of a Note, a coupon sheet relating to the Note;

"Day Count Fraction" means, in respect of the calculation of an amount for any period of time (the "Calculation Period"), such day count fraction as may be specified in these Conditions or the relevant Pricing Supplement and:

- (1) if "Actual/Actual (ICMA)" is so specified, means:
  - (i) where the Calculation Period is equal to or shorter than the Regular Period during which it falls, the actual number of days in the Calculation Period divided by the product of (1) the actual number of days in such Regular Period and (2) the number of Regular Periods in any year; and
  - (ii) where the Calculation Period is longer than one Regular Period, the sum of:
    - (A) the actual number of days in such Calculation Period falling in the Regular Period in which it begins divided by the product of (1) the actual number of days in such Regular Period and (2) the number of Regular Periods in any year; and
    - (B) the actual number of days in such Calculation Period falling in the next Regular Period divided by the product of (a) the actual number of days in such Regular Period and (2) the number of Regular Periods in any year;
- (2) if "Actual/Actual (ISDA)" is so specified, means the actual number of days in the Calculation Period divided by 365 (or, if any portion of the Calculation Period falls in a leap year, the sum of (A) the actual number of days in that portion of the Calculation Period falling in a leap year divided by 366 and (B) the actual number of days in that portion of the Calculation Period falling in a non-leap year divided by 365);
- (3) if "Actual/365 (Fixed)" is so specified, means the actual number of days in the Calculation Period divided by 365;

- (4) if "Actual/360" is so specified, means the actual number of days in the Calculation Period divided by 360;
- (5) if "30/360" is so specified, the number of days in the Calculation Period divided by 360, calculated on a formula basis as follows:

Day Count Fraction = 
$$\frac{[360 \text{ x } (Y_2 - Y_1)] + [30 \text{ x } (M_2 - M_1)] + (D_2 - D_1)}{360}$$

where:

" $Y_1$ " is the year, expressed as a number, in which the first day of the Calculation Period falls;

" $Y_2$ " is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

" $M_1$ " is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

" $M_2$ " is the calendar month, expressed as number, in which the day immediately following the last day included in the Calculation Period falls;

" $D_1$ " is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case  $D_1$  will be 30; and

" $D_2$ " is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless such number would be 31 and  $D_1$  is greater than 29, in which case  $D_2$  will be 30";

(6) if "30E/360" or "Eurobond Basis" is so specified, the number of days in the Calculation Period divided by 360, calculated on a formula basis as follows:

Day Count Fraction = 
$$\frac{[360 \text{ x } (Y_2 - Y_1)] + [30 \text{ x } (M_2 - M_1)] + (D_2 - D_1)}{360}$$

where:

" $Y_1$ " is the year, expressed as a number, in which the first day of the Calculation Period falls;

" $Y_2$ " is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

" $M_1$ " is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

" $M_2$ " is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

" $D_1$ " is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case  $D_1$  will be 30; and

" $D_2$ " is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless such number would be 31, in which case  $D_2$  will be 30; and

(7) if "30E/360 (ISDA)" is so specified, the number of days in the Calculation Period divided by 360, calculated on a formula basis as follows:

Day Count Fraction = 
$$\frac{[360 \text{ x } (Y_2 - Y_1)] + [30 \text{ x } (M_2 - M_1)] + (D_2 - D_1)}{360}$$

where:

" $Y_1$ " is the year, expressed as a number, in which the first day of the Calculation Period falls;

" $Y_2$ " is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

" $M_1$ " is the calendar month, expressed as a number, in which the first day of the Calculation Period falls;

" $M_2$ " is the calendar month, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

" $D_1$ " is the first calendar day, expressed as a number, of the Calculation Period, unless (i) that day is the last day of February or (ii) such number would be 31, in which case  $D_1$  will be 30; and

" $D_2$ " is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless (i) that day is the last day of February but not the Maturity Date or (ii) such number would be 31, in which case  $D_2$  will be 30,

provided, however, that in each such case the number of days in the Calculation Period is calculated from and including the first day of the Calculation Period to but excluding the last day of the Calculation Period;

"Early Redemption Amount (Tax)" means, in respect of any Note, its principal amount or such other amount as may be specified in the relevant Pricing Supplement;

"Early Termination Amount" means, in respect of any Note, its principal amount or such other amount as may be specified in these Conditions or the relevant Pricing Supplement;

"Extraordinary Resolution" has the meaning given in the Agency Agreement;

"Final Redemption Amount" means, in respect of any Note, its principal amount or such other amount as may be specified in the relevant Pricing Supplement;

"First Interest Payment Date" means the date specified in the relevant Pricing Supplement;

"Fixed Coupon Amount" has the meaning given in the relevant Pricing Supplement;

"Guarantee" means, in relation to any Indebtedness of any Person, any obligation of another Person to pay such Indebtedness including (without limitation):

- (1) any obligation to purchase such Indebtedness;
- (2) any obligation to lend money, to purchase or subscribe shares or other securities or to purchase assets or services in order to provide funds for the payment of such Indebtedness;
- (3) any indemnity against the consequences of a default in the payment of such Indebtedness; and
- (4) any other agreement to be responsible for such Indebtedness;

"Holder," in the case of Bearer Notes, has the meaning given in Condition 3(b) (Form, Denomination, Title and Transfer – Title to Bearer Notes) and, in the case of Registered Notes, has the meaning given in Condition 3(d) (Form, Denomination, Title and Transfer – Title to Registered Notes);

"Indebtedness" means any indebtedness of any Person for money borrowed or raised including (without limitation) any indebtedness for or in respect of:

- (1) amounts raised by acceptance under any acceptance credit facility;
- (2) amounts raised under any note purchase facility;
- (3) the amount of any liability in respect of leases or hire purchase contracts which would, in accordance with applicable law and generally accepted accounting principles, be treated as finance or capital leases;
- (4) the amount of any liability in respect of any purchase price for assets or services the payment of which is deferred for a period in excess of 60 days; and
- (5) amounts raised under any other transaction (including, without limitation, any forward sale or purchase agreement) having the commercial effect of a borrowing;

"Interest Amount" means, in relation to a Note and an Interest Period, the amount of interest payable in respect of that Note for that Interest Period;

"Interest Commencement Date" means the Issue Date of the Notes or such other date as may be specified as the Interest Commencement Date in the relevant Pricing Supplement;

"Interest Determination Date" has the meaning given in the relevant Pricing Supplement;

"Interest Payment Date" means the First Interest Payment Date and any other date or dates specified as such in, or determined in accordance with the provisions of, the relevant Pricing Supplement and, if a Business Day Convention is specified in the relevant Pricing Supplement:

- (1) as the same may be adjusted in accordance with the relevant Business Day Convention; or
- (2) if the Business Day Convention is the FRN Convention, Floating Rate Convention or Eurodollar Convention and an interval of a number of calendar months is specified in the relevant Pricing Supplement as being the Specified Period, each of such dates as may occur in accordance with the FRN Convention, Floating Rate Convention or Eurodollar Convention at such Specified Period of calendar months following the Interest Commencement Date (in the case of the first Interest Payment Date) or the previous Interest Payment Date (in any other case);

"Interest Period" means each period beginning on (and including) the Interest Commencement Date or any Interest Payment Date and ending on (but excluding) the next Interest Payment Date;

"ISDA Definitions" means the 2006 ISDA Definitions (as amended and updated as at the date of issue of the first Tranche of the Notes of the relevant Series (as specified in the relevant Pricing Supplement) as published by the International Swaps and Derivatives Association, Inc.);

"Issue Date" has the meaning given in the relevant Pricing Supplement;

"Margin" has the meaning given in the relevant Pricing Supplement;

"Maturity Date" has the meaning given in the relevant Pricing Supplement;

"Maximum Redemption Amount" has the meaning given in the relevant Pricing Supplement;

"Minimum Redemption Amount" has the meaning given in the relevant Pricing Supplement;

"Noteholder," in the case of Bearer Notes, has the meaning given in Condition 3(b) (Form, Denomination, Title and Transfer – Title to Bearer Notes) and, in the case of Registered Notes, has the meaning given in Condition 3(d) (Form, Denomination, Title and Transfer – Title to Registered Notes);

"Optional Redemption Amount (Call)" means, in respect of any Note, its principal amount or such other amount as may be specified in the relevant Pricing Supplement;

"Optional Redemption Amount (Put)" means, in respect of any Note, its principal amount or such other amount as may be specified in the relevant Pricing Supplement;

"Optional Redemption Date (Call)" has the meaning given in the relevant Pricing Supplement;

"Optional Redemption Date (Put)" has the meaning given in the relevant Pricing Supplement;

"Participating Member State" means a Member State of the European Union which adopts the euro as its lawful currency in accordance with the Treaty;

"Payment Business Day" means:

- (1) if the currency of payment is euro, any day which is:
  - (i) a day on which banks in the relevant place of presentation are open for presentation and payment of bearer debt securities and for dealings in foreign currencies; and
  - (ii) in the case of payment by transfer to an account, a TARGET Settlement Day and a day on which dealings in foreign currencies may be carried on in each (if any) Additional Financial Center; or
- (2) if the currency of payment is not euro, any day which is:
  - (i) a day on which banks in the relevant place of presentation are open for presentation and payment of bearer debt securities and for dealings in foreign currencies; and
  - (ii) in the case of payment by transfer to an account, a day on which dealings in foreign currencies may be carried on in the Principal Financial Center of the currency of payment and in each (if any) Additional Financial Center;

"Person" means any individual, company, corporation, firm, partnership, joint venture, association, organization, state or agency of a state or other entity, whether or not having separate legal personality;

"Principal Financial Center" means, in relation to any currency, the principal financial center for that currency provided, however, that:

- (1) in relation to euro, it means the principal financial center of such Member State of the European Communities as is selected (in the case of a payment) by the payee or (in the case of a calculation) by the Calculation Agent;
- (2) in relation to Australian dollars, it means Sydney;
- (3) in relation to New Zealand dollars, it means either Wellington or Auckland as is selected (in the case of a payment) by the payee or (in the case of a calculation) by the Calculation Agent; and
- (4) in relation to Renminbi, it means Hong Kong or the principal financial center as specified in the applicable Pricing Supplement;

"Put Option Notice" means a notice which must be delivered to a Paying Agent by any Noteholder wanting to exercise a right to redeem a Note at the option of the Noteholder;

"Put Option Receipt" means a receipt issued by a Paying Agent to a depositing Noteholder upon deposit of a Note with such Paying Agent by any Noteholder wanting to exercise a right to redeem a Note at the option of the Noteholder;

"Rate of Interest" means the rate or rates (expressed as a percentage per annum) of interest payable in respect of the Notes specified in the relevant Pricing Supplement or calculated or determined in accordance with the provisions of these Conditions and/or the relevant Pricing Supplement;

"Redemption Amount" means, as appropriate, the Final Redemption Amount, the Early Redemption Amount (Tax), the Optional Redemption Amount (Call), the Optional Redemption Amount (Put), the Early Termination Amount or such other amount in the nature of a redemption amount as may be specified in the relevant Pricing Supplement;

"Reference Banks" has the meaning given in the relevant Pricing Supplement or, if none, four major banks selected by the Calculation Agent in the market that is most closely connected with the Reference Rate;

"Reference Price" has the meaning given in the relevant Pricing Supplement;

"Reference Rate" has the meaning given in the relevant Pricing Supplement;

"Regular Period" means:

- (1) in the case of Notes where interest is scheduled to be paid only by means of regular payments, each period from and including the Interest Commencement Date to but excluding the first Interest Payment Date and each successive period from and including one Interest Payment Date to but excluding the next Interest Payment Date;
- (2) in the case of Notes where, apart from the first Interest Period, interest is scheduled to be paid only by means of regular payments, each period from and including a Regular Date falling in any year to but excluding the next Regular Date, where "Regular Date" means the day and month (but not the year) on which any Interest Payment Date falls; and
- (3) in the case of Notes where, apart from one Interest Period other than the first Interest Period, interest is scheduled to be paid only by means of regular payments, each period from and including a Regular Date falling in any year to but excluding the next Regular Date, where "Regular Date" means the day and month (but not the year) on which any Interest Payment Date falls other than the Interest Payment Date falling at the end of the irregular Interest Period.

"Relevant Date" means, in relation to any payment, whichever is the later of (a) the date on which the payment in question first becomes due and (b) if the full amount payable has not been received in the Principal Financial Center of the currency of payment by the Fiscal Agent on or prior to such due date, the date on which (the full amount having been so received) notice to that effect has been given to the Noteholders;

"Relevant Financial Center" has the meaning given in the relevant Pricing Supplement;

"Relevant Screen Page" means the page, section or other part of a particular information service (including, without limitation, Reuters) specified as the Relevant Screen Page in the relevant Pricing Supplement, or such other page, section or other part as may replace it on that information service or such other information service, in each case, as may be nominated by the Person providing or sponsoring the information appearing there for the purpose of displaying rates or prices comparable to the Reference Rate;

"Relevant Time" has the meaning given in the relevant Pricing Supplement;

"Reserved Matter" means any proposal to change any date fixed for payment of principal or interest in respect of the Notes, to reduce the amount of principal or interest payable on any date in respect of the Notes, to alter the method of calculating the amount of any payment in respect of the Notes or the date for any such payment, to change the currency of any payment under the Notes or to change the quorum requirements relating to meetings or the majority required to pass an Extraordinary Resolution;

"Security Interest" means any mortgage, charge, pledge, lien or other security interest including, without limitation, anything analogous to any of the foregoing under the laws of any jurisdiction;

"Specified Currency" has the meaning given in the relevant Pricing Supplement;

"Specified Denomination(s)" has the meaning given in the relevant Pricing Supplement;

"Specified Office" has the meaning given in the Agency Agreement;

"Specified Period" has the meaning given in the relevant Pricing Supplement;

"Subsidiary" means, in relation to any Person (the "first Person") at any particular time, any other Person (the "second Person"):

- (1) whose affairs and policies the first Person controls or has the power to control, whether by ownership of share capital, contract, the power to appoint or remove members of the governing body of the second Person or otherwise; or
- (2) whose financial statements are, in accordance with applicable law and generally accepted accounting principles, consolidated with those of the first Person;

"Talon" means a talon for further Coupons;

"TARGET2" means the Trans-European Automated Real-Time Gross Settlement Express Transfer payment system which utilizes a single shared platform and which was launched on November 19, 2007;

"TARGET Settlement Day" means any day on which TARGET2 is open for the settlement of payments in euro;

"Treaty" means the Treaty of the Functioning of the European Union, as amended;

"Zero Coupon Note" means a Note specified as such in the relevant Pricing Supplement;

- (b) *Interpretation*: In these Conditions:
  - (1) if the Notes are Zero Coupon Notes, references to Coupons and Couponholders are not applicable;
  - (2) if Talons are specified in the relevant Pricing Supplement as being attached to the Notes at the time of issue, references to Coupons shall be deemed to include references to Talons;
  - (3) if Talons are not specified in the relevant Pricing Supplement as being attached to the Notes at the time of issue, references to Talons are not applicable;
  - (4) any reference to principal shall be deemed to include the Redemption Amount, any additional amounts in respect of principal which may be payable under Condition 12 (*Taxation*), any premium payable in respect of a Note and any other amount in the nature of principal payable pursuant to these Conditions;
  - (5) any reference to interest shall be deemed to include any additional amounts in respect of interest which may be payable under Condition 12 (*Taxation*) and any other amount in the nature of interest payable pursuant to these Conditions;

- (6) references to Notes being "outstanding" shall be construed in accordance with the Agency Agreement;
- (7) if an expression is stated in Condition 2(a) (*Definitions*) to have the meaning given in the relevant Pricing Supplement, but the relevant Pricing Supplement gives no such meaning or specifies that such expression is "not applicable" then such expression is not applicable to the Notes; and
- (8) any reference to the Agency Agreement shall be construed as a reference to the Agency Agreement, as amended and/or supplemented up to and including the Issue Date of the Notes.

### 3. FORM, DENOMINATION, TITLE AND TRANSFER

- (a) Bearer Notes: Bearer Notes are in the Specified Denomination(s) with Coupons and, if specified in the relevant Pricing Supplement, Talons attached at the time of issue. In the case of a Series of Bearer Notes with more than one Specified Denomination, Bearer Notes of one Specified Denomination will not be exchangeable for Bearer Notes of another Specified Denomination.
- (b) *Title to Bearer Notes:* Title to Bearer Notes and the Coupons will pass by delivery. In the case of Bearer Notes, "Holder" means the holder of such Bearer Note and "Noteholder" and "Couponholder" shall be construed accordingly.
- (c) *Registered Notes:* Registered Notes are in the Specified Denomination(s), which may include a minimum denomination specified in the relevant Pricing Supplement and higher integral multiples of a smaller amount specified in the relevant Pricing Supplement.
- (d) Title to Registered Notes: The Registrar will maintain the register (the "Register") in accordance with the provisions of the Agency Agreement. A certificate (each, a "Note Certificate") will be issued to each Holder of Registered Notes in respect of its registered holding. Each Note Certificate will be numbered serially with an identifying number which will be recorded in the Register. In the case of Registered Notes, "Holder" means the person in whose name such Registered Note is for the time being registered in the Register (or, in the case of a joint holding, the first named thereof) and "Noteholder" shall be construed accordingly.
- (e) Ownership: The Holder of any Note or Coupon shall (except as otherwise required by law) be treated as its absolute owner for all purposes (whether or not it is overdue and regardless of any notice of ownership, trust or any other interest therein, any writing thereon or, in the case of Registered Notes, on the Note Certificate relating thereto (other than the endorsed form of transfer) or any notice of any previous loss or theft thereof) and no Person shall be liable for so treating such Holder. No person shall have any right to enforce any term or condition of any Note under the Contracts (Rights of Third Parties) Act 1999.
- (f) Transfers of Registered Notes: Subject to paragraphs (i) (Closed periods) and (j) (Regulations concerning transfers and registration) below, a Registered Note may be transferred upon surrender of the relevant Note Certificate, with the endorsed form of transfer duly completed, at the Specified Office of the Registrar or any Transfer Agent, together with such evidence as the Registrar or (as the case may be) such Transfer Agent may require to prove the title of the transferor and the authority of the individuals who have executed the form of transfer; provided, however, that a Registered Note may not be transferred unless the principal amount of Registered Notes transferred and (where not all of the Registered Notes held by a Holder are being transferred) the principal amount of the balance of Registered Notes not transferred are Specified Denominations. Where not all the Registered Notes represented by the surrendered Note Certificate are the subject of the transfer, a new Note Certificate in respect of the balance of the Registered Notes will be issued to the transferor.

- (g) Registration and delivery of Note Certificates: Within five business days of the surrender of a Note Certificate in accordance with paragraph (f) (Transfers of Registered Notes) above, the Registrar will register the transfer in question and deliver a new Note Certificate of a like principal amount to the Registered Notes transferred to each relevant Holder at its Specified Office or (as the case may be) the Specified Office of any Transfer Agent or (at the request and risk of any such relevant Holder) by uninsured first class mail (airmail if overseas) to the address specified for the purpose by such relevant Holder. In this paragraph, "business day" means a day on which commercial banks are open for general business (including dealings in foreign currencies) in the city where the Registrar or (as the case may be) the relevant Transfer Agent has its Specified Office.
- (h) *No charge:* The transfer of a Registered Note will be effected without charge by or on behalf of the Issuer or the Registrar or any Transfer Agent but against such indemnity as the Registrar or (as the case may be) such Transfer Agent may require in respect of any tax or other duty of whatsoever nature which may be levied or imposed in connection with such transfer.
- (i) *Closed periods:* Noteholders may not require transfers to be registered during the period of 15 days ending on the due date for any payment of principal or interest in respect of the Registered Notes.
- (j) Regulations concerning transfers and registration: All transfers of Registered Notes and entries on the Register are subject to the detailed regulations concerning the transfer of Registered 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 in writing a copy of such regulations.

# 4. STATUS

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.

#### 5. NEGATIVE PLEDGE

#### (a) Negative Pledge

So long as any Note remains outstanding, the Issuer will not, and will procure that none of its respective Subsidiaries will, create or permit to subsist any Security Interest upon the whole or any part of its present or future undertaking, assets or revenues (including uncalled capital) to secure any International Investment Securities unless the Issuer, in the case of a Security Interest, before or at the same time, and in any other case, promptly, takes any and all action necessary to ensure that:

- (i) all amounts payable by it under the Notes are secured by the Security Interest equally and rateably with the International Investment Securities; or
- (ii) such other Security Interest or other arrangement (whether or not it includes the giving of a Security Interest) is provided as is approved by an Extraordinary Resolution (which is defined in the Agency Agreement as a resolution duly passed by a majority of not less than three-fourths of the votes cast) of the Noteholders.

The foregoing shall not operate to restrict or prohibit the creation of any Security Interest over the assets of, and/or shareholder interest in, a capital project securing payment of interest or principal of, payment under any guarantee of, or payment under any indemnity relating to, any International Investment Securities issued by a Subsidiary, where the International Investment Securities are issued to finance such capital project and the financier's rights of recovery are limited to cash flows generated by the specifically identifiable project, and the assets of, and/or shareholder interest in, such capital project.

#### (b) Interpretation

For the purposes of this Condition 5 (Negative Pledge):

- (i) "capital project" means a long-term investment project to acquire, develop, improve, and/or maintain water resources, power generation or similar infrastructure projects; and
- (ii) "International Investment Securities" means notes, bonds, debentures, certificates of deposit or investment securities of any Person which (1) by their terms either are payable, or confer a right to receive payment, in any currency other than Korean Won ("Won") or are denominated in Won and more than 50% of the aggregate principal amount of which is initially distributed outside the Republic of Korea ("Korea") by or with the authorization of the Issuer; (2) are for the time being, or are intended to be, quoted, listed, ordinarily dealt in or traded on any stock exchange or over-the-counter or other securities market outside Korea; and (3) are not (A) securities issued in accordance with a securitization plan pursuant to the Asset-Backed Securitization Act of Korea (or other similar laws of Korea); or (B) securities or instruments serviced primarily by the cash flows of a discrete pool of receivables or other financial assets, either fixed or revolving, that by their terms convert into cash within a finite period and which are commonly regarded as asset-backed securities.

### 6. FIXED RATE NOTE PROVISIONS

- (a) *Application:* This Condition 6 (*Fixed Rate Note Provisions*) is applicable to the Notes only if the Fixed Rate Note Provisions are specified in the relevant Pricing Supplement as being applicable.
- (b) Accrual of interest: The Notes bear interest from the Interest Commencement Date at the Rate of Interest payable in arrear on each Interest Payment Date, subject as provided in Condition 10 (Payments Bearer Notes). Each Note will cease to bear interest from the due date for final redemption unless, upon due presentation, payment of the Redemption Amount is improperly withheld or refused, in which case it will continue to bear interest in accordance with this Condition 6 (as well after as before judgment) until whichever is the earlier of (i) the day on which all sums due in respect of such Note up to that day are received by or on behalf of the relevant Noteholder and (ii) the day which is seven days after the Fiscal Agent has notified the Noteholders that it has received all sums due in respect of the Notes up to such seventh day (except to the extent that there is any subsequent default in payment).
- (c) *Fixed Coupon Amount:* The amount of interest payable in respect of each Note for any Interest Period shall be the relevant Fixed Coupon Amount and, if the Notes are in more than one Specified Denomination, shall be the relevant Fixed Coupon Amount in respect of the relevant Specified Denomination.
- (d) Calculation of interest amount: The amount of interest payable in respect of each Note for any period for which a Fixed Coupon Amount is not specified shall be calculated by applying the Rate of Interest to the Calculation Amount, multiplying the product by the relevant Day Count Fraction, rounding the resulting figure to the nearest sub-unit of the Specified Currency (half a sub-unit being rounded upwards) and multiplying such rounded figure by a fraction equal to the Specified Denomination of such Note divided by the Calculation Amount. For this purpose a "sub-unit" means, in the case of any currency other than euro, the lowest amount of such currency that is available as legal tender in the country of such currency and, in the case of euro, means one cent.
- (e) Notes accruing interest otherwise than a Fixed Coupon Amount: This Condition 6(e) shall apply to Notes which are Fixed Rate Notes only where the Pricing Supplement for such Notes specify that the Interest Payment Dates are subject to adjustment in accordance with the Business Day Convention specified therein. The relevant amount of interest payable in respect of each Note for any Interest Period for such Notes shall be calculated by the Calculation Agent by multiplying the product of the Rate of Interest and the Calculation Amount by the relevant Day Count Fraction and rounding the resultant figure to the nearest sub-unit of the Specified Currency (half a sub-unit being rounded upwards). The Calculation Agent shall cause the

relevant amount of interest and the relevant Interest Payment Date to be notified to the Issuer, the Paying Agents, the Registrar (in the case of Registered Notes) and the Noteholders in accordance with Condition 19 (Notices) and, if the Notes are listed on a stock exchange and the rules of such exchange so requires, such exchange as soon as possible after their determination or calculation but in no event later than the fourth Business day thereafter or, if earlier in the case of notification to the stock exchange, the time required by the rules of the relevant stock exchange.

# 7. FLOATING RATE NOTE PROVISIONS

- (a) *Application:* This Condition 7 (*Floating Rate Note Provisions*) is applicable to the Notes only if the Floating Rate Note Provisions are specified in the relevant Pricing Supplement as being applicable.
- (b) Accrual of interest: The Notes bear interest from the Interest Commencement Date at the Rate of Interest payable in arrear on each Interest Payment Date, subject as provided in Condition 10 (Payments Bearer Notes). Each Note will cease to bear interest from the due date for final redemption unless, upon due presentation, payment of the Redemption Amount is improperly withheld or refused, in which case it will continue to bear interest in accordance with this Condition (as well after as before judgment) until whichever is the earlier of (i) the day on which all sums due in respect of such Note up to that day are received by or on behalf of the relevant Noteholder and (ii) the day which is seven days after the Fiscal Agent has notified the Noteholders that it has received all sums due in respect of the Notes up to such seventh day (except to the extent that there is any subsequent default in payment).
- (c) *Screen Rate Determination:* If Screen Rate Determination is specified in the relevant Pricing Supplement as the manner in which the Rate(s) of Interest is/are to be determined, the Rate of Interest applicable to the Notes for each Interest Period will be determined by the Calculation Agent on the following basis:
  - (i) if the Reference Rate is a composite quotation or customarily supplied by one entity, the Calculation Agent will determine the Reference Rate which appears on the Relevant Screen Page as of the Relevant Time on the relevant Interest Determination Date;
  - (ii) if Linear Interpolation is specified as applicable in respect of an Interest Period in the applicable Pricing Supplement, the Rate of Interest for such Interest Period shall be calculated by the Calculation Agent by straight-line linear interpolation by reference to two rates which appear on the Relevant Screen Page as of the Relevant Time on the relevant Interest Determination Date, where:
    - (A) one rate shall be determined as if the relevant Interest Period were the period of time for which rates are available next shorter than the length of the relevant Interest Period; and
    - (B) the other rate shall be determined as if the relevant Interest Period were the period of time for which rates are available next longer than the length of the relevant Interest Period; *provided, however, that* if no rate is available for a period of time next shorter or, as the case may be, next longer than the length of the relevant Interest Period, then the Calculation Agent shall determine such rate at such time and by reference to such sources as it determines appropriate;
  - (iii) in any other case, the Calculation Agent will determine the arithmetic mean of the Reference Rates which appear on the Relevant Screen Page as of the Relevant Time on the relevant Interest Determination Date;

- (iv) if, in the case of (i) above, such rate does not appear on that page or, in the case of (iii) above, fewer than two such rates appear on that page or if, in either case, the Relevant Screen Page is unavailable, the Calculation Agent will:
  - (A) request the principal Relevant Financial Center office of each of the Reference Banks to provide a quotation of the Reference Rate at approximately the Relevant Time on the Interest Determination Date to prime banks in the Relevant Financial Center interbank market in an amount that is representative for a single transaction in that market at that time; and
  - (B) determine the arithmetic mean of such quotations; and
- (v) if fewer than two such quotations are provided as requested, the Calculation Agent will determine the arithmetic mean of the rates (being the nearest to the Reference Rate, as determined by the Calculation Agent) quoted by major banks in the Principal Financial Center of the Specified Currency, selected by the Issuer, at approximately 11.00 a.m. (local time in the Principal Financial Center of the Specified Currency) on the first day of the relevant Interest Period for loans in the Specified Currency to leading European banks for a period equal to the relevant Interest Period and in an amount that is representative for a single transaction in that market at that time,

and the Rate of Interest for such Interest Period shall be the sum of the Margin and the rate or (as the case may be) the arithmetic mean so determined; provided, however, that if the Calculation Agent is unable to determine a rate or (as the case may be) an arithmetic mean in accordance with the above provisions in relation to any Interest Period, the Rate of Interest applicable to the Notes during such Interest Period will be the sum of the Margin and the rate or (as the case may be) the arithmetic mean last determined in relation to the Notes in respect of a preceding Interest Period.

- (d) ISDA Determination: If ISDA Determination is specified in the relevant Pricing Supplement as the manner in which the Rate(s) of Interest is/are to be determined, the Rate of Interest applicable to the Notes for each Interest Period will be the sum of the Margin and the relevant ISDA Rate where "ISDA Rate" in relation to any Interest Period means a rate equal to the Floating Rate (as defined in the ISDA Definitions) that would be determined by the Calculation Agent under an interest rate swap transaction if the Calculation Agent were acting as Calculation Agent for that interest rate swap transaction under the terms of an agreement incorporating the ISDA Definitions and under which:
  - (i) the Floating Rate Option (as defined in the ISDA Definitions) is as specified in the relevant Pricing Supplement;
  - (ii) the Designated Maturity (as defined in the ISDA Definitions) is a period specified in the relevant Pricing Supplement;
  - (iii) the relevant Reset Date (as defined in the ISDA Definitions) is either (A) if the relevant Floating Rate Option is based on LIBOR for a currency, the first day of that Interest Period or (B) in any other case, as specified in the relevant Pricing Supplement; and
  - (iv) if Linear Interpolation is specified as applicable in respect of an Interest Period in the applicable Pricing Supplement, the Rate of Interest for such Interest Period shall be calculated by the Calculation Agent by straight-line linear interpolation by reference to two rates based on the relevant Floating Rate Option, where:
    - (A) one rate shall be determined as if the Designated Maturity were the period of time for which rates are available next shorter than the length of the relevant Interest Period; and
    - (B) the other rate shall be determined as if the Designated Maturity were the period of time for which rates are available next longer than the length of the relevant Interest Period

provided, however, that if there is no rate available for a period of time next shorter than the length of the relevant Interest Period or, as the case may be, next longer than the length of the relevant Interest Period, then the Calculation Agent shall determine such rate at such time and by reference to such sources as it determines appropriate.

#### (e) Effect of Benchmark Transition Event

(i) Benchmark Replacement

If the Issuer or its designee determines that a Benchmark Transition Event (as defined below) and its related Benchmark Replacement Date (as defined below) have occurred prior to the Reference Time (as defined below) in respect of any determination of the Benchmark (as defined below) on any date, the Benchmark Replacement (as defined below) will replace the then-current Benchmark for all purposes relating to the applicable Notes in respect of such determination on such date and all determinations on all subsequent dates.

#### (ii) Benchmark Replacement Conforming Changes

In connection with the implementation of a Benchmark Replacement, the Issuer or its designee will have the right to make Benchmark Replacement Conforming Changes (as defined below) from time to time.

At the request of the Issuer, but subject to receipt by the Agents of a certificate signed by two duly authorized officers of the Issuer pursuant to Condition 7(e)(iv) and at least five London banking days' prior notice thereof, the Agents shall (at the expense of the Issuer) be obliged to concur with the Issuer in using their reasonable endeavors to effect any Benchmark Replacement Conforming Changes (including, inter alia, by amending or supplementing the Agency Agreement) in the circumstances and as otherwise set out in this Condition 7(e), without the consent of the Noteholders, Receiptholders and Couponholders, provided that the Agents shall not be obliged so to concur if, in the opinion of any of the Agents, doing so would impose more onerous obligations upon it or expose it to any additional duties, responsibilities or liabilities or reduce or amend the protective provisions afforded to the Agents in these Terms and Conditions or the Agency Agreement (including, for the avoidance of doubt, any supplements thereto) in any way.

In connection with any Benchmark Replacement Conforming Changes in accordance with this Condition 7(e)(ii), the Issuer shall comply with the rules of any stock exchange on which the applicable Notes are for the time being listed or admitted to trading.

(iii) Decisions and Determinations

Any determination, decision or election that may be made by the Issuer or its designee pursuant to this Condition 7(e), including any determination with respect to a tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action or any selection, will be conclusive and binding absent manifest error, may be made in the Issuer's or its designee's sole discretion, and, notwithstanding anything to the contrary in the these Terms and Conditions or the Agency Agreement, shall become effective with respect to the applicable Notes without consent from any other party.

(iv) Notices, etc.

Any Benchmark Replacement (including any Benchmark Replacement Adjustment) and the specific terms of any Benchmark Replacement Conforming Changes determined under this Condition 7(e) will be notified promptly by the Issuer to the Fiscal Agent and, in accordance with Condition 15, the Noteholders. Such notice shall be irrevocable and shall specify the effective date of the Benchmark Replacement Conforming Changes, if any.

No later than notifying the Fiscal Agent of the same, the Issuer shall deliver to the Agents a certificate signed by two duly authorized officers of the Issuer:

- (A) confirming (1) that a Benchmark Transition Event has occurred and (2) the Benchmark Replacement (including any Benchmark Replacement Adjustment) and the specific terms of any Benchmark Replacement Conforming Changes, in each case as determined in accordance with the provisions of this Condition 7(e); and
- (B) certifying that the Benchmark Replacement Conforming Changes are necessary to ensure the proper operation of the Benchmark Replacement.

The Agents shall be entitled to rely on such certificate (without liability to any person) as sufficient evidence thereof.

(v) Survival of Original Reference Rate

Without prejudice to the obligations of the Issuer under Condition 7(e)(i), (ii), (iii) and (iv), the Benchmark and the fallback provisions provided for in Condition 7(c) will continue to apply unless and until the Fiscal Agent has been notified of the Benchmark Replacement (including any Benchmark Replacement Adjustment) and the specific terms of any Benchmark Replacement Conforming Changes, in accordance with Condition 7(e)(iv).

(vi) Certain Defined Terms

As used in this Condition 7(e):

"Benchmark" means, initially, LIBOR (if LIBOR is specified as the Reference Rate in the applicable Pricing Supplement); provided that if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to LIBOR or the then-current Benchmark, then "Benchmark" means the applicable Benchmark Replacement.

"Benchmark Replacement" means the Interpolated Benchmark; provided that if the Issuer or its designee cannot determine the Interpolated Benchmark as of the Benchmark Replacement Date, then "Benchmark Replacement" means the first alternative set forth in the order below that can be determined by the Issuer or its designee as of the Benchmark Replacement Date:

- (i) the sum of: (1) Term SOFR and (2) the Benchmark Replacement Adjustment;
- (ii) the sum of: (1) Compounded SOFR and (b) the Benchmark Replacement Adjustment;
- (iii) the sum of: (1) the alternate rate of interest that has been selected or recommended by the Relevant Governmental Body as the replacement for the then-current Benchmark for the applicable Corresponding Tenor and (2) the Benchmark Replacement Adjustment;
- (iv) the sum of: (1) the ISDA Fallback Rate and (2) the Benchmark Replacement Adjustment;
- (v) the sum of: (1) the alternate rate of interest that has been selected by the Issuer or its designee as the replacement for the then-current Benchmark for the applicable Corresponding Tenor giving due consideration to any industry-accepted rate of interest as a replacement for the then-current Benchmark for U.S. dollardenominated floating rate notes at such time and (2) the Benchmark Replacement Adjustment.

"Benchmark Replacement Adjustment" means the first alternative set forth in the order below that can be determined by the Issuer or its designee as of the Benchmark Replacement Date:

- the spread adjustment, or method for calculating or determining such spread adjustment (which may be a positive or negative value or zero), that has been selected or recommended by the Relevant Governmental Body for the applicable Unadjusted Benchmark Replacement;
- (ii) if the applicable Unadjusted Benchmark Replacement is equivalent to the ISDA Fallback Rate, then the ISDA Fallback Adjustment;

(iii) the spread adjustment (which may be a positive or negative value or zero) that has been selected by the Issuer or its designee giving due consideration to any industry-accepted spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the then-current Benchmark with the applicable Unadjusted Benchmark Replacement for U.S. dollar-denominated floating rate notes at such time.

"Benchmark Replacement Conforming Changes" means, with respect to any Benchmark Replacement, any technical, administrative or operational changes (including changes to the definition of "Interest Period," timing and frequency of determining rates and making payments of interest, changes to the definition of "Corresponding Tenor" solely when such tenor is longer than the Interest Period and other administrative matters) with respect to these Terms and Conditions or the Agency Agreement or otherwise that the Issuer or its designee decides may be appropriate to reflect the adoption of such Benchmark Replacement in a manner substantially consistent with market practice (or, if the Issuer or its designee decides that adoption of any portion of such market practice is not administratively feasible or if the Issuer or its designee determines that no market practice for use of the Benchmark Replacement exists, in such other manner as the Issuer or its designee determines is reasonably necessary).

"Benchmark Replacement Date" means the earliest to occur of the following events with respect to the then-current Benchmark:

- (i) in the case of clause (i) or (ii) of the definition of "Benchmark Transition Event," the later of (1) the date of the public statement or publication of information referenced therein and (2) the date on which the administrator of the Benchmark permanently or indefinitely ceases to provide the Benchmark; or
- (ii) in the case of clause (iii) of the definition of "Benchmark Transition Event," the date of the public statement or publication of information referenced therein.

For the avoidance of doubt, if the event giving rise to the Benchmark Replacement Date occurs on the same day as, but earlier than, the Reference Time in respect of any determination, the Benchmark Replacement Date will be deemed to have occurred prior to the Reference Time for such determination.

"Benchmark Transition Event" means the occurrence of one or more of the following events with respect to the then-current Benchmark:

- a public statement or publication of information by or on behalf of the administrator of the Benchmark announcing that such administrator has ceased or will cease to provide the Benchmark, permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Benchmark;
- (ii) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark, the central bank for the currency of the Benchmark, an insolvency official with jurisdiction over the administrator for the Benchmark, a resolution authority with jurisdiction over the administrator for the Benchmark or a court or an entity with similar insolvency or resolution authority over the administrator of the Benchmark has ceased or will cease to provide the Benchmark permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Benchmark; or
- (iii) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark announcing that the Benchmark is no longer representative.

"Compounded SOFR" means the compounded average of SOFRs for the applicable Corresponding Tenor, with the rate, or methodology for this rate, and conventions for this rate (which will be compounded in arrears with a lookback and/or suspension period as a mechanism to determine the interest amount payable prior to the end of each Interest Period) being established by the Issuer or its designee in accordance with:

- (i) the rate, or methodology for this rate, and conventions for this rate selected or recommended by the Relevant Governmental Body for determining compounded SOFR; provided that:
- (ii) if, and to the extent that, the issuer or its designee determines that Compounded SOFR cannot be determined in accordance with clause (i) above, then the rate, or methodology for this rate, and conventions for this rate that have been selected by the issuer or its designee giving due consideration to any industry-accepted market practice for U.S. dollar-denominated floating rate notes at such time.

Notwithstanding the foregoing, Compounded SOFR will include a describe lookback and/or suspension period as a mechanism to determine the interest amount payable prior to the end of each Interest Period.

"Corresponding Tenor" with respect to a Benchmark Replacement means a tenor (including overnight) having approximately the same length (disregarding business day adjustment) as the applicable tenor for the then-current Benchmark.

"Federal Reserve Bank of New York's Website" means the website of the Federal Reserve Bank of New York at http://www.newyorkfed.org, or any successor source.

"Interpolated Benchmark" with respect to the Benchmark means the rate determined for the Corresponding Tenor by interpolating on a linear basis between: (i) the Benchmark for the longest period (for which the Benchmark is available) that is shorter than the Corresponding Tenor and (ii) the Benchmark for the shortest period (for which the Benchmark is available) that is longer than the Corresponding Tenor.

"ISDA Definitions" means the 2006 ISDA Definitions published by the International Swaps and Derivatives Association, Inc. or any successor thereto, as amended or supplemented from time to time, or any successor definitional booklet for interest rate derivatives published from time to time.

"ISDA Fallback Adjustment" means the spread adjustment (which may be a positive or negative value or zero) that would apply for derivatives transactions referencing the ISDA Definitions to be determined upon the occurrence of an index cessation event with respect to the Benchmark for the applicable tenor.

"ISDA Fallback Rate" means the rate that would apply for derivatives transactions referencing the ISDA Definitions to be effective upon the occurrence of an index cessation date with respect to the Benchmark for the applicable tenor excluding the applicable ISDA Fallback Adjustment.

"Reference Time" with respect to any determination of the Benchmark means (i) if the Benchmark is LIBOR, 11:00 a.m. (London time) on the day that is two London banking days preceding the date of such determination, and (ii) if the Benchmark is not LIBOR, the time determined by the Issuer or its designee in accordance with the Benchmark Replacement Conforming Changes.

"Relevant Governmental Body" means the Federal Reserve Board and/or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the Federal Reserve Board and/or the Federal Reserve Bank of New York or any successor thereto.

"SOFR" with respect to any day means the secured overnight financing rate published for such day by the Federal Reserve Bank of New York, as the administrator of the benchmark (or a successor administrator) on the Federal Reserve Bank of New York's Website. "Term SOFR" means the forward-looking term rate for the applicable Corresponding Tenor based on SOFR that has been selected or recommended by the Relevant Governmental Body.

"Unadjusted Benchmark Replacement" means the Benchmark Replacement excluding the Benchmark Replacement Adjustment.

- (f) *Maximum or Minimum Rate of Interest:* If any Maximum Rate of Interest or Minimum Rate of Interest is specified in the relevant Pricing Supplement, then the Rate of Interest shall in no event be greater than the maximum or be less than the minimum so specified.
- (g) *Calculation of Interest Amount:* The Calculation Agent will, as soon as practicable after the time at which the Rate of Interest is to be determined in relation to each Interest Period, calculate the Interest Amount payable in respect of each Note for such Interest Period. The Interest Amount will be calculated by applying the Rate of Interest for such Interest Period to the Calculation Amount, multiplying the product by the relevant Day Count Fraction, rounding the resulting figure to the nearest sub-unit of the Specified Currency (half a sub-unit being rounded upwards) and multiplying such rounded figure by a fraction equal to the Specified Denomination of the relevant Note divided by the Calculation Amount. For this purpose a "sub-unit" means, in the case of any currency other than euro, the lowest amount of such currency that is available as legal tender in the country of such currency and, in the case of euro, means one cent. For the avoidance of doubt, this Condition 7(g) shall not apply if a Benchmark Transition Event has occurred and Condition 7(e) becomes effective.
- (h) Notification: The Calculation Agent will cause each Rate of Interest and Interest Amount determined by it, together with the relevant Interest Payment Date, and any other amount(s) required to be determined by it together with any relevant payment date(s) to be notified to the Issuer, the Fiscal Agent, the CMU Lodging and Paying Agent and each relevant Paying Agents as soon as practicable after such determination but (in the case of each Rate of Interest, Interest Amount and Interest Payment Date) in any event not later than the first day of the relevant Interest Period. Notice thereof shall also promptly be given by the Issuer to the Noteholders. The Calculation Agent will be entitled to recalculate any Interest Amount (on the basis of the foregoing provisions) without notice in the event of an extension or shortening of the relevant Interest Period. For the avoidance of doubt, this Condition 7(h) shall not apply if a Benchmark Transition Event has occurred and Condition 7(e) becomes effective.
- (i) Notifications, etc.: All notifications, opinions, determinations, certificates, calculations, quotations and decisions given, expressed, made or obtained for the purposes of this Condition by the Calculation Agent will (in the absence of manifest error) be binding on the Issuer, the Fiscal Agent, the CMU Lodging and Paying Agent, the Paying Agents, the Noteholders and the Couponholders and (subject as aforesaid) no liability to any such Person will attach to the Calculation Agent in connection with the exercise or non-exercise by it of its powers, duties and discretions for such purposes.

#### 8. ZERO COUPON NOTE PROVISIONS

- (a) *Application:* This Condition 8 (Zero Coupon Note Provisions) is applicable to the Notes only if the Zero Coupon Note Provisions are specified in the relevant Pricing Supplement as being applicable.
- (b) *Late payment on Zero Coupon Notes:* If the Redemption Amount payable in respect of any Zero Coupon Note is improperly withheld or refused, the Redemption Amount shall thereafter be an amount equal to the sum of:
  - (i) the Reference Price; and
  - (ii) the product of the Accrual Yield (compounded annually) being applied to the Reference Price on the basis of the relevant Day Count Fraction from (and including) the Issue Date to (but excluding) whichever is the earlier of (i) the day on which all sums due in respect of such Note up to that day are received by or on behalf of the relevant Noteholder and (ii) the day which is seven days after the Fiscal Agent has notified the Noteholders that it has received all sums due in respect of the Notes up to such seventh day (except to the extent that there is any subsequent default in payment).

#### 9. REDEMPTION AND PURCHASE

- (a) *Scheduled redemption*: Unless previously redeemed, or purchased and cancelled, the Notes will be redeemed at their Final Redemption Amount on the Maturity Date, subject as provided in Condition 10 (Payments Bearer Notes).
- (b) *Redemption for tax reasons:* The Notes may be redeemed at the option of the Issuer in whole, but not in part:
  - (i) at any time (unless the Floating Rate Note Provisions are specified in the relevant Pricing Supplement as being applicable); or
  - (ii) on any Interest Payment Date (if the Floating Rate Note Provisions are specified in the relevant Pricing Supplement as being applicable),

on giving not less than 30 nor more than 60 days' notice to the Noteholders, or such other period(s) as may be specified in the relevant final terms, (which notice shall be irrevocable), at their Early Redemption Amount (Tax), together with interest accrued (if any) to the date fixed for redemption, if:

- (A) the Issuer has or will become obliged to pay additional amounts as provided or referred to in Condition 12 (Taxation) as a result of any change in, or amendment to, the laws or regulations of the Republic of Korea or any political subdivision or any authority thereof or therein having power to tax, or any change in the application or official interpretation of such laws or regulations (including a holding by a court of competent jurisdiction), which change or amendment becomes effective on or after the date of issue of the first Tranche of the Notes; and
- (B) such obligation cannot be avoided by the Issuer taking reasonable measures available to it,

provided, however, that no such notice of redemption shall be given earlier than:

- (1) where the Notes may be redeemed at any time, 90 days (or such other period as may be specified in the relevant final terms) prior to the earliest date on which the Issuer would be obliged to pay such additional amounts if a payment in respect of the Notes were then due; or
- (2) where the Notes may be redeemed only on an Interest Payment Date, 60 days (or such other period as may be specified in the relevant final terms) prior to the Interest Payment Date occurring immediately before the earliest date on which the Issuer would be obliged to pay such additional amounts if a payment in respect of the Notes were then due.

Prior to the publication of any notice of redemption pursuant to this paragraph, the Issuer shall deliver to the Fiscal Agent (A) a certificate signed by two directors of the Issuer stating that the Issuer is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to the right of the Issuer so to redeem have occurred of and (B) an opinion of independent legal advisers of recognized standing to the effect that the Issuer has or will become obliged to pay such additional amounts as a result of such change or amendment. Upon the expiry of any such notice as is referred to in this Condition 9(b), the Issuer shall be bound to redeem the Notes in accordance with this Condition 9(b).

(c) Redemption at the option of the Issuer: If the Call Option is specified in the relevant Pricing Supplement as being applicable, the Notes may be redeemed at the option of the Issuer in whole or, if so specified in the relevant Pricing Supplement, in part on any Optional Redemption Date (Call) at the relevant Optional Redemption Amount (Call) on the Issuer's giving not less than 30 nor more than 60 days' notice to the Noteholders, or such other period(s) as may be specified in the relevant pricing supplement (which notice shall be irrevocable and shall oblige the Issuer to redeem the Notes or, as the case may be, the Notes specified in such notice on the relevant Optional Redemption Date (Call) at the Optional Redemption Amount (Call) plus accrued interest (if any) to such date).

- (d) Partial redemption: If the Notes are to be redeemed in part only on any date in accordance with Condition 9(c) (Redemption at the option of the Issuer), in the case of Bearer Notes, the Notes to be redeemed shall be selected by the drawing of lots in such place as the Fiscal Agent approves and in such manner as the Fiscal Agent considers appropriate, subject to compliance with applicable law, the rules of each competent authority, stock exchange and/or quotation system (if any) by which the Notes have then been admitted to listing, trading and/or quotation and the notice to Noteholders referred to in Condition 9(c) (Redemption at the option of the Issuer) shall specify the serial numbers of the Notes so to be redeemed, and, in the case of Registered Notes, each Note shall be redeemed in part in the proportion which the aggregate principal amount of the outstanding Notes to be redeemed on the relevant Optional Redemption Date (Call) bears to the aggregate principal amount of Minimum Redemption Amount is specified in the relevant Pricing Supplement, then the Optional Redemption Amount (Call) shall in no event be greater than the maximum or be less than the minimum so specified.
- Redemption at the option of Noteholders: If the Put Option is specified in the relevant Pricing (e) Supplement as being applicable, the Issuer shall, at the option of the Holder of any Note redeem such Note on the Optional Redemption Date (Put) specified in the relevant Put Option Notice at the relevant Optional Redemption Amount (Put) together with interest (if any) accrued to such date. In order to exercise the option contained in this Condition 9(e), the Holder of a Note must, not less than 30 nor more than 60 days before the relevant Optional Redemption Date (Put) (or such other period(s) as may be specified in the relevant final terms), deposit with any Paying Agent such Note together with all unmatured Coupons relating thereto and a duly completed Put Option Notice in the form obtainable from any Paying Agent. The Paying Agent with which a Note is so deposited shall deliver a duly completed Put Option Receipt to the depositing Noteholder. No Note, once deposited with a duly completed Put Option Notice in accordance with this Condition 9(e), may be withdrawn; provided, however, that if, prior to the relevant Optional Redemption Date (Put), any such Note becomes immediately due and payable or, upon due presentation of any such Note on the relevant Optional Redemption Date (Put), payment of the redemption moneys is improperly withheld or refused, the relevant Paying Agent shall mail notification thereof to the depositing Noteholder at such address as may have been given by such Noteholder in the relevant Put Option Notice and shall hold such Note at its Specified Office for collection by the depositing Noteholder against surrender of the relevant Put Option Receipt. For so long as any outstanding Note is held by a Paying Agent in accordance with this Condition 9(e), the depositor of such Note and not such Paying Agent shall be deemed to be the Holder of such Note for all purposes.
- (f) *No other redemption:* The Issuer shall not be entitled to redeem the Notes otherwise than as provided in paragraphs (a) to (e) above.
- (g) *Early redemption of Zero Coupon Notes:* Unless otherwise specified in the relevant Pricing Supplement, the Redemption Amount payable on redemption of a Zero Coupon Note at any time before the Maturity Date shall be an amount equal to the sum of:
  - (i) the Reference Price; and
  - (ii) the product of the Accrual Yield (compounded annually) being applied to the Reference Price from (and including) the Issue Date to (but excluding) the date fixed for redemption or (as the case may be) the date upon which the Note becomes due and payable.

Where such calculation is to be made for a period which is not a whole number of years, the calculation in respect of the period of less than a full year shall be made on the basis of such Day Count Fraction as may be specified in the Pricing Supplement for the purposes of this Condition 9(g) or, if none is so specified, a Day Count Fraction of 30E/360.

- (h) *Purchase:* The Issuer or any of its Subsidiaries may at any time purchase Notes in the open market or otherwise and at any price, provided that all unmatured Coupons are purchased therewith.
- (i) *Cancellation:* All Notes so redeemed or purchased by the Issuer or any of its Subsidiaries and any unmatured Coupons attached to or surrendered with them shall be cancelled and may not be reissued or resold.

### **10. PAYMENTS – BEARER NOTES**

This Condition 10 is only applicable to Bearer Notes.

- (a) *Principal:* Payments of principal shall be made only against presentation and (provided that payment is made in full) surrender of Bearer Notes at the Specified Office of any Paying Agent outside the United States (i) in the case of a currency other than Renminbi, by transfer to an account denominated in that currency (or, if that currency is euro, any other account to which euro may be credited or transferred) and maintained by the payee with, a bank in the Principal Financial Center of that currency, and (ii) in the case of Renminbi, by transfer to an account denominated in that currency.
- (b) *Interest:* Payments of interest shall, subject to paragraph (h) below, be made only against presentation and (provided that payment is made in full) surrender of the appropriate Coupons at the Specified Office of any Paying Agent outside the United States in the manner described in paragraph (a) above.
- (c) *Payments in New York City:* Payments of principal or interest may be made at the Specified Office of a Paying Agent in New York City if (i) the Issuer has appointed Paying Agents outside the United States with the reasonable expectation that such Paying Agents will be able to make payment of the full amount of the interest on the Notes in the currency in which the payment is due when due, (ii) payment of the full amount of such interest at the offices of all such Paying Agents is illegal or effectively precluded by exchange controls or other similar restrictions and payment is permitted by applicable United States law.
- (d) Payments subject to fiscal laws: All payments in respect of the Notes are subject in all cases to (i) any applicable fiscal or other laws and regulations in the place of payment, but without prejudice to the provisions of Condition 12 (Taxation) and (ii) any withholding or deduction required pursuant to an agreement described in Section 1471(b) of the U.S. Internal Revenue Code of 1986 (the "Code") or otherwise imposed pursuant to Sections 1471 through 1474 of the Code, any regulations or agreements thereunder, any official interpretations thereof, or (without prejudice to the provisions of Condition 12 (Taxation)) any law implementing an intergovernmental approach thereto. No commissions or expenses shall be charged to the Noteholders or Couponholders in respect of such payments.
- (e) *Deductions for unmatured Coupons:* If the relevant Pricing Supplement specifies that the Fixed Rate Note Provisions are applicable and a Bearer Note is presented without all unmatured Coupons relating thereto:
  - (i) if the aggregate amount of the missing Coupons is less than or equal to the amount of principal due for payment, a sum equal to the aggregate amount of the missing Coupons will be deducted from the amount of principal due for payment; provided, however, that if the gross amount available for payment is less than the amount of principal due for payment, the sum deducted will be that proportion of the aggregate amount of such missing Coupons which the gross amount actually available for payment bears to the amount of principal due for payment;
  - (ii) if the aggregate amount of the missing Coupons is greater than the amount of principal due for payment:
    - (A) so many of such missing Coupons shall become void (in inverse order of maturity) as will result in the aggregate amount of the remainder of such missing Coupons (the "Relevant Coupons") being equal to the amount of principal due for payment; provided, however, that where this sub-paragraph would otherwise require a fraction of a missing Coupon to become void, such missing Coupon shall become void in its entirety; and

(B) a sum equal to the aggregate amount of the Relevant Coupons (or, if less, the amount of principal due for payment) will be deducted from the amount of principal due for payment; provided, however, that, if the gross amount available for payment is less than the amount of principal due for payment, the sum deducted will be that proportion of the aggregate amount of the Relevant Coupons (or, as the case may be, the amount of principal due for payment) which the gross amount actually available for payment bears to the amount of principal due for payment.

Each sum of principal so deducted shall be paid in the manner provided in paragraph (a) above against presentation and (provided that payment is made in full) surrender of the relevant missing Coupons.

- (f) Unmatured Coupons void: If the relevant Pricing Supplement specifies that this Condition 10(f) is applicable or that the Floating Rate Note Provisions are applicable, on the due date for final redemption of any Note or early redemption in whole of such Note pursuant to Condition 9(b) (Redemption for tax reasons), Condition 9(e) (Redemption at the option of Noteholders), Condition 9(c) (Redemption at the option of the Issuer) or Condition 13 (Events of Default), all unmatured Coupons relating thereto (whether or not still attached) shall become void and no payment will be made in respect thereof.
- (g) *Payments on business days:* If the due date for payment of any amount in respect of any Bearer Note or Coupon is not a Payment Business Day in the place of presentation, the Holder shall not be entitled to payment in such place of the amount due until the next succeeding Payment Business Day in such place and shall not be entitled to any further interest or other payment in respect of any such delay.
- (h) Payments other than in respect of matured Coupons: Payments of interest other than in respect of matured Coupons shall be made only against presentation of the relevant Bearer Notes at the Specified Office of any Paying Agent outside the United States (or in New York City if permitted by paragraph (c) above).
- (i) *Partial payments:* If a Paying Agent makes a partial payment in respect of any Bearer Note or Coupon presented to it for payment, such Paying Agent will endorse thereon a statement indicating the amount and date of such payment.
- (j) Exchange of Talons: On or after the maturity date of the final Coupon which is (or was at the time of issue) part of a Coupon Sheet relating to the Bearer Notes, the Talon forming part of such Coupon Sheet may be exchanged at the Specified Office of the Fiscal Agent for a further Coupon Sheet (including, if appropriate, a further Talon but excluding any Coupons in respect of which claims have already become void pursuant to Condition 14 (Prescription). Upon the due date for redemption of any Bearer Note, any unexchanged Talon relating to such Note shall become void and no Coupon will be delivered in respect of such Talon.

# **11. PAYMENTS – REGISTERED NOTES**

This Condition 11 is only applicable to Registered Notes.

- (a) *Principal:* Payments of principal shall be made:
  - (i) in the case of a currency other than Renminbi, upon application by a Holder of a Registered Note to the Specified Office of the Fiscal Agent not later than the fifteenth day before the due date for any such payment, by transfer to an account denominated in that currency (or, if that currency is euro, any other account to which euro may be credited or transferred) and maintained by the payee with, a bank in the Principal Financial Center of that currency; and
  - (ii) in the case of Renminbi, by transfer to an account denominated in that currency and maintained by the payee with a bank in the Principal Financial Center of that currency,

and (in the case of redemption) upon surrender (or, in the case of part payment only, endorsement) of the relevant Note Certificates at the Specified Office of any Paying Agent.

- (b) Interest: Payments of interest shall be made
  - (i) in the case of a currency other than Renminbi, upon application by a Holder of a Registered Note to the Specified Office of the Fiscal Agent not later than the fifteenth day before the due date for any such payment, by transfer to an account denominated in that currency (or, if that currency is euro, any other account to which euro may be credited or transferred) and maintained by the payee with, a bank in the Principal Financial Center of that currency; and
  - (ii) in the case of Renminbi, by transfer to an account denominated in that currency and maintained by the payee with a bank in the Principal Financial Center of that currency,

and (in the case of interest payable on redemption) upon surrender (or, in the case of part payment only, endorsement) of the relevant Note Certificates at the Specified Office of any Paying Agent.

- (c) Payments subject to fiscal laws: All payments in respect of the Registered Notes are subject in all cases to any applicable fiscal or other laws and regulations in the place of payment, but without prejudice to the provisions of Condition 12 (Taxation) (ii) any withholding or deduction required pursuant to an agreement described in Section 1471(b) of the Code or otherwise imposed pursuant to Sections 1471 through 1474 of the Code, any regulations or agreements thereunder, any official interpretations thereof, or (without prejudice to the provisions of Condition 12 (Taxation)) any law implementing an intergovernmental approach thereto. No commissions or expenses shall be charged to the Noteholders in respect of such payments.
- (d) Payments on business days: Where payment is to be made by transfer to an account, payment instructions (for value the due date, or, if the due date is not Payment Business Day, for value the next succeeding Payment Business Day) will be initiated and, (i) (in the case of payments of principal and interest payable on redemption) on the later of the due date for payment and the day on which the relevant Note Certificate is surrendered (or, in the case of payments of interest payable other than on redemption) on the due date for payment. A Holder of a Registered Note shall not be entitled to any interest or other payment in respect of any delay in payment resulting from the due date for a payment not being a Payment Business Day.
- (e) *Partial payments:* If a Paying Agent makes a partial payment in respect of any Registered Note, the Issuer shall procure that the amount and date of such payment are noted on the Register and, in the case of partial payment upon presentation of a Note Certificate, that a statement indicating the amount and the date of such payment is endorsed on the relevant Note Certificate.
- (f) *Record date:* Each payment in respect of a Registered Note will be made to the person shown as the Holder in the Register at the opening of business in the place of the Registrar's Specified Office on the fifteenth day before the due date for such payment (the "Record Date").

# 12. TAXATION

- (a) *Gross up:* All payments of principal and interest in respect of the Notes and the Coupons by or on behalf of the Issuer shall be made free and clear of, and without withholding or deduction for or on account of, any present or future taxes, duties, assessments or governmental charges of whatever nature imposed, levied, collected, withheld or assessed by or on behalf of the Republic of Korea or any political subdivision therein or any authority therein or thereof having power to tax ("Korean Tax"), unless the withholding or deduction of such Korean Tax is required by law. In that event, the Issuer shall pay such additional amounts ("Additional Amounts") as will result in receipt by the Noteholders and the Couponholders after such withholding or deduction of such amounts as would have been received by them had no such withholding or deduction been required, except that no such Additional Amounts shall be payable in respect of any Note or Coupon:
  - (i) held by or on behalf of a Holder who is liable to such Korean Tax in respect of such Note or Coupon by reason of its having some connection with the jurisdiction by which such taxes, duties, assessments or charges have been imposed, levied, collected, withheld or assessed other than the mere holding of the Note or Coupon; or

- (ii) held by or on behalf of a Holder who would not be liable for or subject to such deduction or withholding by making a declaration of non-residence or other similar claim for exemption to the relevant tax authority if, after having been requested in writing by the Issuer to make such a declaration or claim, such Holder fails to do so within 30 days; or
- (iii) where the relevant Note or Coupon or Note Certificate is presented or surrendered for payment more than 30 days after the Relevant Date except to the extent that the Holder of such Note or Coupon would have been entitled to such Additional Amounts on presenting or surrendering such Note or Coupon or Note Certificate for payment on the last day of such period of 30 days.
- (b) *Taxing jurisdiction:* If the Issuer becomes subject at any time to any taxing jurisdiction other than the Republic of Korea, references in these Conditions to the Republic of Korea shall be construed as references to the Republic of Korea and/or such other jurisdiction.

# **13. EVENTS OF DEFAULT**

If any of the following events occurs and is continuing:

- (a) *Non-payment of principal:* the Issuer fails to pay any amount of principal in respect of the Notes on the due date for payment thereof; or
- (b) *Non-payment of interest*: the Issuer fails to pay any amount of interest in respect of the Notes on the due date for payment thereof and such default continues for a period of 30 days; or
- (c) *Breach of other obligations:* the Issuer defaults in the performance or observance of any of its other obligations under or in respect of the Notes and such default remains unremedied for 30 days after written notice thereof, addressed to the Issuer by any Noteholder, has been delivered to the Issuer or to the Specified Office of the Fiscal Agent; or
- (d) Cross-default of Issuer or Subsidiary:
  - (i) any Indebtedness of the Issuer or any of its Subsidiaries in the aggregate outstanding principal amount of U.S.\$15,000,000 (or its equivalent in any other currency or currencies) or more is not paid when due or (as the case may be) within any originally applicable grace period;
  - (ii) any such Indebtedness becomes (or becomes capable of being declared) due and payable prior to its stated maturity otherwise than at the option of the Issuer or the relevant Subsidiary or (provided that no event of default, howsoever described, has occurred) any Person entitled to such Indebtedness;
  - (iii) the Issuer or any of its Subsidiaries fails to pay when due any amount payable by it under any Guarantee of any Indebtedness; or
- (e) Unsatisfied judgment: one or more judgment(s) or order(s) from which no further appeal or judicial review is permissible under applicable law for the payment of any amount is rendered against the Issuer or any of its Subsidiaries and continue(s) unsatisfied and unstayed for a period of 30 days after the date(s) thereof or, if later, the date therein specified for payment; or
- (f) *Security enforced:* a secured party takes possession, or a receiver, manager or other similar officer is appointed, of the whole or a substantial part of the undertaking, assets and revenues of the Issuer or any of its Subsidiaries; or
- (g) Insolvency: (i) the Issuer or any of its Subsidiaries becomes insolvent or is unable to pay its debts as they fall due, (ii) an administrator or liquidator is appointed (or application for any such appointment is made) in respect of the Issuer or any of its Subsidiaries or the whole or a substantial part of the undertaking, assets and revenues of the Issuer or any of its Subsidiaries, (iii) the Issuer or any of its Subsidiaries takes any action for a readjustment or deferment of any

of its obligations or makes a general assignment or an arrangement or composition with or for the benefit of its creditors or declares a moratorium in respect of any of its Indebtedness or any Guarantee of any Indebtedness given by it or (iv) the Issuer or any of its Subsidiaries ceases or threatens to cease to carry on all or any substantial part of its business; or

- (h) *Winding up:* an order is made or an effective resolution is passed for the winding up, liquidation or dissolution of the Issuer or any of its Subsidiaries (otherwise than, in the case of a Subsidiary of the Issuer, for the purposes of or pursuant to an amalgamation, reorganization or restructuring whilst solvent); or
- (i) *Analogous event:* any event occurs which under the laws of the Republic of Korea has an analogous effect to any of the events referred to in paragraphs (e) to (h) above; or
- (j) *Failure to take action:* any action, condition or thing at any time required to be taken, fulfilled or done in order (i) to enable the Issuer lawfully to enter into, exercise their respective rights and perform and comply with their respective obligations under and in respect of the Notes, (ii) to ensure that those obligations are legal, valid, binding and enforceable and (iii) to make the Notes and the Coupons admissible in evidence in the courts of the Republic of Korea is not taken, fulfilled or done; or
- (k) *Unlawfulness:* 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; or
- (1) *Controlling shareholder:* the government of the Republic of Korea ceases to hold directly or indirectly at least 51% of the issued share capital of the Issuer,

then any Note may, by written notice addressed by the Holder thereof to the Issuer and delivered to the Issuer or to the Specified Office of the Fiscal Agent, be declared immediately due and payable, whereupon it shall become immediately due and payable at its Early Termination Amount together with accrued interest (if any) without further action or formality.

### **14. PRESCRIPTION**

Claims for principal in respect of Bearer Notes shall become void unless the relevant Bearer Notes are presented for payment within 10 years of the appropriate Relevant Date. Claims for interest in respect of Bearer Notes shall become void unless the relevant Coupons are presented for payment within five years of the appropriate Relevant Date. Claims for principal and interest on redemption in respect of Registered Notes shall become void unless the relevant Note Certificates are surrendered for payment within 10 years of the appropriate Relevant Date.

#### **15. REPLACEMENT OF NOTES AND COUPONS**

If any Note, Note Certificate or Coupon is lost, stolen, mutilated, defaced or destroyed, it may be replaced at the Specified Office of the Fiscal Agent, in the case of Bearer Notes, or the Registrar, in the case of Registered Notes (and, if the Notes are then admitted to listing, trading and/or quotation by any competent authority, stock exchange and/or quotation system which requires the appointment of a Paying Agent or Transfer Agent in any particular place, the Paying Agent or Transfer Agent having its Specified Office in the place required by such competent authority, stock exchange and/or quotation system), subject to all applicable laws and competent authority, stock exchange and/or quotation system requirements, upon payment by the claimant of the expenses incurred in connection with such replacement and on such terms as to evidence, security, indemnity and otherwise as the Issuer may reasonably require. Mutilated or defaced Notes, Note Certificates or Coupons must be surrendered before replacements will be issued.

# 16. AGENTS

In acting under the Agency Agreement and in connection with the Notes and the Coupons, the Agents act solely as agents of the Issuer and do not assume any obligations towards or relationship of agency or trust for or with any of the Noteholders or Couponholders.

The initial Agents and their initial Specified Offices are listed below. The initial Calculation Agent (if any) is specified in the relevant Pricing Supplement. The Issuer reserves the right at any time to vary or terminate the appointment of any Agent and to appoint a successor fiscal agent, registrar, CMU lodging and paying agent, CMU registrar or Calculation Agent and additional or successor paying agents; provided, however, that:

- (a) the Issuer shall at all times maintain a fiscal agent and a registrar; and
- (b) the Issuer shall at all times maintain a CMU lodging and paying agent in relation to Notes accepted for clearance through the CMU Service and (if such Notes are Registered Notes) a CMU Registrar; and
- (c) if a Calculation Agent is specified in the relevant Pricing Supplement, the Issuer shall at all times maintain a Calculation Agent; and
- (d) if and for so long as the Notes are admitted to listing, trading and/or quotation by any competent authority, stock exchange and/or quotation system which requires the appointment of a Paying Agent and/or a Transfer Agent in any particular place, the Issuer shall maintain a Paying Agent and/or a Transfer Agent having its Specified Office in the place required by such competent authority, stock exchange and/or quotation system.

Notice of any change in any of the Agents or in their Specified Offices shall promptly be given to the Noteholders.

# 17. MEETINGS OF NOTEHOLDERS; MODIFICATION AND WAIVER

(a) Meetings of Noteholders: The Agency Agreement contains provisions for convening meetings of Noteholders to consider matters relating to the Notes, including the modification of any provision of these Conditions. Any such modification may be made if sanctioned by an Extraordinary Resolution. Such a meeting may be convened by the Issuer and shall be convened by them upon the request in writing of Noteholders holding not less than one-tenth of the aggregate principal amount of the outstanding Notes. The quorum at any meeting convened to vote on an Extraordinary Resolution will be two or more Persons holding or representing one more than half of the aggregate principal amount of the outstanding Notes or, at any adjourned meeting, two or more Persons being or representing Noteholders whatever the principal amount of the Notes held or represented; provided, however, that Reserved Matters may only be sanctioned by an Extraordinary Resolution passed at a meeting of Noteholders at which two or more Persons holding or representing not less than three-quarters or, at any adjourned meeting, one quarter of the aggregate principal amount of the outstanding Notes form a quorum. Any Extraordinary Resolution duly passed at any such meeting shall be binding on all the Noteholders and Couponholders, whether present or not.

In addition, a resolution in writing signed by or on behalf of all Noteholders who for the time being are entitled to receive notice of a meeting of Noteholders will take effect as if it were an Extraordinary Resolution. Such a resolution in writing may be contained in one document or several documents in the same form, each signed by or on behalf of one or more Noteholders. (b) Modification: The Notes, these Conditions and the Deed of Covenant may be amended without the consent of the Noteholders or the Couponholders to correct a manifest error. In addition, the parties to the Agency Agreement may agree to modify any provision thereof, but the Issuer shall not agree, without the consent of the Noteholders, to any such modification unless it is of a formal, minor or technical nature, it is made to correct a manifest error or it is, in the sole opinion of the Issuer, not materially prejudicial to the interests of the Noteholders. For the avoidance of doubt, none of the Agents shall have any responsibility or liability whatsoever with respect to any determination as to material prejudice to the interests of the Noteholders pursuant to this Condition 17(b).

### **18. FURTHER ISSUES**

The Issuer may from time to time, without the consent of the Noteholders or the Couponholders, create and issue further notes having the same terms and conditions as the Notes in all respects (or in all respects except for the first payment of interest) so as to form a single series with the Notes.

### **19. NOTICES**

- (a) *Bearer Notes:* Notices to the Holders of Bearer Notes shall be valid if published in a leading daily newspaper of general circulation in Asia by the Issuer. The Issuer shall also ensure that notices are duly published in a manner which complies with the rules and regulations of any stock exchange (or any other relevant authority) on which the Bearer Notes are for the time being listed or by which they have been admitted to trading. Any such notice shall be deemed to have been given on the date of first publication (or if required to be published in more than one newspaper, on the first date on which publication shall have been made in all the required newspapers). Couponholders shall be deemed for all purposes to have notice of the contents of any notice given to the Holders of Bearer Notes.
- (b) *Registered Notes:* Notices to the Holders of Registered Notes shall be (i) sent to them by first class mail (or its equivalent) or (if posted to an overseas address) by airmail at their respective addresses on the Register and will be deemed to have been given on the fourth day after mailing and (ii) if and for so long as the Registered Notes are listed on a stock exchange or are admitted to trading by another relevant authority and the rules of that stock exchange or relevant authority so require, such notice will be published in a daily newspaper of general circulation in the place or places required by those rules.

#### 20. CURRENCY INDEMNITY

If any sum due from the Issuer in respect of the Notes or the Coupons or any order or judgment given or made in relation thereto has to be converted from the currency (the "first currency") in which the same is payable under these Conditions or such order or judgment into another currency (the "second currency") for the purpose of (a) making or filing a claim or proof against the Issuer, (b) obtaining an order or judgment in any court or other tribunal or (c) enforcing any order or judgment given or made in relation to the Notes, the Issuer shall indemnify each Noteholder, on the written demand of such Noteholder addressed to the Issuer and delivered to the Issuer or to the Specified Office of the Fiscal Agent, against any loss suffered as a result of any discrepancy between (i) the rate of exchange used for such purpose to convert the sum in question from the first currency into the second currency and (ii) the rate or rates of exchange at which such Noteholder may in the ordinary course of business purchase the first currency with the second currency upon receipt of a sum paid to it in satisfaction, in whole or in part, of any such order, judgment, claim or proof.

This indemnity constitutes a separate and independent obligation of the Issuer and shall give rise to a separate and independent cause of action.

# 21. ROUNDING

For the purposes of any calculations referred to in these Conditions (unless otherwise specified in these Conditions or the relevant Pricing Supplement), (a) all percentages resulting from such calculations will be rounded, if necessary, to the nearest one hundred-thousandth of a percentage point (with 0.000005% being rounded up to 0.00001%), (b) all United States dollar amounts used in or resulting from such calculations will be rounded to the nearest cent (with one half cent being rounded up), (c) all Japanese Yen amounts used in or resulting from such calculations will be rounded downwards to the next lower whole Japanese Yen amount, and (d) all amounts denominated in any other currency used in or resulting from such calculations will be rounded to the nearest two decimal places in such currency, with 0.005 being rounded upwards.

### 22. GOVERNING LAW AND JURISDICTION

- (a) *Governing law*: The Notes and any non-contractual obligations arising out of or in connection with the Notes are governed by English law.
- (b) *English courts*: The courts of England have exclusive jurisdiction to settle any dispute (a "Dispute") arising out of or in connection with the Notes (including any non-contractual obligation arising out of or in connection with the Notes).
- (c) *Appropriate forum*: The Issuer agrees that the courts of England are the most appropriate and convenient courts to settle any Dispute and, accordingly, that it will not argue to the contrary.
- (d) Rights of the Noteholders to take proceedings outside England: Notwithstanding Condition 22(b) (English courts), any Noteholder may take proceedings relating to a Dispute ("Proceedings") in any other courts with jurisdiction. To the extent allowed by law, Noteholders may take concurrent Proceedings in any number of jurisdictions.
- (e) Service of process: The Issuer agrees that the documents which start any Proceedings and any other documents required to be served in relation to those Proceedings may be served on it by being delivered to Law Debenture Corporate Services Limited at Fifth Floor, 100 Wood Street, London EC2V 7EX, or to such other person with an address in England or Wales and/or at such other address in England or Wales as the Issuer may specify by notice in writing to the Noteholders. Nothing in this paragraph shall affect the right of any Noteholder to serve process in any other manner permitted by law. This Condition applies to Proceedings in England and to Proceedings elsewhere.
- (f) *Consent to enforcement, etc.*: The Issuer consents generally in respect of any Proceedings to the giving of any relief or the issue of any process in connection with such Proceedings including (without limitation) the making, enforcement or execution against any property whatsoever (irrespective of its use or intended use) of any order or judgment which is made or given in such Proceedings.
- (g) *Waiver of immunity*: To the extent that the Issuer may in any jurisdiction claim for itself or its assets or revenues immunity from suit, execution, attachment (whether in aid of execution, before judgment or otherwise) or other legal process and to the extent that such immunity (whether or not claimed) may be attributed in any such jurisdiction to the Issuer or its assets or revenues, the Issuer agrees not to claim and irrevocably waives such immunity to the full extent permitted by the laws of such jurisdiction.

# FORM OF PRICING SUPPLEMENT

Set out below is the form of Pricing Supplement which will be completed for each Tranche of Notes issued under the Program.

### Pricing Supplement dated [•]

## KOREA MIDLAND POWER CO., LTD. Issue of [Aggregate Nominal Amount of Tranche] [Title of Notes] under the U.S.\$3,000,000,000 Euro Medium Term Note Program

Any person making or intending to make an offer of the Notes may only do so in circumstances in which no obligation arises for the Issuer or any Dealer to publish a prospectus pursuant to Article 3 of the Prospectus Directive or supplement a prospectus pursuant to Article 16 of the Prospectus Directive, in each case, in relation to such offer.

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

[UK MiFIR PRODUCT GOVERNANCE – Solely for the purposes of each UK MiFIR manufacturer's product approval process, the target market assessment in respect of the Notes has led to the conclusion that: (i) the target market for the Notes is eligible counterparties, as defined in the FCA Handbook Conduct of Business Sourcebook ("COBS") and professional clients, as defined in Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 ("UK MiFIR"); and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Notes (a "UK MiFIR distributor") should take into consideration each UK MiFIR manufacturer's target market assessment; however, a distributor subject to the FCA Handbook Product Intervention and Product Governance Sourcebook (the "UK MiFIR Product Governance Rules") will be responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the target market assessment) and determining the appropriate distribution channels.]

[**PROHIBITION OF SALES TO EEA RETAIL INVESTORS** – The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("EEA"). For these purposes: (a) the expression "retail investor" means a person who is one (or more) of the following: (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "MiFID II"); (ii) a customer within the meaning of Directive (EU) 2016/97 (as amended, the "Insurance Distribution Directive"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (iii) not a qualified investor as defined in Regulation (EU) 2017/1129 (the "Prospectus Regulation"); and (b) the expression "offer" includes the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes. Consequently, no key information document required by Regulation (EU) No 1286/2014 (the "PRIIPs Regulation") for offering or selling the securities or otherwise making them available to retail investors in the EEA has been prepared and therefore, offering or selling the securities or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.]

[PROHIBITION OF SALES TO UK RETAIL INVESTORS – The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the UK. For these purposes: (a) the expression "retail investor" means a person who is one (or more) of the following: (i) a retail client as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 ("EUWA"); (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act 2000 ("FMSA") and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA; or (iii) not a qualified investor as defined in Article 2 of the Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the EUWA; and (b) the expression "offer" includes the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes. Consequently, no key information document required by Regulation (EU) No 1286/2014 as it forms part of domestic law by virtue of the EUWA ("UK PRIIPs Regulation") for offering or selling the Notes or otherwise making them available to retail investors in the UK has been prepared and therefore, offering or selling the Notes or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.]

[THE NOTES HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE FINANCIAL INVESTMENT SERVICES AND CAPITAL MARKET ACT OF KOREA. ACCORDINGLY, THE NOTES MAY NOT BE OFFERED, SOLD OR DELIVERED IN KOREA OR TO ANY RESIDENT THEREOF (AS DEFINED IN THE FOREIGN EXCHANGE TRANSACTION LAW OF KOREA AND THE REGULATIONS THEREUNDER) OR TO ANY OTHER PERSON FOR OFFER, RESALE OR REDELIVERY DIRECTLY OR INDIRECTLY IN KOREA OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, ANY RESIDENT THEREOF FOR A PERIOD OF ONE YEAR AFTER THE DATE OF ISSUE OF THE NOTES, EXCEPT AS OTHERWISE PERMITTED BY APPLICABLE KOREAN LAWS AND REGULATIONS.]<sup>1</sup>

[THE NOTES HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE FINANCIAL INVESTMENT SERVICES AND CAPITAL MARKET ACT OF KOREA. ACCORDINGLY, THE NOTES MAY NOT BE OFFERED, SOLD OR DELIVERED IN KOREA OR TO ANY RESIDENT THEREOF (AS DEFINED IN THE FOREIGN EXCHANGE TRANSACTION LAW OF KOREA AND THE REGULATIONS THEREUNDER) OR TO ANY OTHER PERSON FOR OFFER, RESALE OR REDELIVERY DIRECTLY OR INDIRECTLY IN KOREA OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, ANY RESIDENT OF KOREA, EXCEPT AS OTHERWISE PERMITTED BY APPLICABLE KOREAN LAWS AND REGULATIONS. IN ADDITION, WITHIN ONE YEAR FOLLOWING THE ISSUE OF THE NOTES, 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 DEFINED UNDER THE FOREIGN EXCHANGE TRANSACTIONS LAW OF KOREA AND THE REGULATIONS THEREUNDER) OTHER THAN A "QUALIFIED INSTITUTIONAL BUYER" (A "KOREAN QIB," AS DEFINED IN THE REGULATION ON ISSUANCE, PUBLIC DISCLOSURE, ETC. OF SECURITIES OF KOREA) WHO IS REGISTERED WITH THE KOREA FINANCIAL INVESTMENT ASSOCIATION (THE "KOFIA") AS A KOREAN QIB, PROVIDED THAT THE AMOUNT OF THE NOTES ACQUIRED BY SUCH KOREAN QIBS IN THE PRIMARY MARKET IS LIMITED TO NO MORE THAN 20% OF THE AGGREGATE ISSUE AMOUNT OF THE NOTES.]<sup>2</sup>

[NOTIFICATION UNDER SECTION 309B(1)(C) OF THE SECURITIES AND FUTURES ACT, CHAPTER 289 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 [OR] capital markets products other than prescribed capital markets products] (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018 of Singapore) and [Excluded Investment Products [OR] Specified 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).]

Applicable when relying on the exemption as set out in Article 2-2-2, Paragraph 2 (other than Item 3) of the Regulation on Issuance, Public Disclosure, etc. of Securities of Korea promulgated by the Financial Services Commission of Korea.

<sup>&</sup>lt;sup>2</sup> Applicable when relying on the exemption as set out in Article 2-2-2, Paragraph 2, Item 3, of the Regulation on Issuance, Public Disclosure, etc. of Securities of Korea promulgated by the Financial Services Commission of Korea.

# PART A – CONTRACTUAL TERMS

Terms used herein shall be deemed to be defined as such for the purposes of the Terms and Conditions of the Notes (the "Conditions") set forth in the Offering Circular dated July 27, 2021 [and the supplemental Offering Circular dated [*date*]] ([together,] the "Offering Circular"). This Pricing Supplement is supplemental to and must be read in conjunction with such Offering Circular.

[The following alternative language applies if the first tranche of an issue which is being increased was issued under an offering circular with an earlier date and the relevant terms and conditions from that offering circular with an earlier date were incorporated by reference in this Offering Circular.

Terms used herein shall be deemed to be defined as such for the purposes of the Terms and Conditions of the Notes (the "Conditions") incorporated by reference in the offering circular dated [*original date*]. This Pricing Supplement contains the final terms of the Notes and must be read in conjunction with the Offering Circular, except in respect of the Conditions which are set forth in the offering circular dated [*original date*] and are incorporated by reference in the Offering Circular.]

[Include whichever of the following apply or specify as "Not applicable" (N/A). Note that the numbering should remain as set out below, even if "Not applicable" is indicated for individual paragraphs (in which case the sub-paragraphs of the paragraphs which are not applicable can be deleted). Italics denote guidance for completing the Pricing Supplement.]

1.	(i)	Issuer:	Korea Midland Power Co., Ltd.
			(Legal Entity Identifier: 988400Z1HCY1QUPS1W65)
2.	(i)	Series Number:	[•]
	(ii)	Tranche Number:	[•]
	(iii)	Date on which the Notes become fungible:	[Not applicable/The Notes shall be consolidated, form a single series and be interchangeable for trading purposes with the $[\bullet]$ on $[[\bullet]$ /the Issue Date/exchange of the Temporary Global Note for interests in the Permanent Global Note, as referred to in paragraph 22 below [which is expected to occur on or about $[\bullet]$ ].]
3.	Specified Currency or Currencies:		[•]
4.	Aggregate Nominal Amount:		[•]
	(i)	Series:	[•]
	(ii)	Tranche:	[•]
5.	(i)	Issue Price:	[•]% of the Aggregate Nominal Amount [plus accrued interest from [•] ( <i>in the case of fungible re-opening issues only, if applicable</i> )]
	(ii)	Net Proceeds:	[•]
6.	(i)	Specified Denominations:	[•]
			[If the specified denomination is expressed to be $€100,000$ or its equivalent and multiples of a lower principal amount (for example $€1,000$ ), insert the additional wording below:
			"[€100,000] and integral multiples of [€1,000] in excess thereof up to and including [€199,000]. No Notes in

[€199,000]."]

definitive form will be issued with a denomination above

	[Notes (including Notes denominated in Sterling) in respect of which the issue proceeds are to be accepted by the Issuer in the United Kingdom or whose issue otherwise constitutes a contravention of Section 19 FSMA and which have a maturity of less than one year must have a minimum redemption value of £100,000 (or its equivalent in other currencies).]
	[Notes to be listed on SEHK are required to be traded with board lot size of at least HK\$500,000 (or equivalent in other countries).]
(ii) Calculation Amount:	[●]
7. (i) Issue Date:	[●]
(ii) Interest Commencement Date:	[Specify/Issue Date/Not applicable]
(iii) Trade Date:	[●]
8. Maturity Date:	[Specify date or (for Floating Rate Notes)
	Interest Payment Date falling in or nearest to the relevant month and year] $^1$
9. Interest Basis:	[[●]% Fixed Rate]
	[Specify reference rate] +/- [•]% Floating Rate]
	[Zero Coupon]
	(further particulars specified below)
10. Redemption/Payment Basis:	Subject to any purchase and cancellation or early redemption, the Notes will be redeemed on the Maturity Date at $[[\bullet]/[100]]\%$ of their nominal amount.
11. Change of Interest or Redemption/Payment Basis:	[Applicable/Not applicable]
12. Put/Call Options:	[Investor Put]
	[Issuer Call]
	[(further particulars specified below)]
13. Listing:	[Singapore Exchange Securities Trading Limited/Specify other/None] (For Notes to be listed on the SEHK, insert the expected effective listing date of the Notes)
14. (i) Status of the Notes:	Senior
(ii) Date of [Board] approval for issuance of Notes] obtained:	[●] [and [●], respectively]
issuance of Notes] obtained.	(N.B. Only relevant where Board (or similar) authorization is required for the particular tranche of Notes)
15. Method of distribution:	[Syndicated/Non-syndicated]

Notes:

<sup>(1)</sup> Note that for Renminbi or Hong Kong dollar denominated Fixed Rate Notes where Interest Payment Dates are subject to modification it will be necessary to use the second option here.

## PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE

16.	5. Fixed Rate Note Provisions		[Applicable/Not applicable]
			(If not applicable, delete the remaining sub-paragraphs of this paragraph)
	(i)	Rate(s) of Interest:	[•]% per annum payable in arrear on each Interest Payment Date
	(ii)	Interest Payment Date(s):	[•] in each year [adjusted in accordance with [specify Business Day Convention and any applicable Business Center(s) for the definition of "Business Day"]/not adjusted] <sup>2</sup>
	(iii)	Fixed Coupon Amount(s): (applicable to Notes in definitive form)	[[•] per Calculation Amount/Not applicable] For Notes where the Interest Payment Dates are subject to modification: The amount of interest payable for any Interest Period is to be calculated in accordance with Condition $6(e)$ ] <sup>3</sup>
	(iv)	Broken Amount(s): (applicable to Notes in definitive form)	[●] per Calculation Amount, payable on the Interest Payment Date falling [in/on] [●]
	(v)	Day Count Fraction:	[30/360/Actual/Actual (ICMA/ISDA)/other]
	(vi)	Determination Date(s):	[•] in each year (Insert regular interest payment dates, ignoring issue date or maturity date in the case of a long or short first or last coupon N.B. This will need to be amended in the case of regular interest payment dates which are not of equal duration N.B. Only relevant where Day Count Fraction is Actual/Actual (ICMA))
	(vii)	Other terms relating to the method of calculating for Fixed Rate Notes:	[The Fiscal Agent will act as the Calculation Agent/None/ <i>Give details</i> ]
17.	7. Floating Rate Note Provisions		[Applicable/Not applicable]
			(If not applicable, delete the remaining sub-paragraphs of this paragraph)
	(i)	Specified Period:	[•]
	(ii)	Specified Interest Payment Dates:	[[●] in each year]
	(iii)	First Interest Payment Date:	[•]
	(iv)	Business Day Convention:	[Floating Rate Convention/Following Business Day Convention/Modified Following Business Day Convention/Preceding Business Day Convention]

Notes:

<sup>(2)</sup> Note that for certain Renminbi or Hong Kong dollar denominated Fixed Rate Notes, the Interest Payment Dates are subject to adjustment in accordance with the Modified Following Business Day Convention.

<sup>(3)</sup> For Renminbi or Hong Kong dollar denominated Fixed Rate Notes where the Interest Payment Dates are subject to modification the following alternative wording is appropriate: "Each Fixed Coupon Amount shall be calculated by multiplying the product of the Rate of Interest and the Calculation Amount by the Day Count Fraction and rounding the resultant figure to the nearest RMB0.01, RMB0.005 for the case of Renminbi-denominated Fixed Rate Notes and to the nearest HK\$0.01, HK\$0.005 for the case of Hong Kong dollar denominated Fixed Rate Notes, being rounded upwards."

	(v)	Additional Business Center(s):	[Not applicable/[•]]
	(vi)	Manner in which the Rate(s) of Interest is/are to be determined:	[Screen Rate Determination/ISDA Determination]
	(vii)	Party responsible for calculating the Rate(s) of Interest and/or Interest Amount(s) (if not the [Fiscal Agent]):	[[•] shall be the Calculation Agent]
	(viii)	Screen Rate Determination:	
		• Reference Rate:	[•]
		• Interest Determination Date(s):	[•]
		• Relevant Screen Page:	[●]
		• Relevant Time:	[●]
		• Relevant Financial Center:	[●]
	(ix)	ISDA Determination:	
		• Floating Rate Option:	[•]
		• Designated Maturity:	[•]
		• Reset Date:	[•]
		• ISDA Definitions:	[2006]
	(x)	Linear Interpolation:	Not applicable/Applicable – the Rate of Interest for the [long/short] [first/last] Interest Period shall be calculated using Linear Interpolation ( <i>specify for each short or long interest period</i> )
	(xi)	Margin(s):	[+/-] [●]% per annum
	(xii)	Minimum Rate of Interest:	[●]% per annum
	(xiii)	Maximum Rate of Interest:	[●]% per annum
	(xiv)	Day Count Fraction:	[•]
18.	Zero	o Coupon Note Provisions	[Applicable/Not applicable]
			(If not applicable, delete the remaining sub-paragraphs of this paragraph)
	(i)	Accrual Yield:	[●]% per annum
	(ii)	Reference Price:	[•]
	(iii)	Day Count Fraction in relation to early Redemption Amounts:	[30/360/Actual/Actual (ICMA/ISDA)/other]

# **PROVISIONS RELATING TO REDEMPTION**

19.	19. Call Option			[Applicable/Not applicable]						
				(If not applicable, delete the remaining sub-paragraphs of this paragraph)						
	(i) Optional Redemption Date(s):		onal Redemption Date(s):	[•]						
	(ii) Optional Redemption Amount(s) of each Note:			[•] per Calculation Amount [/Spens Amount/Make-Whole Amount]						
	(iii)	If re	deemable in part:							
		(a)	Minimum Redemption Amount:	[•] per Calculation Amount						
		(b)	Maximum Redemption Amount	[•] per Calculation Amount						
	(iv)	Noti	ce period:	$[ullet]^4$						
20.	Put	Optio	)n	[Applicable/Not applicable]						
				(If not applicable, delete the remaining sub-paragraphs of this paragraph)						
	(i)	Opti	onal Redemption Date(s):	[•]						
	(ii)	of ea any,	onal Redemption Amount(s) ach Note and method, if of calculation of such unt(s):	[•] per Calculation Amount						
	(iii)	Noti	ce period:	[•]						
21.		l Red Note	lemption Amount of e	[•]/[Par] per Calculation Amount						
22.	2. Early Redemption Amount		demption Amount							
	Early Redemption Amount(s) per Calculation Amount payable on redemption for taxation reasons or on event of default or other early redemption:		on Amount payable on on for taxation reasons or on lefault or other early	[[•]/[Par] per Calculation Amount/Not applicable]						

Notes:

<sup>(4)</sup> Euroclear and Clearstream require a minimum of five business days' notice for exercise of call options

# GENERAL PROVISIONS APPLICABLE TO THE NOTES

dates on which such Talons mature):

23. Form of Notes:	Bearer Notes:				
	[Temporary Global Note exchangeable for a Permanent Global Note which is exchangeable for Definitive Notes on [•] days' notice and in the limited circumstances specified in the Permanent Global Note]				
	[Temporary Global Note exchangeable for Definitive Notes on [•] days' notice]				
	[Permanent Global Note exchangeable for Definitive Notes on [•] days' notice and in the limited circumstances specified in the Permanent Global Note]				
	Registered Notes:				
	[Global Registered Note exchangeable for Individual Note Certificates on [•] days' notice and in the limited circumstances described in the Global Registered Note]				
24. New Global Note:	No				
25. Additional Financial Center(s) or other special provisions relating to payment dates:	[Not applicable/give details. Note that this paragraph relates to the date of payment, and not the end dates of interest periods for the purposes of calculating the amount of interest end dates, to which sub paragraph $15(v)$ relates]				
26. Talons for future Coupons to be attached to Definitive Notes (and	[Yes/No. As the Notes have more than 27 coupon payments, talons may be required if, on exchange into				

payments, talons may be required if, on exchange into definitive form, more than 27 coupon payments are left.]

# **PART B – OTHER INFORMATION**

#### 1. LISTING AND ADMISSION TO TRADING

[Application will be made to/Application has been made to/Approval in-principle has been received from] the Singapore Exchange Securities Trading Limited (the "Singapore Stock Exchange") for the listing and quotation of the Notes on the Singapore Stock Exchange. The Singapore Stock Exchange assumes no responsibility for the correctness of any of the statements made, opinions expressed or reports contained in this Pricing Supplement. Approval-in-principle from, admission to the Official List of, and listing and quotation of the Notes on, the Singapore Stock Exchange are not to be taken as an indication of the merits of the Issuer, the Program or the Notes.]/[Application is expected to be made by the Issuer (or on its behalf) for the Notes to be admitted to trading on *specify other exchange*] with effect from [•].] [Not applicable.]

(Where documenting a fungible issue, need to indicate that original Notes are already admitted to trading.)

# 2. OPERATIONAL INFORMATION

3.

ISIN:				[•]					
Common code:			code:	[●]					
Delivery				Delivery [against/free of] payment					
Names and addresses of additional Paying Agent(s) (if any):				[•]					
	DIST	FRIB	UTION						
	(i)	Met	hod of distribution:	[Syndicated/Non-syndicated]					
	(ii)	If sy	vndicated:	[Not applicable/give names]					
		(a)	Names of Managers:	[•]					
		(b)	Date of subscription agreement:	[•]					
		(c)	Stabilizing Manager(s) (if any):	[Not applicable/[•]]					
	(iii)		on-syndicated, name of ager:	[Not applicable/give name]					
	(iv)	of th	cation of the overall amount ne underwriting commission of the placing commission:	[•]% of the Aggregate Nominal Amount					
	(v)	US	selling restrictions	[Reg. S Compliance Category [1/2]; TEFRA C/TEFRA D/TEFRA not applicable]					
		inve	egories of potential stors to which the Notes offered):						
	(vi)		nibition of sales to EEA or retail investors:	[Applicable/Not applicable]					
	(vii)	Add	itional selling restrictions:	[Not applicable/give details]					

Signed on behalf of KOREA MIDLAND POWER CO., LTD.:

# SUMMARY OF PROVISIONS RELATING TO THE NOTES WHILE IN GLOBAL FORM

## **CLEARING SYSTEM ACCOUNTHOLDERS**

In relation to any Tranche of Notes represented by a Global Note in bearer form, references in the Terms and Conditions of the Notes to "Noteholder" are references to the bearer of the relevant Global Note which, for so long as the Global Note is held by a depositary or a common depositary for Euroclear and/or Clearstream and/or any other relevant clearing system and/or a sub-custodian for the CMU Service, will be that depositary or common depositary or, as the case may be, sub-custodian.

In relation to any Tranche of Notes represented by a Global Registered Note, references in the Terms and Conditions of the Notes to "Noteholder" are references to the person in whose name such Global Registered Note is for the time being registered in the Register which, for so long as the Global Registered Note is held by or on behalf of a depositary or a common depositary for Euroclear and/or Clearstream and/or any other relevant clearing system and/or a sub-custodian for the CMU Service, will be that depositary or common depositary or a nominee for that depositary or common depositary or such sub-custodian.

Each of the persons shown in the records of Euroclear and/or Clearstream and/or any other relevant clearing system as being entitled to an interest in a Global Note or a Global Registered Note (each an "Accountholder") must look solely to Euroclear and/or Clearstream and/or such other relevant clearing system (as the case may be) for such Accountholder's share of each payment made by the Issuer or the Guarantor to the holder of such Global Note or Global Registered Note and in relation to all other rights arising under such Global Note or Global Registered Note. The extent to which, and the manner in which, Accountholders may exercise any rights arising under the Global Note or Global Registered Note will be determined by the respective rules and procedures of Euroclear and Clearstream and any other relevant clearing system from time to time. For so long as the relevant Notes are represented by a Global Note or Global Registered Note, Accountholders shall have no claim directly against the Issuer or the Guarantor in respect of payments due under the Notes and such obligations of the Issuer and the Guarantor will be discharged by payment to the holder of such Global Note or Global Note or Global Registered Note.

If a Global Note or a Global Registered Note is lodged with a sub-custodian for or registered with the CMU Service, the person(s) for whose account(s) interests in such Global Note or Global Registered Note are credited as being held in the CMU Service in accordance with the CMU Rules as notified by the CMU Service to the CMU Lodging and Paying Agent in a relevant CMU Instrument Position Report or any other relevant notification by the CMU Service (which notification, in either case, shall be conclusive evidence of the records of the CMU Service save in the case of manifest error) shall be the only person(s) entitled or in the case of Registered Notes, directed or deemed by the CMU Service as entitled to receive payments in respect of the Notes represented by such Global Note or Global Registered Note and the Issuer and the Guarantor will be discharged by payment to, or to the order of, such person(s) for whose account(s) interests in such Global Note or Global Note Certificate are credited as being held in the CMU Service in respect of each amount so paid. Each of the persons shown in the records of the CMU Service, as the beneficial holder of a particular nominal amount of the Notes represented by such Global Note or Global Registered Note or Global Registered Note must look solely to the CMU Lodging and Paying Agent for his share of each payment so made by the Issuer in respect of such Global Note or Global Note or Global Registered Note.

# CONDITIONS APPLICABLE TO GLOBAL NOTES

Each Global Note and Global Registered Note will contain provisions which modify the Terms and Conditions of the Notes as they apply to the Global Note or Global Registered Note. The following is a summary of certain of those provisions:

*Payments:* All payments in respect of the Global Note or Global Registered Note which, according to the Terms and Conditions of the Notes, require presentation and/or surrender of a Note, Note Certificate or Coupon will be made against presentation and (in the case of payment of principal in full with all interest accrued thereon) surrender of the Global Note or Global Registered Note to or to the order of any Paying Agent and will be effective to satisfy and discharge the corresponding liabilities of the Issuer in respect of the Notes. On each occasion on which a payment of principal or interest is made in respect of the Global Note, the Issuer shall procure that the payment is noted in a schedule thereto.

*Payment Business Day*: In the case of a Global Note, or a Global Registered Note, shall be, if the currency of payment is euro, any day which is a TARGET Settlement Day and a day on which dealings in foreign currencies may be carried on in each (if any) Additional Financial Center; or, if the currency of payment is not euro, any day which is a day on which dealings in foreign currencies may be carried on in the Principal Financial Center of the currency of payment and in each (if any) Additional Financial Center.

*Payment Record Date*: Each payment in respect of a Global Registered Note will be made to the person shown as the Holder in the Register at the close of business (in the relevant clearing system) on the Clearing System Business Day before the due date for such payment (the "Record Date") where "Clearing System Business Day" means a day on which each clearing system for which the Global Registered Note is being held is open for business.

*Exercise of put option:* In order to exercise the option contained in Condition 9(e) (Redemption at the option of Noteholders) the bearer of the Permanent Global Note or the holder of a Global Registered Note must, within the period specified in the Conditions for the deposit of the relevant Note and put notice, give written notice of such exercise to the Fiscal Agent or, as the case may be, the CMU Lodging and Paying Agent specifying the principal amount of Notes in respect of which such option is being exercised. Any such notice will be irrevocable and may not be withdrawn.

*Partial exercise of call option:* In connection with an exercise of the option contained in Condition 9(c) (Redemption at the option of the Issuer) in relation to some only of the Notes, the Permanent Global Note or Global Registered Note may be redeemed in part in the principal amount specified by the Issuer in accordance with the Conditions and the Notes to be redeemed will not be selected as provided in the Conditions but in accordance with the rules and procedures of Euroclear and Clearstream or the CMU Service (to be reflected in the records of Euroclear and Clearstream or the CMU Service as either a pool factor or a reduction in principal amount, at their discretion).

*Notices:* Notwithstanding Condition 19 (Notices), while all the Notes are represented by a Permanent Global Note (or by a Permanent Global Note and/or a Temporary Global Note) or a Global Registered Note and the Permanent Global Note is (or the Permanent Global Note and/or the Temporary Global Note are), or the Global Registered Note is, (i) deposited with a depositary or a common depositary for Euroclear and/or Clearstream and/or any other relevant clearing system or a common safekeeper, notices to Noteholders may be given by delivery of the relevant notice to Euroclear and/or Clearstream and/or any other relevant notices shall be deemed to have been given to the Noteholders in accordance with Condition 19 (Notices) on the date of delivery to Euroclear and/or Clearstream and/or any other relevant clearing system or (ii) deposited with the CMU Service, notices to the holders of Notes of the relevant Series may be given by delivery of the relevant of the relevant notice to the persons shown in a CMU Instrument Position Report issued by the CMU Service on the business day preceding the date of dispatch of such notice as holding interests in the relevant Global Note or Global Note Certificate.

# FORM OF THE NOTES

# **BEARER NOTES**

Each Tranche of Notes in bearer form ("Bearer Notes") will initially be in the form of either a temporary global note in bearer form (the "Temporary Global Note"), without interest coupons, or a permanent global note in bearer form (the "Permanent Global Note"), without interest coupons, in each case as specified in the relevant Pricing Supplement. Each Temporary Global Note or, as the case may be, Permanent Global Note (each a "Global Note") will be deposited on or around the issue date of the relevant Tranche of the Notes with a depositary or a common depositary for Euroclear Bank SA/NV as operator of the Euroclear System ("Euroclear") and/or Clearstream Banking, S.A. ("Clearstream") and/or any other relevant clearing system.

In the case of each Tranche of Bearer Notes, the relevant Pricing Supplement will also specify whether United States Treasury Regulation \$1.163-5(c)(2)(i)(C) (the "TEFRA C Rules") or United States Treasury Regulation \$1.163-5(c)(2)(i)(D) (the "TEFRA D Rules") are applicable in relation to the Notes or, if the Notes do not have a maturity of more than 365 days, that neither the TEFRA C Rules nor the TEFRA D Rules are applicable.

# Temporary Global Note exchangeable for Permanent Global Note

If the relevant Pricing Supplement specifies the form of Notes as being "Temporary Global Note exchangeable for a Permanent Global Note," then the Notes will initially be in the form of a Temporary Global Note which will be exchangeable, in whole or in part, for interests in a Permanent Global Note, without interest coupons, not earlier than 40 days after the issue date of the relevant Tranche of the Notes upon certification as to non-U.S. beneficial ownership. No payments will be made under the Temporary Global Note unless exchange for interests in the Permanent Global Note is improperly withheld or refused. In addition, interest payments in respect of the Notes cannot be collected without such certification of non-U.S. beneficial ownership.

Whenever any interest in the Temporary Global Note is to be exchanged for an interest in a Permanent Global Note, the Issuer shall procure (in the case of first exchange) the delivery of a Permanent Global Note to the bearer of the Temporary Global Note or (in the case of any subsequent exchange) an increase in the principal amount of the Permanent Global Note in accordance with its terms against:

- (i) presentation and (in the case of final exchange) presentation and surrender of the Temporary Global Note to or to the order of the Fiscal Agent; and
- (ii) receipt by the Fiscal Agent of a certificate or certificates of non-U.S. beneficial ownership.

The principal amount of Notes represented by the Permanent Global Note shall be equal to the aggregate of the principal amounts specified in the certificates of non-U.S. beneficial ownership *provided*, *however*, that in no circumstances shall the principal amount of Notes represented by the Permanent Global Note exceed the initial principal amount of Notes represented by the Temporary Global Note.

If:

- (a) the Permanent Global Note has not been delivered or the principal amount thereof increased by 5.00 p.m. (London time) on the seventh day after the bearer of the Temporary Global Note has requested exchange of an interest in the Temporary Global Note for an interest in a Permanent Global Note; or
- (b) the Temporary Global Note (or any part thereof) has become due and payable in accordance with the Terms and Conditions of the Notes or the date for final redemption of the Temporary Global Note has occurred and, in either case, payment in full of the amount of principal falling due with all accrued interest thereon has not been made to the bearer of the Temporary Global Note in accordance with the terms of the Temporary Global Note on the due date for payment,

then the Temporary Global Note (including the obligation to deliver a Permanent Global Note) will become void at 5.00 p.m. (London time) on such seventh day (in the case of (a) above) or at 5.00 p.m. (London time) on such due date (in the case of (b) above) and the bearer of the Temporary Global Note will have no further rights thereunder (but without prejudice to the rights which the bearer of the Temporary Global Note or others may have under the Deed of Covenant).

The Permanent Global Note will become exchangeable, in whole but not in part only and at the request of the bearer of the Permanent Global Note, for Bearer Notes in definitive form ("Definitive Notes"):

- (a) if the Pricing Supplement specifies "in the limited circumstances described in the Permanent Global Note," then if either of the following events occurs:
  - Euroclear or Clearstream or any other relevant clearing system is closed for business for a continuous period of 14 days (other than by reason of legal holidays) or announces an intention permanently to cease business; or
  - (ii) any of the circumstances described in Condition 13 (Events of Default) occurs.

Whenever the Permanent Global Note is to be exchanged for Definitive Notes, the Issuer shall procure the prompt delivery (free of charge to the bearer) of such Definitive Notes, duly authenticated and with Coupons and Talons attached (if so specified in the Pricing Supplement), in an aggregate principal amount equal to the principal amount of Notes represented by the Permanent Global Note to the bearer of the Permanent Global Note against the surrender of the Permanent Global Note to or to the order of the Fiscal Agent within 30 days of the bearer requesting such exchange.

If:

- (a) Definitive Notes have not been duly delivered by 5.00 p.m. (London time) on the thirtieth day after the bearer has requested exchange of the Permanent Global Note for Definitive Notes; or
- (b) the Permanent Global Note was originally issued in exchange for part only of a Temporary Global Note representing the Notes and such Temporary Global Note becomes void in accordance with its terms; or
- (c) the Permanent Global Note (or any part thereof) has become due and payable in accordance with the Terms and Conditions of the Notes or the date for final redemption of the Permanent Global Note has occurred and, in either case, payment in full of the amount of principal falling due with all accrued interest thereon has not been made to the bearer in accordance with the terms of the Permanent Global Note on the due date for payment,

then the Permanent Global Note (including the obligation to deliver Definitive Notes) will become void at 5.00 p.m. (London time) on such thirtieth day (in the case of (a) above) or at 5.00 p.m. (London time) on the date on which such Temporary Global Note becomes void (in the case of (b) above) or at 5.00 p.m. (London time) on such due date ((c) above) and the bearer of the Permanent Global Note will have no further rights thereunder (but without prejudice to the rights which the bearer of the Permanent Global Note or others may have under the Deed of Covenant).

For so long as the Notes are listed on the Singapore Stock Exchange and the rules of the Singapore Stock Exchange so require, in the event that the Permanent Global Note is exchanged for Definitive Notes, 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 the Permanent Global Note is exchanged for Definitive Notes, an announcement of such exchange will be made by or on behalf of the Issuer through the Singapore Stock Exchange and such announcement will include all material information with respect to the delivery of the Definitive Notes, including details of the paying agent in Singapore.

# Temporary Global Note exchangeable for Definitive Notes

If the relevant Pricing Supplement specifies the form of Notes as being "Temporary Global Note exchangeable for Definitive Notes" and also specifies that the TEFRA C Rules are applicable or that neither the TEFRA C Rules or the TEFRA D Rules are applicable, then the Notes will initially be in the form of a Temporary Global Note which will be exchangeable, in whole but not in part, for Definitive Notes not earlier than 40 days after the issue date of the relevant Tranche of the Notes.

If the relevant Pricing Supplement specifies the form of Notes as being "Temporary Global Note exchangeable for Definitive Notes" and also specifies that the TEFRA D Rules are applicable, then the Notes will initially be in the form of a Temporary Global Note which will be exchangeable, in whole or in part, for Definitive Notes not earlier than 40 days after the issue date of the relevant Tranche of the Notes upon certification as to non-U.S. beneficial ownership. Interest payments in respect of the Notes cannot be collected without such certification of non-U.S. beneficial ownership.

Whenever the Temporary Global Note is to be exchanged for Definitive Notes, the Issuer shall procure the prompt delivery (free of charge to the bearer) of such Definitive Notes, duly authenticated and with Coupons and Talons attached (if so specified in the relevant Pricing Supplement), in an aggregate principal amount equal to the principal amount of the Temporary Global Note to the bearer of the Temporary Global Note against the surrender of the Temporary Global Note to or to the order of the Fiscal Agent within 30 days of the bearer requesting such exchange.

If:

- (a) Definitive Notes have not been duly delivered by 5.00 p.m. (London time) on the thirtieth day after the bearer has requested exchange of the Temporary Global Note for Definitive Notes; or
- (b) the Temporary Global Note (or any part thereof) has become due and payable in accordance with the Terms and Conditions of the Notes or the date for final redemption of the Temporary Global Note has occurred and, in either case, payment in full of the amount of principal falling due with all accrued interest thereon has not been made to the bearer in accordance with the terms of the Temporary Global Note on the due date for payment,

then the Temporary Global Note (including the obligation to deliver Definitive Notes) will become void at 5.00 p.m. (London time) on such thirtieth day (in the case of (a) above) or at 5.00 p.m. (London time) on such due date (in the case of (b) above) and the bearer of the Temporary Global Note will have no further rights thereunder (but without prejudice to the rights which the bearer of the Temporary Global Note or others may have under the Deed of Covenant).

For so long as the Notes are listed on the Singapore Stock Exchange and the rules of the Singapore Stock Exchange so require, in the event that the Temporary Global Note is exchanged for Definitive Notes, 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 the Temporary Global Note is exchanged for Definitive Notes, an announcement of such exchange will be made by or on behalf of the Issuer through the Singapore Stock Exchange and such announcement will include all material information with respect to the delivery of the Definitive Notes, including details of the paying agent in Singapore.

#### Permanent Global Note exchangeable for Definitive Notes

If the relevant Pricing Supplement specifies the form of Notes as being "Permanent Global Note exchangeable for Definitive Notes," then the Notes will initially be in the form of a Permanent Global Note which will be exchangeable in whole, but not in part, for Definitive Notes:

- (a) on the expiry of such period of notice as may be specified in the relevant Final Terms; or
- (b) if the relevant Pricing Supplement specifies "in the limited circumstances described in the Permanent Global Note," then if either of the following events occurs:
  - (i) Euroclear or Clearstream or any other relevant clearing system is closed for business for a continuous period of 14 days (other than by reason of legal holidays) or announces an intention permanently to cease business; or
  - (ii) any of the circumstances described in Condition 13 (Events of Default) occurs.

Whenever the Permanent Global Note is to be exchanged for Definitive Notes, the Issuer shall procure the prompt delivery (free of charge to the bearer) of such Definitive Notes, duly authenticated and with Coupons and Talons attached (if so specified in the Pricing Supplement), in an aggregate principal amount equal to the principal amount of Notes represented by the Permanent Global Note to the bearer of the Permanent Global Note against the surrender of the Permanent Global Note to or to the order of the Fiscal Agent within 30 days of the bearer requesting such exchange.

If:

- (a) Definitive Notes have not been duly delivered by 5.00 p.m. (London time) on the thirtieth day after the bearer has requested exchange of the Permanent Global Note for Definitive Notes; or
- (b) the Permanent Global Note (or any part thereof) has become due and payable in accordance with the Terms and Conditions of the Notes or the date for final redemption of the Permanent Global Note has occurred and, in either case, payment in full of the amount of principal falling due with all accrued interest thereon has not been made to the bearer in accordance with the terms of the Permanent Global Note on the due date for payment,

then the Permanent Global Note (including the obligation to deliver Definitive Notes) will become void at 5.00 p.m. (London time) on such thirtieth day (in the case of (a) above) or at 5.00 p.m. (London time) on such due date ((b) above) and the bearer of the Permanent Global Note will have no further rights thereunder (but without prejudice to the rights which the bearer of the Permanent Global Note or others may have under the Deed of Covenant).

For so long as the Notes are listed on the Singapore Stock Exchange and the rules of the Singapore Stock Exchange so require, in the event that the Permanent Global Note is exchanged for Definitive Notes, 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 the Permanent Global Note is exchanged for Definitive Notes, an announcement of such exchange will be made by or on behalf of the Issuer through the Singapore Stock Exchange and such announcement will include all material information with respect to the delivery of the Definitive Notes, including details of the paying agent in Singapore.

# **Rights under Deed of Covenant**

Under the Deed of Covenant, persons shown in the records of Euroclear and/or Clearstream and/or any other relevant clearing system as being entitled to an interest in a Temporary Global Note or a Permanent Global Note which becomes void will acquire directly against the Issuer all those rights to which they would have been entitled if, immediately before the Temporary Global Note or Permanent Global Note became void, they had been the holders of Definitive Notes in an aggregate principal amount equal to the principal amount of Notes they were shown as holding in the records of Euroclear and/or Clearstream and/or any other relevant clearing system.

#### Terms and Conditions applicable to the Notes

The terms and conditions applicable to any Definitive Note will be endorsed on that Note and will consist of the terms and conditions set out under "Terms and Conditions of the Notes" below and the provisions of the relevant Pricing Supplement which complete those terms and conditions.

The terms and conditions applicable to any Note in global form will differ from those terms and conditions which would apply to the Note were it in definitive form to the extent described under "Summary of Provisions Relating to the Notes while in Global Form" below.

# Legend concerning United States persons

In the case of any Tranche of Bearer Notes having a maturity of more than 365 days, the Notes in global form, the Notes in definitive form and any Coupons and Talons appertaining thereto will bear a legend to the following effect:

"Any United States person who holds this obligation will be subject to limitations under the United States income tax laws, including the limitations provided in Sections 165(j) and 1287(a) of the Internal Revenue Code."

# Temporary Global Note or Permanent Global Note exchangeable for Definitive Notes

For the avoidance of doubt, where a Temporary Global Note or a Permanent Global Note is exchangeable for Definitive Notes on the expiry of such period of notice as may be specified in the relevant Final Terms, the exchange upon notice should not be expressed to be applicable if the Specified Denomination of the Notes in the relevant Pricing Supplement includes language substantially to the following effect: "€100,000 and integral multiples of €1,000 in excess thereof up to and including €199,000." Furthermore, such Specified Denomination construction is not permitted in relation to any issuance of Notes which is to be represented on issue by a Permanent Global Note exchangeable for Definitive Notes.

# **REGISTERED NOTES**

Each Tranche of Registered Notes will be in the form of either individual Note Certificates in registered form ("Individual Note Certificates") or a global Note in registered form (a "Global Registered Note"), in each case as specified in the relevant Pricing Supplement.

Each Global Registered Note will be deposited on or around the relevant issue date with a depositary or a common depositary for Euroclear and/or Clearstream and/or any other relevant clearing system and registered in the name of a nominee for such depositary and will be exchangeable for Individual Note Certificates in accordance with its terms.

If the relevant Pricing Supplement specifies the form of Notes as being "Individual Note Certificates," then the Notes will at all times be in the form of Individual Note Certificates issued to each Noteholder in respect of their respective holdings.

If the relevant Pricing Supplement specifies the form of Notes as being "Global Registered Note exchangeable for Individual Note Certificates," then the Notes will initially be in the form of a Global Registered Note which will be exchangeable in whole, but not in part, for Individual Note Certificates:

- (a) on the expiry of such period of notice as may be specified in the relevant Pricing Supplement; or
- (b) if the relevant Pricing Supplement specifies "in the limited circumstances described in the Global Registered Note," then if either of the following events occurs:
  - Euroclear or Clearstream or any other relevant clearing system is closed for business for a continuous period of 14 days (other than by reason of legal holidays) or announces an intention permanently to cease business or
  - (ii) any of the circumstances described in Condition 13 (Events of Default) occurs.

Whenever the Global Registered Note is to be exchanged for Individual Note Certificates, the Issuer shall procure that Individual Note Certificates will be issued in an aggregate principal amount equal to the principal amount of the Global Registered Note within five business days of the delivery, by or on behalf of the registered holder of the Global Registered Note to the Registrar of such information as is required to complete and deliver such Individual Note Certificates (including, without limitation, the names and addresses of the persons in whose names the Individual Note Certificates are to be registered and the principal amount of each such person's holding) against the surrender of the Global Registered Note at the specified office of the Registrar.

Such exchange will be effected in accordance with the provisions of the Agency Agreement and the regulations concerning the transfer and registration of Notes scheduled thereto and, in particular, shall be effected without charge to any holder, but against such indemnity as the Registrar may require in respect of any tax or other duty of whatsoever nature which may be levied or imposed in connection with such exchange.

- (a) Individual Note Certificates have not been delivered by 5.00 p.m. (London time) on the thirtieth day after they are due to be issued and delivered in accordance with the terms of the Global Registered Note; or
- (b) any of the Notes represented by a Global Registered Note (or any part of it) has become due and payable in accordance with the Terms and Conditions of the Notes or the date for final redemption of the Notes has occurred and, in either case, payment in full of the amount of principal falling due with all accrued interest thereon has not been made to the holder of the Global Registered Note in accordance with the terms of the Global Registered Note on the due date for payment,

then the Global Registered Note (including the obligation to deliver Individual Note Certificates) will become void at 5.00 p.m. (London time) on such thirtieth day (in the case of (a) above) or at 5.00 p.m. (London time) on such due date (in the case of (b) above) and the holder of the Global Registered Note will have no further rights thereunder (but without prejudice to the rights which the holder of the Global Registered Note or others may have under the Deed of Covenant. Under the Deed of Covenant, persons shown in the records of Euroclear and/or Clearstream and/or any other relevant clearing system as being entitled to an interest in a Global Registered Note will acquire directly against the Issuer all those rights to which they would have been entitled if, immediately before the Global Registered Note became void, they had been the holders of Individual Note Certificates in an aggregate principal amount equal to the principal amount of Notes they were shown as holding in the records of Euroclear and/or Clearstream and/or any other relevant clearing system.

For so long as the Notes are listed on the Singapore Stock Exchange and the rules of the Singapore Stock Exchange so require, in the event that the Global Registered Note 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 the Global Registered Note is exchange d for Individual Note Certificates, an announcement of such exchange will be made by or on behalf of the Issuer through the Singapore Stock Exchange 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.

# Terms and Conditions applicable to the Notes

The terms and conditions applicable to any Individual Note Certificate will be endorsed on that Individual Note Certificate and will consist of the terms and conditions set out under "Terms and Conditions of the Notes" below and the provisions of the relevant Pricing Supplement which complete those terms and conditions.

The terms and conditions applicable to any Global Registered Note will differ from those terms and conditions which would apply to the Note were it in definitive form to the extent described under "Summary of Provisions Relating to the Notes while in Global Form" below.

If:

# KOREAN TAXATION

The information provided below does not purport to be a complete summary of Korean tax law and practice currently applicable. This summary is based on laws, regulations, rulings and decision in effect as of the date of this Offering Circular. These laws, regulations, rulings and/or decisions may change; any such change could apply retroactively and could affect the continued validity of this summary. In addition, this summary does not describe all of the tax considerations that may be relevant to you or your situation, particularly if you are subject to special tax rules. Prospective investors who are in any doubt as to their tax position should consult with their own professional advisors.

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

#### TAX ON INTEREST

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

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

The tax is withheld by the payer or us.

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

#### TAX ON CAPITAL GAINS

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

If the exclusion or exemption from Korean taxation referred to above were to cease to be in effect, in the absence of an applicable treaty reducing or eliminating tax on capital gains, the applicable rate of tax would be the lower of 11% (including local income tax) of the gross realization proceeds and (subject to the production of satisfactory evidence of the acquisition cost and certain direct transaction costs of the relevant Note) 22% (including local income tax) of the realized gain (i.e., the excess of the gross realization proceeds over the acquisition cost and certain direct transaction costs) made. If such evidence shows that no gain (or a loss) was made on the sale, no Korean tax is payable. With respect to computing the above-mentioned 22% withholding taxes (including local income tax) on the realized gain, please note that there is no provision under relevant Korean law for offsetting gains and losses or otherwise aggregating transactions for the purpose of computing the net gain attributable to sales of Notes issued by Korean companies. The purchaser or any other designated withholding agent of Notes is obliged under Korean law to withhold the applicable amount of Korean tax and make payment thereof to the relevant Korean tax authority. Unless the seller can claim the benefit of an exemption from tax under an applicable tax treaty or on the failure of the seller to produce satisfactory evidence of his acquisition cost and certain direct transaction costs in relation to the instruments being sold, the purchaser or such withholding agent must withhold an amount equal to 11% (including local income tax) of the gross realization proceeds. Any amounts withheld by the purchaser or withholding agent must be paid to the competent Korean tax office. The purchaser or withholding agent must pay any withholding tax no later than the tenth day of the month following the month in which the payment for the purchase of the relevant instruments occurred. Failure to transmit the withheld tax to the Korean tax authorities in time subjects the purchaser or the withholding agent to penalties under Korean tax laws. The Korean tax authorities may attempt to collect such tax from a Non- Resident who is liable for payment of any Korean tax on gains, as a purchaser or withholding agent who is obliged to withhold such tax, through proceedings against payments due to the Non-Resident from its Korean investments and the assets or revenues of any of the Non-Resident's branch or representative offices in Korea.

# INHERITANCE TAX AND GIFT TAX

Korean inheritance tax is imposed upon (a) all assets (wherever located) of the deceased if at the time of his death he was domiciled in Korea or had resided in Korea continuously for at least 183 days immediately prior to his death and (b) all property located in Korea which passes on death (irrespective of the domicile of the deceased). Gift tax is imposed in similar circumstances to the above. The taxes are imposed if the value of the relevant property is above a certain limit and the rate varies from 10% to 50% according to the value of the property and the identity of the persons involved. At present, Korea has not entered into any tax treaties regarding its inheritance or gift taxes.

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

# STAMP DUTY AND SECURITIES TRANSACTION TAX

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

# TAX TREATIES

At the date of this Offering Circular, Korea has tax treaties with, *inter alia*, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, China, Czech Republic, Denmark, Egypt, Finland, France, Germany, India, Indonesia, Ireland, Italy, Japan, Luxembourg, Malaysia, Mexico, Mongolia, the Netherlands, New Zealand, Norway, Pakistan, Philippines, Poland, Republic of Fiji, Romania, Singapore, Spain, Sri Lanka, Sweden, Switzerland, Thailand, Tunisia, Turkey, the United Kingdom, the United States of America and Vietnam under which the rate of withholding tax on interest is reduced, generally to between 5 and 16.5% (including local income tax), and the tax on capital gains is often eliminated.

Each Holder should inquire whether he is entitled to the benefit of a tax treaty with respect to any transaction involving the Notes. It is the responsibility of the party claiming the benefits of a tax treaty in respect of interest payments to file with the payer or us a certificate as to his country of tax residence. In the absence of sufficient proof, the payer or we, as the case may be, must withhold taxes in accordance with the above discussion.

Further, in order for a non-resident to obtain the benefit of a tax exemption under an applicable tax treaty, Korean tax law requires such non-resident (or its agents) to submit to the payer of such Korean source income an application for tax exemption under a tax treaty along with a certificate of tax residency of such non-resident issued by a competent authority of the non-resident's country of residence, subject to certain exceptions. The Korean tax law also requires an overseas investment vehicle to receive the application for tax exemption from the beneficial owners together with a certificate of tax residency of the beneficial owner and forward a Report of Overseas Investment Vehicle to the payer of such Korean source income, together with a Schedule of Beneficial Owners and the obtained application for an exemption from the beneficial owner. The payer of such Korean source income, in turn, is required to submit such exemption application to the relevant district tax office in Korea by the ninth day of the month following the date of the first payment of such income. However, this requirement does not apply to tax exemptions under Korean tax law such as the STTCL. Furthermore, in order to obtain a reduced rate of withholding tax on

interest, a Non-Resident as a beneficial owner of the interest, must submit to the payer of the interest, prior to the payment date, the Application for Entitlement to Reduced Tax Rate. If interest is paid to an overseas investment vehicle, the overseas investment vehicle must submit a Report of Overseas Investment Vehicle and a Schedule of Beneficial Owners, with certain exceptions.

# WITHHOLDING AND GROSS UP

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

# **CLEARANCE AND SETTLEMENT**

The information set out below is subject to any change in or reinterpretation of the rules, regulations and procedures of Euroclear or Clearstream currently in effect. The information in this section concerning the Clearing Systems has been obtained from sources that the Issuer believes to be reliable, but none of the Issuer, any Arranger or Dealer, the Trustee or any Agent takes any responsibility for the accuracy thereof. Investors wishing to use the facilities of any of the Clearing Systems are advised to confirm the continued applicability of the rules, regulations and procedures of the relevant Clearing System. None of the Issuer or any other party to the Agency Agreement will have any responsibility or liability for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in the Notes held through the facilities of any Clearing System or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

# THE CLEARING SYSTEMS

#### **Euroclear and Clearstream**

Euroclear and Clearstream each holds securities for participating organizations and facilitates the clearance and settlement of securities transactions by electronic book-entry transfer between their respective accountholders. Euroclear and Clearstream provide various services including safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Euroclear and Clearstream also deal with domestic securities markets in several countries through established depository and custodial relationships. Euroclear and Clearstream have established an electronic bridge between their two systems across which their respective participants may settle trades with each other. Euroclear and Clearstream participants are world-wide financial institutions, including underwriters, securities brokers and dealers, banks, trust companies and clearing corporations.

Indirect access to Euroclear and Clearstream is available to other institutions that clear through or maintain a custodial relationship with an account holder of either system. Distributions of principal with respect to book-entry interests in the Notes held through Euroclear or Clearstream will be credited, to the extent received by any Paying Agent, to the cash accounts of Euroclear or Clearstream participants in accordance with the relevant system's rules and procedures.

# SUBSCRIPTION AND SALE

The Dealers have, in an amended and restated program agreement dated January 11, 2019, as supplemented and amended from time to time (the "Program Agreement"), agreed with the Issuer on a basis upon which they or any of them may from time to time agree to purchase or procure purchasers for Notes. Any such agreement will extend to those matters stated under "Form of the Notes" and "Terms and Conditions of the Notes." In the Program Agreement, the Issuer has agreed to reimburse the Dealers for certain of their expenses in connection with the establishment of the Program and the issue of Notes under the Program and to indemnify the Dealers against certain liabilities incurred by them in connection therewith.

In order to facilitate the offering of any Tranche of the Notes, certain persons participating in the offering of the Tranche may to the extent permitted by applicable laws and regulations engage in transactions that stabilize, maintain or otherwise affect the market price of the relevant Notes during and after the offering of the Tranche. Specifically such persons may over-allot or create a short position in the Notes for their own account by selling more Notes than have been sold to them by the Issuer.

Such persons may also elect to cover any such short position by purchasing Notes in the open market. In addition, such persons may stabilize or maintain the price of the Notes by bidding for or purchasing Notes in the open market and may impose penalty bids, under which selling concessions allowed to syndicate members or other broker-dealers participating in the offering of the Notes are reclaimed if Notes previously distributed in the offering are repurchased in connection with stabilization transactions or otherwise. The effect of these transactions may be to stabilize or maintain the market price of the Notes at a level above that which might otherwise prevail in the open market. The imposition of a penalty bid may also affect the price of the Notes to the extent that it discourages resales thereof. No representation is made as to the magnitude or effect of any such stabilizing or other transactions. Such transactions, if commenced, may be discontinued at any time. Stabilization activities are subject to certain prescribed time limits in certain jurisdictions.

# **CERTAIN RELATIONSHIPS**

The Dealers and certain affiliates of the Dealers may have performed banking and advisory services (which may include securities trading, commercial and investment banking, financial advice, investment management, principal investment, hedging, financing and brokerage activities) for the Issuer from time to time for which they have received customary fees and expenses. The Dealers and certain of their affiliates may, from time to time, engage in transactions with and perform services for the Issuer in the ordinary course of their business. In the ordinary course of their various business activities, the Dealers and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investments and securities may involve securities and instruments of the Issuer.

The Dealers or certain of their respective affiliates may purchase the Notes and be allocated Notes for asset management and/or proprietary purposes and not with a view to distribution. The Dealers and/or their affiliates may purchase 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 or its 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).

In addition, in the ordinary course of their business activities, the Dealers and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of the Issuer or its affiliates. The Dealers and their respective affiliates may also make investment recommendations and/or publish or express independent research views with respect to such securities or financial instruments and may hold, or recommend to clients that they acquire long and/or short positions in such securities and instruments. If a jurisdiction requires that the offering be made by a licensed broker or dealer and the Dealer or any affiliate of the Dealer is a licensed broker or dealer in that jurisdiction, the offering shall be deemed to be made by that Dealer or its affiliate on behalf of the Issuer in such jurisdiction.

## SELLING RESTRICTIONS

#### **United States of America**

The Notes have not been, and will not be, registered under the Securities Act or with any securities regulatory authority of any state or other jurisdiction of the United States, and Bearer Notes are subject to U.S. tax law requirements. The Notes may not be offered, sold or (in the case of Bearer Notes) delivered within the United States except in certain transactions exempt from the registration requirements of the Securities Act. Each of the Dealers has agreed that, except as permitted by the Program Agreement, it will not offer, sell or, in the case of Bearer Notes, deliver the Notes within the United States.

Notes in bearer form (other than Notes with a maturity of 365 days or less including unilateral rollovers and extensions) will be issued in accordance with the provisions of United States Treasury Regulations Section 1.163-5(c)(2)(i)(D) (the "D Rules"), or in accordance with the provisions of United States Treasury Regulations Section 1.163-5(c)(2)(i)(C) (the "C Rules"), as specified in the applicable Pricing Supplement.

In respect of Notes issued in accordance with the D Rules, each Dealer has represented and agreed that:

- (i) except to the extent permitted under the D Rules, (x) it has not offered or sold, and during the restricted period will not offer or sell, Notes to a person who is within the United States or its possessions or to a United States person, and (y) such Dealer has not delivered and will not deliver within the United States or its possessions definitive Notes in bearer form that are sold during the restricted period;
- (ii) it has and throughout the restricted period will have in effect procedures reasonably designed to ensure that its employees or agents who are directly engaged in selling Notes in bearer form are aware that such Notes may not be offered or sold during the restricted period to a person who is within the United States or its possessions or to a United States person, except as permitted by the D Rules;
- (iii) if such Dealer is a United States person, it has represented that it is acquiring the Notes in bearer form for purposes of resale in connection with their original issuance and if such Dealer retains Notes for its own account, it will only do so in accordance with the requirements of United States Treasury Regulations Section 1.163-5(c)(2)(i)(D)(6);
- (iv) with respect to each affiliate that acquires from such Dealer Notes in bearer form for the purposes of offering or selling such Notes during the restricted period, such Dealer either (x) repeats and confirms the representations and agreements contained in sub-clauses (i), (ii) and (iii) on such affiliate's behalf or (y) agrees that it will obtain from such affiliate for the benefit of the Issuer the representations and agreements contained in sub-causes (i), (ii) and (iii); and
- (v) such Dealer will obtain for the benefit of the Issuer the representations and agreements contained in sub-clauses (i), (ii), (iii) and (iv) from any person other than its affiliate with whom it enters into a written contract, as defined in United States Treasury Regulations Section 1.163-5(c)(2)(i)(D)(4), for the offer and sale during the restricted period of Notes.

Terms used in the above paragraph have the meanings given to them by the Code and regulations thereunder, including the D Rules.

In respect of Notes issued in accordance with the C Rules, Notes in bearer form must be issued and delivered outside the United States and its possessions in connection with their original issuance. In relation to such tranche, each Dealer has represented and agreed that it has not offered, sold or delivered and will not offer, sell or deliver, directly or indirectly, Notes in bearer form within the United States or its possessions in connection with their original issuance. Further, each Dealer has represented and agreed in connection with the original issuance of Notes, that it has not communicated, and will not communicate, directly or indirectly, with a prospective purchaser if either of them is within the United States or its possessions and will not otherwise involve its U.S. office in the offer or sale of Notes in bearer form. Terms used in this paragraph have the meaning given to them by the Code and regulations thereunder, including the C Rules.

Notes issued pursuant to the D Rules and any receipts or coupons appertaining thereto will bear the following legend: "Any United States person who holds this obligation will be subject to limitations under the United States income tax laws, including the limitation provided in Sections 165(j) and 1287(a) of the Internal Revenue Code."

Until 40 days after the commencement of the offering of any Series of Notes, an offer or sale of such Notes within the United States by any dealer that is not participating in the offering may violate the registration requirements of the Securities Act.

Each issuance of index-linked, commodity-linked or currency-linked Notes may be subject to such additional U.S. selling restrictions as the Issuer and the relevant Dealer may agree as a term of the issuance and purchase of such Notes, which additional selling restrictions shall be set out in the applicable Pricing Supplement.

# European Economic Area

The final terms (or the Pricing Supplement, as the case may be) in respect of any Series of Notes may include information entitled "MiFID II Product Governance," which will outline the target market assessment in respect of the Notes of any such Series and which channels for distribution of the Notes are appropriate. If such information is included, any person subsequently offering, selling or recommending the Notes (a "**distributor**") should take into consideration the target market assessment; however, a distributor subject to MiFID II will be responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the target market assessment) and determining the appropriate distribution channels.

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

Unless the final terms (or Pricing Supplement, as the case may be) in respect of any Series of Notes specifies "Prohibition of Sales to EEA Retail Investors" as "Not Applicable," each Dealer has represented and agreed, and each further Dealer appointed under the Program will be required to represent and agree, that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Notes which are the subject of the offering contemplated by this Offering Circular as completed by the final terms (or Pricing Supplement, as the case may be) in relation thereto to any retail investor in the EEA. For the purposes of this provision: (a) the expression "retail investor" means a person who is one (or more) of the following: (i) a retail client as defined in point (11) of Article 4(1) of MiFID II; (ii) a customer within the meaning of Directive (EU) 2016/97 (the "**Insurance Distribution Directive**"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (iii) not a qualified investor as defined in the Prospectus Regulation; and (b) the expression "offer" includes the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes.

If the final terms (or the Pricing Supplement, as the case may be) in respect of any Notes specifies the "Prohibition of sales to EEA retail investors" as "Not Applicable," in relation to each Member State of the EEA, each Dealer has represented and agreed, and each further Dealer appointed under the Program will be required to represent and agree, that it has not made and will not make an offer of Notes which are the subject of the offering contemplated by this Offering Circular, as completed by the final terms in relation thereto, to the public in that Member State except that it may make an offer of such Notes to the public in that Member State:

(a) if the final terms in relation to the Notes specify that an offer of those Notes may be made other than pursuant to Article 1(4) of the Prospectus Regulation in that Member State (a "Non-exempt Offer"), following the date of publication of a prospectus in relation to such Notes which has been approved by the competent authority in that Member State or, where appropriate, approved in another Member State and notified to the competent authority in that Member State, provided that any such prospectus has subsequently been completed by the final terms contemplating such Non-exempt Offer, in accordance with the Prospectus Regulation in the period beginning and ending on the dates specified in such prospectus or final terms, as applicable, and the Issuer has consented in writing to its use for the purpose of that Non-exempt Offer;

- (b) at any time to any legal entity which is a qualified investor as defined in the Prospectus Regulation;
- (c) subject to any other restriction and obtaining the prior consent of the relevant Dealer or Dealers nominated by the Issuer for any such offer, at any time to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Regulation); or
- (d) at any time in any other circumstances falling within Article 1(4) of the Prospectus Regulation;

provided that no such offer of Notes referred to in (b) to (d) above shall require the Issuer or any Dealer to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

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

The EEA selling restrictions described above are in addition to any other applicable selling restriction set out below.

# United Kingdom

The final terms (or the Pricing Supplement, as the case may be) in respect of any Series of Notes may include information entitled "UK MiFIR Product Governance" which will outline the target market assessment in respect of the Notes of any such Series and which channels for distribution of the Notes are appropriate. If such information is included, any person subsequently offering, selling or recommending the Notes (a "UK MiFIR distributor") should take into consideration the target market assessment; however, a UK MiFIR distributor subject to the FCA Handbook Product Intervention and Product Governance Sourcebook (the "UK MiFIR Product Governance Rules") will be responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the target market assessment) and determining the appropriate distribution channels.

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

Unless the final terms (or the Pricing Supplement, as the case may be) in respect of any Series of Notes specifies "Prohibition of Sales to UK Retail Investors" as "Not Applicable," each Dealer has represented and agreed, and each further Dealer appointed under the Program will be required to represent and agree, that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Notes which are the subject of the offering contemplated by this Offering Circular as completed by the final terms (or Pricing Supplement, as the case may be) in relation thereto to any retail investor in the UK. For the purposes of this provision: (a) the expression "retail investor" means a person who is one (or more) of the following: (i) a retail client as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the EUWA; (ii) a customer within the meaning of the FSMA and any rules or regulations made under the FSMA to implement the Insurance Distribution Directive, where that customer would not qualify as a professional client as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA; or (iii) not a qualified investor as defined in Article 2 of the UK Prospectus Regulation; and (b) the expression "offer" includes the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes.

If the final terms (or the Pricing Supplement, as the case may be) in respect of any Notes specifies the "Prohibition of sales to UK retail investors" as "Not Applicable," in relation to the UK, each Dealer has represented and agreed, and each further Dealer appointed under the Program will be required to represent and agree, that it has not made and will not make an offer of Notes which are the subject of the offering contemplated by this Offering Circular, as completed by the final terms in relation thereto, to the public in the UK except that it may make an offer of such Notes to the public in the UK:

- (a) if the final terms in relation to the Notes specify that an offer of those Notes may be made other than pursuant to section 86 of the FSMA (a "Public Offer"), following the date of publication of a prospectus in relation to such Notes which either (i) has been approved by the Financial Conduct Authority, or (ii) is to be treated as if it had been approved by the Financial Conduct Authority in accordance with the transitional provision in Regulation 74 of the Prospectus (Amendment etc.) (EU Exit) Regulations 2019, provided that any such prospectus has subsequently been completed by the final terms contemplating such Public Offer, in the period beginning and ending on the dates specified in such prospectus or final terms, as applicable, and the Issuer has consented in writing to its use for the purpose of that Public Offer;
- (b) at any time to any legal entity which is a qualified investor as defined in Article 2 of the UK Prospectus Regulation;
- (c) at any time to fewer than 150 natural or legal persons (other than qualified investors as defined in Article 2 of the UK Prospectus Regulation) in the UK subject to obtaining the prior consent of the relevant Dealer or Dealers nominated by the Issuer for any such offer; or
- (d) at any time in any other circumstances falling within section 86 of the FSMA;

provided that no such offer of Notes referred to in (b) to (d) above shall require the Issuer or any Dealer to publish a prospectus pursuant to section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation.

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

Each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Program will be required to represent, warrant and agree that:

- (a) in relation to any Notes having a maturity of less than one year, (i) it is a person whose ordinary activities involve it in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of its business and (ii) it has not offered or sold and will not offer or sell any Notes other than to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or as agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses where the issue of the Notes would otherwise constitute a contravention of Section 19 of the FSMA by the Issuer; and
- (b) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) received by it in connection with the issue or sale of any Notes in circumstances in which Section 21(1) of the FSMA does not apply to the Issuer; and
- (c) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to any Notes in, from or otherwise involving the UK.

This Offering Circular is only being distributed to and is only directed at (i) persons who are outside the UK, or (ii) persons having professional experience in matters relating to investments who are investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order"), or (iii) high net worth entities, and other persons to whom it may

lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order or (iv) other persons to whom an invitation or inducement to engage in investment activity (within the meaning of the FSMA) in connection with the issue or sale of any notes may otherwise be lawfully communicated (all such persons in (i), (ii), (iii) and (iv) together being referred to as "Relevant Persons"). Any Notes will only be available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such Notes will be engaged in only with, Relevant Persons. Any person who is not a Relevant Person should not act or rely on this Offering Circular or any of its contents.

The UK selling restrictions described above are in addition to any other applicable selling restriction set out below.

# 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 Relevant Dealer represents and agrees that it has not, directly or indirectly, offered or sold and will not, directly or indirectly, offer or sell any Notes in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan) or to others for re-offering or re-sale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Act and other relevant laws and regulations of Japan.

# Hong Kong

Each Dealer has represented, warranted and agreed and each further Dealer appointed under the Program will be required to represent, warrant and agree 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 (i) 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 (ii) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong (the "C(WUMP)O"); and
- (b) it has not issued or had in its possession for the purposes of issue, and will not issue or have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or document relating to the Notes, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to the Notes which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made under the SFO.

#### Singapore

Each Dealer has acknowledged, and each further Dealer appointed under the Program will be required to acknowledge, that 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, Chapter 289 of Singapore (the "SFA"). Accordingly, each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Program will be required to represent, warrant and agree, that it has not offered or sold any Notes or caused the Notes to be made the subject of an invitation for subscription or purchase and will not offer or sell any Notes or cause the Notes to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this Offering Circular or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Notes, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor 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:
  - to an institutional investor or to a relevant person defined in Section 275(2) of the SFA or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
  - (ii) where no consideration is or will be given for the transfer;
  - (iii) where the transfer is by operation of law;
  - (iv) as specified in Section 276(7) of the SFA; or
  - (v) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018 of Singapore.

# Korea

The Notes have not been and will not be registered under the Financial Investment Services and the Capital Markets Act of Korea.

Accordingly, Each Dealer has represented and agreed and each further Dealer appointed under the Program will be required to represent and agree that:

- in respect of the Notes relying on the exemption as set out in Article 2-2-2, Paragraph 2, Item 3 of (a) the Regulation on Issuance, Public Disclosure, Etc. of Securities of Korea), during the first year after the issuance of the Notes, 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 defined under the Foreign Exchange Transactions Law of Korea and the regulations thereunder) other than a "qualified institutional buyer" (a "Korean QIB," as defined in the Regulation on Issuance, Public Disclosure, Etc. of Securities of Korea) who is registered with the Korea Financial Investment Association (the "KOFIA") as a Korean QIB, 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 no more 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 Issuer and the Dealers shall individually or collectively keep the evidence of fulfilment of conditions (a) through (d) above after having taken necessary actions therefor, except as otherwise permitted by applicable Korean laws and regulations; and
- (b) in respect of the Notes relying on the exemption as set out in Article 2-2-2, Paragraph 2 (other than Item 3), of the Regulation on Issuance, Public Disclosure, Etc. of Securities of Korea, 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 defined under the Foreign Exchange Transactions Law of Korea and the regulations thereunder), except as otherwise permitted by applicable Korean laws and regulations.

Each Dealer has undertaken, and each further Dealer appointed under the Program will be required to undertake, to ensure that any securities dealer to which it sells Notes confirms that it is purchasing such Notes as principal and agrees with such Dealer that it will comply with the restrictions described above.

# Switzerland

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

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

# General

Each Dealer represents, warrants and undertakes that it has complied and will comply with all applicable laws and regulations in each country or jurisdiction in which it purchases, offers, sells or delivers Notes or has in its possession or distributes the Offering Circular or any Pricing Supplement or any related offering material, in all cases at its own expense.

# **LEGAL MATTERS**

Cleary Gottlieb Steen & Hamilton LLP, English law counsel to the Dealers, will pass upon certain legal matters as to English law relating to the Notes. Lee & Ko, our Korean counsel, will pass upon certain matters as to Korean law. Cleary Gottlieb Steen & Hamilton LLP may rely as to all matters of Korean law on Lee & Ko. Lee & Ko may rely on Cleary Gottlieb Steen & Hamilton LLP as to all matters of English law.

# **INDEPENDENT AUDITORS**

Our consolidated financial statements as of and for the years ended December 31, 2019 and 2020, which are included herein, have been audited by Ernst & Young Han Young ("E&Y"), our independent auditor, as stated in their reports appearing herein.

With respect to our unaudited interim condensed consolidated financial statements as of March 31, 2021 and for the three months ended March 31, 2020 and 2021 included herein, E&Y has reported that it applied limited procedures in accordance with professional standards for a review of such information. In addition, E&Y's separate report included in this Offering Circular states that it did not audit and it does not express an opinion on such interim financial information. Accordingly, the degree of reliance on its report on such information should be restricted in light of the limited nature of the review procedures applied.

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> **Independent auditor's review report** Based on a report originally issued in Korean

# The Shareholder and the Board of Directors Korea Midland Power Co., Ltd.

We have reviewed the accompanying interim condensed consolidated financial statements of Korea Midland Power Co., Ltd. (the "Company") and its subsidiaries (collectively referred to as the "Group"), which comprise the interim condensed consolidated statement of financial position as of March 31, 2021, and the related interim condensed consolidated statements of comprehensive income for the three-month periods ended March 31, 2021 and 2020, and the related interim condensed consolidated statements of changes in equity and interim condensed consolidated statements of cash flows for the three-month periods then ended, and a summary of significant accounting policies and other explanatory information.

#### Management's responsibility for the interim condensed consolidated financial statements

Management is responsible for the preparation and fair presentation of these interim condensed consolidated financial statements in accordance with the Rules for Accounting Affairs of Public Corporations and Quasi-governmental Institutions in the Republic of Korea, and for such internal control as management determines is necessary to enable the preparation of the interim condensed consolidated financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditor's responsibility

Our responsibility is to express a conclusion on these interim condensed consolidated financial statements based on our review. We conducted our review in accordance with the review standards for interim financial statements in the Republic of Korea. A review of interim financial statements consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Korean Auditing Standards ("KGAAS") and, consequently, does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

#### Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the accompanying interim condensed consolidated financial statements are not prepared, in all material respects, in accordance with the Rules for Accounting Affairs of Public Corporations and Quasi-governmental Institutions.

#### **Emphasis of matter**

As described in Note 2 to the interim condensed consolidated financial statements, the Group's interim condensed consolidated financial statements were prepared in accordance with the Rules for Accounting Affairs of Public Corporations and Quasi-governmental Institutions. Pursuant to its Article 2-5, the Group applies Korean International Financial Reporting Standards ("KIFRS") where specific accounting treatments are not prescribed by the Rules for Accounting Affairs of Public Corporations and Quasi-governmental Institutions. There are no accounts of which accounting treatment is different compared to KIFRS in order for the Group to be in full compliance with the Rules for Accounting Affairs of Public Corporations and Quasi-governmental Institutions. Our conclusion is not modified in respect of this matter.



#### Other matter

We have audited the consolidated statement of financial position of the Group as of December 31, 2020, and the related consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended in accordance with KGAAS (not presented herein), and our report dated March 12, 2021 expressed an unqualified opinion thereon. The accompanying consolidated statement of financial position as of December 31, 2020 presented for comparative purposes is not different, in all material respects, from the above audited consolidated statement of financial position.

May 14, 2021

Ernst Joung Han Young

This review report is effective as of May 14, 2021, the independent auditor's review report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the independent auditor's review report date to the time this review report is used. Such events and circumstances could significantly affect the accompanying interim condensed consolidated financial statements and may result in modification to this review report.

A member firm of Ernst & Young Global Limited

Interim Condensed Consolidated Statements of Financial Position As of March 31, 2021 and December 31, 2020

In won	Note		March 31, 2021 (Unaudited)	December 31, 2020
Assets				
Cash and cash equivalents	5,6,8,36	₩	292,974,857,682	254,069,769,864
Current financial assets	5,7,8,9,11,37,38		97,561,788,881	14,394,606,890
Trade and other receivables	5,12,36,37		740,245,105,210	628,602,781,037
Inventories	13,39		402,836,496,241	420,167,742,002
Current tax assets	33		4,843,783,387	6,322,345,122
Current non-financial assets	14		107,872,067,025	162,590,503,710
Current assets		_	1,646,334,098,426	1,486,147,748,625
Non-current financial assets	5,7,10,11,36,37		203,993,934,558	233,872,756,638
Non-current trade and other receivables	5,12,36,37		280,330,810,265	274,164,057,532
Property, plant and equipment	15,19,39		10,871,445,185,372	10,917,248,407,019
Intangible assets	16,41		94,297,623,475	90,899,456,258
Investments in associates and joint ventures	17,37		399,706,045,634	395,262,100,501
Deferred tax assets			4,747,975,276	4,551,542,010
Non-current non-financial assets	14		24,585,645,343	23,481,831,428
Non-current assets		-	11,879,107,219,923	11,939,480,151,386
Total assets		₩	13,525,441,318,349	13,425,627,900,011
		_		

(Continued)

Interim Condensed Consolidated Statements of Financial Position, Continued As of March 31, 2021 and December 31, 2020

In won	Note	March 31, 2021 (Unaudited)	December 31, 2020
Liabilities			
Trade and other payables	5,18,19,36,37 W	556,450,055,124	491,814,179,788
Current financial liabilities	5,11,20,36		
Short-term borrowings		140,200,000,000	200,000,000,000
Current portion of long-term borrowings		11,457,329,980	11,755,594,471
Current portion of bonds, net of discount on bonds		919,229,517,307	565,917,142,108
Derivative liabilities		23,394,799,638	37,186,274,798
Current tax liabilities	33	18,922,710,907	4,142,078,121
Current non-financial liabilities	21	41,386,712,022	16,658,980,993
Current provisions	22	150,843,112,916	149,668,693,875
Current liabilities	-	1,861,884,237,894	1,477,142,944,154
Non-current trade and other payables	5,18,19,36	811,911,583,195	803,263,724,126
Non-current financial liabilities	5,11,20,36	177 777 717 670	177 126 602 660
Long-term borrowings		177,727,317,638	177,126,693,569
Bonds, net of discount on bonds Derivative liabilities		6,469,461,145,340	6,796,223,508,207
Non-current non-financial liabilities	21	12,809,698,612	20,273,400,564
	23,36	3,551,074,915	3,426,331,460
Employee benefits obligations Deferred tax liabilities	33	164,585,331,759 164,507,034,856	176,383,047,475 172,679,899,096
Non-current liabilities		7,804,553,186,315	8,149,376,604,497
Total liabilities	-	9,666,437,424,209	9,626,519,548,651
	-	-,,,	
Equity			
Contributed capital	24	1,270,930,147,572	1,270,930,147,572
Retained earnings	25	2,816,006,664,057	2,753,603,559,149
Other components of equity	5,10,11,26	(266,550,563,681)	(258,469,169,727)
Equity attributable to owner of the Company	· · · · ·	3,820,386,247,948	3,766,064,536,994
Non-controlling interests	-	38,617,646,192	33,043,814,366
Total equity		3,859,003,894,140	3,799,108,351,360
Total liabilities and equity	w_	13,525,441,318,349	13,425,627,900,011

The accompanying notes are an integral part of the interim condensed consolidated financial statements.

#### Interim Condensed Consolidated Statements of Comprehensive Income For the three-month periods ended March 31, 2021 and 2020

In won

in won	Notes		March 31, 2021 (Unaudited)	March 31, 2020 (Unaudited)
Sales	4,27,37	w	1,172,834,696,890	1,247,884,860,000
Cost of sales	34,37	**	1,015,012,152,228	1,068,939,322,341
Gross profit	0 1,07		157,822,544,662	178,945,537,659
Selling and administrative expenses	28,34		32,953,516,144	28,233,070,927
Operating profit	20,01		124,869,028,518	150,712,466,732
Other non-operating income	29		1,210,384,077	2,203,187,660
Other non-operating expenses	29		259,972,385	1,050,539,624
Other profit (loss), net	5,30		1,574,529,314	(3,076,541,957)
Finance income	5,11,31		43,392,154,079	62,561,097,559
Finance costs	5,11,32		100,686,702,232	146,679,421,037
Income related to associates and joint ventures	17		5,425,747,459	8,994,367,530
Profit before income tax	17		75,525,168,830	
Income tax	33		14,635,668,024	73,664,616,863
Profit for the period	55		60,889,500,806	12,507,757,060 61,156,859,803
Other comprehensive income (loss): Items that will not be reclassified subsequently to profit				
or loss (net of tax)				
Remeasurements of defined benefit liability	23,25		3,894,901,153	(4,991,259,908)
Equity investments at fair value through OCI ("FVOCI") —net change in fair value	5,26		(22.222.055.117)	(22.021.470.520)
Items that will be reclassified subsequently to profit or loss (net of tax)	5,20		(22,332,955,117)	(23,921,470,530)
Net change in the unrealized fair value of derivatives			364,268,369	(8,422,966,292)
using cash flow hedge accounting Share in other comprehensive loss of associates and joint	5,11,26		,,	
ventures, net of tax	5,17		(186,344,335)	(1,090,142,772)
Foreign currency translation of foreign operations			17,587,924,920	12,770,440,272
Other comprehensive $\ensuremath{loss}$ for the period, net of tax			(672,205,010)	(25,655,399,230)
Total comprehensive income for the period		₩	60,217,295,796	35,501,460,573
		_		
Profit (loss) attributable to				
Owners of the Company		₩	58,526,166,660	64,033,688,401
Non-controlling interests		_	2,363,334,146	(2,876,828,598)
Profit for the period		₩	60,889,500,806	61,156,859,803
Total comprehensive income (loss) attributable to:				
Owners of the Company		₩	54,339,673,859	37,707,406,427
Non-controlling interests			5,877,621,937	(2,205,945,854)
Total comprehensive income for the period		₩	60,217,295,796	35,501,460,573
Earnings per share				
Basic earnings per share	35	₩	2,048	2,240

The accompanying notes are an integral part of the interim condensed consolidated financial statements.

# KOREA MIDLAND POWER CO., LTD. AND SUBSIDIARIES Interim Condensed Consolidated Statements of Changes in Equity For the three-month periods ended March 31, 2020

In won	E	quity attributable to o				
	Contributed capital	Retained earnings	Other components of equity	Subtotal	Non- controlling interests	Total equity
As of January 1, 2020 ¥ Total comprehensive	+ <u>1,270,930,147,572</u>	2,767,970,213,817	(233,225,835,924)	3,805,674,525,465	31,407,025,774	3,837,081,551,239
income (loss) for the period: Profit (loss) for the period		64 022 699 401		64 022 699 401	(2 976 929 509)	61 156 950 902
Items that will not be reclassified subsequently to	-	64,033,688,401	-	64,033,688,401	(2,876,828,598)	61,156,859,803
profit or loss (net of tax): Remeasurements of defined benefit						
liability, net of tax Equity investments at fair value through OCI	-	(4,897,551,066)	-	(4,897,551,066)	(93,708,842)	(4,991,259,908)
("FVOCI") –net change in fair value Items that will be reclassified		-	(23,921,470,530)	(23,921,470,530)	-	(23,921,470,530)
subsequently to profit or loss (net of tax):						
Net change in the unrealized fair value of derivatives using cash flow						
hedge accounting Share in other comprehensive loss	-	-	(8,422,966,292)	(8,422,966,292)	-	(8,422,966,292)
of associates and joint ventures Foreign currency translation of	-	-	(1,090,142,772)	(1,090,142,772)	-	(1,090,142,772)
foreign operations			12,005,848,686	12,005,848,686	764,591,586	12,770,440,272
As of March 31, 2020 (Unaduited) ¥	4 1,270,930,147,572	2,827,106,351,152	(254,654,566,832)	3,843,381,931,892	29,201,079,920	3,872,583,011,812

(Continued)

# Interim Condensed Consolidated Statements of Changes in Equity, Continued For the three-month periods ended March 31, 2021

In won	E	quity attributable to o				
	Other				Non-	
	Contributed capital	Retained earnings	components of equity	Subtotal	controlling interests	Total equity
As of January 1, 2021,						
· · · · · · · · · · · · · · · · · · ·	1,270,930,147,572	2,753,603,559,149	(258,469,169,727)	3,766,064,536,994	33,043,814,366	3,799,108,351,360
Total comprehensive income (loss) for the period:						
Profit for the period	-	58,526,166,660	-	58,526,166,660	2,363,334,146	60,889,500,806
Items that will not be reclassified						
subsequently to profit or loss (net						
of tax): Remeasurements of defined benefit						
liability, net of tax Equity investments	-	3,894,901,153	-	3,894,901,153	-	3,894,901,153
at fair value through OCI ("FVOCI") –net						
change in fair value	-	-	(22,332,955,117)	(22,332,955,117)	-	(22,332,955,117)
reclassified subsequently to						
profit or loss (net						
of tax):						
Net change in the						
unrealized fair value of derivatives						
using cash flow						
hedge accounting			(2 4 2 4 4 2 5 5 2 4 )		2 400 702 000	264,260,260
Share in other	-	-	(2,134,435,531)	(2,134,435,531)	2,498,703,900	364,268,369
comprehensive						
loss of associates						
and joint ventures	-	_	(186,344,335)	(186,344,335)	_	(186,344,335)
Foreign currency			(100)011,0000)	(100)0		(200)011/000/
translation of foreign						17,587,924,920
operations	-	-	16,572,341,029	16,572,341,029	1,015,583,891	
Transactions with					_//	
owners of the						
Company,						
recognized directly in						
equity:						
Dividends paid	_	_	_		(303,790,111)	(303,790,111)
Changes in	-	-	-		(303,730,111)	• • • • •
subsidiaries	-	(17,962,905)	-	(17,962,905)	-	(17,962,905)
As of March 31, 2021						
(Unaudited) W	1,270,930,147,572	2,816,006,664,057	(266,550,563,681)	3,820,386,247,948	38,617,646,192	3,859,003,894,140

The accompanying notes are an integral part of the interim condensed consolidated financial statements.

## KOREA MIDLAND POWER CO., LTD. AND SUBSIDIARIES Interim Condensed Consolidated Statements of Cash Flows For the three-month periods ended March 31, 2021 and 2020

In won	_	March 31, 2021 (unaudited)	March 31, 2020 (unaudited)
Cash flows from operating activities			
Profit for the period	₩	60,889,500,806	61,156,859,803
Adjustments for:			- ,,,
Employee benefit expense		5,970,260,588	5,190,221,819
Accrual of provisions for employee benefits		10,644,981,286	10,592,651,846
Depreciation		185,530,833,001	179,070,033,498
Amortization		2,705,760,526	2,289,214,887
Income tax benefit		14,635,668,024	12,507,757,060
Loss on disposal of property, plant and equipment		342,374,124	5,478,505
Loss on foreign currency translation		55,034,082,838	85,114,838,927
Loss on valuation of derivative instruments		2,414,389,320	17,404,177,974
Loss on transaction of derivative instruments		782,797,449	1,879,053,581
Loss on valuation of associates and joint ventures		2,163,849,686	823,934,896
Loss on financial guarantees		248,714,759	023,334,030
Increase in (reversal of) provisions of provisions of RPS, net		240,714,755	1,703,204,426
Increase (reversal of) in provisions of greenhouse gas emission, net		- (10,037,891,561)	14,477,465,248
		(10,037,091,301)	117,011,473
Increase in provisions for wage litigation		-	41,598,498,771
Interest expenses		40,794,068,784	
Gain on disposal of property, plant and equipment		(4,259,782)	(109,433,537)
Interest income		(8,371,146,473)	(6,112,612,432)
Gain on foreign currency translation		(1,992,030,569)	(1,550,556,358)
Gain on valuation of derivative instruments		(28,986,223,922)	(49,939,941,971)
Gain on transaction of derivative instruments		(4,224,707,087)	(5,266,856,793)
Gain on valuation of associates and joint ventures		(7,589,597,145)	(9,818,302,426)
Others, net	-	(1,177,195,435)	192,540,770
	-	258,884,728,411	300,168,380,164
Changes in:		0.050.445.004	402 250 040 707
Trade receivables		9,959,415,234	183,359,819,787
Other receivables		(48,154,168,073)	83,341,410,293
Accrued income		(66,748,938,152)	(35,572,644)
Prepayments		123,886,335	1,359,188,249
Prepaid expenses		4,151,432,002	(4,008,361,577)
Inventories		17,393,160,096	116,885,560,684
Long-term trade receivables		8,291,559,008	8,285,568,336
Long-term prepayments		(363,950,000)	(1,042,100,358)
Long-term prepaid expenses		(88,414,409)	(296,419,692)
Trade payables		146,471,909,245	(32,776,436,562)
Other payables		4,465,264,770	(78,638,737,028)
Accrued expenses		(5,178,185,758)	(3,575,926,515)
Deferred income		1,894,257,090	1,639,765,140
Withholdings		(2,440,216,831)	(2,457,276,006)
Other withholdings		567,787,835	3,188,088,337
Retirement benefits paid		(462,838,690)	(446,295,532)
Plan assets		(387,598,375)	(494,295,365)
Provisions for employee benefits		(2,488,469,350)	(2,268,422,530)
Provisions for wage litigation		(2,675,168,065)	-
Other long-term employee benefit liabilities		(11,743,015)	(4,423,548)
Transition to the defined contribution retirement pension		(12,532,881,830)	(4,439,255,280)
Others, net		71,830,540,718	55,804,055,757
	₩	123,616,639,785	323,379,933,946
	-		

(Continued)

#### KOREA MIDLAND POWER CO., LTD. AND SUBSIDIARIES Interim Condensed Consolidated Statements of Cash Flows, Continued

For the three-month periods ended March 31, 2021 and 2020

In won	-	March 31, 2021 (unaudited)	March 31, 2020 (unaudited)
Cash flows from operating activities			
Interest received	₩	900,657,135	1,028,607,914
Interest paid		(56,298,719,245)	(49,956,680,871)
Dividends received		19,411,109,800	15,518,793,102
Income taxes paid		(1,638,569,203)	4,488,820,987
Net cash provided by operating activities	_	405,765,347,489	655,784,715,045
Cash flows from investing activities			
Disposal of financial assets at FVTPL		1,413,137	-
Collection of short-term loans		529,901,955	238,159,808
Collection of long-term loans		896,263,062	938,377,860
Decrease in long-term deposits		1,615,183,164	2,288,738,450
Proceeds from disposal of property, plant and equipment		24,064,721	153,772,966
Increase in financial assets at FVTPL		(76,900,000,000)	(151,300,000,000)
Increase in short-term loans		(29,506,136)	(65,384,644)
Increase in long-term loans		(2,430,055,112)	(2,522,868,740)
Acquisition of associates and joint ventures		(11,545,848,800)	(2,937,869,646)
Increase in long-term deposits		(2,216,000,000)	(6,272,261,744)
Acquisition of property, plant and equipment		(18,532,536,643)	(4,164,243,837)
Acquisition of construction-in-progress		(183,737,204,864)	(210,230,420,982)
Acquisition of intangible assets	_	(15,648,767)	(556,896,571)
Net cash used in investing activities	_	(292,339,974,283)	(374,430,897,080)
Cash flows from financing activities			
Payment of lease liabilities		(21,309,561,841)	(23,709,611,403)
Repayment of short-term borrowings, net		(59,800,000,000)	(350,100,000,000)
Repayment of short-term portion of long-term borrowings		(3,438,050,684)	(4,356,207,290)
Repayment of short-term portion of bonds		-	(170,000,000,000)
Settlement of derivative instruments		2,782,618,258	249,302,640,000
Proceeds from changes in subsidiaries	_	280,195,924	3,274,233,212
Net cash used in financing activities		(81,484,798,343)	(295,588,945,481)
Effect of exchange rate fluctuations on cash held	_	6,964,512,955	2,165,368,231
Net increase (decrease) in cash and cash equivalents	_	38,905,087,818	(12,069,759,285)
Cash and cash equivalents at the beginning of the period		254,069,769,864	125,210,764,144
Cash and cash equivalents at the end of the period	₩	292,974,857,682	113,141,004,859

The accompanying notes are an integral part of the interim condensed consolidated financial statements.

#### 1. Reporting entity

#### (1) Description of controlling company

Korea Midland Power Co., Ltd. ("KOMIPO" or the "Company") was incorporated on April 2, 2001 through the spin-off of the power generation division of Korea Electric Power Corporation ("KEPCO") in accordance with the restructuring plan, dated January 21, 1999, for the electricity industry in the Republic of Korea announced by the Ministry of Knowledge Economy and the Law on Promotion of Restructuring of the Electricity Industry published on December 23, 2000. KOMIPO and its subsidiaries (collectively, the "Group") are engaged in the generation of electricity and development of electric power resources and sell all generated electricity to KEPCO through the Korea Power Exchange ("KPX") in accordance with Article 31 of the Electricity Business Law. As of March 31, 2021, the Company operates six power plants with a generating capacity in the aggregate of 9,733MW.

The Company's head office is located in Boryeong-si, Chungcheongnam-do. As of March 31, 2021, the Company's issued and outstanding shares are wholly owned by KEPCO.

Demonstrate of example (0/)

#### (2) Status of subsidiaries

(i) Subsidiaries as of March 31, 2021 and December 31, 2020 are as follows:

			Percentage of	ownership (%)
			March 31,	December 31,
Company	Key operating activities	Location	2021	2020
KOMIPO Global Pte Ltd.	Construction and operation of utility plant	Singapore	100.0	100.0
KOMIPO Australia Pty., Ltd.	Resources development	Australia	100.0	100.0
РТ КРЈВ	Operation of utility plant	Indonesia	51.0	51.0
PT Cirebon Power Service (*1)	Operation of utility plant	Indonesia	27.5	27.5
PT Tanggamus Electric Power	Hydropower	Indonesia	52.5	52.5
KOMIPO America Inc.	Holding Company	USA	100.0	100.0
Commerce and Industry Energy Co., Ltd.	RDF Power generation	Korea	85.0	85.0
KOMIPO Bylong Pty., Ltd. (*2)	Overseas resources development	Australia	100.0	100.0
PT Siborpa Eco Power	Hydropower	Indonesia	55.0	55.0
PT KOMIPO Energy Indonesia	Overseas operation maintenance	Indonesia	95.0	95.0
KOMIPO Service., Ltd.	Service business	Korea	100.0	100.0
KOMIPO Europe B.V.	Holding Company	Netherland	100.0	100.0
KOMIPO Vanphong Power Services Limited Liability Company	Operation of utility plant	Vietnam	100.0	100.0
Ogiri Solar Power Generation	Solar Power generation	Korea	70.0	70.0
Solar Vader Co., Ltd.	Solar Power generation	Korea	100.0	-
Yeongyang Apollon Solar Co., Ltd.	Solar Power generation	Korea	100.0	-
Yeongyang Solar Management Co., Ltd.	Solar Power generation	Korea	100.0	-
Yeongyang Innovation Co., Ltd.	Solar Power generation	Korea	100.0	-
Yeongyang Corporation Co., Ltd.	Solar Power generation	Korea	100.0	-
Yeongyang Horus Solar Co., Ltd.	Solar Power generation	Korea	100.0	-

(\*1) The Group is able to exercise majority voting rights of the Board of Directors according to the shareholders agreement, even though the Group's ownership interest is less than 50%. As such, the entity is included in the Group's scope of consolidation.

(\*2) Ratio of ownership is ratio of common stock except for preferred stock which have no voting rights.

(ii) Changes in subsidiaries

Solar Vader Co., Ltd., Yeongyang Apollon Solar Co., Ltd., Yeongyang Solar Management Co., Ltd., Yeongyang Innovation Co., Ltd., Yeongyang Corporation Co., Ltd., and Yeongyang Horus Solar Co., Ltd were newly included in the scope of consolidation during the three-month period ended March 31, 2021. No subsidiaries have been excluded in the consolidation scope

(Unaudited)

#### 1. Reporting entity, continued

#### (2) Status of subsidiaries, continued

(iii) Summary financial information of subsidiaries as of and for the three-month period ended March 31, 2021 are as follows:

In won			N	1arch 31, 2021			
Investees	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Sales	Net income (loss)	Total comprehensive income (loss)
KOMIPO Global Pte Ltd. 🛶	70,307,621,956	207,775,570,600	189,538,418	401,379,979	-	2,359,208,466	3,572,476,283
KOMIPO Australia Pty., Ltd.	22,822,000,342	24,569,869,349	3,218,743,806	1,156,362,375	3,338,383,348	566,201,824	566,201,824
РТ КРЈВ	11,372,362,733	3,221,536,253	2,864,578,599	1,183,905,786	4,493,231,306	1,866,859,360	1,866,859,360
PT Cirebon Power Services	1,619,454,122	202,107,585	368,523,521	55,517,697	1,846,915,538	51,236,274	51,236,274
PT Tanggamus Electric Power	16,424,270,559	193,363,963,839	10,977,696,091	155,069,253,548	793,295,353	3,251,711,217	8,512,140,480
KOMIPO America Inc.	90,354,001,286	19,826,597,046	581,442,314	-	-	(318,538,824)	(160,192,369)
Commerce and Industry Energy Co., Ltd.	16,805,098,282	71,968,197,533	5,991,414,165	33,696,052,877	8,101,479,088	789,189,168	789,189,168
KOMIPO Bylong Pty., Ltd.	6,996,272	-	78,387,157	-	-	-	-
PT Siborpa Eco Power	345,633,144	10,531,696,111	2,020,533	-	-	(38,704,069)	(38,704,069)
PT KOMIPO Energy Indonesia	1,584,748,853	526,794,475	150,998,094	3,131,086	157,400	(385,826,351)	(385,826,351)
KOMIPO Service., Ltd.	2,833,216,415	538,925,535	3,357,420,968	1,124,293,304	7,912,381,770	(87,520,561)	(87,520,561)
KOMIPO Europe B.V.	31,933,519,737	10,686,618,761	59,974,459	-	99,788,661	(118,655,747)	(274,242,889)
KOMIPO Vanphong Power Services Limited Liability Company	1,577,484,412	-	13,022,472	-	-	(220,322,352)	(220,322,352)
Ogiri Solar Power Generation	745,378,719	285,531,000	320,000	-	-	(1,035,347)	(1,035,347)
Solar Vader Co., Ltd.	75,338,574	-	3,304,000	-	-	(1,715,533)	(1,715,533)
Yeongyang Apollon Solar Co., Ltd.	22,861,095	-	12,094,000	-	-	(1,866,011)	(1,866,011)
Yeongyang Solar Management Co., Ltd.	22,610,652	-	1,764,000	-	-	(1,715,518)	(1,715,518)
Yeongyang Innovation Co., Ltd.	83,384,555	-	2,024,000	-	-	(1,715,549)	(1,715,549)
Yeongyang Corporation Co., Ltd.	22,616,655	-	1,764,000	-	-	(1,715,517)	(1,715,517)
Yeongyang Horus Solar Co., Ltd.	54,026,918	-	2,764,000	-	-	(1,715,518)	(1,715,518)

#### 1. Reporting entity, continued

#### (2) Status of subsidiaries, continued

- (iv) Summary financial information of subsidiaries as of and for the year ended December 31, 2020 are as follows:
- 1. In won

			Dee	ember 31, 2020	)		
Investees	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Sales	Net income (loss)	Total comprehensive income (loss)
KOMIPO Global Pte Ltd. 🛶	60,771,652,997	202,606,166,051	190,691,160	465,293,613	-	12,459,674,431	11,254,949,526
KOMIPO Australia Pty., Ltd.	21,534,351,419	23,716,048,960	2,658,724,358	1,123,081,800	14,326,807,098	2,684,812,683	2,684,812,683
РТ КРЈВ	10,521,194,418	2,425,133,472	2,962,584,778	335,571,477	20,305,686,768	4,774,854,522	4,774,854,522
PT Cirebon Power Services	1,825,498,541	-	549,760,877	-	8,641,890,846	344,103,798	344,103,798
PT Tanggamus Electric Power	30,567,283,513	187,162,332,060	27,386,675,240	156,670,581,107	3,490,800,274	11,941,542,881	6,449,719,092
KOMIPO America Inc.	86,693,859,741	19,231,851,392	917,800,896	-	342,170,248	(1,782,789,614)	(1,782,789,614)
Commerce and Industry Energy Co., Ltd.	16,763,559,488	72,917,003,472	7,281,238,505	34,102,684,850	31,603,078,492	1,623,405,195	1,644,568,804
KOMIPO Bylong Pty., Ltd.	6,794,499	-	76,130,725	-	-	(11,032,864)	(11,032,864)
PT Siborpa Eco Power	394,268,776	10,096,616,651	14,325,119	-	-	(360,522,138)	(360,522,138)
PT KOMIPO Energy Indonesia	2,127,084,427	346,411,201	150,605,827	3,095,096	2,391,404,052	51,853,882	51,853,882
KOMIPO Service., Ltd.	2,995,082,681	386,207,985	2,991,014,997	657,977,134	28,596,417,704	(478,588,968)	(990,448,035)
KOMIPO Europe B.V.	33,921,399,109	9,277,066,284	46,138,326	-	333,463,773	(385,784,960)	(39,674,749)
KOMIPO Vanphong Power Services Limited Liability Company	1,727,311,385	-	11,727,472	-	-	(33,944,208)	(33,944,208)
Ogiri Solar Power Generation	1,032,066,066	-	442,000	-	-	-	-

(Unaudited)

#### 1. Reporting entity, continued

#### (2) Status of subsidiaries, continued

(v) Details of non-controlling interest (NCI) prior to intra-group eliminations as of and for the three-month period ended March 31, 2021 are as follows:

In won			Ma	arch 31, 2021			
	РТ КРЈВ	PT Cirebon Power Service	PT Tanggamus Electric Power	Commerce and Industry Energy Co., Ltd.	KOMIPO Bylong Pty., I Ltd.	PT Siborpa Eco Power	PT KOMIPO Energy Indonesia
Current assets	W11,372,362,7331	,619,454,122	16,424,270,559	16,805,098,282	6,996,272	345,633,144	1,584,748,853
Non-current assets	3,221,536,253	202,107,585	193,363,963,839	71,968,197,533	-1	10,531,696,111	526,794,475
Current liabilities	2,864,578,599	368,523,521	10,977,696,091	5,991,414,165	78,387,157	2,020,533	150,998,094
Non-current liabilities	1,183,905,786	55,517,697	155,069,253,548	33,696,052,877	-	-	3,131,086
Net assets	10,545,414,6011	,397,520,489	43,741,284,759	49,085,828,773	(71,390,885)1	10,875,308,722	1,957,414,148
Book value of NCI	5,162,459,4361	,013,202,354	20,777,110,259	6,438,724,735	(71,390,895)	4,893,888,927	97,870,707
Sales	4,493,231,3061	,846,915,538	793,295,353	8,101,479,088	-	-	157,400
Profit (loss) for the period	1,866,859,360	51,236,274	3,251,711,217	789,189,168	-	(38,704,069)	(385,826,351)
Profit (loss) for the period attributable to NCI	682,484,782	48,761,635	1,544,562,828	127,952,327	-	(17,416,831)	(19,567,198)
Cash flows from operating activities	2,117,927,029	496,774,949	(1,936,761,124)	1,286,952,504	1,097,736	(60,296,440)	865,866,156
Cash flows from investing activities	- (	127,901,852)	(45,288,384)	(138,600,000)	-	7,193,556	(59,340,539)
Cash flows from financing activities before dividends to NCI	· -	(3,871,324)	(2,889,290,519)	(901,268,116)	-	-	(83,168,510)
Cash flows from financing activities cash dividends to NCI		-	-	-	-	-	-
Effect of exchange rate fluctuations or cash held	40,425,661	16,760,696	409,337,775	-	170,233	15,078,574	4,239,337
Net increase (decrease) in cash and casl equivalents	<sup>1</sup> 2,158,352,690	381,762,469	(4,462,002,252)	247,084,388	1,267,969	(38,024,310)	727,596,444

#### 1. Reporting entity, continued

#### (2) Status of subsidiaries, continued

(v) Details of non-controlling interest (NCI) prior to intra-group eliminations as of and for the three-month period ended March 31, 2021 are as follows, continued:

In won				Ma	irch 31, 2021			
		Ogiri Solar Power Generation	Solar Vader Co., Ltd.	Yeongyang Solar Management Co., Ltd.	Yeongyang Apollon Solar Co., Ltd.	Yeongyang Innovation Co., Ltd.	Yeongyang Corporation Co., Ltd.	Yeongyang Horus Solar Co., Ltd.
Current assets	w	745,378,719	75,338,574	22,610,652	22,861,095	83,384,555	22,616,655	54,026,918
Non-current assets		285,531,000	-	-			-	-
Current liabilities		320,000	3,304,000	1,764,000	12,094,000	2,024,000	1,764,000	2,764,000
Non-current liabilities		-	-	-			-	-
Net assets		1,030,589,719	72,034,574	20,846,652	10,767,095	81,360,555	20,852,655	51,262,918
Book value of NCI		308,913,762	(514,660)	(514,655)	(559,803)	(514,665)	(514,655)	(514,655)
Sales		-	-	-		-	-	-
Profit (loss) for the period		(1,035,347)	(1,715,533)	(1,715,518)	(1,866,011)	(1,715,549)	(1,715,517)	(1,715,518)
Profit (loss) for the period attributable to NCI		(310,304)	(514,660)	(514,655)	(559,803)	(514,665)	(514,655)	(514,655)
Cash flows from operating activities		(1,176,747)	(1,469,733)	(1,469,718)	(1,620,211)	(1,475,549)	(1,469,717)	(1,469,718)
Cash flows from investing activities		-	-	-			-	-
Cash flows from financing activities, before dividends to NCI		-	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
Cash flows from financing activities - cash dividends to NCI		-	-	-			-	-
Effect of exchange rate fluctuations on cash held		-	-	-			-	-
Net increase (decrease) in cash and cash equivalents	n	(1,176,747)	30,267	30,282	(120,211)	24,451	30,283	30,282

#### 1. Reporting entity, continued

#### (3) Status of subsidiaries, continued

(vi) Details of non-controlling interest (NCI) prior to intra-group eliminations as of and for the year ended December 31, 2020 are as follows:

In won			December 3	31, 2020	
		РТ КРЈВ	PT Cirebon Power Service	PT Tanggamus Electric Power	Commerce and Industry Energy Co., Ltd.
Current assets	w	10,521,194,418	1,825,498,541	30,567,283,513	16,763,559,488
Non-current assets		2,425,133,472	-	187,162,332,060	72,917,003,472
Current liabilities		2,962,584,778	549,760,877	27,386,675,240	7,281,238,505
Non-current liabilities		335,571,477	-	156,670,581,107	34,102,684,850
Net assets		9,648,171,635	1,275,737,664	33,672,359,226	48,296,639,605
Book value of NCI		4,724,375,405	943,966,218	15,994,370,631	6,310,772,408
Sales		20,305,686,768	8,641,890,846	3,490,800,274	31,603,078,492
Profit (loss) for the period		4,774,854,522	344,103,798	11,941,542,881	1,623,405,195
Profit (loss) for the period attributable to NCI		1,767,672,312	281,426,966	4,921,398,340	282,195,757
Cash flows from operating activities		1,922,100,345	223,851,981	20,734,232,042	8,878,960,864
Cash flows from investing activities		(264,111,202)	-	(151,284,099)	(962,353,473)
Cash flows from financing activities, before dividends to NCI		(1,020,802,272)	(230,488,001)	(12,178,926,635)	(3,605,072,464)
Cash flows from financing activities - cash dividends to NCI		(980,770,810)	(584,441,586)	-	-
Effect of exchange rate fluctuations on cash held		(331,811,752)	(4,791,329)	(916,879,091)	-
Net increase (decrease) in cash and cash equivalents		(675,395,691)	(595,868,935)	7,487,142,217	4,311,534,927

#### 1. Reporting entity, continued

#### (3) Status of subsidiaries, continued

(vi) Details of non-controlling interest (NCI) prior to intra-group eliminations as of and for the year ended December 31, 2020 are as follows, continued:

In won		December	31, 2020	
	KOMIPO Bylong Pty., Ltd.	PT Siborpa Eco Power	PT KOMIPO Energy Indonesia	Ogiri Solar Power Generation
Current assets W	6,794,499	394,268,776	2,127,084,427	1,032,066,066
Non-current assets	-	10,096,616,651	346,411,201	-
Current liabilities	76,130,725	14,325,119	150,605,827	442,000
Non-current liabilities	-	-	3,095,096	-
Net assets	(69,336,226)	10,476,560,308	2,319,794,705	1,031,624,066
Book value of NCI	(69,336,237)	4,714,452,140	115,989,735	309,224,066
Sales	-	-	2,391,404,052	-
Profit (loss) for the period	(11,032,864)	(360,522,138)	51,853,882	-
Profit (loss) for the period attributable to NCI	(11,032,864)	(162,234,962)	1,938,248	-
Cash flows from operating activities	5,568,636	(464,768,877)	(735,803,969)	-
Cash flows from investing activities	-	64,507,893	(293,891,799)	-
Cash flows from financing activities, before dividends to NCI	-	-	-	-
Cash flows from financing activities - cash dividends to NCI	-	-	-	-
Effect of exchange rate fluctuations on cash held	158,046	(17,006,809)	(72,931,517)	-
Net increase (decrease) in cash and cash equivalents	5,726,682	(417,267,793)	(1,102,627,285)	-

#### 2. Basis of preparation

#### (1) Statement of compliance

The interim condensed consolidated financial statements have been prepared in accordance with Rules for Accounting Affairs of Public Corporations and Quasi-governmental Institutions. In accordance with its Article 2-5, the Group applies Korean international Financial Reporting Standards ("KIFRS") where accounting provisions have not been specified in the Rules. There are no significant matters that have been applied differently from KIFRS under the Rules. The accompanying interim condensed consolidated financial statements have been condensed, restructured and translated into English from the Korean language financial statements. In the event of any differences in interpreting the interim condensed consolidated financial statements or the independent auditor's review report thereon, the Korean version, which is used for regulatory reporting purposes, shall prevail.

The interim condensed consolidated financial statements were prepared in accordance with KIFRS 1034 Interim Financial Reporting. It contains less information than required in the annual financial statements.

#### (2) Basis of measurement

The interim condensed consolidated financial statements have been prepared under 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
- Liabilities for defined benefit plans recognized at the net of the total present value of defined benefit obligations less the fair value of

plan assets

(3) Functional and presentation currency

The financial statements of the parent and each subsidiary are prepared in functional currency of the respective operation. These interim condensed consolidated financial statements are presented in Korean won, which is the Group's functional currency that is the currency of the primary economic environment in which the Group operates.

(4) Use of estimates and judgments

The preparation of the interim condensed consolidated financial statements in conformity with KIFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

In preparing these interim condensed consolidated financial statements, the significant judgments made by management, in applying the Group's accounting policies and the key sources of estimation uncertainty were the same as those applied to the consolidated financial statements as of and for the year ended December 31, 2020.

#### (5) Measurement of fair values

The Group has an established control framework with respect to the measurement of fair values. This includes a valuation team that has overall responsibility for overseeing all significant fair value measurements, including Level 3 fair values, and the results are directly reported to Chief Financial Officer.

The valuation team regularly reviews significant unobservable inputs and valuation adjustments. If third party information, such as broker quotes or pricing services, is used to measure fair values, then the valuation team assesses the evidence obtained from the third parties to support the conclusion that such valuations meet the requirements of KIFRS, including the level in the fair value hierarchy in which such valuations should be classified.

#### 3. Changes in accounting policies

Except for the changes below, the Group has consistently applied the accounting policies to all periods presented in these interim condensed consolidated statements.

The Group has adopted the following amendments to standards and new interpretation with a date of initial application of January 1, 2021.

#### (1) Standards and amendments adopted by the Group

The details of changes in accounting policies are as follows:

1) KIFRS 1107 Financial Instruments: Disclosures, KIFRS 1109 Financial Instruments, KIFRS 1039 Financial Instruments: Recognition and Measurement, KIFRS 1104 Insurance Contracts, KIFRS 1116 Leases (Amendment) – Interest Rate Benchmark Reform – Phase 2

The amendments provide temporary reliefs which address the financial reporting effects when an interbank offered rate (IBOR) is replaced with an alternative nearly risk-free interest rate (RFR). The amendments include the following practical expedients:

• A practical expedient to require contractual changes, or changes to cash flows that are directly required by the reform, to be treated as changes to a floating interest rate, equivalent to a movement in a market rate of interest

• Permit changes required by IBOR reform to be made to hedge designations and hedge documentation without the hedging relationship being discontinued

• Provide temporary relief to entities from having to meet the separately identifiable requirement when an RFR instrument is designated as a hedge of a risk component

These amendments had no material impact on the interim condensed consolidated financial statements of the Group. The Group will use the practical expedient in the future when it becomes applicable.

#### 2) KIFRS 1116 COVID-19 related Rent Concessions (Amendment)

The amendment to KIFRS 1116 provides lessees with a practical expedient to elect not to assess whether rent concessions arising as a direct consequence of the COVID-19 pandemic constitutes a lease modification. Lessees may apply the practical expedient only if all conditions of the practical expedient are met and lessees that makes this election accounts for any change in lease payments resulting from the rent concessions the same . This amendment had no material impact on the interim condensed consolidated financial statements of the Group.

(2) Standards and amendments issued but not yet effective

The standards and interpretations for enactment or revision that have been enacted or published but which have not been applied early by the Group due to the lack of effective date are as follows:

#### 1) Amendments to KIFRS 1001: Classification of Liabilities as Current or Non-current

The amendments to paragraphs 69 to 76 of KIFRS 1001 specify the requirements for classifying liabilities as current or non-current. The amendments clarify:

- What is meant by a right to defer settlement
- That a right to defer must exist at the end of the reporting period
- That classification is unaffected by the likelihood that an entity will exercise its deferral right

• That only if an embedded derivative in a convertible liability is itself an equity instrument would the terms of a liability not impact its classification

The amendments are effective for annual reporting periods beginning on or after January 1, 2023 and must be applied retrospectively. The amendments are not expected to have a material impact on the Group.

#### 3. Changes in accounting policies, continued

2) Reference to the Conceptual Framework – Amendments to KIFRS 1103

The amendments are intended to replace a reference to the Framework for the Preparation and Presentation of Financial Statements, issued in 1989, with a reference to the Conceptual Framework for Financial Reporting issued in March 2018 without significantly changing its requirements.

An exception was added to the recognition principle of KIFRS 1103 to avoid the issue of potential 'day 2' gains or losses arising for liabilities and contingent liabilities that would be within the scope of KIFRS 1037 or KIFRS 2121, if incurred separately. At the same time, it was decided to clarify existing guidance in KIFRS 1103 for contingent assets that would not be affected by replacing the reference to the Framework for the Preparation and Presentation of Financial Statements. The amendments are effective for annual reporting periods beginning on or after January 1, 2022 and apply prospectively. The amendments are not expected to have a material impact on the Group.

#### 3) Property, Plant and Equipment: Proceeds before Intended Use – Amendments to KIFRS 1016

The purpose of these amendments is to prohibits entities deducting from the cost of an item of property, plant and equipment, any proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognises the proceeds from selling such items, and the costs of producing those items, in profit or loss. The amendment is effective for annual reporting periods beginning on or after January 1, 2022 and must be applied retrospectively to items of property, plant and equipment made available for use on or after the beginning of the earliest period presented when the entity first applies the amendment. The Group is assessing the impact of the amendments on the interim condensed consolidated financial statements.

#### 4) Onerous Contracts – Costs of Fulfilling a Contract – Amendments to KIFRS 1037

The purpose of these amendments is to specify which costs an entity needs to include when assessing whether a contract is onerous or loss-making. The amendments apply a "directly related cost approach". The costs that relate directly to a contract to provide goods or services include both incremental costs and an allocation of costs directly related to contract activities. General and administrative costs do not relate directly to a contract and are excluded unless they are explicitly chargeable to the counterparty under the contract. The amendments are effective for annual reporting periods beginning on or after January 1, 2022. The Group will apply these amendments to contracts for which it has not yet fulfilled all its obligations at the beginning of the annual reporting period in which it first applies the amendments. The amendments are not expected to have a material impact on the Group.

#### 5) 2018-2020 Annual Improvements to KIFRS

#### ① KIFRS 1101 First-time Adoption of International Financial Reporting Standards – Subsidiary as a first-time adopter

The amendment permits a subsidiary that elects to apply paragraph D16(1) of KIFRS 1101 to measure cumulative translation differences using the amounts reported by the parent, based on the parent's date of transition to KIFRS. This amendment is also applied to an associate or joint venture that elects to apply paragraph D16(1) of KIFRS 1101. The amendment is effective for annual reporting periods beginning on or after January 1, 2022 with earlier adoption permitted. The amendments are not expected to have a material impact on the Group.

#### 2 KIFRS 1109 Financial Instruments – Fees in the '10 per cent' test for derecognition of financial liabilities

The amendment clarifies the fees that an entity includes when assessing whether the terms of a new or modified financial liability are substantially different from the terms of the original financial liability. These fees include only those paid or received between the borrower and the lender, including fees paid or received by either the borrower or lender on the other's behalf. An entity applies the amendment to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment.

#### 3. Changes in accounting policies, continued

The amendment is effective for annual reporting periods beginning on or after January 1, 2022 with earlier adoption permitted. The Group will apply the amendments to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment. The amendments are not expected to have a material impact on the Group.

#### ③ KIFRS 1041 Agriculture – Taxation in fair value measurements

The amendment removes the requirement in paragraph 22 of KIFRS 1041 that entities exclude cash flows for taxation when measuring the fair value of assets within the scope of KIFRS 1041. An entity applies the amendment prospectively to fair value measurements on or after the beginning of the first annual reporting period beginning on or after January 1, 2022 with earlier adoption permitted. The amendments are not expected to have a material impact on the Group.

#### 4. Segment information

Substantially all of the Group's revenue are derived from non-current assets located in Korea. The Group's chief operating decision maker ("CODM") does not receive and therefore does not review discrete financial information for any component of the Group, therefore it does not report segment information. All of the Group's electricity sales for the three-month periods ended March 31, 2021 and 2020 amounted to ¥1,132,444,070,580 (including ¥15,850,310,926 in sales related to Shinseocheon test power generation) and ¥1,190,134,143,650 respectively, and are made to KEPCO, who owns 100 percent of the Group.

### (Unaudited)

### 5. Classification of financial instruments

(1) Classification of financial assets as of March 31, 2021 and December 31, 2020 are as follows:

In won			March 31, 2021		
Current assets	Financial assets at FVTPL	FVOCI - equity instuments	Financial assets at amortized cost	Derivative assets (using hedge accounting)	Total
Cash and cash W equivalents	-	-	292,974,857,682	-	292,974,857,682
Financial assets at FVTPL Short torres	76,900,000,000	-	-	-	76,900,000,000
Short-term financial instruments	-	-	11,000,000,000	-	11,000,000,000
Derivative assets	101,700,000	-	-	7,339,911,642	7,441,611,642
Short-term Ioans	-	-	2,220,177,239	-	2,220,177,239
Trade and other receivables	-	-	740,245,105,210	-	740,245,105,210
	77,001,700,000	-	1,046,440,140,131	7,339,911,642	1,130,781,751,773
Non-current assets					
Financial assets at FVOCI	-	149,168,745,099	-	-	149,168,745,099
Derivative assets	7,641,891,128	-	-	1,446,544,311	9,088,435,439
Long-term Ioans	-	-	45,736,754,020	-	45,736,754,020
Trade and other receivables		-	280,330,810,265	-	280,330,810,265
	7,641,891,128	149,168,745,099	326,067,564,285	1,446,544,311	484,324,744,823
w	84,643,591,128	149,168,745,099	1,372,507,704,416	8,786,455,953	1,615,106,496,596

#### 5. Classification of financial instruments, continued

(1) Classification of financial assets as of March 31, 2021 and December 31, 2020 are as follows, Continued:

In won				December 31, 2020		
		Financial assets at FVTPL	FVOCI - equity instuments	Financial assets at amortized cost	Derivative assets (using hedge accounting)	Total
Current						
assets						
	₩					
cash equivalents Financial		-	-	254,069,769,864	-	254,069,769,864
assets at FVTPL		1,413,137		-		1,413,137
Short-term financial instruments		-	-	11,000,000,000	-	11,000,000,000
Short-term loans		-	-	3,393,193,753	-	3,393,193,753
Trade and other receivables		-	-	628,602,781,037	-	628,602,781,037
		1,413,137	-	897,065,744,654	-	897,067,157,791
Non-current						
assets						
Financial assets at FVOCI		-	178,914,535,572	-	-	178,914,535,572
Derivative assets		6,531,444,292	-	-	3,251,874,804	9,783,319,096
Long-term Ioans		-	-	45,174,901,970	-	45,174,901,970
Trade and other receivables		-	-	274,164,057,532	-	274,164,057,532
		6,531,444,292	178,914,535,572	319,338,959,502	3,251,874,804	508,036,814,170
	₩	6,532,857,429	178,914,535,572	1,216,404,704,156	3,251,874,804	1,405,103,971,961

### 5. Classification of financial instruments, continued

(2) Classification of financial liabilities as of March 31, 2021 and December 31, 2020 are as follows:

In won			March 31, 2	2021	
				Derivative liabilities	
		Financial liabilities at	Financial liabilities	(using hedge	
		FVTPL	at amortized cost	accounting)	Total
Current liabilities					
Borrowings	₩	-	151,657,329,980	-	151,657,329,980
Bonds		-	919,229,517,307	-	919,229,517,307
Derivative liabilities		7,225,000	-	23,387,574,638	23,394,799,638
Trade and other payables		-	556,450,055,124	-	556,450,055,124
		7,225,000	1,627,336,902,411	23,387,574,638	1,650,731,702,049
Non-current liabilities					
Borrowings		-	177,727,317,638	-	177,727,317,638
Bonds		-	6,469,461,145,340	-	6,469,461,145,340
Derivative liabilities		3,448,978,110	-	9,360,720,502	12,809,698,612
Trade and other payables		-	811,911,583,195	-	811,911,583,195
		3,448,978,110	7,459,100,046,173	9,360,720,502	7,471,909,744,785
	₩	3,456,203,110	9,086,436,948,584	32,748,295,140	9,122,641,446,834

In won			December 3	1, 2020	
		Financial liabilities at FVTPL	Financial liabilities at amortized cost	Derivative liabilities (using hedge accounting)	Total
Current liabilities				accounting	Total
Borrowings	₩	-	211,755,594,471	-	211,755,594,471
Bonds		-	565,917,142,108	-	565,917,142,108
Derivative liabilities		250,845,000	-	36,935,429,798	37,186,274,798
Trade and other payables		-	491,814,179,788	-	491,814,179,788
		250,845,000	1,269,486,916,367	36,935,429,798	1,306,673,191,165
Non-current liabilities					
Borrowings		-	177,126,693,569	-	177,126,693,569
Bonds		-	6,796,223,508,207	-	6,796,223,508,207
Derivative liabilities		3,448,978,110	-	16,824,422,454	20,273,400,564
Trade and other payables		-	803,263,724,126	-	803,263,724,126
		3,448,978,110	7,776,613,925,902	16,824,422,454	7,796,887,326,466
	₩	3,699,823,110	9,046,100,842,269	53,759,852,252	9,103,560,517,631

### (Unaudited)

#### 5. Classification of financial instruments, continued

(3) Classification of comprehensive income (loss) from financial instruments for the three-month periods ended March 31, 2021 and 2020 are as follows:

In won		-	March 31, 2021
Financial assets at amortized	Loss on fluctuation of exchange rates from cash and cash equivalents	₩	(167,435,784
cost	Interest income from cash and cash equivalents		206,397,682
	Interest income from loans		25,634,344
	Gain on fluctuation of exchange rates from trade and other receivables		47,100,054
	Interest income from trade and other receivables		8,139,114,44
inancial assets at FVTPL	Gain on valuation of derivative (profit or loss)		1,212,146,830
Derivative assets	Gain on valuation of derivatives (profit or loss)		6,942,763,11
(using hedge accounting)	Loss on valuation of derivatives (equity, before tax)		(1,408,181,969
	Gain on transaction of derivatives		2,495,386,40
inancial assets at FVOCI	Loss on valuation of financial assets at FVOCI (equity, before tax)		(29,463,001,473
inancial liabilities at	Loss on fluctuation of exchange rates		(52,921,716,539
amortized cost	Interest expenses from borrowing and bonds		(36,050,571,907
	Interest expenses from trade and other payables		(4,743,496,877
inancial liabilities at FVTPL	Loss on valuation of derivatives (profit or loss)		(7,225,000
	Gain on transaction of derivatives		694,849,25
Derivative liabilities	Gain on valuation of derivatives (profit or loss)		18,424,149,64
(using hedge accounting)	Gain on valuation of derivatives (equity, before tax)		1,091,007,86
	Gain on transaction of derivatives		251,673,97
'n won		_	March 31, 2020
inancial assets at	Gain on fluctuation of exchange rates from cash and cash equivalents	₩	49,946,949
amortized cost			
			, ,
	Interest income from cash and cash equivalents		426,746,26
	Interest income from cash and cash equivalents Interest income from loans		426,746,26 51,815,88
	Interest income from cash and cash equivalents Interest income from loans Gain on fluctuation of exchange rates from trade and other receivables		426,746,26 51,815,88 243,762,01
inancial assets at FVTPL	Interest income from cash and cash equivalents Interest income from loans Gain on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables		426,746,26 51,815,88 243,762,014 5,634,050,27
inancial assets at FVTPL	Interest income from cash and cash equivalents Interest income from loans Gain on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss)		426,746,26 51,815,88 243,762,01 5,634,050,27 2,986,210,40
	Interest income from cash and cash equivalents Interest income from loans Gain on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss) Gain on transaction of derivatives		426,746,26 51,815,88 243,762,01 5,634,050,27 2,986,210,40 1,770,654,13
Derivative assets	Interest income from cash and cash equivalents Interest income from loans Gain on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss) Gain on transaction of derivatives Gain on valuation of derivatives (profit or loss)		426,746,26 51,815,88 243,762,01 5,634,050,27 2,986,210,40 1,770,654,13 19,364,395,63
Derivative assets	Interest income from cash and cash equivalents Interest income from loans Gain on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss) Gain on transaction of derivatives Gain on valuation of derivatives (profit or loss) Loss on valuation of derivatives (equity, before tax)		426,746,26 51,815,88 243,762,01 5,634,050,27 2,986,210,40 1,770,654,13 19,364,395,63 (125,354,043
Derivative assets	Interest income from cash and cash equivalents Interest income from loans Gain on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss) Gain on transaction of derivatives Gain on valuation of derivatives (profit or loss) Loss on valuation of derivatives (equity, before tax) Gain on transaction of derivatives		426,746,26 51,815,88 243,762,01 5,634,050,27 2,986,210,40 1,770,654,13 19,364,395,63 (125,354,043 2,793,061,40
Derivative assets (using hedge accounting)	Interest income from cash and cash equivalents Interest income from loans Gain on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss) Gain on transaction of derivatives Gain on valuation of derivatives (profit or loss) Loss on valuation of derivatives (equity, before tax) Gain on transaction of derivatives Loss on valuation of financial assets at FVOCI (equity, before tax)		426,746,26 51,815,88 243,762,01 5,634,050,27 2,986,210,40 1,770,654,13 19,364,395,63 (125,354,043 2,793,061,40 (31,558,668,245
Financial assets at FVTPL Derivative assets (using hedge accounting) Financial liabilities at amortized cost	Interest income from cash and cash equivalents Interest income from loans Gain on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss) Gain on transaction of derivatives Gain on valuation of derivatives (profit or loss) Loss on valuation of derivatives (equity, before tax) Gain on transaction of derivatives Loss on valuation of financial assets at FVOCI (equity, before tax) Loss on fluctuation of exchange rates		426,746,26 51,815,88 243,762,01 5,634,050,27 2,986,210,40 1,770,654,13 19,364,395,63 (125,354,043 2,793,061,40 (31,558,668,245 (83,857,991,536
Derivative assets (using hedge accounting) Financial liabilities at	Interest income from cash and cash equivalents Interest income from loans Gain on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss) Gain on transaction of derivatives Gain on valuation of derivatives (profit or loss) Loss on valuation of derivatives (equity, before tax) Gain on transaction of derivatives Loss on valuation of financial assets at FVOCI (equity, before tax) Loss on fluctuation of exchange rates Interest expenses from borrowing and bonds		426,746,26 51,815,88 243,762,01 5,634,050,27 2,986,210,40 1,770,654,13 19,364,395,63 (125,354,043 2,793,061,40 (31,558,668,245 (83,857,991,536 (36,556,620,196
Derivative assets (using hedge accounting) Financial liabilities at amortized cost	Interest income from cash and cash equivalents Interest income from loans Gain on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss) Gain on transaction of derivatives Gain on valuation of derivatives (profit or loss) Loss on valuation of derivatives (equity, before tax) Gain on transaction of derivatives Loss on valuation of financial assets at FVOCI (equity, before tax) Loss on fluctuation of exchange rates Interest expenses from borrowing and bonds Interest expenses from trade and other payables		426,746,26 51,815,88 243,762,01 5,634,050,27 2,986,210,40 1,770,654,13 19,364,395,63 (125,354,043 2,793,061,40 (31,558,668,245 (83,857,991,536 (36,556,620,196 (5,041,878,575
Derivative assets (using hedge accounting) inancial liabilities at amortized cost	Interest income from cash and cash equivalents Interest income from loans Gain on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss) Gain on transaction of derivatives Gain on valuation of derivatives (profit or loss) Loss on valuation of derivatives (equity, before tax) Gain on transaction of derivatives Loss on valuation of financial assets at FVOCI (equity, before tax) Loss on fluctuation of exchange rates Interest expenses from borrowing and bonds Interest expenses from trade and other payables Loss on valuation of derivatives (profit or loss)		426,746,26 51,815,88 243,762,01 5,634,050,27 2,986,210,40 1,770,654,13 19,364,395,63 (125,354,043 2,793,061,40 (31,558,668,245 (83,857,991,536 (36,556,620,196 (5,041,878,575 (1,656,355,320
Derivative assets (using hedge accounting) Financial liabilities at	Interest income from cash and cash equivalents Interest income from loans Gain on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss) Gain on transaction of derivatives Gain on valuation of derivatives (profit or loss) Loss on valuation of derivatives (equity, before tax) Gain on transaction of derivatives Loss on valuation of financial assets at FVOCI (equity, before tax) Loss on fluctuation of exchange rates Interest expenses from borrowing and bonds Interest expenses from trade and other payables		426,746,26 51,815,88 243,762,01 5,634,050,27 2,986,210,40 1,770,654,13 19,364,395,63 (125,354,043 2,793,061,40 (31,558,668,245 (83,857,991,536 (36,556,620,196 (5,041,878,575

Loss on transaction of derivatives

(1,175,912,325)

(Unaudited)

#### 6. Cash and cash equivalents

Cash and cash equivalents as of March 31, 2021 and December 31, 2020 are as follows:

In won		March 31, 2021	December 31, 2020		
Cash	W	281,345,391,123	245,961,419,294		
Cash equivalents		11,629,466,559	8,108,350,570		
	W	292,974,857,682	254,069,769,864		

Cash and cash equivalents in the statement of cash flows include cash and bank deposits.

#### 7. Financial assets

(1) Financial assets as of March 31, 2021 and December 31, 2020 are as follows:

In won		March 31	, 2021	December 31, 2020			
	_	Current	Non-current	Current	Non-current		
Loans	₩	2,299,439,344	57,092,360,985	3,473,226,994	56,467,672,653		
Less: present value discount		(79,262,105)	(1,227,895,225)	(80,033,241)	(1,165,058,943)		
Less: allowance for doubtful accounts		-	(10,127,711,740)	-	(10,127,711,740)		
	_	2,220,177,239	45,736,754,020	3,393,193,753	45,174,901,970		
Financial instruments		11,000,000,000	-	11,000,000,000	-		
Financial assets at FVTPL		76,900,000,000	-	1,413,137	-		
Derivative assets		7,441,611,642	9,088,435,439	-	9,783,319,096		
Financial assets at FVOCI		-	149,168,745,099	-	178,914,535,572		
	₩	97,561,788,881	203,993,934,558	14,394,606,890	233,872,756,638		

#### (2) Loans as of March 31, 2021 and December 31, 2020 are as follows:

In won		March 3	1, 2021	December 31, 2020		
		Current	Non-current	Current	Non-current	
Loans for tuition (*1)	W	1,192,050,190	19,483,108,985	1,419,786,700	18,260,754,485	
Present value discount		(79,262,105)	(1,227,895,225)	(80,033,241)	(1,165,058,943)	
	_	1,112,788,085	18,255,213,760	1,339,753,459	17,095,695,542	
Housing fund loans (*2)		1,106,921,784	12,350,864,877	1,031,440,294	11,754,330,247	
Loans to affiliates (*3)		-	25,014,902,255	-	26,343,787,921	
Allowance for doubtful accounts		-	(10,127,711,740)	-	(10,127,711,740)	
Other loans		467,370	243,484,868	1,022,000,000	108,800,000	
	W	2,220,177,239	45,736,754,020	3,393,193,753	45,174,901,970	

(\*1) The Group makes loans to employees interest free for the purpose of supporting school expenses of their children. Loans are collected quarterly in equal installment payment through deduction from salary payment.

(\*2) The Group makes loans to employees who do not own a house for the purpose of improving residential stability of employees. The interest rate is 95% of weighted average borrowing rate of the Group. Loan terms are 20 years with installment payments.

(\*3) The Group lends to PT Cirebon Electric Power, PT Wampu Electric Power and Gunsan Bio Energy at interest rates of 4.6~11% per annum.

(Unaudited)

#### 7. Financial assets, continued

(3) Financial instruments as of March 31, 2021 and December 31, 2020 are as follows:

In won		March 31, 2021	December 31, 2020
Term deposit and others	₩	11,000,000,000	11,000,000,000

(4) Changes in allowance for dounbtful accounts of loans for the three-month period ended March 31, 2021 and the year ended December 31,

 $\mathbf{2020}\xspace$  are as follows

In won		March 31, 2021	December 31, 2020
Beginning balance Bad debt expenses for impaired financial assets	₩	10,127,711,740	10,127,711,740
Ending balance	₩	10,127,711,740	10,127,711,740

#### 8. Restriction of deposit

Restricted deposits as of March 31, 2021 and December 31, 2020 are as follows:

In won		March 31, 2021	December 31, 2020	
Cash and cash equivalents (*1)	₩	11,849,510,653	12,212,498,170	
Short-term financial instruments (*2)		11,000,000,000	11,000,000,000	

(\*1) As explained in Note 15, this amount is provided as collateral for the long-term borrowings of Commerce and Industry Energy Co., Ltd., a subsidiary of KOMIPO.

(\*2) Restriction on withdrawal related to 'win-win growth program' for small and medium enterprises of the IBK bank.

#### 9. Financial assets at FVTPL

Financial assets at FVTPL as of March 31, 2021 and December 31, 2020 are as follows:

In won		March 31, 2021	December 31, 2020	
MMT (Money market trust)	₩	76,900,000,000	1,413,137	

#### 10. Financial assets at FVOCI

(1) Financial assets at FVOCI as of March 31, 2021 and December 31, 2020 are as follows:

In won Ownership Acquisition Shares (%) cost Book value Book value Equity securities Listed					March	31, 2021	December 31, 2020
Listed	n won	Shares	•	_	•	Book value	Book value
	• •						
		100 000 040	1.000/		00 533 335 360	120 220 000 512	150 500 005 005
, , , , , , , , , , , , , , , , , , , ,		133,333,340	4.00%	₩	80,533,337,360	130,239,006,512	159,702,007,985
Unlisted		1.00(.075	7 1 40/		0 121 274 714	15 0 (0 002 202	15 0 60 002 202
	8	, ,			, , ,	, , ,	15,960,993,283
KEPCO-Uhde Inc.         103,230         2.40%         516,150,000         14,198,304         14,198,304	KEPCO-Uhde Inc.	103,230	2.40%		516,150,000	14,198,304	14,198,304
HeeMang Sunlight Power Co.,         78,600         8.33%         393,000,000         393,000,000         393,000,000           Ltd.         78,600         8.33%         393,000,000	<b>e e</b> .	78,600	8.33%		393,000,000	393,000,000	393,000,000
West Highway Solar Co., Ltd (*) 194,600,000	West Highway Solar Co., Ltd (*)	-	-		-	-	194,600,000
East Highway Solar Co., Ltd (*) 190,200,000	East Highway Solar Co., Ltd (*)	-	-		-	-	190,200,000
PT Cirebon Energi Prasarana 22,420 10.00% 2,612,000,000 2,541,307,000 2,439,296,000	PT Cirebon Energi Prasarana	22,420	10.00%		2,612,000,000	2,541,307,000	2,439,296,000
KEPCO Bylong Australia Pty., Ltd.         3,537,032         2.00%         6,134,697,340         -	KEPCO Bylong Australia Pty., Ltd.	3,537,032	2.00%		6,134,697,340	-	-
Fire Guarantee         40         -         20,240,000         20,240,000         20,240,000	Fire Guarantee	40	-		20,240,000	20,240,000	20,240,000
₩ 99,340,799,414 149,168,745,099 178,914,535,572				₩	99,340,799,414	149,168,745,099	178,914,535,572

(\*) For the period ended March 31, 2021, the investments was reclassified from financial assets at FVOCI to investments in associates, due to the additional acquisition of their equities through the disproportionated capital reduction.

#### 10. Financial assets at FVOCI, continued

(2) Changes in financial assets at FVOCI (equity securities) for the three-month period ended March 31, 2021 and the year ended December 31, 2020 are as follows:

In won				March 31, 2021		
		Beginning balance	Transfer	Valuation	Others	Ending balance
PT. Bayan Resources TBK	₩	159,702,007,985	-	(29,463,001,473)	-	130,239,006,512
Korea Power Exchange		15,960,993,283	-	-	-	15,960,993,283
KEPCO-Uhde Inc.		14,198,304	-	-	-	14,198,304
HeeMang Sunlight Power Co., Ltd.		393,000,000	-	-	-	393,000,000
West Highway Solar Co., Ltd		194,600,000	(194,600,000)	-	-	-
East Highway Solar Co., Ltd		190,200,000	(190,200,000)	-	-	-
PT Cirebon Energi Prasarana		2,439,296,000	-	-	102,011,000	2,541,307,000
KEPCO Bylong Australia Pty., Ltd.		-	-	-	-	-
Fire Guarantee.		20,240,000	-	-	-	20,240,000
	₩	178,914,535,572	(384,800,000)	(29,463,001,473)	102,011,000	149,168,745,099

In won		December 31, 2020							
		Beginning balance	Transfer	Valuation	Others	Ending balance			
PT. Bayan Resources TBK	₩	176,172,008,809	-	(16,470,000,824 )	-	159,702,007,98 5			
Korea Power Exchange		16,357,391,992	-	(396,398,709)	-	15,960,993,283			
KEPCO-Uhde Inc.		14,198,304	-	-	-	14,198,304			
HeeMang Sunlight Power Co., Ltd.		393,000,000	-	-	-	393,000,000			
West Highway Solar Co., Ltd		194,600,000	-	-	-	194,600,000			
East Highway Solar Co., Ltd		190,200,000	-	-	-	190,200,000			
Muan Solar Power Plant Co., Ltd.		1,491,500,000	(1,491,500,000 )	-	-	-			
PT Cirebon Energi Prasarana		2,595,787,600	-	-	(156,491,600 )	2,439,296,000			
KEPCO Bylong Australia Pty., Ltd.		-	-	-	-	-			
Fire Guarantee.		-	20,240,000	-	-	20,240,000			
	₩	197,408,686,705	(1,471,260,000)	(16,866,399,533 )	(156,491,600	178,914,535,57 2			

(Unaudited)

#### 11. Derivatives

(1) Derivatives as of March 31, 2021 and December 31, 2020 are as follows:

In won	_	March 3	31, 2021	December 31, 2020		
		Current	Non-current	Current	Non-current	
Derivative assets						
Currency swap	₩	7,339,911,642	1,446,544,311	-	3,251,874,804	
Currency forward		101,700,000	-	-	-	
Interest rate swap		-	7,641,891,128	-	6,531,444,292	
	-	7,441,611,642	9,088,435,439	-	9,783,319,096	
Derivative liabilities						
Currency swap		22,504,588,680	4,313,176,006	36,087,887,916	5,393,051,395	
Currency forward		7,225,000	-	250,845,000	-	
Interest rate swap		882,985,958	5,047,544,496	847,541,882	11,431,371,059	
Others deritative instrument (*)		-	3,448,978,110	-	3,448,978,110	
	₩	23,394,799,638	12,809,698,612	37,186,274,798	20,273,400,564	

(\*) As described in Note 37, it is a fair value of the obligation to acquire the shares of financial investors for the Hyundai Green Power Co., Ltd. in accordance with the contract among its shareholders.

(2) Currency swap contracts which are designated as hedging instruments for cash flow as of March 31, 2021 are as follows:

#### In won and foreign currencies

			Contract amount			Contract inter	Contract	
Counterparty	Terms of the contract		Рау	_	Receive	Рау	Receive	exchange rate
Korea Development Bank	2016.01.21. ~ 2021.07.21.	₩	121,000,000,000	USD	100,000,000	2.15	2.50	₩1,210.00
Morgan Stanley	2016.01.21. ~ 2021.07.21.		121,000,000,000	USD	100,000,000	2.10+ floating rate	2.50	₩1,210.00
BNP Paribas	2016.01.21. ~ 2021.07.21.		121,000,000,000	USD	100,000,000	2.10+ floating rate	2.50	₩1,210.00
Nomura	2017.10.24. ~ 2037.10.30.		52,456,800,000	EUR	40,000,000	2.60	1.70	₩1,311.42
Nomura	2017.11.09. ~ 2037.11.16.		59,422,500,000	SEK	450,000,000	2.62	2.36	₩132.05
Kookmin Bank	2019.01.23. ~ 2022.01.22.		112,650,000,000	USD	100,000,000	1.80	3.38	₩1,126.50
Korea Development Bank	2019.01.14. ~ 2022.01.22.		112,650,000,000	USD	100,000,000	1.80	3.38	₩1,126.50
Woori Bank	2019.01.15. ~ 2022.01.22.		112,650,000,000	USD	100,000,000	1.80	3.38	₩1,126.50

#### 11. Derivatives, continued

(3) Currency forward contracts which are designated for the trading purpose as of March 31, 2021 are as follows:

#### In won and U.S. dollars

			Contract a		
Counterparty	Terms of the contract		Рау	Receive	Contract exchange rate
MUFG	2021.03.16. ~ 2021.04.06.	₩	9,060,400,000	\$ 8,000,000	₩ 1,132.55
MUFG	2021.03.17. ~ 2021.04.06.		11,318,500,000	10,000,000	₩ 1,131.85
MUFG	2021.03.18. ~ 2021.04.06.		8,990,400,000	8,000,000	₩ 1,123.80
MUFG	2021.03.25. ~ 2021.04.14.		9,641,975,000	8,500,000	₩ 1,134.35

(4) Interest rate swap contracts which are designated for the trading purpose as of March 31, 2021 are as follows:

#### In won and U.S. dollars

				Contract inter	rest rate (%)	Contract
Counterparty	Terms of the contract		Contract amount	Рау	Receive	exchange rate
Societe Generale	2017.03.28. ~ 2022.06.28.	₩	200,000,000,000	3.44+ floating rate	3.77	-
Nomura	2017.10.24. ~ 2032.10.30.	₩	52,456,800,000	2.25+	2.60	-
				floating rate		
Nomura	2017.11.09. ~ 2027.11.16.	₩	59,422,500,000	2.27+	2.62	-
				floating rate		
The Export-Import Bank of Korea	2015.02.12. ~ 2031.12.29.	\$	15,893,000	2.67	Libor(6M)	₩1,071.90
ING Bank N.V.	2015.02.12. ~ 2031.12.29.	\$	7,861,000	2.67	Libor(6M)	₩1,071.90
BNP Paribas	2015.02.17. ~ 2031.12.29.	\$	7,861,000	2.67	Libor(6M)	₩1,210.00

(5) Gain or loss on valuation and transaction of derivatives for the three-month periods ended March 31, 2021 and 2020 are as follows:

In won	Net income effects of valuation gain (loss)			e effects of a gain (loss)	Accumulated other comprehensive gain (loss) (*)	
	March 31, 2021	March 31, 2020	March 31, 2021	March 31, 2020	March 31, 2021	March 31, 2020
Currency swap 🛛 ₩	25,775,359,146	39,827,657,532	2,747,060,381	1,617,149,082	(5,577,603,372)	(11,112,092,734)
Currency forward	94,475,000	(98,700,000)	694,849,257	1,770,654,130	-	-
Interest rate swap	702,000,456	(7,193,193,535)	-	-	5,260,429,263	-
. ₩	26,571,834,602	32,535,763,997	3,441,909,638	3,387,803,212	(317,174,109)	(11,112,092,734)

(\*) Loss on valuation of derivatives recorded in accumulated other comprehensive loss in the amounts of W1,257,470,846 and accumulated other comprehensive gain in the amount of W3,391,906,376 as of March 31, 2021 and December 31, 2020, respectively, are net of tax.

(Unaudited)

#### 12. Trade and other receivables

#### (1) Trade and other receivables as of March 31, 2021 and December 31, 2020 are as follows:

In won			March 31, 2021	
			Allowance for	
		Gross receivables	doubtful accounts	Book value
Current assets				
Trade receivables	W	368,132,573,537	-	368,132,573,537
Other receivables		381,697,734,280	(9,585,202,607)	372,112,531,673
		749,830,307,817	(9,585,202,607)	740,245,105,210
Non-current assets				
Trade receivables		170,689,831,823	-	170,689,831,823
Other receivables		109,640,978,442	-	109,640,978,442
		280,330,810,265	-	280,330,810,265
	₩	1,030,161,118,082	(9,585,202,607)	1,020,575,915,475
In won			December 31, 2020	
			Allowance for	
			Anowance for	
		Gross receivables	doubtful accounts	Book value
Current assets		Gross receivables		Book value
<b>Current assets</b> Trade receivables	₩	Gross receivables 376,784,824,666		Book value 376,784,824,666
	₩			
Trade receivables	₩.	376,784,824,666	doubtful accounts	376,784,824,666
Trade receivables	₩	376,784,824,666 261,403,158,978	doubtful accounts (9,585,202,607)	376,784,824,666 251,817,956,371
Trade receivables Other receivables	₩	376,784,824,666 261,403,158,978	doubtful accounts (9,585,202,607)	376,784,824,666 251,817,956,371
Trade receivables Other receivables Non-current assets	₩	376,784,824,666 261,403,158,978 638,187,983,644	doubtful accounts (9,585,202,607)	376,784,824,666 251,817,956,371 628,602,781,037
Trade receivables Other receivables <b>Non-current assets</b> Trade receivables	₩	376,784,824,666 261,403,158,978 638,187,983,644 165,334,003,407	doubtful accounts (9,585,202,607)	376,784,824,666 251,817,956,371 628,602,781,037 165,334,003,407

### 12. Trade and other receivables, continued

(2) Other receivables as of March 31, 2021 and March 31, 2020 are as follows:

March 31, 2021			
-		Allowance for	
-	Gross receivables	doubtful accounts	Book value
₩	266,904,066,220	(9,585,202,607)	257,318,863,613
	113,822,966,822	-	113,822,966,822
	970,701,238	-	970,701,238
-	381,697,734,280	(9,585,202,607)	372,112,531,673
-			
	83,512,148,348	-	83,512,148,348
	26,128,830,094	-	26,128,830,094
-	109,640,978,442	-	109,640,978,442
₩ -	491,338,712,722	(9,585,202,607)	481,753,510,115
		<ul> <li>✓ 266,904,066,220</li> <li>113,822,966,822</li> <li>970,701,238</li> <li>381,697,734,280</li> <li>83,512,148,348</li> <li>26,128,830,094</li> <li>109,640,978,442</li> </ul>	Allowance for doubtful accounts         Gross receivables       Allowance for doubtful accounts         ₩       266,904,066,220       (9,585,202,607)         113,822,966,822       -         970,701,238       -         381,697,734,280       (9,585,202,607)         83,512,148,348       -         26,128,830,094       -         109,640,978,442       -

In won			December 31, 2020	
			Allowance for	
		Gross receivables	doubtful accounts	Book value
Current assets				
Non-trade receivables	₩	213,630,007,621	(9,585,202,607)	204,044,805,014
Accrued income		46,812,455,381	-	46,812,455,381
Deposits		960,695,976	-	960,695,976
		261,403,158,978	(9,585,202,607)	251,817,956,371
Non-current assets				
Non-trade receivables		83,308,133,163	-	83,308,133,163
Deposits		25,521,920,962	-	25,521,920,962
		108,830,054,125	-	108,830,054,125
	₩	370,233,213,103	(9,585,202,607)	360,648,010,496

(3) Changes in allowance for doubtful accounts of other receivables for the three-month period ended March 31, 2021 and the year ended December 31, 2020 are as follows:

In won		March 31, 2021	December 31, 2020
Beginning balance	₩	9,585,202,607	9,585,202,607
Bad debt expenses for impaired financial assets		-	-
Ending balance	₩	9,585,202,607	9,585,202,607

### (Unaudited)

#### 12. Trade and other receivables, continued

(4) An aging analysis of account trade and other receivables as of March 31, 2021 is as follows:

In millions of won		Trade receivables	Other receivables
Receivables that are neither past due nor impaired: Receivables that are past due but not impaired: 0 ~ 90 days	₩	538,822,405,360	479,694,145,031
Receivables that are impaired:			
0 ~ 90 days		-	-
90 ~ 120 days		-	-
120 days ~ 1 years		-	-
Over 1 years		-	11,644,567,691
Subtotal		538,822,405,360	491,338,712,722
(Less allowance for doubtful receivables)		-	(9,585,202,607)
(Less present value)		-	-
Ending balance	₩	538,822,405,360	481,753,510,115

#### 13. Inventories

Inventories as of March 31, 2021 and December 31, 2020 are as follows:

In won		March 31, 2021	December 31, 2020	
Raw materials	₩	179,008,544,565	225,230,366,778	
Supplies		85,704,960,460	76,016,308,026	
Inventories in transit		137,720,310,091	118,529,975,398	
Other inventories		402,681,125	391,091,800	
	₩	402,836,496,241	420,167,742,002	

#### 14. Non-financial assets

Non-financial assets as of March 31, 2021 and December 31, 2020 are as follows:

In won		March 31	, 2021	December 3	1, 2020
	_	Current	Non-current	Current	Non-current
Advance payment	₩	428,894,693	3,679,871,478	534,179,874	3,315,921,492
Prepaid expenses		9,525,145,563	19,741,106,591	13,713,751,473	19,213,967,398
Others		97,918,026,769	1,164,667,274	148,342,572,363	951,942,538
	₩	107,872,067,025	24,585,645,343	162,590,503,710	23,481,831,428

#### 15. Property, plant and equipment

(1) Property, plant and equipment as of March 31, 2021 and December 31, 2020 are as follows:

In won			March 31, 2021						
		Acquisition cost	Government grants	Accumulated depreciation	Accumulated impairment losses	Book value			
Land	₩	805,659,128,410	-	-	-	805,659,128,410			
Buildings		2,130,628,312,139	(13,694,606,668)	(683,686,558,714)	(3,820,946,122)	1,429,426,200,635			
Structures		1,229,983,147,881	-	(441,642,882,534)	(8,725,595,587)	779,614,669,760			
Machinery		9,076,613,246,012	(5,634,186,721)	(4,204,509,894,538)	(67,304,276,186)	4,799,164,888,567			
Ships		36,362,730	-	(36,361,730)	-	1,000			
Vehicles		10,751,358,837	(209,273,751)	(8,997,468,524)	(116,354,054)	1,428,262,508			
Equipment		121,662,999,090	-	(93,471,567,324)	-	28,191,431,766			
Tools		29,845,901,705	-	(24,401,924,517)	(32,158,165)	5,411,819,023			
Construction-in- progress		2,037,009,678,241	-	-	-	2,037,009,678,241			
Right-of-use assets		1,246,534,169,465	-	(259,925,433,471)	(1,069,630,532)	985,539,105,462			
	₩	16,688,724,304,510	(19,538,067,140)	(5,716,672,091,352)	(81,068,960,646)	10,871,445,185,372			

In won		December 31, 2020					
		Acquisition cost	Government grants	Accumulated depreciation	Accumulated impairment losses	Book value	
Land	₩	805,727,876,793	-	-	-	805,727,876,793	
Buildings		2,131,408,381,174	(14,124,835,765)	(658,772,857,268)	(3,820,946,122)	1,454,689,742,019	
Structures		1,189,260,028,955	-	(432,107,037,994)	(8,725,595,587)	748,427,395,374	
Machinery		9,000,923,605,675	(5,793,576,719)	(4,084,328,388,140)	(67,304,276,186)	4,843,497,364,630	
Ships		36,362,730	-	(36,361,730)	-	1,000	
Vehicles		10,784,393,727	(230,023,334)	(8,833,059,564)	(116,354,054)	1,604,956,775	
Equipment		120,917,917,482	-	(89,778,742,631)	-	31,139,174,851	
Tools		30,031,324,094	-	(23,840,515,371)	(32,158,165)	6,158,650,558	
Construction-in- progress		2,023,838,122,310	-	-	-	2,023,838,122,310	
Right-of-use assets		1,244,772,493,593	-	(241,537,740,352)	(1,069,630,532)	1,002,165,122,709	
	₩	16,557,700,506,533	(20,148,435,818)	(5,539,234,703,050)	(81,068,960,646)	10,917,248,407,019	

#### 15. Property, plant and equipment, continued

(2) Changes in property, plant and equipment for the three-month period ended March 31, 2021 is as follows:

In won				Marc	h 31, 2021		
		Beginning balance	Acquisition	Disposal	Depreciation	Others(*)	Ending balance
Land	₩	805,727,876,793	-	(100,845)	-	(68,647,538)	805,659,128,410
Buildings		1,454,689,742,019	-	(334,300,796)	(25,034,336,792)	105,096,204	1,429,426,200,635
Structures		748,427,395,374	-	-	(9,533,631,158)	40,720,905,544	779,614,669,760
Machinery		4,843,497,364,630	18,453,852,177	(1,000)	(119,770,923,389)	56,984,596,149	4,799,164,888,567
Ships		1,000	-	-	-	-	1,000
Vehicles		1,604,956,775	-	(19,570,446)	(161,539,630)	4,415,809	1,428,262,508
Equipment		31,139,174,851	72,775,188	(140,404)	(3,564,394,363)	544,016,494	28,191,431,766
Tools		6,158,650,558	5,909,278	(1,921,208)	(787,673,411)	36,853,806	5,411,819,023
Construction- in- progress		2,023,838,122,310	99,825,642,905	-	-	(86,654,086,974)	2,037,009,678,241
Right-of-use assets		1,002,165,122,709	8,056,810,211	-	(26,678,334,258)	1,995,506,800	985,539,105,462
	₩	10,917,248,407,019	126,414,989,759	(356,034,699)	(185,530,833,001)	13,668,656,294	10,871,445,185,372

(\*) The amounts are composed of transfers from construction-in-progress to depreciable assets, borrowing costs for capitalization, retirement benefit expenses for capitalization, effect of exchange rate fluctuations and others.

#### 15. Property, plant and equipment, continued

(2) Changes in property, plant and equipment for the year ended December 31, 2020 are as follows:

In won				D	ecember 31, 2020	)		
		Beginning balance	Acquisition	Disposal	Depreciation	Impairment loss(*1)	Others(*2)	Ending balance
Land	₩	803,081,284,394	91,828,642	(93,547,647)	-	-	2,648,311,404	805,727,876,793
Buildings		1,089,249,935,854	-	(434,737)	(99,306,618,302)	(2,046,333,359)	466,793,192,563	1,454,689,742,019
Structures		1,122,682,203,278	-	(1,000)	(37,763,793,834)	(700,118,673)	(335,790,894,397)	748,427,395,374
Machinery		4,796,627,424,273	78,281,357,605	(26,139,785)	(524,323,863,711)	(57,385,083,614)	550,323,669,862	4,843,497,364,630
Ships		1,000	-	-	-	-	-	1,000
Vehicles		1,279,043,976	136,337,818	(69,057,624)	(630,978,332)	-	889,610,937	1,604,956,775
Equipment		27,742,516,859	279,808,791	(3,788,963)	(13,424,442,393)	-	16,545,080,557	31,139,174,851
Tools		6,574,440,420	172,998,944	(21,100)	(3,177,370,148)	-	2,588,602,442	6,158,650,558
Constructio n-in- progress		1,608,421,431,382	1,078,449,010,506	-	-	-	(663,032,319,578)	2,023,838,122,310
Right-of-use assets		902,748,843,775	202,985,794,342	-	(103,515,302,567)	(1,069,630,532)	1,015,417,691	1,002,165,122,709
	₩	10,358,407,125,211	1,360,397,136,648	(192,990,856)	(782,142,369,287)	(61,201,166,178)	41,980,671,481	10,917,248,407,019

(\*1) Following the decision to close Boryeong Thermal Power Plant Units 1 and 2 in accordance with the 9<sup>th</sup> electric power supply plan, The Group estimated the fair value of the related individual assets, deducting the cost of disposal, as a recoverable value. Accordingly, the Group recognized an impairment loss of ₩61,201,166,178.

(\*2) The amounts are composed of transfers from construction-in-progress to depreciable assets, borrowing costs for capitalization, retirement benefit expenses for capitalization, deduction of liquidated damages due to delay from acquisition cost.

#### (3) Government grants as of March 31, 2021 and March 31, 2020 are as follows:

In won		March 31, 2021	December 31, 2020
Buildings	₩	13,694,606,668	14,124,835,765
Machinery		5,634,186,721	5,793,576,719
Vehicles		209,273,751	230,023,334
	₩	19,538,067,140	20,148,435,818

(Unaudited)

#### 15. Property, plant and equipment, continued

(4) Changes in government grants for the three-month period ended March 31, 2021 and the year ended December 31, 2020 are as follows:

In won			March 3	1, 2021	
		Beginning balance	Acquisition	Depreciation	Ending balance
Buildings	₩	14,124,835,765	-	(430,229,097)	13,694,606,668
Machinery		5,793,576,719	-	(159,389,998)	5,634,186,721
Vehicles		230,023,334	-	(20,749,583)	209,273,751
	₩	20,148,435,818	-	(610,368,678)	19,538,067,140

In won		December 31, 2020							
		Beginning balance	Acquisition	Depreciation	Ending balance				
Buildings	₩	15,845,752,154	-	(1,720,916,389)	14,124,835,765				
Machinery		6,356,923,376	72,600,000	(635,946,657)	5,793,576,719				
Vehicles		136,438,333	163,600,000	(70,014,999)	230,023,334				
	₩	22,339,113,863	236,200,000	(2,426,878,045)	20,148,435,818				

(5) Collateral assets of the Group as of March 31, 2021 are as follows:

In won			Established amount of	Type of	Balance of	Bank that the
Collateral assets		Book value	collateral	borrowing	borrowing (*2)	borrowing is made
Land, buildings, structure and machinery (*1)	₩	70,805,180,923	110,500,000,000	Long-term borrowings	35,149,456,524	Industrial Bank of Korea and others

(\*1) Property, plant and equipment of Commerce and Industry Energy Co., Ltd. is provided as collateral. Cash and cash equivalents and benefit of property insurance are also provided as collateral.

(\*2) Balance of borrowing is related to Commerce and Industry Energy Co., Ltd.'s long term borrowing, presented above at its face value.

#### 16. Intangible assets

#### (1) Intangible assets as of March 31, 2021 and December 31, 2020 are as follows:

In won		March 31, 2021							
	-	Acquisition cost	Accumulated amortization	Accumulated impairment loss	Book value				
Software	₩	43,413,688,300	(31,989,305,636)	-	11,424,382,664				
Development expenditures		42,479,286,147	(37,295,878,169)	(19,105,502)	5,164,302,476				
Mining rights		19,679,431,121	(7,114,529,623)	-	12,564,901,498				
Others		63,764,393,670	(1,177,091,958)	(25,445,077)	62,561,856,635				
Goodwill		2,582,180,202	-	-	2,582,180,202				
	₩	171,918,979,440	(77,576,805,386)	(44,550,579)	94,297,623,475				

In won

In won					
		Acquisition cost	Accumulated amortization	Accumulated impairment loss	Book value
Software	₩	43,294,392,102	(30,072,097,083)	-	13,222,295,019
Development expenditures		42,468,819,198	(36,689,396,227)	(19,105,502)	5,760,317,469
Mining rights		19,113,049,165	(6,747,662,036)	-	12,365,387,129
Others		58,152,040,993	(1,157,319,477)	(25,445,077)	56,969,276,439
Goodwill		2,582,180,202	-	-	2,582,180,202
	₩	165,610,481,660	(74,666,474,823)	(44,550,579)	90,899,456,258

#### 16. Intangible assets, continued

(2) Changes in intangible assets for the three-month period ended March 31, 2021 and the year ended December 31, 2020 are as follows:

In won March 31, 2021						
		Beginning balance	Acquisition	Amortization	Others (*)	Ending balance
Software	₩	13,222,295,019	5,181,818	(1,916,495,048)	113,400,875	11,424,382,664
Development expenditures		5,760,317,469	10,466,949	(605,621,942)	(860,000)	5,164,302,476
Mining rights		12,365,387,129	-	(166,838,728)	366,353,097	12,564,901,498
Others		56,969,276,439	-	(16,804,808)	5,609,385,004	62,561,856,635
Goodwill		2,582,180,202	-	-	-	2,582,180,202
	₩	90,899,456,258	15,648,767	(2,705,760,526)	6,088,278,976	94,297,623,475

(\*) Others consist of transfer from construction-in-progress to depreciable assets, transfer from amortization cost to construction-inprogress, transfer of greenhouse gases emission right and effect of exchange rate fluctuations.

On the other hand, greenhouse gases emission right allocated free of charge from the government is classified as intangible assets and measured as nil.

In won			December 31, 2020					
		Beginning balance	Acquisition	Amortization	Others (*)	Ending balance		
Software	₩	14,973,230,091	1,663,827	(4,780,219,200)	3,027,620,301	13,222,295,019		
Development expenditures		5,196,783,994	596,561,000	(1,977,182,942)	1,944,155,417	5,760,317,469		
Mining rights		12,698,694,325	542,997,900	(1,266,662,303)	390,357,207	12,365,387,129		
Others		24,753,835,245	34,572,900	(106,780,822)	32,287,649,116	56,969,276,439		
Goodwill		2,582,180,202	-	-	-	2,582,180,202		
	₩	60,204,723,857	1,175,795,627	(8,130,845,267)	32,163,993,981	90,899,456,258		

(\*) Others consist of transfer from construction-in-progress to depreciable assets, transfer from amortization cost to construction-inprogress, transfer of greenhouse gases emission right and effect of exchange rate fluctuations.

On the other hand, greenhouse gases emission right allocated free of charge from the government is classified as intangible assets and measured as nil.

(Unaudited)

#### 17. Investments in associates and joint ventures

(1) Investments in associates and joint ventures as of March 31, 2021 and December 31, 2020 are as follows:

In won			March 31, 202	1		
Investees	Key operation activities	Location	Percentage of ownership(%)		Acquisition cost	Book value
Investees	Rey operation activities	Location	ownership(%)		Acquisition cost	BOOK Value
<associates></associates>						
KEPCO Lebanon S.A.R.L.	Combined cycle operation and maintenance	Lebanon	49.0	₩	503,056,419	-
Gangwon Wind Power Co., Ltd. (*1)	Wind power	Korea	15.0		5,725,222,288	9,982,301,541
Hyundai Green Power Co., Ltd.	Byproduct gas power generation	Korea	29.0		88,885,000,000	121,773,681,149
PT Cirebon Electric Power	Coal thermal power generation	Indonesia	27.5		40,365,236,597	117,625,846,826
PT Wampu Electric Power	Water power generation	Indonesia	46.0		21,292,365,498	30,894,018,355
Korea Offshore Wind Power Co., Ltd.(*1)	Wind power generation	Korea	12.5		26,600,000,000	21,280,175,307
Gunsan Bio Energy Co.,Ltd. (*1)	Bio energy power generation	Korea	18.9		1,000,000,000	-
KEPCO Solar Co., Ltd. (*1)	Solar school business	Korea	8.3		16,650,000,000	17,300,237,625
KEPCO Energy Solution Co., Ltd. (*1)	Energy saving business	Korea	8.3		25,000,000,000	25,860,470,963
YaksuESS Co., Ltd.	Installing ESS related equipment	Korea	29.0		210,430,000	521,048,794
Jeju Hallim Offshore Wind Power Co., Ltd.	Wind power generation	Korea	30.3		9,770,000,000	7,868,605,376
YeongGwang Yaksu Wind Electric.Co., Ltd. (*1)	Wind power generation	Korea	9.6		533,280,000	363,986,586
Green Energy Power Co., Ltd.	Wind power generation	Korea	29.0		1,189,000,000	1,651,713,237
Namjung Floating Solar Light Operation Co., Ltd. (*1)	Solar power generation	Korea	15.0		969,450,000	367,062,433
Kwangbaek Solar Power Investment Co., Ltd.	Solar power generation	Korea	44.0		4,756,840,000	4,776,870,196
Muan Solar Plant Co., Ltd.	Solar power generation	Korea	20.0		1,570,000,000	1,249,454,052
Goesan Solar Park Co., Ltd.	Solar power generation	Korea	29.0		1,276,000,000	1,805,605,055
Bitgoeul Eco Energy Co., Ltd.	Fuel cell power generation	Korea	29.0		4,640,000,000	4,616,226,419
Jeju Gimnyeong Wind Power Co., Ltd.	Wind power generation	Korea	30.0		714,285,000	550,943,540
East Highway Solar Co., Ltd(*2)	Solar power generation	Korea	20.0		190,200,000	190,200,000
West Highway Solar Co., Ltd(*2)	Solar power generation	Korea	20.0		194,600,000	195,338,137
				-	252,034,965,802	368,873,785,591
<joint ventures=""></joint>						
Stavro Holding II A.B.	Overseas investment	Sweden	20.0		10,595,354,106	10,686,618,761
Energy Co.	Solar power generation	Korea	29.0		1,659,000,000	1,992,468,825
CAES, LLC	ESS based VPP business	U.S.	36.0		19,414,182,600	18,153,172,457
					31,668,536,706	30,832,260,043
				₩	283,703,502,508	399,706,045,634

(\*1) Although the Group owns less than 20% of the equity shares of the entity, the Group participates in the directors' meetings and exercises significant influence. As such, it is classified as investments in associates.

(\*2) For the period ended March 31, 2021, the investments was reclassified from financial assets at FVOCI to investments in associates, due to the additional acquisition of their equities through the disproportionated capital reduction.

(Unaudited)

#### 17. Investments in associates and joint ventures, continued

(1) Investments in associates and joint ventures as of March 31, 2021 and December 31, 2020 are as follows, continued:

In won			December 31, 2020	)		
	Key operation		Percentage of			
Investees	activities	Location	ownership(%)		Acquisition cost	Book value
<associates></associates>						
KEPCO Lebanon S.A.R.L.	Combined cycle operation and maintenance	Lebanon	49.0	₩	503,056,419	
Gangwon Wind Power Co., Ltd. (*1)	Wind power	Korea	15.0		5,725,222,288	11,443,176,720
Hyundai Green Power Co., Ltd.	Byproduct gas power generation	Korea	29.0		88,885,000,000	132,774,096,611
PT Cirebon Electric Power	Coal thermal power generation	Indonesia	27.5		40,365,236,597	117,811,405,468
PT Wampu Electric Power	Water power generation	Indonesia	46.0		21,292,365,498	27,865,205,420
Korea Offshore Wind Power Co., Ltd.(*1)	Wind power generation	Korea	12.5		26,600,000,000	20,921,058,537
Gunsan Bio Energy Co.,Ltd. (*1)	Bio energy power generation	Korea	18.9		1,000,000,000	
KEPCO Solar Co., Ltd. (Formerly Solar School Plant Co., Ltd.) (*1)(*2)	Solar school business	Korea	8.3		16,650,000,000	17,261,498,193
KEPCO Energy Solution Co., Ltd. (*1)	Energy saving business	Korea	8.3		25,000,000,000	25,805,060,795
YaksuESS Co., Ltd.	Installing ESS related equipment	Korea	29.0		210,430,000	454,158,749
Jeju Hallim Offshore Wind Power Co., Ltd.	Wind power generation	Korea	26.1		4,500,000,000	2,855,022,699
YeongGwang Yaksu Wind Electric.Co., Ltd. (*1)	Wind power generation	Korea	9.6		533,280,000	312,063,472
Green Energy Power Co., Ltd.	Wind power generation	Korea	29.0		1,189,000,000	24,919,263
Namjung Floating Solar Light Operation Co., Ltd. (*1)	Solar power generation	Korea	15.0		969,450,000	102,591,063
Kwangbaek Solar Power Investment Co., Ltd.	Solar power generation	Korea	44.0		4,756,840,000	4,682,495,07
Muan Solar Plant Co., Ltd.	Solar power generation	Korea	20.0		1,570,000,000	1,096,239,602
Goesan Solar Park Co., Ltd.	Solar power generation	Korea	29.0		1,276,000,000	1,684,242,848
Bitgoeul Eco Energy Co., Ltd.	Fuel cell power generation	Korea	29.0		29,000,000	29,000,000
Jeju Gimnyeong Wind Power Co., Ltd.	Wind power generation	Korea	30.0		714,285,000	1,578,199,704
					241,769,165,802	366,700,434,217
<joint ventures=""></joint>						
Stavro Holding II A.B.	Overseas investment	Sweden	20.0		8,930,505,306	9,277,066,284
Energy Co.	Solar power generation	Korea	29.0		1,659,000,000	1,659,000,000
CAES, LLC	ESS based VPP business	U.S.	36.0		19,414,182,600	17,625,600,000
					30,003,687,906	28,561,666,284
				₩	271,772,853,708	395,262,100,501

(\*1) Although the Group owns less than 20% of the equity shares of the entity, the Group participates in the directors' meetings and exercises significant influence. As such, it is classified as investments in associates.

(\*2) During the previous period, the company name was changed from Solar School Plant Co., Ltd. to KEPCO Solar Co., Ltd.

(Unaudited)

#### 17. Investments in associates and joint ventures, continued

(2) Changes in investments in associates and joint ventures for the three-month period ended March 31, 2021 and the year ended December 31, 2020 are as follows:

In won		March 31, 2021									
Investees	Beginning balance	Acquisition	Dividends received	Share of income (loss)	Other comprehen -sive income (loss)	Others	Ending balance				
<associates></associates>											
KEPCO Lebanon S.A.R.L.	₩ -	-	-	-	-	-	-				
Gangwon Wind Power Co., Ltd.	11,443,176,720	-	(1,703,790,000)	242,914,821	-	-	9,982,301,541				
Hyundai Green Power Co., Ltd.	132,774,096,611	-	(8,888,500,000)	(766,086,191)	(1,345,829,271)	-	121,773,681,149				
PT Cirebon Electric Power	117,811,405,468	-	(8,578,185,000)	3,250,214,739	303,281,118	4,839,130,501	117,625,846,826				
PT Wampu Electric Power Korea Offshore	27,865,205,420	-	-	921,531,298	909,986,699	1,197,294,938	30,894,018,355				
Wind Power Co., Ltd.	20,921,058,537	-	-	359,116,770	-	-	21,280,175,307				
Gunsan Bio Energy Co.,Ltd.	-	-	-	-	-	-	-				
KEPCO Solar Co., Ltd.	17,261,498,193	-	-	38,739,432	-	-	17,300,237,625				
KEPCO Energy Solution Co., Ltd.	25,805,060,795	-	-	55,410,168	-	-	25,860,470,963				
YaksuESS Co., Ltd. Jeju Hallim	454,158,749	-	-	66,890,045	-	-	521,048,794				
Offshore Wind Power Co., Ltd.	2,855,022,699	5,270,000,000	-	(232,538,426)	(23,878,897)	-	7,868,605,376				
YeongGwang Yaksu Wind Electric.Co., Ltd.	312,063,472	-	-	51,923,114	-	-	363,986,586				
Green Energy Power Co., Ltd.	24,919,261	-	-	1,626,793,976	-	-	1,651,713,237				
Namjung Floating Solar Light Operation Co., Ltd.	102,591,061	-	-	264,471,372	-	-	367,062,433				
Kwangbaek Solar Power Investment Co., Ltd.	4,682,495,077	-	-	94,375,119	-	-	4,776,870,196				
Muan Solar Plant Co., Ltd.	1,096,239,602	-	-	153,214,450	-	-	1,249,454,052				
Goesan Solar Park Co., Ltd.	1,684,242,848	-	-	127,541,945	(6,179,738)	-	1,805,605,055				
Bitgoeul Eco Energy Co., Ltd.	29,000,000	4,611,000,000	-	(1,050,921)	(22,722,660)	-	4,616,226,419				
Jeju Gimnyeong Wind Power Co., Ltd.	1,578,199,704	-	-	(1,025,748,199)	(1,507,965)	-	550,943,540				
East Highway Solar Co., Ltd(*1)	-	-	-	-	-	190,200,000	190,200,000				
West Highway Solar Co., Ltd(*1)	-	-	-	738,137	-	194,600,000	195,338,137				
<joint ventures=""></joint>											
Stavro Holding II A.B.	9,277,066,284	1,664,848,800	-	(14,782,085)	(155,587,142)	(84,927,096)	10,686,618,761				
Energy Co. CAES, LLC	1,659,000,000 17,625,600,000	-	- (240,634,800)	335,721,759 (123,643,864)	(2,252,934) 158,346,455	- 733,504,666	1,992,468,825 18,153,172,457				
	₩ 395,262,100,501	11,545,848,800	(19,411,109,800)	5,425,747,459	(186,344,335)	7,069,803,009	399,706,045,634				

(\*1) For the period ended March 31, 2021, the investments was reclassified from financial assets at FVOCI to investments in associates, due to the additional acquisition of their equities through the disproportionated capital reduction.

(Unaudited)

#### 17. Investments in associates and joint ventures, continued

(2) Changes in investments in associates and joint ventures for the three-month period ended March 31, 2021 and the year ended December 31, 2020 are as follows, continued:

In won	December 31, 2020									
Investees	Beginning balance	Acquisition	Dividends received	Share of income (loss)	Other comprehen -sive income	Others	Ending balance			
<associates></associates>										
KEPCO Lebanon <del>W</del> S.A.R.L.	-	-	-	-	-	-	-			
Gangwon Wind Power Co., Ltd.	12,326,979,652	-	(1,987,755,000)	1,103,952,068	-	-	11,443,176,720			
Hyundai Green Power Co., Ltd.	124,253,249,631	-	(8,888,500,000)	17,409,346,980	-	-	132,774,096,611			
PT Cirebon Electric Power	123,424,823,715	-	(9,782,054,861)	11,330,347,925	433,782,403	(7,595,493,714)	117,811,405,468			
PT Wampu Electric Power	29,354,759,765	-	(1,302,794,199)	3,245,152,168	(1,638,507,308)	(1,793,405,006)	27,865,205,420			
Korea Offshore Wind Power Co., Ltd.	21,080,817,675	-	-	(159,759,138)	-	-	20,921,058,537			
Gunsan Bio Energy Co.,Ltd.	-	-	-	-	-	-	-			
KEPCO Solar Co., Ltd.	17,095,730,035	-	-	166,015,920	-	(247,762)	17,261,498,193			
KEPCO Energy Solution Co.,	25,503,827,202	-	-	304,628,330	-	(3,394,737)	25,805,060,795			
Ltd. YaksuESS Co., Ltd.	515,591,093	-	-	(61,432,344)	-	-	454,158,749			
Jeju Hallim Offshore Wind Power Co., Ltd.	3,609,811,622	-	-	(754,788,923)	-	-	2,855,022,699			
YeongGwang Yaksu Wind Electric.Co., Ltd.	386,254,695	-	-	(74,191,223)	-	-	312,063,472			
Green Energy Power Co., Ltd.	162,990,108	-	-	(138,070,847)	-	-	24,919,261			
Namjung Floating Solar Light Operation Co., Ltd.	812,456,261	-	-	(709,865,200)	-	-	102,591,061			
Kwangbaek Solar Power Investment Co., Ltd.	2,054,090,000	2,702,750,000	-	(74,344,923)	-	-	4,682,495,077			
Muan Solar Plant Co., Ltd(*)	-	78,500,000	-	(473,760,398)	-	1,491,500,000	1,096,239,602			
Goesan Solar Park Co., Ltd.	-	1,276,000,000	-	408,242,848	-	-	1,684,242,848			
Bitgoeul Eco Energy Co., Ltd.	-	29,000,000	-	-	-	-	29,000,000			
Jeju Gimnyeong Wind Power Co., Ltd.	-	714,285,000	-	863,914,704	-	-	1,578,199,704			
<joint ventures=""></joint>										
Stavro Holding II A.B.	5,625,498,064	3,305,007,242	-	(156,374,224)	346,110,209	156,824,993	9,277,066,284			
Energy Co. CAES, LLC	-	1,659,000,000 19,414,182,600	- (297,372,600)	-	-	- (1,491,210,000)	1,659,000,000 17,625,600,000			
W	366,206,879,518	29,178,724,842	(22,258,476,660)	32,229,013,723	(858,614,696)	(9,235,426,226)	395,262,100,501			

(\*) It has been replaced by an investment stake in a related company due to the acquisition of additional shares.

(Unaudited)

#### 17. Investments in associates and joint ventures, continued

(3) Summary of financial information of associates and joint ventures as of March 31, 2021 and 2020, and for the three-month period ended March 31, 2021 and the year ended December 31, 2020 are as follows:

In won		March 31, 2021										
Investees	-	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Sales	Profit (loss)	Total compreh - ensive income (loss)				
<associates></associates>												
KEPCO Lebanon S.A.R.L.	₩	-	-	-	-	-	-	-				
Gangwon Wind Power Co., Ltd.		29,753,099,150	38,018,087,600	1,519,955,178	29,141,661	5,275,720,126	1,623,431,283	1,623,431,283				
Hyundai Green Power Co., Ltd.		60,588,980,983	774,009,425,581	42,871,465,053	371,817,696,170	25,169,890,653	(1,983,621,423)	(1,983,621,423)				
PT Cirebon Electric Power		216,440,555,480	496,545,736,695	114,147,536,268	171,108,403,834	69,348,301,263	12,919,585,490	14,376,444,271				
PT Wampu Electric Power		30,605,343,075	171,465,440,612	14,683,592,048	120,226,282,162	4,718,569,726	1,997,482,827	3,975,714,780				
Korea Offshore Wind Power Co., Ltd.		58,032,483,873	300,927,582,865	9,602,774,563	179,115,889,716	10,124,550,040	3,174,768,342	3,174,768,342				
Gunsan Bio Energy		772,713,841	8,097,934,771	16,469,660,063	12,028,554,184	-	(645,374,213)	(645,374,213)				
KEPCO Solar Co.,		121,789,442,654	94,538,270,939	4,857,246,017	3,659,805,416	1,911,873,394	465,338,520	465,338,520				
KEPCO Energy		244,005,021,675	72,370,902,396	4,076,719,513	1,973,553,000	3,802,249,101	664,922,016	664,922,016				
YaksuESS Co., Ltd.		1,130,892,049	5,592,882,146	78,619,463	4,852,760,000	465,308,903	231,663,573	231,663,573				
Jeju Hallim Offshore Wind Power Co., Ltd.		2,061,090,904	31,321,393,766	6,913,270,693	1,377,566,584	-	(642,523,786)	(642,523,786)				
YeongGwang Yaksu Wind Electric.Co., Ltd.		1,080,926,093	41,739,898,582	2,321,282,334	39,836,593,571	2,421,758,294	440,784,156	440,784,156				
Green Energy Power Co., Ltd.		3,224,256,252	56,371,300,936	2,939,896,011	53,645,499,998	92,836,243	(269,174,655)	(269,174,655)				
Namjung Floating Solar Light Operation Co., Ltd.		3,766,089,517	55,051,320,415	2,551,892,235	53,950,000,000	754,625,731	(1,237,096,003)	(1,237,096,003)				
Kwangbaek Solar Power Investment Co., Ltd.		3,513,910,386	331,277,000,000	19,617,833,716	305,034,000,000	3,527,065,632	58,767,198	58,767,198				
Muan Solar Plant Co., Ltd.		11,466,305,047	134,631,295,230	6,850,109,288	135,471,656,400	3,507,305,494	(251,346,819)	(251,346,819)				
Goesan Solar Park Co., Ltd.		2,592,066,604	51,477,491,322	175,273,449	47,668,060,149	1,772,114,675	418,485,949	418,485,949				
Bitgoeul Eco Energy Co., Ltd.		12,867,376,935	3,318,445,199	267,800,000	-	-	(3,623,866)	(3,623,866)				
Jeju Gimnyeong Wind Power Co., Ltd.		10,095,265,072	60,706,294,890	2,649,527,451	66,315,550,188	2,085,065,390	(3,286,128,135)	(3,286,128,135)				
East Highway Solar Co., Ltd		1,096,121,668	18,182,812,256	1,606,956,029	16,973,000,000	301,085,852	(208,731,840)	(208,731,840)				
West Highway Solar Co., Ltd <joint ventures=""></joint>		1,859,382,670	18,425,204,136	1,975,896,122	17,332,000,000	372,872,039	(152,205,032)	(152,205,032)				
Stavro Holding II		2,390,482,436	51,090,371,269	47,759,912	-	-	(73,910,474)	(73,910,474)				
A.B. Energy Co.		15,046,532,107	10,741,383,661	576,072,727	21,200,000,000	_	(1,148,681,206)	(1,148,681,206)				
CAES, LLC		52,282,676	41,927,238,318	13,602,000	-	-	(1,148,081,200) (343,455,142)	96,396,106				

(Unaudited)

#### 17. Investments in associates and joint ventures, continued

(3) Summary of financial information of associates and joint ventures as of March 31, 2021 and 2020, and for the three-month period ended March 31, 2021 and the year ended December 31, 2020 are as follows, continued

In won	December 31, 2020								
Investees	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Sales	Profit (loss)	Total compreh -ensive income (loss)		
<associates></associates>									
KEPCO Lebanon S.A.R.L. ₩	-	-	-	-	-	-	-		
Gangwon Wind Power Co., Ltd.	37,541,851,328	39,755,249,357	1,335,842,913	-	23,349,693,204	7,472,082,323	7,472,082,323		
Hyundai Green Power Co., Ltd.	91,885,476,561	782,688,675,024	80,870,602,718	335,861,836,417	390,441,974,203	55,591,230,857	55,591,230,857		
PT Cirebon Electric Power	213,809,105,536	516,210,695,680	92,378,382,976	209,236,311,168	246,013,767,671	40,675,716,954	42,253,105,130		
PT Wampu Electric Power	33,002,406,685	166,838,488,479	15,922,709,380	123,341,653,251	20,264,612,195	7,371,787,691	3,813,158,379		
Korea Offshore Wind Power Co., Ltd.	49,644,069,634	305,001,643,001	8,520,674,394	178,756,569,949	26,838,054,064	399,900,967	399,900,967		
Gunsan Bio Energy	4,520,281,296	4,819,706,901	28,297,412,274	24,767,345	-	(1,501,431,090)	(1,501,431,090)		
Solar School Plant Co.,	146,114,459,523	84,328,776,084	19,355,525,249	3,742,386,718	3,932,848,432	1,887,900,661	1,884,924,540		
KEPCO Energy Solution	244,220,005,780	69,533,631,058	2,286,776,673	1,806,130,623	5,584,912,756	3,655,539,964	3,614,803,123		
YaksuESS Co., Ltd.	902,548,546	5,681,408,407	38,302,550	4,983,915,000	216,666,418	(211,833,038)	(211,833,038)		
Jeju Hallim Offshore Wind Power Co., Ltd.	711,021,480	11,768,856,916	1,502,680,709	39,288,501	-	(2,832,336,631)	(2,832,336,631)		
YeongGwang Yaksu Wind Electric.Co., Ltd.	652,297,647	42,386,790,173	1,648,442,970	41,266,876,901	5,801,724,720	(637,157,876)	(637,157,876)		
Green Energy Power Co., Ltd.	4,049,297,662	49,884,453,799	33,224,682	56,500,000,000	-	(920,491,711)	(920,491,711)		
Namjung Floating Solar Light Operation Co., Ltd.	7,087,890,250	55,952,743,314	8,538,258,344	53,950,000,000	1,127,782,597	(4,654,656,886)	(4,654,656,886)		
Kwangbaek Solar Power Investment Co., Ltd.	3,372,060,365	335,851,000,000	19,778,472,601	309,520,000,000	13,192,244,525	(328,857,144)	(328,857,144)		
Muan Solar Plant Co., Ltd	33,254,100,194	114,653,965,986	1,518,843,040	143,379,460,800	6,016,555,316	(2,365,062,262)	(2,365,062,262)		
Goesan Solar Park Co., Ltd.	4,256,640,102	52,075,144,798	2,505,437,992	48,018,612,949	2,809,343,427	(262,356,441)	(262,356,441)		
Bitgoeul Eco Energy Co., Ltd.	100,000,000	-	-	-	-	-	-		
Jeju Gimnyeong Wind Power Co., Ltd.	10,106,719,891	62,450,573,964	897,693,931	66,398,923,198	8,927,132,996	(1,575,740,581)	(1,575,740,581)		
<joint ventures=""></joint>									
Stavro Holding II A.B.	5,752,085,337	40,642,306,997	9,060,895	-	-	(781,871,139)	(781,871,139)		
Energy Co.	2,755,195,422	670,167,413	563,273,670	-	-	(2,856,183,548)	(2,856,183,548)		
CAES, LLC	487,124,789	40,352,891,655	-	-	-	(1,656,110,078)	(1,656,110,078)		

### 17. Investments in associates and joint ventures, continued

(4) As of March 31, 2021 and December 31, 2020, unrecognized equity interest in investments in associates and joint ventures whose book value has been reduced to zero due to accumulated losses over their book values are as follows:

In won		March 3	1, 2021	December 31, 2020		
	-	Unrecognized equity interest	Accumulated unrecognized equity interest	Accumula Unrecognized unrecognized equity interest equity interest		
Gunsan Bio Energy Co., Ltd.	₩	121,768,720	3,703,314,271	289,469,070	3,581,545,551	

### 18. Trade and other payables

Trade and other payables as of March 31, 2021 and December 31, 2020 are as follows:

In won	-	March 3	1, 2021	December 31, 2020		
	-	Current	Non-current	Current	Non-current	
Trade payables	₩	248,448,430,974	-	101,848,862,756	-	
Non-trade payables		131,487,906,512	-	209,493,800,497	-	
Accrued expenses		52,407,498,804	-	62,496,260,039	-	
Other deposits received		18,316,332,248	-	17,748,544,413	-	
Dividend payables		294,339,077	-	-	-	
Lease liabilities (*)		105,495,547,509	811,911,583,195	100,226,712,083	803,263,724,126	
	₩	556,450,055,124	811,911,583,195	491,814,179,788	803,263,724,126	

(\*) Refer to Note 19 for the details of lease liabilities.

#### 19. Leases

### (1) Details of right-of-use assets as of March 31, 2021 and December 31, 2020 are as follows:

In won		March 31, 2021						
	-	Acquisition	Accumulated depreciation	Accumulated impairment loss	Book value			
Ships	₩	1,042,242,066,488	(194,476,232,519)	-	847,765,833,969			
Machinery		162,585,331,474	(61,161,967,480)	(1,069,630,532)	100,353,733,462			
Other right-of-use assets		41,706,771,503	(4,287,233,472)	-	37,419,538,031			
	₩	1,246,534,169,465	(259,925,433,471)	(1,069,630,532)	985,539,105,462			
In won			December	31, 2020				
	-	Acquisition	Accumulated depreciation	Accumulated impairment loss	Book value			
Ships	₩	1,042,242,066,488	(171,647,143,232)	-	870,594,923,256			
Machinery		162,585,331,474	(59,485,708,614)	(1,069,630,532)	102,029,992,328			
Other right-of-use assets		39,945,095,631	(10,404,888,506)	-	29,540,207,125			
	₩-	1,244,772,493,593	(241,537,740,352)	(1,069,630,532)	1,002,165,122,709			

### 19. Leases, continued

(2) Changes in right-of-use assets for the three-month period ended March 31, 2021 and the year ended December 31, 2020 are as follows:

In won				March 31, 2021				
		Beginning balance	Acquisition	Depreciation	Others	Ending balance		
Ships	₩	870,594,923,256	-	(22,829,089,287)	-	847,765,833,969		
Machinery Other right-of-use		102,029,992,328	-	(1,676,255,730)	(3,136)	100,353,733,462		
assets		29,540,207,125	8,056,810,211	(2,172,989,241)	1,995,509,936	37,419,538,031		
	₩	1,002,165,122,709	8,056,810,211	(26,678,334,258)	1,995,506,800	985,539,105,462		

In won		December 31, 2020								
		Beginning balance	Acquisition	Impairment	Depreciation	Others	Ending balance			
Ships Machinery Other right- of-use	₩	775,177,096,393 109,537,627,300	183,789,267,955 -	- (1,069,630,532)	(88,371,441,092) (7,461,664,321)	- 1,023,659,881	870,594,923,256 102,029,992,328			
assets		18,034,120,082	19,196,526,387	-	(7,682,197,154)	(8,242,190)	29,540,207,125			
	₩	902,748,843,775	202,985,794,342	(1,069,630,532)	(103,515,302,567)	1,015,417,691	1,002,165,122,709			

(3) Expenses recognized in profit or loss related to leases for the three-month periods ended March 31, 2021 and 2020 are as follows:

In won		March 31, 2021	March 31, 2020
Depreciation of right-of use assets	₩	26,678,334,258	24,414,839,416
Interest expenses of lease liabilities		4,337,927,933	4,235,511,953
	₩	31,016,262,191	28,650,351,369

### 19. Leases, continued

### (4) Lease liabilities as of March 31, 2021 and December 31, 2020 are as follows:

In won		March 3	1, 2021	December 31, 2020		
		Minimum lease payments	Present value of minimum lease payments	Minimum lease payments	Present value of minimum lease payments	
Less than 1 year	₩	106,825,835,949	105,495,547,509	101,472,202,689	100,226,712,083	
1 ~ 5 years		362,232,588,598	342,341,232,942	351,498,104,083	332,276,854,463	
More than 5 years		569,002,246,450	469,570,350,253	570,869,161,947	470,986,869,664	
	₩	1,038,060,670,997	917,407,130,704	1,023,839,468,719	903,490,436,210	

(5) Changes in lease liabilities for the three-month period ended March 31, 2021 and for the year ended December 31, 2020 are as follows:

In won		March 31, 2021								
		Beginning balance	Acquisition	Payment	Interest expense	Exchange rate change	Others	Ending balance		
Lease liabilities	₩	903,490,436,210	8,056,810,211	(25,647,489,774)	4,337,927,933	27,070,520,241	98,925,883	917,407,130,704		

In won	December 31, 2020									
-	Beginning balance	Acquisition	Payment	Interest expense	Exchange rate change	Ending balance				
Lease liabilities	837,391,118,790	202,985,794,342	(111,026,216,776)	17,665,454,849	(43,525,714,995)	903,490,436,210				

### 20. Financial liabilities

### (1) Financial liabilities as of March 31, 2021 and December 31, 2020 are as follows:

In won		March 3	31, 2021	December 31, 2020		
	-	Current	Non-current	Current	Non-current	
Borrowings	₩	151,657,329,980	177,727,317,638	211,755,594,471	177,126,693,569	
Bonds		919,229,517,307	6,469,461,145,340	565,917,142,108	6,796,223,508,207	
Derivative liabilities (*)	Derivative liabilities (*)		12,809,698,612	37,186,274,798	20,273,400,564	
	₩	1,094,281,646,925	6,659,998,161,590	814,859,011,377	6,993,623,602,340	

(\*) Details of derivative liabilities are described in Note 11.

(2) Borrowings and bonds issued as of March 31, 2021 and December 31, 2020 are as follows:

In won		March 31, 2021	December 31, 2020
Current liabilities			
Short-term borrowings	₩	140,200,000,000	200,000,000,000
Current portion of long-term borrowings		12,270,433,737	12,536,059,303
Less: current portion of discount on long-term borrowings		(813,103,757)	(780,464,832)
Current portion of bonds issued		920,100,000,000	566,400,000,000
Less: current portion of discount on bonds		(870,482,693)	(482,857,892)
		1,070,886,847,287	777,672,736,579
Non-current liabilities			
Long-term borrowings		183,552,196,420	182,930,779,901
Less: discount on long-term borrowings		(5,824,878,782)	(5,804,086,332)
Bonds issued		6,481,523,600,000	6,809,676,100,000
Less: discount on bonds		(12,062,454,660)	(13,452,591,793)
		6,647,188,462,978	6,973,350,201,776
<del>M</del>	₩	7,718,075,310,265	7,751,022,938,355

### 20. Financial liabilities, continued

(3) Short-term borrowings as of March 31, 2021 and December 31, 2020 are as follows:

### In won

				March 31,	December 31,
Туре	Creditor	Interest rate (%)	Maturity	2021	2020
Short-term	DB Financial Investment Co., Ltd.	Fixed rate 0.81%	2021-01-05 ₩	-	20,000,000,000
borrowings	BNK Investment & Securities Co., Ltd.	Fixed rate 0.81%	2021-01-05	-	50,000,000,000
	SK Securities Co., Ltd.	Fixed rate 0.80%	2021-01-13	-	10,000,000,000
	BNK Investment & Securities Co., Ltd.	Fixed rate 0.80%	2021-01-13	-	40,000,000,000
	Woori Investment Bank	Fixed rate 0.80%	2021-01-13	-	30,000,000,000
	KB Securities Co., Ltd.	Fixed rate 1.17%	2021-01-22	-	40,000,000,000
	KTB Securities Co., Ltd.	Fixed rate 1.17%	2021-01-22	-	10,000,000,000
	Woori Investment Bank	Fixed rate 0.75%	2021-04-23	10,000,000,000	-
	BNK Investment & Securities Co., Ltd.	Fixed rate 0.75%	2021-04-23	60,000,000,000	-
	BNK Investment & Securities Co., Ltd.	Fixed rate 0.53%	2021-04-02	70,000,000,000	-
	Nonghyup Bank	Fixed rate 2.91%	2021-04-30	200,000,000	
			W	140,200,000,000	200,000,000,000

### 20. Financial liabilities, continued

### (4) Long-term borrowings as of March 31, 2021 and December 31, 2020 are as follows:

In won and foreign currencies

Resources Corporation         development loan Resources development loan Resources         Floating rate Floating rate         2223-06-15 3yr KTB         2023-06-15 224-06-15         -         25,200,000           Industrial Bank of Korea         PR efinancing loan of korea         Floating rate         3yr KTB         2024-06-15         -         -         38,350,000           Industrial Bank of Korea         PF Refinancing loan of Korea         Floating rate         3yr KTB         2024-09-15         -         -         9,304,267,908           Industrial Bank of Korea         PF Refinancing loan of Korea         Floating rate         4.10         2030-10-30         -         -         9,304,267,908           Insurance Co., Ltd.         Development         Fixed rate         4.10         2030-10-30         -         -         13,439,498,085           Co., Ltd.         Development         Fixed rate         4.50         2022-04-29         -         22,346,880,000           The Export         Shareholder's loan         Fixed rate         8.00         2031-12-31         USD         2,426,634         2,750,589,775           PT BS Lorgy         Shareholder's loan         Fixed rate         8.00         2031-12-31         USD         5,7362,049,477           Import Bank of Korea         Facility <td< th=""><th></th><th></th><th></th><th>March 31, 20</th><th>21</th><th></th><th></th><th></th><th></th></td<>				March 31, 20	21				
Korea Resources Corporation         Resources development loan Resources development loan Resources         Floating rate advelopment loan Resources         Syr KTB Floating rate development loan Resources         2023-03-15 rate -2.25         -         -         W         598,800,000           Industrial Bank of Korea Hyundai Life Usual ana Power, Ltd.         Floating rate development Ioan Resources         Floating rate Floating rate         2024-06-15 38,350,000         -         -         10,080,000           of Korea of Korea Hyundai Life Usual ana Power, Ltd.         PF Refinancing loan Fixed rate         Floating rate         2.024-09-15 2030-10-30         -         -         9,304,267,908           Co., Ltd.         Hana Power, Ltd.         PF Refinancing loan Fixed rate         Fixed rate         4.10         2030-10-30         -         -         12,405,690,531           PT BS Energy Shareholder's loan Fixed rate         4.50         2022-04-29         -         22,346,880,000           Stata Power, Ltd. and others         Development Fixed rate         8.00         2031-12-31         USD         2,426,634         2,750,589,775           PT BS Energy Shareholder's loan Fixed rate         Fixed rate         8.00         2031-12-31         USD         4,533,687         5,138,934,691           Import Bank of Korea Shopathach         Facility         Floating rate         LIBOR(6M)							•		
Resources Corporation         development loan development loan         rate -2.25 rate -2.25         -         -         25,200,000           Resources development loan development loan         Floating rate rate -2.25         37 KTB         2024-06-15         -         -         38,350,000           Industrial Bank of Korea Hyundai Life         PF Refinancing loan Floating rate         Floating rate Post are -2.25         2030-10-30         -         -         9,304,267,908           Industrial Bank of Korea Hyundai Life         PF Refinancing loan Floating rate         Floating rate         4.10         2030-10-30         -         -         12,405,690,531           Insurance Co, Ltd.         PF Refinancing loan Fixed rate         Fixed rate         4.10         2030-10-30         -         -         13,439,498,085           Co, Ltd.         Hana Power, Hana Power, Co, Ltd.         Development         Fixed rate         4.50         2022-04-29         -         -         22,346,880,000           TB S Energy         Shareholder's loan         Fixed rate         8.00         2031-12-31         USD         2,426,634         2,750,589,775           POSCO E&C         Shareholder's loan         Fixed rate         8.00         2031-12-31         USD         4,533,687         5,138,934,691           Import Bank of Korea </th <th></th> <th>Туре</th> <th>-</th> <th>. ,</th> <th></th> <th>-</th> <th>currency</th> <th></th> <th></th>		Туре	-	. ,		-	currency		
Corporation         Resources development loan         Floating rate         3yr KTB         2023-06-15         -         -         25,200,000           Resources development loan         Floating rate         3yr KTB         2024-06-15         -         -         38,350,000           Industrial Bank of Korea         PF Refinancing Ioan         Floating rate         3yr KTB         2024-06-15         -         -         9,304,267,908           Industrial Bank of Korea         PF Refinancing Ioan         Fixed rate         4.10         2030-10-30         -         -         12,405,690,531           Insurance Co., Ltd.         Development         Fixed rate         4.10         2030-10-30         -         -         13,439,498,085           Co., Ltd.         Development         Fixed rate         4.10         2030-10-30         -         -         13,439,498,085           Co., Ltd.         Development         Fixed rate         4.00         2031-12-31         USD         2,426,634         2,750,589,775           POSCO E&C         Shareholder's Ioan         Fixed rate         8.00         2031-12-31         USD         5,739,801         6,732,764,258           PT BS Energy         Shareholder's Ioan         Fixed rate         8.00         2031-12-31	Korea		Floating rate		2023-03-15	-	-	₩	598,800,000
development loan Resources development loan development loan for the exports         rate - 2.25 Floating rate at e - 2.25         2024-06-15 rate - 2.25         -         -         38,350,000           Industrial Bank of Korea Hyundai Life DBI Insurance Co., Ltd.         PF Refinancing Ioan Fixed rate         Floating rate         3yr KTB 3yr KTB         2024-09-15         -         -         9,304,267,908           Industrial Bank of Korea Hyundai Life DBI Insurance Co., Ltd.         PF Refinancing Ioan Fixed rate         Fixed rate         4.10         2030-10-30         -         -         9,304,267,908           DBI Insurance Co., Ltd.         PF Refinancing Ioan Insurance         Fixed rate         4.10         2030-10-30         -         -         13,439,498,085           Co., Ltd.         Development         Fixed rate         4.50         2022-04-29         -         -         22,346,880,000           Ltd. and others'         Development         Fixed rate         8.00         2031-12-31         USD         2,426,634         2,750,589,775           PT BS Energy PDSC0 E&C         Shareholder's Ioan Fixed rate         8.00         2031-12-31         USD         50,782,576         57,562,049,477           Import Bank of Korea The Export- Branch         Facility         Floating rate         LIBOR(6M)         2031-12-31         USD         50,78		•	-						
Resources development loan Resources development loan         Floating rate rate -2.25         2024-06-15 rate -2.25         -         -         38,350,000           Industrial Bank of Korea         PF Refinancing loan Insurance Co.         Floating rate         2024-09-15         -         -         101,080,000           Insurance Co.         PF Refinancing loan Insurance Co.         Fixed rate         4.10         2030-10-30         -         -         12,405,690,531           Utd.         PF Refinancing loan Insurance Co.         Fixed rate         4.10         2030-10-30         -         -         13,439,498,085           Co., ttd.         Co.         td.         2030-10-30         -         -         12,405,690,531           Hana Power, Ltd. and others         Development         Fixed rate         4.50         2022-04-29         -         -         22,346,880,000           PT BS Energy         Shareholder's loan         Fixed rate         8.00         2031-12-31         USD         2,426,634         2,750,589,775           POSCO E&C         Shareholder's loan         Fixed rate         8.00         2031-12-31         USD         5,7562,049,477           Import Bank of Korea         Facility         Floating rate         LIBOR(6M)         2031-12-31         USD         5,7562	Corporation		Floating rate		2023-06-15	-	-		25,200,000
development loan Resources         rate -2.25 3yr KTB         2024-09-15         -         -         101,080,000           industrial Bank of Korea Hyundai Life Insurance Co, Ltd.         PF Refinancing Ioan Fixed rate         Floating rate         CD +1.25         2030-10-30         -         -         9,304,267,908           Of Korea Hyundai Life Insurance Co, Ltd.         PF Refinancing Ioan Insurance Co, Ltd.         Fixed rate         4.10         2030-10-30         -         -         13,439,498,085           Co, Ltd.         Hana Power, Ltd. and others         Development         Fixed rate         4.50         2022-04-29         -         -         22,346,880,000           Dt Ltd. and others         Development         Fixed rate         8.00         2031-12-31         USD         2,426,634         2,750,589,775           POSCO E&C         Shareholder's Ioan fixed rate         Fixed rate         8.00         2031-12-31         USD         4,533,687         5,138,934,691           Import Bank of Korea fixed rate         B.00         2031-12-31         USD         4,533,687         5,756,2049,477           Import Bank of Korea Shoreholder's Ioan fixed rate         LIBOR(6M)         2031-12-31         USD         5,782,576         57,562,049,477           Import Bank of Korea BNP Paribas, Seauli Branch         Facility </td <td></td> <td>•</td> <td>Electing rate</td> <td></td> <td>2024-06-15</td> <td>_</td> <td>_</td> <td></td> <td>38 350 000</td>		•	Electing rate		2024-06-15	_	_		38 350 000
Resources development loan         Floating rate rate -2.25         3yr KTB rate -2.25         2024-09-15         -         -         101,080,000           Industrial Bank of Korea hyundai Life Insurance Co, Ltd.         PF Refinancing loan         Floating rate         CD +1.25         2030-10-30         -         -         9,304,267,908           DB Insurance Co, Ltd.         PF Refinancing loan         Fixed rate         4.10         2030-10-30         -         -         12,405,690,531           DB Insurance Co, Ltd.         PF Refinancing loan         Fixed rate         4.10         2030-10-30         -         -         13,439,498,085           Co, Ltd.         PF Refinancing loan         Fixed rate         4.50         2022-04-29         -         -         22,346,880,000           Ltd. and others         Development         Fixed rate         8.00         2031-12-31         USD         2,426,634         2,750,589,775           POSCO E&C         Shareholder's loan         Fixed rate         8.00         2031-12-31         USD         4,533,687         5,138,934,691           Import Bank of Korea         -         Floating rate         LIBOR(6M)         2031-12-31         USD         50,782,576         57,562,049,474           Seoul Branch         Facility         Floating ra			rioating rate	,	2024-00-13				58,550,000
development loan         rate -2.25           Industrial Bank         PF Refinancing loan         Floating rate         CD +1.25         2030-10-30         -         -         9,304,267,908           Hyundai Life         PF Refinancing loan         Fixed rate         4.10         2030-10-30         -         -         12,405,690,531           Insurance Co., Ltd.         De Insurance         PF Refinancing loan         Fixed rate         4.10         2030-10-30         -         -         13,439,498,085           Co., Ltd.         Hana Power, Ltd. and others         Development         Fixed rate         4.50         2022-04-29         -         -         22,346,880,000           PT BS Energy         Shareholder's loan         Fixed rate         8.00         2031-12-31         USD         2,426,634         2,750,589,755           POSCO E&C         Shareholder's loan         Fixed rate         8.00         2031-12-31         USD         4,533,687         5,138,934,691           Import Bank         of Korea         -		•	Floating rate		2024-09-15	-	-		101,080,000
of Korea         PF Refinancing loan         Fixed rate         4.10         2030-10-30         -         -         12,405,690,531           Insurance Co., Ltd.         PF Refinancing loan         Fixed rate         4.10         2030-10-30         -         -         13,439,498,085           Co., Ltd.         Hana Power, Ltd. and others         Development         Fixed rate         4.50         2022-04-29         -         -         22,346,880,000           PT BS Energy         Shareholder's loan         Fixed rate         8.00         2031-12-31         USD         2,426,634         2,750,589,775           POSCO E&C         Shareholder's loan         Fixed rate         8.00         2031-12-31         USD         4,533,687         5,138,934,691           Import Bank of Korea         Fixed rate         8.00         2031-12-31         USD         4,533,687         5,138,934,691           Import Bank of Korea         Fixed rate         8.00         2031-12-31         USD         50,782,576         57,562,049,477           Import Bank of Korea         Facility         Floating rate         LIBOR(6M)         2031-12-31         USD         25,391,288         28,781,024,744           Seoul Branch         Facility         Floating rate         LIBOR(6M)         2031-12-3		development loan	0						, ,
Insurance Co., Ltd.       PF Refinancing loan       Fixed rate       4.10       2030-10-30       -       -       13,439,498,085         Co., Ltd.       Hana Power,       Development       Fixed rate       4.50       2022-04-29       -       -       22,346,880,000         Ltd. and others       -       -       -       22,346,880,000       -       -       -       22,346,880,000         Ltd. and others       - <td>Industrial Bank of Korea</td> <td>PF Refinancing loan</td> <td>Floating rate</td> <td>CD +1.25</td> <td>2030-10-30</td> <td>-</td> <td>-</td> <td></td> <td>9,304,267,908</td>	Industrial Bank of Korea	PF Refinancing loan	Floating rate	CD +1.25	2030-10-30	-	-		9,304,267,908
Co., Itd.       Hana Power, Ltd. and others       Development       Fixed rate       4.50       2022-04-29       -       -       22,346,880,000         Ltd. and others       Shareholder's loan       Fixed rate       8.00       2031-12-31       USD       2,426,634       2,750,589,775         PT BS Energy       Shareholder's loan       Fixed rate       8.00       2031-12-31       USD       5,939,801       6,732,764,258         POSCO E&C       Shareholder's loan       Fixed rate       8.00       2031-12-31       USD       4,533,687       5,138,934,691         Import Bank       of Korea       The Export-       Facility       Floating rate       LIBOR(6M)       2031-12-31       USD       50,782,576       57,562,049,477         Import Bank       -       +2.50       of Korea       -       -       -       -         BNP Paribas,       Facility       Floating rate       LIBOR(6M)       2031-12-31       USD       25,391,288       28,781,024,744         N.V.,Singapore       -       +1.70       -       -       -       -       -         BNP Paribas,       Facility       Floating rate       LIBOR(6M)       2031-12-31       USD       3,447,938       3,908,237,972         Singapore <td></td> <td>PF Refinancing loan</td> <td>Fixed rate</td> <td>4.10</td> <td>2030-10-30</td> <td>-</td> <td>-</td> <td></td> <td>12,405,690,531</td>		PF Refinancing loan	Fixed rate	4.10	2030-10-30	-	-		12,405,690,531
Ltd. and others       58,259,766,524         PT BS Energy       Shareholder's loan       Fixed rate       8.00       2031-12-31       USD       2,426,634       2,750,589,775         POSCO E&C       Shareholder's loan       Fixed rate       8.00       2031-12-31       USD       5,939,801       6,732,764,258         The Export-       Shareholder's loan       Fixed rate       8.00       2031-12-31       USD       4,533,687       5,138,934,691         Import Bank       of Korea       The Export-       Facility       Floating rate       LIBOR(6M)       2031-12-31       USD       50,782,576       57,562,049,477         Import Bank       of Korea       HEXP aribas,       Facility       Floating rate       LIBOR(6M)       2031-12-31       USD       25,391,288       28,781,024,744         Seoul Branch       HIBOR(FM)       2031-12-31       USD       25,391,288       28,781,024,744         N.V., Singapore       Haring rate       LIBOR(6M)       2031-12-31       USD       3,447,938       3,908,237,972         Singapore       Haring       HIBOR(6M)       2031-12-31       USD       3,447,938       3,908,237,972         Singapore       Facility       Floating rate       LIBOR(6M)       2031-12-31       USD	DB Insurance Co., Ltd.	PF Refinancing loan	Fixed rate	4.10	2030-10-30	-	-		13,439,498,085
PT BS EnergyShareholder's loanFixed rate8.002031-12-31USD2,426,6342,750,589,775POSCO E&CShareholder's loanFixed rate8.002031-12-31USD5,939,8016,732,764,258The Export-Shareholder's loanFixed rate8.002031-12-31USD4,533,6875,138,934,691Import Bankof KoreaThe Export-FacilityFloating rateLIBOR(6M)2031-12-31USD50,782,57657,562,049,477Import Bankof KoreaThe Export-FacilityFloating rateLIBOR(6M)2031-12-31USD50,782,57657,562,049,477ING BankFacilityFloating rateLIBOR(6M)2031-12-31USD25,391,28828,781,024,744N.V., SingaporeBNP Paribas,FacilityFloating rateLIBOR(6M)2031-12-31USD3,447,9383,908,237,972N.V., SingaporeHacilityFloating rateLIBOR(6M)2031-12-31USD3,447,9383,908,237,972BranchHacilityFloating rateLIBOR(6M)2031-12-31USD3,447,9383,908,237,972N.V., SingaporeHacilityFloating rateLIBOR(6M)2031-12-31USD3,447,9383,908,237,972N.V., SingaporeHacilityFloating rateLIBOR(6M)2031-12-31USD3,447,9383,908,237,972N.V., SingaporeHacilityFloating rateLIBOR(6M)2031-12-31USD3,447,9383,908,237,972Less: discount on long-term	Hana Power,	Development	Fixed rate	4.50	2022-04-29	-	-		22,346,880,000
OSCO E&C         Shareholder's loan         Fixed rate         8.00         2031-12-31         USD         5,939,801         6,732,764,258           The Export-         Shareholder's loan         Fixed rate         8.00         2031-12-31         USD         4,533,687         5,138,934,691           Import Bank of Korea         The Export-         Facility         Floating rate         LIBOR(6M)         2031-12-31         USD         50,782,576         57,562,049,477           Import Bank of Korea         BNP Paribas,         Facility         Floating rate         LIBOR(6M)         2031-12-31         USD         25,391,288         28,781,024,744           Seoul Branch         Harch         +1.70         USD         25,391,288         28,781,024,744           N.V., Singapore         Facility         Floating rate         LIBOR(6M)         2031-12-31         USD         25,391,288         28,781,024,744           N.V., Singapore         Facility         Floating rate         LIBOR(6M)         2031-12-31         USD         3,447,938         3,908,237,972           Singapore         +2.50         Branch         Facility         Floating rate         LIBOR(6M)         2031-12-31         USD         3,447,938         3,908,237,972           N.V., Singapore         +2.5									58,259,766,524
The Export- Import Bank of Korea The Export- The Expo	PT BS Energy	Shareholder's loan	Fixed rate	8.00	2031-12-31	USD	2,426,634		2,750,589,775
Import Bank of Korea The Export- Facility Floating rate LIBOR(6M) 2031-12-31 USD 50,782,576 57,562,049,477 Import Bank - +2.50 of Korea BNP Paribas, Facility Floating rate LIBOR(6M) 2031-12-31 USD 25,391,288 28,781,024,744 +1.70 ING Bank Facility Floating rate LIBOR(6M) 2031-12-31 USD 25,391,288 28,781,024,744 N.V.,Singapore +1.70 Branch BNP Paribas, Facility Floating rate LIBOR(6M) 2031-12-31 USD 3,447,938 3,908,237,972 Singapore +2.50 Branch ING Bank Facility Floating rate LIBOR(6M) 2031-12-31 USD 3,447,938 3,908,237,972 Singapore +2.50 Branch ING Bank Facility Floating rate LIBOR(6M) 2031-12-31 USD 3,447,938 3,908,237,972 (Independence) +2.50 Branch ING Bank Facility Floating rate LIBOR(6M) 2031-12-31 USD 3,447,938 3,908,237,972 (Independence) +2.50 Branch Independence) +2.50 Branch Independence Branch (Independence) +2.50 Branch (Independence) +2.50 Bran	POSCO E&C	Shareholder's loan	Fixed rate	8.00	2031-12-31	USD	5,939,801		6,732,764,258
Import Bank +2.50 of Korea BNP Paribas, Facility Floating rate LIBOR(6M) 2031-12-31 USD 25,391,288 28,781,024,744 Seoul Branch +1.70 ING Bank Facility Floating rate LIBOR(6M) 2031-12-31 USD 25,391,288 28,781,024,744 +1.70 Branch BNP Paribas, Facility Floating rate LIBOR(6M) 2031-12-31 USD 3,447,938 3,908,237,972 Singapore +2.50 Branch ING Bank Facility Floating rate LIBOR(6M) 2031-12-31 USD 3,447,938 3,908,237,972 N.V.,Singapore +2.50 Branch ING Bank Facility Floating rate LIBOR(6M) 2031-12-31 USD 3,447,938 3,908,237,972 Harach ING Bank Facility Floating rate LIBOR(6M) 2031-12-31 USD 3,447,938 3,908,237,972 Singapore +2.50 Branch ING Bank Facility Floating rate LIBOR(6M) 2031-12-31 USD 3,447,938 3,908,237,972 Singapore +2.50 Branch ING Bank Facility Floating rate LIBOR(6M) 2031-12-31 USD 3,447,938 3,908,237,972 Singapore +2.50 Branch ING Bank Facility Floating rate LIBOR(6M) 2031-12-31 USD 3,447,938 3,908,237,972 Singapore +2.50 Branch (II,457,329,980) Less: current portion of long-term borrowings (11,457,329,980)	•	Shareholder's loan	Fixed rate	8.00	2031-12-31	USD	4,533,687		5,138,934,691
Seoul Branch +1.70 ING Bank Facility Floating rate LIBOR(6M) 2031-12-31 USD 25,391,288 28,781,024,744 N.V.,Singapore +1.70 Branch BNP Paribas, Facility Floating rate LIBOR(6M) 2031-12-31 USD 3,447,938 3,908,237,972 Branch ING Bank Facility Floating rate LIBOR(6M) 2031-12-31 USD 3,447,938 3,908,237,972 N.V.,Singapore +2.50 Branch ING Bank Facility Floating rate LIBOR(6M) 2031-12-31 USD 3,447,938 3,908,237,972 Less: discount on long-term borrowings (6,637,982,539) Less: current portion of long-term borrowings (11,457,329,980)	•	Facility	Floating rate	. ,	2031-12-31	USD	50,782,576		57,562,049,477
N.V.,Singapore +1.70 Branch BNP Paribas, Facility Floating rate LIBOR(6M) 2031-12-31 USD 3,447,938 3,908,237,972 Singapore +2.50 Branch ING Bank Facility Floating rate LIBOR(6M) 2031-12-31 USD 3,447,938 3,908,237,972 N.V.,Singapore +2.50 Branch Intersection of long-term borrowings (6,637,982,539) Less: current portion of long-term borrowings (11,457,329,980)	BNP Paribas,	Facility	Floating rate	. ,	2031-12-31	USD	25,391,288		28,781,024,744
BNP Paribas, Facility       Floating rate       LIBOR(6M)       2031-12-31       USD       3,447,938       3,908,237,972         Singapore       +2.50       +2.50       +2.50       3,908,237,972       3,908,237,972         Branch       ING Bank       Facility       Floating rate       LIBOR(6M)       2031-12-31       USD       3,447,938       3,908,237,972         N.V.,Singapore       +2.50       +2.50       137,562,863,633       195,822,630,157         Branch		Facility	Floating rate		2031-12-31	USD	25,391,288		28,781,024,744
ING Bank Facility Floating rate LIBOR(6M) 2031-12-31 USD 3,447,938 3,908,237,972 N.V.,Singapore +2.50 Branch 137,562,863,633 195,822,630,157 Less: discount on long-term borrowings (6,637,982,539) Less: current portion of long-term borrowings (11,457,329,980)	÷ .	Facility	Floating rate	. ,	2031-12-31	USD	3,447,938		3,908,237,972
137,562,863,633         137,562,863,633         195,822,630,157         (6,637,982,539)         Less: current portion of long-term borrowings         (11,457,329,980)	ING Bank N.V.,Singapore	Facility	Floating rate	. ,	2031-12-31	USD	3,447,938		3,908,237,972
Less: discount on long-term borrowings(6,637,982,539)Less: current portion of long-term borrowings(11,457,329,980)									137,562,863,633
Less: current portion of long-term borrowings (11,457,329,980)									195,822,630,157
Less: current portion of long-term borrowings (11,457,329,980)	Less: discount on	long-term borrowings							(6,637,982,539)
			wings						

### 20. Financial liabilities, continued

### (4) Long-term borrowings as of March 31, 2021 and December 31, 2020 are as follows, continued:

In won and foreign currencies

		D	ecember 31, 2	020				
	-		. (0/)			Foreign		Local
	Туре	Interest	. ,	Maturity	-	currency		currency
Korea Resources	Resources	Floating rate	3yr KTB rate –2.25	2023-03-15		-	₩	673,650,000
Corporation	development loan Resources	Floating rate	3yr KTB	2023-06-15		_		28,000,000
corporation	development loan	rioating fate	rate –2.25	2023 00 13				28,000,000
	Resources	Floating rate	3yr KTB	2024-06-15		-		41,300,000
	development loan		rate –2.25					
	Resources	Floating rate	3yr KTB	2024-09-15		-		108,300,000
	development loan	_	rate –2.25					
ndustrial Bank of Korea	PF Refinancing loan	Floating rate	CD +1.25	2030-10-30		-		9,542,838,880
Hyundai Life Insurance Co., Ltd.	PF Refinancing loan	Fixed rate	4.10	2030-10-30		-		12,723,785,160
DB Insurance Co., Ltd.	PF Refinancing loan	Fixed rate	4.10	2030-10-30		-		13,784,100,600
Hana Power, Ltd. and others	Development	Fixed rate	4.50	2022-04-29		-		22,346,880,000
							-	59,248,854,640
PT BS Energy	Shareholder's loan	Fixed rate	8.00	2031-12-31	USD	2,673,408		2,908,667,839
POSCO	Shareholder's loan	Fixed rate	8.00	2031-12-31	USD	6,392,860		6,955,432,223
The Export- Import Bank of Korea	Shareholder's loan	Fixed rate	8.00	2031-12-31	USD	4,994,736		5,434,272,387
The Export- Import Bank of Korea	Facility	Floating rate	LIBOR(6M) +2.50	2031-12-31	USD	51,842,868		56,405,040,651
3NP Paribas, Seoul Branch	Facility	Floating rate	LIBOR(6M) +1.70	2031-12-31	USD	25,921,434		28,202,520,325
NG Bank N.V.,Singapore Branch	Facility	Floating rate	LIBOR(6M) +1.70	2031-12-31	USD	25,921,434		28,202,520,325
3NP Paribas, Singapore Branch	Facility	Floating rate	LIBOR(6M) +2.50	2031-12-31	USD	3,769,864		4,101,612,152
NG Bank N.V.,Singapore Branch	Facility	Floating rate	LIBOR(6M) +2.50	2031-12-31	USD	3,769,864		4,101,612,152
							-	136,311,678,054
							-	195,560,532,694
Less: discount on l	ong-term borrowings							(6,678,244,654)
	-							-

₩ 177,126,693,569

### 20. Financial liabilities, continued

(5) Local bonds as of March 31, 2021 and December 31, 2020 are as follows:

Туре	Issue date	Maturity	Interest ra	ite (%)		March 31, 2021	December 31, 2020
Debenture	2014-04-18	2021-04-18	Fixed rate	3.49	₩	110,000,000,000	110,000,000,00
	2014-07-09	2021-07-09	Fixed rate	3.08		80,000,000,000	80,000,000,00
	2014-11-12	2021-11-12	Fixed rate	2.58		50,000,000,000	50,000,000,00
	2015-04-29	2022-04-29	Fixed rate	2.24		80,000,000,000	80,000,000,00
	2017-05-25	2022-05-25	Fixed rate	2.06		100,000,000,000	100,000,000,00
	2012-06-28	2022-06-28	Fixed rate	3.77		200,000,000,000	200,000,000,00
	2015-07-30	2022-07-30	Fixed rate	2.32		70,000,000,000	70,000,000,00
	2018-02-20	2023-02-20	Fixed rate	2.72		60,000,000,000	60,000,000,00
	2013-02-22	2023-02-22	Fixed rate	3.13		100,000,000,000	100,000,000,00
	2018-03-27	2023-03-27	Fixed rate	2.66		50,000,000,000	50,000,000,00
	2013-04-05	2023-04-05	Fixed rate	2.91		100,000,000,000	100,000,000,00
	2020-08-25	2023-08-25	Fixed rate	1.01		160,000,000,000	160,000,000,00
	2020-10-30	2023-10-30	Fixed rate	1.20		50,000,000,000	50,000,000,00
	2014-04-18	2024-04-18	Fixed rate	3.67		190,000,000,000	190,000,000,00
	2014-07-09	2024-07-09	Fixed rate	3.26		180,000,000,000	180,000,000,00
	2019-12-04	2024-12-04	Fixed rate	1.76		70,000,000,000	70,000,000,0
	2015-03-23	2025-03-23	Fixed rate	2.26		130,000,000,000	130,000,000,0
	2015-04-29	2025-04-29	Fixed rate	2.46		160,000,000,000	160,000,000,0
	2015-06-16	2025-06-16	Fixed rate	2.73		100,000,000,000	100,000,000,0
	2020-10-30	2025-10-30	Fixed rate	1.45		60,000,000,000	60,000,000,0
	2016-03-11	2026-03-11	Fixed rate	1.94		60,000,000,000	60,000,000,0
	2016-07-06	2026-07-06	Fixed rate	1.60		160,000,000,000	160,000,000,0
	2017-03-29	2027-03-29	Fixed rate	2.40		150,000,000,000	150,000,000,0
	2017-05-25	2027-05-25	Fixed rate	2.49		100,000,000,000	100,000,000,0
	2017-08-03	2027-08-03	Fixed rate	2.35		20,000,000,000	20,000,000,0
	2017-11-10	2027-11-10	Fixed rate	2.74		90,000,000,000	90,000,000,00
	2018-02-20	2028-02-20	Fixed rate	2.92		130,000,000,000	130,000,000,0
	2018-03-27	2028-03-27	Fixed rate	2.79		50,000,000,000	50,000,000,0
	2018-06-15	2028-06-15	Fixed rate	2.79		70,000,000,000	70,000,000,00
	2019-03-26	2029-03-26	Fixed rate	2.03		100,000,000,000	100,000,000,0
	2019-06-18	2029-06-18	Fixed rate	1.70		70,000,000,000	70,000,000,00
	2019-10-30	2029-10-30	Fixed rate	1.95		50,000,000,000	50,000,000,00
	2019-11-13	2029-11-13	Fixed rate	2.00		140,000,000,000	140,000,000,0
	2019-12-04	2029-12-04	Fixed rate	1.92		80,000,000,000	80,000,000,00
	2020-07-21	2030-07-21	Fixed rate	1.51		90,000,000,000	90,000,000,00
	2015-07-30	2030-07-30	Fixed rate	2.67		130,000,000,000	130,000,000,00
	2020-08-25	2030-08-25	Fixed rate	1.57		70,000,000,000	70,000,000,00
	2016-03-11	2031-03-11	Fixed rate	2.01		130,000,000,000	130,000,000,0
	2016-07-06	2031-07-06	Fixed rate	1.62		90,000,000,000	90,000,000,00
	2016-11-09	2031-11-09	Fixed rate	1.99		100,000,000,000	100,000,000,00
	2017-03-29	2032-03-29	Fixed rate	2.43		50,000,000,000	50,000,000,00

### 20. Financial liabilities, continued

(5) Local bonds as of March 31, 2021 and December 31, 2020 are as follows, continued:

Туре	Issue date	Maturity	Interest ra	ite (%)	_	March 31, 2021	December 31, 2020
Debenture	2017-05-25	2032-05-25	Fixed rate	2.60	₩	100,000,000,000	100,000,000,000
	2017-08-03	2032-08-03		2.44		70,000,000,000	70,000,000,000
	2018-06-15	2033-06-15		2.80		110,000,000,000	110,000,000,000
	2018-07-09	2033-07-09		2.66		20,000,000,000	20,000,000,000
	2017-08-03	2037-08-03		2.47		130,000,000,000	130,000,000,000
	2017-11-10	2037-11-10		2.69		90,000,000,000	90,000,000,000
	2018-07-09	2038-07-09		2.70		180,000,000,000	180,000,000,000
	2018-09-10	2038-09-10		2.30		90,000,000,000	90,000,000,000
	2018-10-31	2038-10-31		2.24		90,000,000,000	90,000,000,000
	2019-02-08	2039-02-08		2.19		160,000,000,000	160,000,000,000
	2019-05-21	2039-05-21		1.96		130,000,000,000	130,000,000,000
	2019-06-18	2039-06-18		1.75		110,000,000,000	110,000,000,000
	2019-10-30	2039-10-30		1.92		80,000,000,000	80,000,000,000
	2020-02-25	2040-02-25		1.53		50,000,000,000	50,000,000,000
	2020-03-18	2040-03-18		1.59		80,000,000,000	80,000,000,000
	2020-06-18	2040-06-18		1.66		60,000,000,000	60,000,000,000
	2020-07-21	2040-07-21		1.64		100,000,000,000	100,000,000,000
	2020-08-25	2040-08-25		1.66		40,000,000,000	40,000,000,000
	2018-09-10	2048-09-10		2.26		110,000,000,000	110,000,000,000
	2018-10-31	2048-10-31		2.17		30,000,000,000	30,000,000,000
	2019-02-08	2049-02-08		2.17		120,000,000,000	120,000,000,000
	2019-03-26	2049-03-26		1.99		120,000,000,000	120,000,000,000
	2019-05-21	2049-05-21		1.95		120,000,000,000	120,000,000,000
	2019-06-18	2049-06-18		1.72		70,000,000,000	70,000,000,000
	2019-11-13	2049-11-13		1.86		80,000,000,000	80,000,000,000
	2020-02-25	2050-02-25		1.53		120,000,000,000	120,000,000,000
	2020-06-18	2050-06-18		1.69		120,000,000,000	120,000,000,000
						6,610,000,000,000	6,610,000,000,000
Less: discount c	on local bonds					(11,858,421,370)	(12,251,153,090)
Less: current po	ortion of local bonds	i				(240,000,000,000)	(240,000,000,000)
Add: current pc	ortion of discount or	local bonds				22,516,784	50,925,156
					₩	6,358,164,095,414	6,357,799,772,066

### 20. Financial liabilities, continued

### (6) Foreign bonds as of March 31, 2021 and December 31, 2020 are as follows:

In won and foreign currencies

					March 31, 2021			December 31, 2020		
Issue date	Maturity	Interest rat	te (%)		Foreign currency		Local currency	Foreign currency	Local currency	
2016-01-21	2021-07-21	Fixed rate	2.50	USD	300,000,000	₩	340,050,000,000	300,000,000 ₩	326,400,000,000	
2017-10-30	2037-10-30	Fixed rate	1.70	EUR	40,000,000		53,131,600,000	40,000,000	53,529,600,000	
2017-11-16	2037-11-16	Fixed rate	2.36	SEK	450,000,000		58,392,000,000	450,000,000	59,746,500,000	
2019-01-22	2022-01-22	Fixed rate	3.38	USD	300,000,000		340,050,000,000	300,000,000	326,400,000,000	
					-		791,623,600,000	-	766,076,100,000	
Less: discount	on foreign bond	ls			-		(1,074,515,983)	-	(1,684,296,595)	
Less: current p	ortion of foreig	n bonds			-		(680,100,000,000)	-	(326,400,000,000)	
Add: current p	ortion of discou	nt on foreign b	oonds		-		847,965,909	-	431,932,736	
					-	₩	111,297,049,926	- ₩	438,423,736,141	

(7) Repayment schedules of borrowings and bonds as of March 31, 2021 are as follows:

In won		Borrowings	Bonds	Total
Less than 1 year 🛛 🖞	₩	152,470,433,737	920,100,000,000	1,072,570,433,737
1-5 years		94,436,566,035	1,920,000,000,000	2,014,436,566,035
More than 5 years		89,115,630,385	4,561,523,600,000	4,650,639,230,385
¥	N.	336,022,630,157	7,401,623,600,000	7,737,646,230,157

(8) Changes in borrowings and bonds for the three-month period ended March 31, 2021 and, the year ended December 31, 2020 are as follows:

In won				March 31, 20	21	
		Beginning balance	Cash flow	Changes in exchange rates	Interest expense	Ending balance
Borrowings and bonds	₩	7,751,022,938,355	(63,238,050,684)	29,515,769,408	774,653,186	7,718,075,310,265
In won				December 31, 2	2020	
		Beginning balance	Cash flow	Changes in exchange rates	Interest expense	Ending balance
Borrowings and bonds	₩	7,353,112,831,957	429,128,799,428	(43,793,677,536)	12,574,984,506	7,751,022,938,355

(Unaudited)

### 21. Non-financial liabilities

Non-financial liabilities as of March 31, 2021 and December 31, 2020 are as follows:

In won		March	31, 2021	December 31, 2020		
	_	Current	Non-current	Current	Non-current	
Advance received	₩	1,810,000	-	-	-	
Unearned revenue		3,843,359,777	2,515,666,097	2,036,947,114	2,414,684,352	
Withholdings		4,373,620,002	-	6,813,526,635	-	
Others (*)		33,167,922,243	1,035,408,818	7,808,507,244	1,011,647,108	
	₩	41,386,712,022	3,551,074,915	16,658,980,993	3,426,331,460	

(\*) Others consist mainly of the sales taxes.

### 22. Provisions

(1) Provisions as of March 31, 2021 and December 31, 2020 are as follows:

In won		March 31	, 2021	December 31, 2020		
	_	Current	Non-current	Current	Non-current	
Provisions for wage litigation (*1)	₩	514,476,771	-	3,189,644,836	-	
Provisions for employee benefits		51,801,966,889	-	43,636,361,712	-	
Provisions for greenhouse gas emission (*2)		92,741,106,073	-	97,305,838,903	-	
Provisions for financial guarantee contract		5,785,563,183	-	5,536,848,424	-	
	₩	150,843,112,916	-	149,668,693,875	-	

(\*1) As of March 31, 2021, the Group recognized a provision for the litigation of ordinary wage as an outflow of resources embodying economic benefits is probable and reliably estimable.

(\*2) Provisions for greenhouse gas emission

The Group's greenhouse gas emission right which are allocated free of charge from the government according to the Act on Allocation and Trading of Greenhouse Gas Emission as of March 31, 2021 are as follows:

In tons	Implementation year					
	2021	2022	2023	2024	2025	
Quantity of emission right allocated free of charge from the government	29,898,982	29,898,982	29,898,982	9,966,328	9,966,328	

The Group has not provided emission rights allocated free of charge from the government as collateral.

In accordance with the Act on Allocation and Trading of Greenhouse Gas Emission, the Group has a present obligation of submitting emission rights to the government when it is probable that there will be outflows of resources in fulfilling the obligation. The Group received all of its discharged quantities of emission rights from FY2021 to FY2023 and 30% of its discharged quantities for emission rights from FY2024 to FY2025. Therefore, a provision for greenhouse gas emission was recognized. The provision is derecognized when the emission rights are submitted to the government.

### 22. Provisions, continued

<sup>(2)</sup> Changes in provisions for the three-month period ended March 31, 2021 and the year ended December 31, 2020 are as follows:

In won		March 31, 2021						
		Beginning balance	Accrual (reversal) of provision	Payments	Ending balance			
Provisions for wage litigation	₩	3,189,644,836	-	(2,675,168,065)	514,476,771			
Provisions for employee benefits Provisions of greenhouse gas		43,636,361,712	10,654,074,527	(2,488,469,350)	51,801,966,889			
emission		97,305,838,903	(4,564,732,830)	-	92,741,106,073			
Provisions for financial guarantee contract		5,536,848,424	248,714,759		5,785,563,183			
	₩	149,668,693,875	6,338,056,456	(5,163,637,415)	150,843,112,916			

In won	December 31, 2020						
		Beginning balance	Accrual (reversal) of provision	Payments	Ending balance		
Provisions for wage litigation	₩	3,072,633,363	117,011,473	-	3,189,644,836		
Provisions for employee benefits		42,031,429,001	36,858,053,861	(35,253,121,150)	43,636,361,712		
Provisions of greenhouse gas emission		130,547,906,267	65,389,331,315	(98,631,398,679)	97,305,838,903		
Provisions for financial guarantee contract		6,216,236,000	(679,387,576)	-	5,536,848,424		
Provisions for RPS		2,889,088,871	(2,889,088,871)	-	-		
	₩	184,757,293,502	98,795,920,202	(133,884,519,829)	149,668,693,87 5		

#### 23. Employment benefits obligations

### (1) Defined contribution plan

The Group operates a defined contribution plan which is subject to the employees' choice. A defined contribution fund is separately managed by the plan's administrator. When employees terminate their employment before the benefits have vested, the Group's obligation to make contributions to the plan decreases on a pro rata basis. The Group contributed  $\frac{1}{2}$ ,468,419,162 and  $\frac{1}{2}$ ,1526,130,380 for the three-month periods ended March 31, 2021 and 2020, respectively.

Expenses recognized by defined contribution plan for the three-month periods ended March 31, 2021 and 2020 are as follows:

In won	_	March 31, 2021	March 31, 2020
Cost of sales	₩	1,557,909,338	1,071,794,892
Selling and administrative expenses		608,526,750	280,676,010
Others(construction-in-progress and others)		301,983,074	173,659,478
	₩	2,468,419,162	1,526,130,380

### 23. Employment benefits obligations, continued

(2) Defined benefit plan

(i) Principal assumptions on actuarial valuation as of March 31, 2021 and December 31, 2020 are as follows:

	March 31, 2021	December 31, 2020
Discount rate	2.23% ~ 2.77%	1.99% ~ 2.77%
Expected salary increasing rate	2.84% ~ 6.98%	2.84% ~ 6.98%
Weighted-average maturity	10.1 years ~ 11.9 years	10.0 years ~ 11.9 years

(ii) Details of expense relating to defined benefit plans for the three-month periods ended March 31, 2021 and 2020 are as follows:

In won	-	March 31, 2021	March 31, 2020
Current service cost	W	5,938,540,034	5,181,243,122
Interest cost		1,010,875,989	917,666,327
Expected return on plan assets		(211,449,266)	(176,372,325)
	₩-	6,737,966,757	5,922,537,124

The expense is recognized as retirement benefit expense in the accompanying consolidated statements of comprehensive income. For the three-month period ended March 31, 2021, ₩5,470,019,012, ₩500,241,576 and ₩767,706,169 are recognized in cost of goods sold, selling and administrative expenses and construction in progress, respectively. For the three-month period ended March 31, 2020, ₩4,690,002,857, ₩500,218,962 and ₩732,315,305 are recognized in cost of goods sold, selling and administrative expenses and construction in progress, respectively.

(iii) Employee benefit liabilities as of March 31, 2021 and December 31, 2020 are as follows:

In won	_	March 31, 2021	December 31, 2020
Present value of defined benefit obligations	₩	211,365,533,032	222,566,031,812
Fair value of plan assets		(47,160,411,973)	(46,584,031,293)
Net employee benefits liabilities from defined benefit plans	₩	164,205,121,059	175,982,000,519

(iv) Changes in the present value of defined benefit obligations for the three-month period ended March 31, 2021 and the year ended December 31, 2020 are as follows:

In won	-	March 31, 2021	December 31, 2020
Beginning balance	₩	222,566,031,812	198,695,249,319
Current service cost		5,938,540,034	23,410,737,637
Interest cost		1,010,875,989	4,024,582,016
Actual payments		(488,614,584)	(1,183,367,876)
Remeasurement component		(5,135,283,090)	5,770,311,667
Payment due to change of plan to defined contribution plan		(12,532,881,830)	(8,125,418,540)
Others		6,864,701	(26,062,411)
Ending balance	₩	211,365,533,032	222,566,031,812

### 23. Employment benefits obligations, continued

### (2) Defined benefit plan, continued

(v) Changes in the present value of plan assets for the three-month period ended March 31, 2021 and the year ended December 31, 2020 are as follows:

In won		March 31, 2021	December 31, 2020
Beginning balance	₩	46,584,031,293	37,869,026,847
Expected return on plan assets		211,449,266	817,373,678
Contributions by the employers		387,598,375	8,216,465,927
Actual payments		(25,775,894)	(263,849,699)
Remeasurement component		3,108,933	(54,985,460)
Ending balance	₩	47,160,411,973	46,584,031,293

(vi) Details of the fair value of plan assets as of March 31, 2021 and December 31, 2020 are as follows:

In won	-	March 31, 2021	December 31, 2020
Guaranteed insurance for interest rates	₩	47,159,621,505	46,583,241,533
Others		790,468	789,760
	₩	47,160,411,973	46,584,031,293

(vii) Remeasurements gains or losses recognized as other comprehensive income(loss) for the three-month period ended March 31, 2021 and the year ended December 31, 2020 are as follows:

In won	_	March 31, 2021	December 31, 2020
Remeasurements gains or losses by financial assumptions	₩	5,004,757,723	273,527,093
Experience adjustments		130,525,367	(6,043,838,760)
Income from plan assets		3,108,933	(54,985,460)
	₩	5,138,392,023	(5,825,297,127)

(3) Other long-term employee benefit liabilities as of March 31, 2021 and December 31, 2020 are as follows:

In won	-	March 31, 2021	December 31, 2020
Other payables of long-term employee vacation obligations	W	380,210,700	401,046,956

(Unaudited)

### 24. Issued capital

### (1) Details of issued capital as of March 31, 2021 and December 31, 2020 are as follows:

In won	_	March 31, 2021	December 31, 2020
Share capital	₩	142,906,600,000	142,906,600,000
Share premium		1,128,023,547,572	1,128,023,547,572
	₩	1,270,930,147,572	1,270,930,147,572

### (2) Details of shares issued as of March 31, 2021 and December 31, 2020 are as follows:

In shares	_	March 31, 2021	December 31, 2020
Number of shares authorized		100,000,000	100,000,000
Number of shares issued		28,581,320	28,581,320
Par value per share (in won)	₩	5,000	5,000
Common shares (in won)		142,906,600,000	142,906,600,000

No changes in shares exist for the three-month period ended March 31, 2021 and the year ended December 31, 2020.

#### (3) Share Premium

As of January 1, 2011, the Group spun off its pumped storage power plant which was subsequently merged into a related party, resulting in an decrease in shares issued (capital) of W15,610 million and share premium (additional paid-in-capital) of W119,697 million. In addition, loss on reduction of capital in the amount of W279,193 million was incurred.

#### 25. Retained earnings and dividends paid

#### (1) Details of voluntary reserves as of March 31, 2021 and December 31, 2020 are as follows:

In won	_	March 31, 2021	December 31, 2020
Reserve for business stabilization (*)	₩	119,929,565	119,929,565
Reserve for research and human development		70,183,636,020	70,183,636,020
Reserve for investment on social overhead capital		1,805,437,434,963	1,835,317,761,820
	₩	1,875,741,000,548	1,905,621,327,405

(\*) Prior to 2002, the Group appropriated certain tax-deductible benefits as reserve for business stabilization, for offsetting future deficit in accordance with the relevant tax laws. Due to the amendment of such tax laws on December 11, 2002, the reserve is no longer required. However, the Group continues to maintain such reserve on a voluntary basis.

### 25. Retained earnings and dividends paid, continued

### (2) Changes in retained earnings for the three-month period ended March 31, 2021 and the year ended December 31, 2020 are as follows:

In won	_	March 31, 2021	December 31, 2020
Beginning balance	₩	2,753,603,559,149	2,767,970,213,817
Net income(loss) for the period attributed to owner of the Company		58,526,166,660	(9,829,161,975)
Remeasurements of defined benefit liability, net of tax		3,894,901,153	(4,537,492,693)
Share in other comprehensive income related to associates and joint ventures		(17,962,905)	-
Ending balance	₩	2,816,006,664,057	2,753,603,559,149

(3) Dividends paid for the three-month period ended March 31, 2021 and the year ended December 31, 2020 are as follows:

		March 31, 2021					
	Number of shares issued	Number of shares eligible for dividends	Dividends paid per share (in won)	Dividends paid (in won)			
Common shares	28,581,320	28,581,320	-	-			
		December	31, 2020				
	Number of shares issued	Number of shares eligible for dividends	Dividends paid per share (in won)	Dividends paid (in won)			
Common shares	28,581,320	28,581,320	-				

(4) Changes in remeasurement components related to defined benefit liability for the three-month period ended March 31, 2021 and the year ended December 31, 2020 are as follows :

In won	_	March 31, 2021	December 31, 2020
Beginning balance	₩	(23,397,650,172)	(18,860,157,479)
Changes		5,138,392,023	(5,828,466,297)
Income tax effect		(1,243,490,870)	1,290,973,604
Ending balance	₩	(19,502,749,019)	(23,397,650,172)

### 26. Other components of equity

(1) Other components of equity of the parent as of March 31, 2021 and December 31, 2020 are as follows:

In won		March 31, 2021	December 31, 2020
Accumulated other comprehensive income	₩	33,120,152,255	41,201,546,209
Other equity		(299,670,715,936)	(299,670,715,936)
	W	(266,550,563,681)	(258,469,169,727)

(2) Changes in accumulated other comprehensive income (loss) for the three-month period ended March 31, 2021 and the year ended December 31, 2020 are as follows:

In won		Reserve for financial assets at FVOCI	Reserve for gain (loss) on valuation of derivatives	March 31, 2021 Share in other comprehensive income (loss) of associates and joint ventures	Reserve for gain (loss) on translation of overseas operations	Total
Beginning balance	₩	64,806,222,204	3,391,906,376	(4,083,251,388)	(22,913,330,983)	41,201,546,209
Changes in financial assets at FVOCI Net change in the unrealized fair value		(29,463,001,473)	-	-	-	(29,463,001,473)
of derivatives using cash flow hedge accounting		-	(2,815,878,009)	-	-	(2,815,878,009)
Share in other comprehensive income of associates and joint ventures		-	-	(186,344,335)	-	(186,344,335)
Foreign currency translation of foreign operations		-	-	-	16,572,341,029	16,572,341,029
Tax effect		7,130,046,356	681,442,478	-	-	7,811,488,834
Ending balance	₩	42,473,267,087	1,257,470,845	(4,269,595,723)	(6,340,989,954)	33,120,152,255

# (Unaudited)

### 26. Other components of equity, continued

(2) Changes in accumulated other comprehensive income (loss) for the three-month period ended March 31, 2021 and the year December 31, 2020 are as follows, continued:

In won				December 31, 2020		
		Reserve for financial assets at FVOCI	Reserve for gain (loss) on valuation of derivatives	Share in other comprehensive income (loss) of associates and joint ventures	Reserve for gain (loss) on translation of overseas operations	Total
Beginning balance	₩	77,590,953,050	(4,204,356,799)	(3,224,636,692)	(3,717,079,547)	66,444,880,012
Changes in financial assets at FVOCI		(16,866,399,533)	-	-	-	(16,866,399,533)
Net change in the unrealized fair value of derivatives using cash flow hedge accounting		-	10,021,455,376	-	-	10,021,455,376
Share in other comprehensive income of associates and joint ventures		-	-	(858,614,696)		(858,614,696)
Foreign currency translation of foreign operations		-	-	-	(19,196,251,436)	(19,196,251,436)
Tax effect		4,081,668,687	(2,425,192,201)	-	-	1,656,476,486
Ending balance	₩	64,806,222,204	(3,391,906,376)	(4,083,251,388)	(22,913,330,983)	41,201,546,209

(3) Details of other equity as of March 31, 2021 and December 31, 2020 are as follows:

In won	_	March 31, 2021	December 31, 2020
Loss on capital reduction	₩	(279,192,511,260)	(279,192,511,260)
Other capital adjustment		(20,478,204,676)	(20,478,204,676)
	₩	(299,670,715,936)	(299,670,715,936)

27. Sales

Details of sales for the three-month periods ended March 31, 2021 and 2020 are as follows:

In won		March 31, 2021	March 31, 2020
Sales of goods			
Domestic	₩	1,161,139,826,667	1,234,350,514,052
Overseas		4,054,942,661	4,364,784,826
		1,165,194,769,328	1,238,715,298,878
Sales of service			
Domestic		272,751,750	1,209,364,086
Overseas		7,367,175,812	7,960,197,036
		7,639,927,562	9,169,561,122
	₩	1,172,834,696,890	1,247,884,860,000

### 28. Selling and administrative expenses

Selling and administrative expenses for the three-month periods ended March 31, 2021 and 2020 are as follows:

In won		March 31, 2021	March 31, 2020
Salaries	₩	7,464,428,130	7,879,159,205
Employee benefit expense		1,108,768,326	780,894,972
Welfare and benefit expense		919,018,016	887,363,568
Insurance expense		88,312,486	83,025,327
Depreciation		5,821,554,858	3,974,021,420
Amortization		2,459,028,847	1,460,240,157
Commission		7,212,769,959	4,143,039,268
Advertising expense		168,316,848	166,722,900
Training expense		29,284,027	46,004,229
Vehicle maintenance expense		31,453,690	41,561,899
Publishing expense		60,594,367	83,677,084
Business promotion expense		37,373,329	41,601,866
Rent expense		181,492,073	279,093,291
Telecommunication expense		166,818,442	113,608,334
Taxes and dues		351,632,476	460,720,184
Expendable supplies expense		51,073,694	70,541,689
Water, light and heating expense		184,935,613	178,516,781
Repairs and maintenance expense		2,142,841,394	2,132,555,739
Ordinary development expense		3,731,977,570	4,328,969,442
Travel expense		145,647,520	129,939,435
Clothing expense		4,090,000	45,159,290
Survey and analysis expense		3,397,113	4,682,096
Sales facilitation expense		10,080,800	6,715,000
Others		578,626,566	895,257,751
	₩	32,953,516,144	28,233,070,927

(Unaudited)

### 29. Other non-operating income and other non-operating expenses

### (1) Other non-operating income for the three-month periods ended March 31, 2021 and 2020 are as follows:

In won		March 31, 2021	March 31, 2020
Compensation and other revenue	₩	483,776	470,745,956
Rental income		1,209,900,301	1,707,992,316
Reversal of Allowance for Doubtful Accounts	_	-	24,449,388
	₩	1,210,384,077	2,203,187,660
	-		

(2) Other non-operating expenses for the three-month periods ended March 31, 2021 and 2020 are as follows:

In won		March 31, 2021	March 31, 2020
Donations	₩	259,972,385	1,050,539,624
	₩	259,972,385	1,050,539,624

### 30. Other profit (loss)

Details of other profit (loss) for the three-month periods ended March 31, 2021 and 2020 are as follows:

In won	March 31, 2021	March 31, 2020
Other profit		
Gain on disposal of property plant, and equipment	4,259,782	109,433,537
Gain on foreign currency translations (*)	192,006,973	375,654,598
Gain on foreign currency transactions (*)	1,284,033,154	1,087,969,300
Others	3,164,555,708	1,507,981,120
Other loss		
Loss on disposal of property plant, and equipment	(342,374,124)	(5,478,505)
Loss on foreign currency translations (*)	(45,706,148)	-
Loss on foreign currency transactions (*)	(1,405,099,639)	(2,252,555,925)
Others	(1,277,146,392)	(3,899,546,082)
<u>₩</u>	¥ 1,574,529,314	(3,076,541,957)

(\*) These represent gains (losses) on foreign currency translations and transactions from operating activities.

### 31. Finance income

Finance income for the three-month periods ended March 31, 2021 and 2020 are as follows:

In won	_	March 31, 2021	March 31, 2020
Interest income	₩	8,371,146,473	6,112,612,432
Gain on valuation of derivative instruments		28,986,223,922	49,939,941,971
Gain on transaction of derivative instruments		4,224,707,087	5,266,856,793
Gain on foreign currency translations (*)		1,800,023,596	1,174,901,760
Gain on foreign currency transactions (*)		10,053,001	66,784,603
	₩	43,392,154,079	62,561,097,559

(\*) These represent gains (losses) on foreign currency translations and transactions from financing activities.

### 32. Finance costs

(1) Finance costs for the three-month periods ended March 31, 2021 and 2020 are as follows:

In won		March 31, 2021	March 31, 2020
Interest expense	₩	40,794,068,784	41,598,498,771
Loss on valuation of derivative instruments		2,414,389,320	17,404,177,974
Loss on transaction of derivative instruments		782,797,449	1,879,053,581
Loss on foreign currency translations (*)		54,988,376,690	85,114,838,927
Loss on foreign currency transactions (*)		1,458,291,763	682,851,784
Others		248,778,226	-
	₩	100,686,702,232	146,679,421,037

(\*) These represent losses on foreign currency translations and transactions arising from financing activities.

(2) Interest expense included in finance costs for the three-month periods ended March 31, 2021 and 2020 are as follows:

In won		March 31, 2021	March 31, 2020
Trade and other payables	₩	405,568,944	806,366,622
Short-term borrowings		349,115,579	969,807,191
Long-term borrowings		2,146,591,464	1,775,507,071
Bonds		44,318,510,655	43,311,232,442
Lease liabilities		4,337,927,933	4,235,511,953
		51,557,714,575	51,098,425,279
Less: capitalized borrowing costs		(10,763,645,791)	(9,499,926,508)
	₩	40,794,068,784	41,598,498,771

Capitalization rates for the three-month periods ended March 30, 2021 and 2020 are 2.24% and 2.50%, respectively.

#### 33. Income tax expense

Income tax expense is calculated by adjusting current income tax expenses recognized in the previous period, deferred income tax expenses due to generation and realization of temporary differences, and items recognized other than in the profit for the period. For the three-month periods ended March 31, 2021 and 2020, the effective tax rate was 19.38% and 16.98, respectively

March 21 2021

### 34. Expenses by nature

#### (1) Expenses by nature for the three-month period ended March 31, 2021 are as follows:

In won

In won		March 31, 2021					
	_	Selling and administrative					
	_	expenses	Cost of sales	Total			
Raw materials used	₩	-	717,720,823,311	717,720,823,311			
Salaries		7,464,428,130	54,886,018,293	62,350,446,423			
Employee benefit expense		1,108,768,326	7,027,928,350	8,136,696,676			
Welfare and benefit expense		919,018,016	5,245,451,253	6,164,469,269			
Insurance expense		88,312,486	1,614,082,162	1,702,394,648			
Depreciation		5,821,554,858	179,709,278,143	185,530,833,001			
Amortization		2,459,028,847	246,731,679	2,705,760,526			
Commission		7,212,769,959	2,286,973,217	9,499,743,176			
Advertising expense		168,316,848	130,130,375	298,447,223			
Training expense		29,284,027	53,745,317	83,029,344			
Vehicle maintenance expense		31,453,690	85,174,577	116,628,267			
Publishing expense		60,594,367	40,307,268	100,901,635			
Business promotion expense		37,373,329	36,147,279	73,520,608			
Rent expense		181,492,073	3,343,430,273	3,524,922,346			
Telecommunication expense		166,818,442	57,786,807	224,605,249			
Transportation expense		-	2,369,352	2,369,352			
Taxes and dues		351,632,476	4,614,270,584	4,965,903,060			
Expendable supplies expense		51,073,694	766,012,196	817,085,890			
Water, light and heating expense		184,935,613	308,837,719	493,773,332			
Repairs and maintenance expense		2,142,841,394	23,975,651,788	26,118,493,182			
Ordinary development expense		3,731,977,570	3,771,710,327	7,503,687,897			
Travel expense		145,647,520	279,019,199	424,666,719			
Clothing expense		4,090,000	22,548,727	26,638,727			
Survey and analysis expense		3,397,113	61,655,431	65,052,544			
Other expense related to RPS		-	15,688,878,042	15,688,878,042			
Reversal of provisions of							
greenhouse gas emission debt Sales promotion expense		- 10,080,800	(10,037,891,561)	(10,037,891,561) 10,080,800			
Others		578,626,566	3,075,082,120	3,653,708,686			
omera		32,953,516,144	1,015,012,152,228	1,047,965,668,372			
	₩	32,933,310,144	1,013,012,132,228	1,047,900,008,372			

### 34. Expenses by nature, continued

### (2) Expenses by nature for the three-month period ended March 31, 2020 are as follows:

In won		March 31, 2020				
	_	Selling and administrative				
	-	expenses	Cost of sales	Total		
Raw materials used	₩	-	772,109,236,218	772,109,236,218		
Salaries		7,879,159,205	52,674,359,009	60,553,518,214		
Employee benefit expense		780,894,972	5,761,797,749	6,542,692,721		
Welfare and benefit expense		887,363,568	4,777,467,450	5,664,831,018		
Insurance expense		83,025,327	1,503,018,840	1,586,044,167		
Depreciation		3,974,021,420	175,096,012,078	179,070,033,498		
Amortization		1,460,240,157	828,974,730	2,289,214,887		
Commission		4,143,039,268	5,756,986,159	9,900,025,427		
Advertising expense		166,722,900	110,533,730	277,256,630		
Training expense		46,004,229	76,148,854	122,153,083		
Vehicle maintenance expense		41,561,899	86,108,554	127,670,453		
Publishing expense		83,677,084	43,339,459	127,016,543		
Business promotion expense		41,601,866	43,702,368	85,304,234		
Rent expense		279,093,291	3,850,256,037	4,129,349,328		
Telecommunication expense		113,608,334	47,166,755	160,775,089		
Transportation expense		-	37,249,106	37,249,106		
Taxes and dues		460,720,184	4,497,982,544	4,958,702,728		
Expendable supplies expense		70,541,689	696,559,734	767,101,423		
Water, light and heating expense		178,516,781	295,159,295	473,676,076		
Repairs and maintenance expense		2,132,555,739	25,529,109,696	27,661,665,435		
Ordinary development expense		4,328,969,442	6,836,068,089	11,165,037,531		
Travel expense		129,939,435	269,208,158	399,147,593		
Clothing expense		45,159,290	4,500,000	49,659,290		
Survey and analysis expense		4,682,096	72,868,380	77,550,476		
Other expense related to RPS		-	174,154,206	174,154,206		
Other expense related to provisions of						
greenhouse gas emission debt		- 6,715,000	5,956,159,232	5,956,159,232		
Sales promotion expense Others		895,257,751	- 1,805,195,911	6,715,000 2,700,453,662		
Others	-					
	₩	28,233,070,927	1,068,939,322,341	1,097,172,393,268		

(Unaudited)

### 35. Earnings per share

### (1) Basic earnings per share for the three-month period ended March 31, 2021 and 2020 are as follows:

In won		March 31, 2021	March 31, 2020
Basic earnings per share	₩	2,048	2,240

### (2) Basic earnings per share

Profit for the year and weighted average number of common shares used in the calculation of basic earnings (loss) per share for the three-month period ended March 31, 2021 and 2020 are as follows:

In won, except for share data		March 31, 2021	March 31, 2020
Profit used in the calculation of total basic earnings per share	₩	58,526,166,660	64,033,688,401
Weighted average number of common shares		28,581,320	28,581,320

#### (3) Diluted earnings per share

The Group has no potential dilutive instruments as of March 31, 2021 and 2020.

#### 36. Risk management

#### (1) Capital risk management

The purpose of the Group's capital management is to ensure that it maintains a high credit rating and healthy capital ratios in order to support its business and maximize shareholder's value. The Group manages its capital structure and makes adjustments to it in light of changes in economic conditions. To maintain or adjust the capital structure, the Group may adjust the dividend payment, capital return to shareholders or issue new shares.

The Group manages capital based on a gearing ratio which is net debt divided by total equity. The Group calculates net debt as interest bearing loans, borrowings and bonds payable, less cash and cash equivalents.

No changes were made in the purpose, policies and processes for managing capital during the periods ended March 31, 2021 and 2020

Details of the Group's capital management accounts as of March 31, 2021 and December 31, 2020 are as follows:

In won	March 31, 2021	December 31, 2020
Total borrowings and bonds	7,718,075,310,265	7,751,022,938,355
Cash and cash equivalents	292,974,857,682	254,069,769,864
Net borrowings and bonds	7,425,100,452,583	7,496,953,168,491
Total equity	3,859,003,894,140	3,799,108,351,360
Net debt to equity ratio	192.41%	197.33%

#### 36. Risk management, continued

#### (2) Financial risk management

The Group is exposed to a variety of financial risks associated with financial instruments, such as market risks (foreign exchange risks, interest rate risks, price risks) and credit risks. Our risk management aims to identify potential risks that affect our financial performance and to reduce, eliminate, and avoid them to an acceptable level. The Group uses derivative financial instruments to hedge certain risk exposures. The Group's overall financial risk management strategy remains consistent with the prior year

#### (i) Credit risk

Credit risk is the risk that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Group is exposed to credit risk from its operating activities, and its financing activities including debt securities, derivative instruments, financial guarantees and unused line of credits. Credit risk from balances with banks and financial institutions is limited by making transactions with counterparties with very low credit risk. Credit quality of a customer is assessed based on a customer's financial positions, past experiences with similar loss patterns and other factors.

Book values of the financial assets represent the maximum exposed amounts of the credit risk. Details of the Group's level of maximum exposure to credit risk as of March 31, 2021 and December 31, 2020 are as follows:

In won	March 31, 2021	December 31, 2020
Cash and cash equivalents	₩ 292,974,857,682	254,069,769,864
Financial assets at FVTPL	76,900,000,000	1,413,137
Financial instruments	11,000,000,000	11,000,000,000
Loans and receivables	47,956,931,259	48,568,095,723
Trade and other receivables	1,020,575,915,475	902,766,838,569
Derivative financial assets held for trading	7,743,591,128	6,531,444,292
Derivative assets (using hedge accounting)	8,786,455,953	3,251,874,804

There are no financial assets or non-financial assets acquired by exercising a lien or other credit enhancement as of March 31, 2021 and December 31, 2020.

#### (ii) Market risk

Market risk is the risk that the Group's fair values of the financial instruments or future cash flows are affected by the changes in the market. Market risk consists of interest rate risk, currency risk and other price risk.

(Unaudited)

#### 36. Risk management, continued

- (2) Financial risk management, continued
  - (iii) Sensitivity analysis

- Significant assets and liabilities with uncertainties in underlying assumptions

1 Defined benefit obligations

The following is a sensitivity analysis of defined benefit obligations assuming a 1% increase and decrease in the actuarial valuation assumptions as of March 31, 2021 and December 31, 2020:

In won		March	31, 2021	Decembe	r 31, 2020
Туре	Accounts	1% Increase	1% Decrease	1% Increase	1% Decrease
Future salary increases	Defined benefit W obligation	21,910,576,808	(19,194,160,571)	22,402,749,250	(19,619,990,938)
Discount rate	Defined benefit obligation	(19,589,093,083)	22,947,333,591	(20,608,060,659)	24,122,946,532

- Management judgment is affected by uncertainties in underlying assumptions.

### ① Foreign currency risk

Foreign currency risk is the risk that the fair value or future cash flows on an exposure will fluctuate because of changes in foreign exchange rate. The Group's exposure to the risk of changes in foreign exchanges rates relates primarily to the Group's operating activities. The details of monetary liabilities denominated in foreign currencies as of March 31, 2021 and December 31, 2020 are as follows:

In foreign currency	Ass	ets	Liabilities		
	March 31, 2021	December 31, 2020	March 31, 2021	December 31, 2020	
USD	35,748,851	2,873,934	1,261,861,356	1,416,779,717	
EUR	-	-	39,924,932	39,912,812	
SEK	-	-	449,135,122	449,124,532	
SGD	187,100	230,289	269,493	261,722	
IDR	453,779,571	813,271,565	24,174,529	176,968,822	

Applied exchange rates are as follows:

In won	Average rate	Spot rate as of		
	March 31, 2021	December 31, 2020	March 31, 2021	December 31, 2020
USD	1,114.05	1,180.05	1,133.50	1,088.00
EUR	1,342.62	1,345.99	1,328.29	1,338.24
SEK	132.74	128.42	129.76	132.77
SGD	836.13	855.11	840.97	822.22
IDR	0.08	0.08	0.08	0.08

(Unaudited)

#### 36. Risk management, continued

#### (2) Financial risk management, continued

A sensitivity analysis on the Group's profit for the periods assuming a 10% increase and decrease in currency exchange rates with all other variables held constant as of March 31 2021 and December 31, 2020 is as follows:

In won	March 3	1, 2021	December	31, 2020
	10% Increase	10% Decrease	10% Increase	10% Decrease
Increase (decrease) of profit before income tax	4 (150,114,583,762)	150,114,583,762	(165,134,927,326)	165,134,927,326
Increase (decrease) of shareholder's equity (*)	(150,114,583,762)	150,114,583,762	(165,134,927,326)	165,134,927,326

(\*) The effect of income tax is not considered.

The movement in the effect is a result of a change in the fair value of derivative financial instruments not designated in a hedge relationship and monetary assets and liabilities denominated in foreign currencies, where the functional currency of the Group is a currency other than KRW. The Group manages its foreign currency risk through cross-currency swaps, currency option agreements and currency forward agreements for hedging transactions of payments denominated in a foreign currency, receivables denominated in a foreign currency and forecasted purchases.

When a derivative is entered into for the purpose of a hedge, the Group negotiates the terms of the derivatives to match the terms of the hedged exposure. For hedges of forecast transactions, the derivatives cover the period of exposure from the point the cash flows of the transactions are forecasted up to the point of settlement of the resulting receivable or payable that is denominated in the foreign currency. Those forecasted transactions are highly probable at the reporting date.

There is an economic relationship between the hedged transactions and hedging instruments as the terms of the currency swaps match the terms of the expected highly probable forecasted transactions. The Group has established a hedge ratio of 1:1 for the hedging relationships as the underlying risk of the currency swaps are identical to the hedged risk components. The Group's hedging instruments were hedging the risk at the reporting date.

#### ② Interest rate risk

The Group is exposed to interest rate risk due to its borrowing with floating interest rates. A 1% increase or decrease is used when reporting interest rate risk internally to key management personnel which represents management's assessment of the reasonably possible change in interest rates.

The Group's borrowings and bonds with floating interest rates as of March 31, 2021 and December 31, 2020 are as follows:

In won	_	March 31, 2021	December 31, 2020
Long-term borrowings	₩	133,008,272,817	131,407,394,485

A sensitivity analysis on the Group's borrowings and bonds assuming a 1% increase and decrease in interest rates with all other variables held constant as of March 31, 2021 and December 31, 2020 is as follows:

In won

in won		March 31	, 2021	December 31, 2020		
		1% Increase	1% Decrease	1% Increase	1% Decrease	
Increase (decrease) of profit before income tax	₩	(1,330,082,728)	1,330,082,728	(1,314,073,945)	1,314,073,945	
Increase (decrease) of shareholder's equity (*)		(1,330,082,728)	1,330,082,728	(1,314,073,945)	1,314,073,945	

(\*) The effect of income tax is not considered.

To manage its interest rate risks, the Group enters into certain interest swap agreements or maintains an appropriate mix of fixed and floating rate borrowings. Sensitivity analysis above is conducted without consideration of hedge effect of related derivatives.

#### 36. Risk management, continued

- (2) Financial risk management, continued
  - ③ Liquidity risk

The Group manages its capital to ensure that entities in the Group will be able to continue while maximizing the return to shareholders by minimizing capital procurement costs. Management regularly reviews the capital structure and maintains the optimal capital structure through short- and long-term capital borrowing and paid-in capital increase. The capital structure of the Group consists of net debt (offset by cash and cash equivalents) and equity. The Group's overall capital risk management strategy remains consistent with the prior year.

The following table shows the details of maturities of non-derivative financial liabilities based on contractual undiscounted payments:

In won			March 31, 2	2021		
	Less tha	in		More than		
Туре	1 year	1~2 years	2~5 year	s 5 years	Total	
Borrowings and bonds (cash flows of principal)	₩ 1,072,570,43	33,737 696,169,136	,890 1,318,267,42	9,145 4,650,639,230,385	7,737,646,230,157	
Borrowings and bonds (cash flows of estimated interest)	171,289,11	142,599,194	,290 352,756,82	8,374 993,701,214,904	1,660,346,349,140	
	1,243,859,54	15,309 838,768,331	,180 1,671,024,25	7,519 5,644,340,445,289	9,397,992,579,297	
Trade and other payables	567,208,78		,125 287,975,70		1,913,010,580,733	
Financial guarantee contract (*)	6,574,30	00,000	-	- 16,837,777,513	23,412,077,513	
	573,783,08	31,659 305,652,252	,125 287,975,70	0,498 769,011,623,964	1,936,422,658,246	
	₩ 1,817,642,62	26,968 1,144,420,583	,305 1,958,999,958	8,017 6,413,352,069,253	11,334,415,237,543	

(\*) The total amount of guarantees that the Group will incur in the event of a financial guarantee. As of March 31, 2021, the Group has recognized  $\frac{1}{2}$ , 785, 563, 183 as guarantee provision for financial guarantee contracts.

### 36. Risk management, continued

### (2) Financial risk management, continued

In won		December 31, 2020									
Туре		Less than 1 year	1~2 years	2~5 years	More than 5 years	Total					
Borrowings and bonds (cash flows of principal)	₩	778,936,059,303	788,936,038,471	1,489,622,901,124	4,714,141,633,796	7,771,636,632,694					
Borrowings and bonds (cash flows of estimated interest)		179,174,041,492	153,712,757,301	366,907,841,748	1,025,702,287,957	1,725,496,928,498					
		958,110,100,795	942,648,795,772	1,856,530,742,872	5,739,843,921,753	9,497,133,561,192					
Trade and other payables		493,059,670,394	94,609,979,539	256,931,143,467	570,869,161,946	1,415,469,955,346					
Financial guarantee contract (*)		6,310,400,000	-	-	16,655,587,072	22,965,987,072					
. ,		499,370,070,394	94,609,979,539	256,931,143,467	587,524,749,018	1,438,435,942,418					
	₩	1,457,480,171,189	1,037,258,775,311	2,113,461,886,339	6,327,368,670,771	10,935,569,503,610					

(\*) The total amount of guarantees that the Group will incur in the event of a financial guarantee. As of December 31, 2020, the Group has recognized \$5,536,848,424 as guarantee provision for financial guarantee contracts.

### 36. Risk management, continued

### (2) Financial risk management, continued

The expected maturities for non-derivative financial assets as of March 31, 2021 and December 31, 2020 in detail are as follows:

In won		March 31, 2021						
		Less than		More than				
Туре	-	1 year	1~5 years	5 years	Others	Total		
Cash and cash equivalents	₩	292,974,857,682	-	-	-	292,974,857,682		
Financial instruments		76,900,000,000	-	-	-	76,900,000,000		
Financial assets at FVTPL		11,000,000,000	-	-	-	11,000,000,000		
Financial assets at FVOCI		-	-	-	149,168,745,099	149,168,745,099		
Loans		2,299,439,344	6,947,951,141	9,321,302,377	40,823,107,467	59,391,800,329		
Trade and other receivables		749,830,307,817	280,330,810,265	-	-	1,030,161,118,082		
	₩	1,133,004,604,843	287,278,761,406	9,321,302,377	189,991,852,566	1,619,596,521,192		

In won	December 31, 2020							
Туре	Less than 1 year	1~5 years	More than 5 years	Others	Total			
Cash and cash equivalents	₩ 254,069,769,864	-	-	-	254,069,769,864			
Financial instruments	1,413,137	-	-	-	1,413,137			
Financial assets at FVTPL	11,000,000,000	-	-	-	11,000,000,000			
Financial assets at FVOCI	-	-	-	178,914,535,572	178,914,535,572			
Loans	3,473,226,994	5,661,716,111	8,607,615,587	42,198,340,955	59,940,899,647			
Trade and other receivables	638,187,983,644	274,164,057,532	-	-	912,352,041,176			
	₩ 906,732,393,639	279,825,773,643	8,607,615,587	221,112,876,527	1,416,278,659,396			

Derivative liabilities classified by maturity periods from reporting date to maturity date of contract as of March 31, 2021 and December 31, 2020 are as follows:

In won		March 31, 2021								
		Less than			More than					
Туре		1 year	1~2 years	2~5 years	5 years	Total				
Gross settlement										
- Hedging	₩	23,387,574,638	-	-	9,360,720,502	32,748,295,140				
- Trading		7,225,000	-	-	-	7,225,000				
- Others		-			3,448,978,110	3,448,978,110				
	₩	23,394,799,638		-	12,809,698,612	36,204,498,250				

### 36. Risk management, continued

#### (2) Financial risk management, continued

In won		December 31, 2020							
Туре	·	Less than 1 year	1~2 years	2~5 years	More than 5 years	Total			
Gross settlement									
- Hedging	₩	36,935,429,798	4,143,098,658	-	12,681,323,796	53,759,852,252			
- Trading		250,845,000	-	-	-	250,845,000			
- Others		-	-		3,448,978,110	3,448,978,110			
	₩	37,186,274,798	4,143,098,658		16,130,301,906	57,459,675,362			

Derivative assets classified by maturity periods from reporting date to maturity date of contract as of March 31, 2021 and December 31, 2020 are as follows:

In won		March 31, 2021								
Туре	_	Less than 1 year	1~2 years	2~5 years	More than 5 years	Total				
Gross settlement										
- Hedging	₩	7,339,911,642	-	-	1,446,544,311	8,786,455,953				
- Trading		101,700,000	1,279,206,809	-	6,362,684,319	7,743,591,128				
	₩	7,441,611,642	1,279,206,809		7,809,228,630	16,530,047,081				

In won				March 31, 202	1	
		Less than			More than	
Туре	·	1 year	1~2 years	2~5 years	5 years	Total
Gross settlement						
- Hedging	₩	-	-	-	3,251,874,804	3,251,874,804
- Trading		-	1,528,879,825	-	5,002,564,467	6,531,444,292
	₩	-	1,528,879,825	-	8,254,439,271	9,783,319,096

#### (3) Fair value risk

The fair value of the Group's actively-traded financial instruments (i.e. available-for-sale financial assets, etc.) is based on the traded market-price as of the reporting period end. The fair value of the Group's financial assets is the amount which the asset could be exchanged for or the amount a liability could be settled for.

The fair values of financial instruments where no active market exists or where quoted prices are not otherwise available are determined by using valuation techniques. Valuation techniques include using recent arm's length market transactions between knowledgeable, willing parties, if available, reference to the current fair value of another instrument that is substantially the same, discounted cash flow analysis and option pricing models. If there is a valuation technique commonly used by market participants to price the instrument and that technique has been demonstrated to provide reliable estimates of prices obtained in actual market transactions, the Group uses that technique.

For trade receivables and trade payables, the Group considers the carrying value, net of impairment, as approximation of fair value. While for disclosure purposes, the fair value of debt securities is estimated by discounting a financial instrument with similar contractual cash flows using the effective interest method.

### 36. Risk management, continued

#### (3) Fair value risk, continued

(i) Fair value and book value of financial assets and liabilities as of March 31, 2021 and December 31, 2020 are as follows:

In won	March 31, 2021		December 31, 2020	
Туре	Book value	Fair value	Book value	Fair value
Assets recognized at fair value				
Currency swap (using hedge 4 accounting)	¥ 8,786,455,953	8,786,455,953	3,251,874,804	3,251,874,804
Currency forward (for trading)	101,700,000	101,700,000	-	-
Interest rate swap (for trading)	7,641,891,128	7,641,891,128	6,531,444,292	6,531,444,292
Financial assets at FVTPL	76,900,000,000	76,900,000,000	1,413,137	1,413,137
Financial assets at FVOCI	149,168,745,099	149,168,745,099	178,914,535,572	178,914,535,572
7	¥ 242,598,792,180	242,598,792,180	188,699,267,805	188,699,267,805
Assets carried at amortized cost				
	¥ 292,974,857,682	292,974,857,682	254,069,769,864	254,069,769,864
Short-term financial instruments	11,000,000,000		11,000,000,000	11,000,000,000
Loans	47,956,931,259		48,568,095,723	48,568,095,723
Trade and other receivables	1,020,575,915,475		902,766,838,569	902,766,838,569
+	₩ 1,372,507,704,416		1,216,404,704,156	1,216,404,704,156
Liabilities recognized at fair value				
Currency swan (using hedge	¥ 26,817,764,686	26,817,764,686	41,480,939,311	41,480,939,311
Currency forward (for trading)	7,225,000	7,225,000	250,845,000	250,845,000
Interest rate swap (for trading)	5,930,530,454	5,930,530,454	12,278,912,941	12,278,912,941
Other derivative instruments	3,448,978,110	3,448,978,110	3,448,978,110	3,448,978,110
4	₩ 36,204,498,250	36,204,498,250	57,459,675,362	57,459,675,362
Liabilities carried at amortized cost				
- I I II	¥ 1,368,361,638,319	1,368,361,638,319	1,295,077,903,914	1,295,077,903,914
Unsecured borrowings(*)	329,384,647,618		388,882,288,040	388,882,288,040
Unsecured bond	7,388,690,662,647		7,362,140,650,315	7,469,585,159,207
4		9,012,548,756,477	9,046,100,842,269	9,153,545,351,161

(\*) The Group has pledged all of the Company's shares for the Commerce and Industry Energy Co., Ltd. with carrying amounts of W35,149,456,524 as of March 31, 2021 (W36,050,724,620 as of December 31, 2020), in order to fulfill the collateral requirements for the borrowings.

#### 36. Risk management, continued

#### (3) Fair value risk, continued

(ii) Interest rates used for determining fair value

The interest rates used to discount estimated cash flows, when applicable, are based on the government yield curve at the reporting date plus an adequate credit spread.

The discount rate used for calculating fair value as of March 31, 2021 and December 31, 2020 are as follows:

Туре	March 31, 2021 (%)	December 31, 2020 (%)		
Bonds	0.70 ~ 2.56	0.81 ~ 2.25		
Lease	0.57 ~ 3.21	0.57 ~ 3.21		

(iii) Fair value hierarchy

The following table provides an analysis of financial instruments that are measured subsequent to initial recognition at fair value, classified as Level 1, 2, or 3, based on the degree to which the fair value is observable.

Level 1: Unadjusted quoted prices in active markets for identical assets or liabilities;

Level 2: Inputs other than quoted prices that are observable for the asset or liability either directly or indirectly; and

Level 3: Inputs that are not based on observable market data.

Fair values of financial instruments by hierarchy level as of March 31, 2021 and December 31, 2020 are as follows:

In won		March 31, 2021			
Туре		Level 1	Level 2	Level 3	Total
Financial assets at fair value					
Financial assets at FVTPL	₩	-	76,900,000,000	-	76,900,000,000
Financial assets at FVOCI (*)		130,239,006,512	-	18,929,738,587	149,168,745,099
Derivative assets		-	16,530,047,081	-	16,530,047,081
	₩	130,239,006,512	93,430,047,081	18,929,738,587	242,598,792,180
Financial liabilities at fair value Derivative liabilities	₩	-	32,755,520,140	3,448,978,110	36,204,498,250

(\*) Financial assets at FVOCI measured at cost amount <del>W</del>2,968,745,304 as of March 31, 2021 included in the above disclosure since the difference between the fair value and the cost was not significant.

(Unaudited)

### 36. Risk management, continued

### (3) Fair value risk, continued

In won	_	December 31, 2020			
Туре		Level 1	Level 2	Level 3	Total
Financial assets at fair value					
Financial assets at FVTPL		-	1,413,137	-	1,413,137
Financial assets at FVOCI (*)	₩	159,702,007,985	-	19,212,527,587	178,914,535,572
Derivative assets		-	9,783,319,096	-	9,783,319,096
	₩	159,702,007,985	9,784,732,233	19,212,527,587	188,699,267,805
Financial liabilities at fair value Derivative liabilities	₩	-	54,010,697,252	3,448,978,110	57,459,675,362

(\*) Financial assets at FVOCI measured at cost amount ₩3,251,534,304 as of December 31, 2020 included in the above disclosure since the difference between the fair value and the cost was not significant.

The fair value of unquoted financial assets at FVOCI is calculated using the valuation results from an external pricing service in which weighted average borrowing rates of interest of evaluated companies are used as a discount rate. The fair value of derivatives is measured using valuation model which is determined at the present value of estimated future cash flows discounted at current market interest rate.

There is no change between level 1 and level 2 for the three-month period ended March 31, 2021 and the year ended December 31, 2020.

Changes of financial assets and liabilities which are classified as level 3 for the three-month period ended March 31, 2021 are as follows:

In won March 31, 2021 Beginning Ending balance Translation Туре Transfer balance Financial assets at fair value Financial assets at FVOCI 19,212,527,587 102,011,000 (384,800,000) 18,929,738,587 W.

## 37. Related parties

(1) Related parties of the Group as of March 31, 2021 are as follows:

Туре	Related party								
Parent	KEPCO								
Associates	KEPCO Lebanon S.A.R.L.								
-550010105	Gangwon Wind Power Co., Ltd.								
	Hyundai Green Power Co., Ltd.								
	Korea Offshore Wind Power Co., Ltd.								
	PT Cirebon Electric Power								
	PT Wampu Electric Power								
	Gunsan Bio Energy Co., Ltd.								
	Solar School Plant Co., Ltd.								
	KEPCO Energy Solution Co., Ltd.								
	YaksuESS Co., Ltd.								
	Jeju Hallim Offshore Wind Power Co., Ltd.								
	YeongGwang Yaksu Wind Electric.Co., Ltd.								
	Green Energy Power Co., Ltd.								
	Namjung Floating Solar Light Operation Co., Ltd.								
	Kwangbaek Solar Power Investment Co., Ltd.								
	Muan Solar Plant Co., Ltd.								
	Stavro Holding II A.B.								
	Goesan Solar Park Co., Ltd.								
	Bitgoeul Eco Energy Co., Ltd.								
	Jeju Gimnyeong Wind Power Co., Ltd.								
	Energy Co.								
	CAES, LLC								
	East Highway Solar Co., Ltd.								
	West Highway Solar Co., Ltd.								
Others	Korea Hydro & Nuclear Power Co., Ltd.								
	Korea East-West Power Co., Ltd.								
	Korea Western Power Co., Ltd.								
	Korea Southern Power Co., Ltd.								
	Korea South-East Power Co., Ltd.								
	KEPCO Engineering & Construction Company INC.								
	KEPCO Plant Service & Engineering Co., Ltd.								
	KEPCO KDN Co., Ltd.								
	Korea Gas Corporation								
	Korea Electronic Power Industrial Development Co., Ltd.								
	Korea Power Exchange								
	Korea Development Bank and others								

(Unaudited)

## 37. Related parties, continued

(2) Related party transactions for the three-month periods ended March 31, 2021 and 2020 are as follows:

In won			Sales and		Purchase a	
Company name	Transaction type	-	March 31, 2021	March 31, 2020	March 31, 2021	March 31, 2020
Korea Electric Power Corporation	Electricity trading and others	₩	1,132,671,169,398	1,190,570,314,965	13,137,542,345	17,763,551,816
Korea Hydro & Nuclear Power Co., Ltd.	Rental and others		-	-	1,761,534	2,274,643
Korea South-East Power Co., Ltd.	Commission income and others		7,592,760	-	-	-
Korea East-West Power Co., Ltd.	Commission income and others		42,043,050	-	-	-
Korea Southern Power Co., Ltd.	commission expenses and others		-	-	16,123,413	14,042,629
Korea Western Power Co., Ltd.	commission expenses and others		32,378,200	-	1,693,980	1,684,500
KEPCO Engineering & Construction Company INC.	commission expenses and others		-	-	236,591,010	896,617,500
KEPCO Plant Service & Engineering Co., Ltd.	Rental and services and others		218,284,854	130,227,058	16,293,286,365	9,843,816,461
KEPCO KDN Co., Ltd.	Rental and services and others		1,001,993	1,095,020	3,536,634,064	3,085,533,633
Korea Gas Corporation	Raw material purchase and others		92,208,577	116,572,971	242,081,005,108	209,038,506,499
Korea Electronic Power Industrial Development Co., Ltd.	Rental and services and others		81,490,210	53,750,700	11,599,968,266	9,070,335,015
Gangwon Wind Power Co., Ltd.	Dividend income		1,703,790,000	1,987,755,000	-	-
Hyundai Green Power Co., Ltd.	Dividend income and others		9,513,499,990	9,486,791,274	-	9,069,150
PT Cirebon Electric Power	Dividend income and others		9,135,800,745	591,604,879	-	-
PT Wampu Electric Power	Other incomes		337,009,063	105,156,599	-	-
Ieju Hallim Offshore Wind Power Co., Ltd.	Sales of services		82,620,480	98,747,571	-	-
Korea Offshore Wind Power Co., Ltd.	Commission expenses		-	-	1,319,119,000	-
KEPCO Energy Solution Co.,	Sales of services		23,707,950	-	-	-
Solar School Plant Co., Ltd.	Sales of services		32,947,530	-	-	-
Korea Power Exchange	commission expenses and others		-	-	1,109,968,111	1,178,088,404
Kwangbaek Solar Power Investment Co., Ltd.	commission expenses and others		-	-	152,379,032	-
Namjung Floating Solar Light Operation Co., Ltd.	commission expenses and others		-	-	3,342,601,787	-
East Highway Solar Co., Ltd.	commission expenses and others		-	-	177,312,726	-
West Highway Solar Co., Ltd.	commission expenses and others		-	-	217,419,044	-
Bitgoeul Eco Energy Co., Ltd.	Sales of services		16,711,145	-	-	-
YeongGwang Yaksu Wind Electric.Co., Ltd.	commission expenses and others		-	-	1,653,625,624	-
Jeju Gimnyeong Wind Power Co., Ltd.	commission expenses and others		-	-	4,312,291,997	-
Muan Solar Plant Co., Ltd.	commission expenses and others		-	-	2,482,247,420	-
Gunsan Bio Energy Co., Ltd.	Sales of services and others		6,201,260	37,354,425	378,130	7,278,550
CAES, LLC	Dividend income		240,634,800	-		
		₩.	1,154,239,092,005	1,203,179,370,462	301,671,948,956	250,910,798,800

(Unaudited)

### 37. Related parties, continued

(3) Receivables and payables arising from related party transactions as of March 31, 2021 and December 31, 2020 are as follows:

In won

		Receivables		Payabl	es
Company name	Transaction type	March 31, 2021	December 31, 2020	March 31, 2021	December 31, 2020
КЕРСО	Trade receivables 🛛 ₩	333,716,885,352	327,811,960,169	-	-
	Other receivables	270,549,733,703	231,779,849,975	-	-
	Trade payables	-	-	11,369,882,931	12,041,036,449
Korea Hydro & Nuclear Power Co., Ltd.	Other receibables	5,220,100	194,638	-	-
Korea South-East Power Co., Ltd	Other receivables	1,646,582,451	2,275,634,395	-	-
	Other payables	-	-	174,570	-
Korea East-West Power Co., Ltd.	Other receivables	1,640,012,160	2,400,321,595	-	-
	Other payables	-	-	174,570	-
Korea Southern Power Co., Ltd.	Other receivables	1,631,537,178	2,275,634,395	-	-
	Other payables	-	-	174,570	-
Korea Western Power Co., Ltd.	Other receivables	1,630,241,025	2,275,634,395	-	-
·	Other payables	-	-	174,570	484,491,970
KEPCO KDN Co., Ltd.	Other payables	-	-	1,021,895,440	2,157,581,923
KEPCO Plant Service & Engineering Co., Ltd.	Other payables	-	-	2,384,351,451	14,720,311,140
KEPCO Engineering & Construction Company INC.	Other payables	-	-	-	6,803,680,252
Korea Gas Corporation	Trade payables	661,535,086	-	87,640,286,195	77,693,260,057
Gunsan Bio Energy Co., Ltd.(*)	Loans and others	24,040,787,691	24,040,787,691	-	-
Hyundai Green Power Co., Ltd.	Trade receivables	588,428,604	554,301,316	-	-
Jeju Hallim Offshore Wind Power Co., Ltd.	Other receivables	92,427,890	248,444,193	-	-
Korea Offshore Wind Power Co., Ltd.	Other receivables	-	52,469,530	-	-
KEPCO Energy Solution Co.,	Other receivables	26,468,740	35,608,760	-	-
Solar School Plant Co., Ltd.	Other receivables	36,833,390	35,862,836	-	-
Korea Development Bank	Derivatives	2,446,637,214	-	7,519,711,784	14,217,070,767
Korea Power Exchange	Trade receivables and others	-	104,589,790	110,232,836	107,506,408
Korea Electronic Power Industrial Development Co., Ltd.	Advance payment	-	-	-	2,571,748,300
PT Cirebon Electric Power	Other receivables	334,710,000	325,320,000	-	-
PT Wampu Electric Power	Loans	12,429,961,000	12,357,872,963	-	-
	₩	651,478,001,584	606,574,486,641	110,047,058,917	130,796,687,266

(\*) The Group has recognized an allowance for doubtful accounts of  $\frac{1}{2}$  19,712,914,347 for loan receivables from Gunsan Bio Energy Co., Ltd. as of March 31, 2021.

### 37. Related parties, continued

(4) Loans arising from related party transactions as of March 31, 2021 and December 31, 2020 are as follows:

In won				
Туре	Company name	Beginning balance	Others	Ending balance
Associates	PT Wampu Electric Power	12,357,872,963	516,804,430	12,874,677,393
Associates	Gunsan Bio Energy Co., Ltd.(*)	12,396,220,000	-	12,396,220,000

(\*) The company has recognized an allowance for doubtful accounts of ₩ 10,127,711,740 for loan receivables from Gunsan Bio Energy Co., Ltd. as of March 31, 2021.

(5) Payment guarantees provided to an associates or joint ventures as of March 31, 2021 are as follows:

In USD				
Primary guarantor	Secondary guarantor	Type of guarantees	Credit limit	Guarantee
Korea Midland Power Co., Ltd.	PT Cirebon Electric Power	Payment guarantee for debt	USD 10,037,500	Mizuho Bank
Korea Midland Power Co., Ltd.	PT Wampu Electric Power	Payment guarantee for debt	USD 4,817,178	SMBC
Korea Midland Power Co., Ltd.	KEPCO Bylong Australia Pty., Ltd.	Payment guarantee for debt	USD 5,800,000	The Export- Import Bank of Korea

(6) Payment collaterals provided to an associates or joint ventures as of March 31, 2021 are as follows:

#### In won

Primary guarantor	Secondary guarantor	Type of guarantees		Book value	Guarantee
Korea Midland Power Co., Ltd.	Hyundai Green Power Co., Ltd.	Collateralized money invested	₩	121,773,681,149	Korea Development Bank and others
Korea Midland Power Co., Ltd.	YaksuESS Co., Ltd.	Collateralized money invested		521,048,794	Industrial Bank of Korea
Korea Midland Power Co., Ltd.	Korea Offshore Wind Power Co., Ltd.	Collateralized money invested		21,280,175,307	Woori Bank and others
Korea Midland Power Co., Ltd.	YeongGwang Yaksu Wind Electric.Co., Ltd.	Collateralized money invested		363,986,586	Industrial Bank of Korea and others
Korea Midland Power Co., Ltd.	Green Energy Power Co., Ltd.	Collateralized money invested		1,651,713,237	Industrial Bank of Korea
Korea Midland Power Co., Ltd.	Namjung Floating Solar Light Operation Co., Ltd.	Collateralized money invested		367,062,433	Industrial Bank of Korea
Korea Midland Power Co., Ltd.	Kwangbaek Solar Power Investment Co., Ltd.	Collateralized money invested		4,776,870,196	Kyobo Life and others
Korea Midland Power Co., Ltd.	Muan Solar Plant Co., Ltd.	Collateralized money invested		1,249,454,052	Industrial Bank of Korea
Korea Midland Power Co., Ltd.	Goesan Solar Park Co., Ltd.	Collateralized money invested		1,805,605,055	Industrial Bank of Korea
Korea Midland Power Co., Ltd.	Bitgoeul Eco Energy Co., Ltd.	Collateralized money invested		4,616,226,419	Industrial Bank of Korea and others
Korea Midland Power Co., Ltd.	Energy Co.	Collateralized money invested		1,992,468,825	Nonghyup Bank
Korea Midland Power Co., Ltd.	Jeju Gimnyeong Wind Power Co., Ltd.	Collateralized money invested		550,943,540	Nonghyup Bank
Korea Midland Power Co., Ltd.	East Highway Solar Co., Ltd.	Collateralized money invested		190,200,000	Nonghyup Bank
Korea Midland Power Co., Ltd.	West Highway Solar Co., Ltd.	Collateralized money invested		195,338,137	Nonghyup Bank

#### 37. Related parties, continued

#### (7) Other Commitments

(i) Hyundai Green Power Co., Ltd.

As of March 31, 2021, Hyundai Green Power Co., Ltd., a related party of the Group, which engages in the by-product gas power generating industry in Dangjin, South Chungcheong Province, carries long-term borrowings for project financing amounting to <del>W</del>390 billion (<del>W</del>390 billion as of March 31, 2021) from Korea Development Bank and others. In connection with these borrowings, the Group pledged its investment securities in Hyundai Green Power Co. Ltd.

On the other hand, the Group has the right to request the financial investors to sell their equity and the obligation to buy their equities upon their request during a specified future period.

In addition, if the specific condition in the shareholder agreement is satisfied, the Group will have the right to request Hyundai Steel Company (operating investor) and a third party designated by Hyundai Steel Company to buy its equity and have the obligation to sell its equity to Hyundai Steel Company at its request.

(ii) YaksuESS Co., Ltd.

As of March 31, 2021, YaksuESS Co., Ltd. a related party of the Group, is in the process of constructing and operating an energy storage system (ESS) linked to wind power plants in Yeonggwang, South Jeolla Province. YaksuESS Co., Ltd. carries long-term borrowings for project financing amounting to  $\frac{1}{2}$ .9 billion from Industrial Bank of Korea. In connection with these borrowings, the Group pledged its investment securities in YaksuESS Co., Ltd.

#### (iii) Korea Offshore Wind Power Co., Ltd.

As of March 31, 2021, Korea Offshore Wind Power Co., Ltd., a related party of the Group, is in the process of constructing and operating offshore wind power plants in Buan and Gochang County, North Jeolla Province. Korea Offshore Wind Power Co., Ltd. carries long-term borrowings for project financing amounting to W244.5 billion from Woori Bank and others. In connection with these borrowings, the Group pledged its investment securities in Korea Offshore Wind Power Co., Ltd. In addition, the Group has entered into additional funding agreements related to the excess operating expenses of the project.

#### (iv) YeongGwang Yaksu Wind Electric.Co., Ltd.

As of March 31, 2021, YeongGwang Yaksu Wind Electric. Co., Ltd., a related party of the Group, is conducting a wind power project in Yeonggwang, South Jeolla Province. YeongGwang Yaksu Wind Electric.Co., Ltd. carries long-term borrowings for project financing amounting to W46 billion from Industrial Bank of Korea and others. In connection with these borrowings, the Group pledged its investment securities in YeongGwang Yaksu Wind Electric.Co., Ltd.

#### (v) Green Energy Power Co., Ltd.

As of March 31, 2021, Green Energy Power Co., Ltd., a related party of the Group, is constructing a wind power plant and operating the business in Taebaek, Gangwon Province. Green Energy Power Co., Ltd. carries long-term borrowings for project financing amounting to <del>W7</del>4.6 billion from Industrial Bank of Korea. In connection with these borrowings, the Group pledged its investment securities in Green Energy Power Co., Ltd. In addition, the Group has entered into additional funding agreements related to the excess operating expenses of the project.

(vi) Namjung Floating Solar Light Operation Co., Ltd.

As of March 31, 2021, Namjung Floating Solar Light Operation Co., Ltd., a related party of the Group, is constructing a solar light power plant and operating the business in Goheung, South Jeolla Province. Namjung Floating Solar Light Operation Co., Ltd. carries long-term borrowings for project financing amounting to <del>W5</del>8.2 billion from Industrial Bank of Korea. In connection with these borrowings, the Group pledged its investment securities in Namjung Floating Solar Light Operation Co., Ltd.

(vii) Kwangbaek Solar Power Investment Co., Ltd.

As of March 31,2021, Gwangbaek Solar Investment Co., Ltd., a related party of the Group, is constructing a Yeonggwang Gwangbaek 100MW solar power plant and operating ESS business in Yeongnam-gun, South Jeolla Province. Gwangbaek Solar Power Investment Co., Ltd. carries long-term borrowings for project financing of <del>W</del>349.5 billion from Industrial Bank of Korea. In connection with these borrowings, the Group pledged its investment securities in Kwangbaek Solar Power Investment Co., Ltd. as collateral.

37. Related parties, continued

(7) Other Commitments, Continued

(viii) Muan Solar Plant Co., Ltd.

As of March 31,2021, Muan Solar Plant Co., Ltd., a related party of the Group, is constructing a Muan 33MW solar power plant and operating ESS business in Muan-gun, South Jeolla Province. Muan Solar Plant Co., Ltd. carries long-term borrowings for project financing of W149.1 billion from Industrial Bank of Korea. In connection with these borrowings, the Group pledged its investment securities in Muan Solar Plant Co., Ltd. as collateral.

### (ix) Goesan Solar Park Co., Ltd.

As of March 31, 2021, Goesan Solar Park Co., Ltd., a related party of the Group, is constructing a solar power plant and ESS facility in So-soo myeon, North Chung-cheong Province. Goesan Solar Park carries long-term borrowings for project financing of W43.8 billion from Industrial Bank of Korea. In connection with these borrowings, the Group pledged its investment securities in Goesan Solar Park as collateral.

(x) Bitgoeul Eco Energy

As of March 31, 2021, Bitgoeul Eco Energy, a related party of the Group, is promoting the fuel cell power generation business in business district, Gwangju. Bitgoeul Eco Energy carries long-term borrowings for project financing of <del>W</del>65.5 billion from Industrial Bank of Korea. In connection with these borrowings, the Group pledged its investment securities in Bitgoeul Eco Energy as collateral.

(xi) Energy Co.

As of March 31, 2021, Energy Co., a related party of the Group, is managing construction of the solar power plant and operating the business in Eoeun ri, Okgu eup, Gunsan si, North Jeolla Province. Energy Co. carries long-term borrowings for project financing of W49.1 billion from Nonghyup Bank. In connection with these borrowings, the Group pledged its investment securities in Energy Co. as collateral.

(xii) Jeju Gimnyeong Wind Power Co., Ltd.

As of March 31, 2021, Jeju Gimnyeong Wind Power Co., Ltd., a related party of the Group, is operating the Wind power plant in Kimsong ro, Gujwa eup, Jeju si. Jeju Gimnyeong Wind Power Co., Ltd. carries long-term borrowings for project financing of <del>W6</del>0 billion from Nonghyup Bank. In connection with these borrowings, the Group pledged its investment securities in Jeju Gimnyeong Wind Power Co., Ltd. as collateral.

(xiii) East Highway Solar Co., Ltd.

As of March 31, 2021, East Highway Solar Co., Ltd., a related party of the Group, is managing construction of the solar power plant and operating the business in Gumijoongang ro, Gumi si. East Highway Solar Co., Ltd. carries long-term borrowings for project financing of ₩18.1 billion from Nonghyup Bank. In connection with these borrowings, the Group pledged its investment securities in East Highway Solar Co., Ltd. as collateral.

(xiv) West Highway Solar Co., Ltd.

As of March 31, 2021, West Highway Solar Co., Ltd., a related party of the Group, is managing construction of the solar power plant and operating the business in Ami ri, Bubal eup, Icheon si. West Highway Solar Co., Ltd. carries long-term borrowings for project financing of ₩18.5 billion from Nonghyup Bank. In connection with these borrowings, the Group pledged its investment securities in West Highway Solar Co., Ltd. as collateral.

# (Unaudited)

### 37. Related parties, continued

(8) Salaries and other compensations to the key members of management of the Group for the three-month periods ended March 31, 2021 and 2020 are as follows:

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Туре		March 31, 2021	March 31, 2020
Salaries	₩	122,244,960	118,915,290
Employee benefits		9,550,813	10,168,505
	₩	131,795,773	129,083,795

### (9) Housing and tuition loans to employees as of March 31, 2021 and December 31, 2020 are as follows:

In won			
Туре		March 31, 2021	December 31, 2020
Short-term loans	₩	2,219,709,869	2,371,170,622
Long-term loans		30,606,078,637	28,850,025,789
	₩	32,825,788,506	31,221,196,411

### 38. Non-cash transactions

Significant non-cash investment and finance transactions excluded from statements of cash flows for the three-month periods ended March 31, 2021 and 2020 are as follows:

In won			
Transactions		March 31, 2021	March 31, 2020
Transfer from construction-in-progress to depreciable assets	W	98,611,915,321	36,402,016,881
Transfer of long-term borrowings and bonds from non-current to current		356,140,346,703	87,820,000
Non-trade payables related to acquisition of property, plant and equipment		(83,911,561,959)	(22,836,405,734)
Transfer from liquidated damages due to delay to acquisition costs of property, plant and equipment		-	(2,213,331,472)
Transfer of long-term lease liability from non-current to current		24,421,441,552	15,126,950,799

### 39. Commitments for expenditure

(1) The agreements for acquisition of property, plant and equipment as of March 31, 2021 and December 31, 2020 are as follows:

In won		March 31	, 2021	December 31, 2020		
Contracts	_	Amounts	Balance	Amounts	Balance	
Construction of Jeju units	₩	166,287,179,481	11,181,517,127	166,287,179,481	11,181,517,127	
Construction of Seoul units		772,687,336,729	934,058,256	772,687,336,729	983,672,342	
Construction of Shinboryeong units		1,095,113,986,047	242,876,700	1,095,097,706,047	520,518,900	
Construction of Shinseocheon units		695,224,068,275	40,322,026,136	692,669,153,994	50,844,743,623	

### (2) Long-term marine transportation commitments

The long-term marine transportation commitments for bituminous coal as of March 31, 2021 and the details are as follows:

Company name	Vessel	Contract periods
NYK Bulkship Korea	JP AZURE	2009.12. ~ 2022.03.
SK Shipping	K. Phoenix	2011.09. ~ 2021.08.
SW Shipping	KG ASIA	2017.09. ~ 2032.08.
	Sea Future	2018.09. ~ 2033.08.
Dooyang Limited	Dooyang Jeju	2018.10. ~ 2033.09.
Korea Shipping Corporation	SM Samarinda	2015.12. ~ 2030.11.
	SM Shinseocheon 1	2020.03. ~ 2045.02.
	SM Shinseocheon 2	2020.07. ~ 2045.06.
H-LINE Shipping Co., Ltd.	HL Richards Bay	2010.08. ~ 2025.07.
	HL IBT	2010.06. ~ 2025.05.
	HL Power	2011.10. ~ 2023.06.
	HL Komipo	2017.01. ~ 2031.12.
	HL Boryeong	2017.07. ~ 2035.06.
	HL Shinboryeong	2018.09. ~ 2033.08.
Pan Ocean Co., Ltd.	Pan KOMIPO	2016.07. ~ 2034.09.
Five Ocean	Ricsea	2010.08. ~ 2025.08.

(Unaudited)

### 39. Commitments for expenditure, continued

(3) Contracts for raw materials purchase

Details of contracts for raw materials purchase as of March 31, 2021 are as follows:

### In tons, except for kiloliter

Company name	Contract periods	Amount
Coal:		
Australia (Moolarben)	2009.07. ~ End of mining production	625
Australia(Glencore and others)	2015.12. ~ 2024.04.	7,470
Russia	2010.01. ~ 2023.12.	2,720
Indonesia	2010.01. ~ 2023.09.	4,600
U.S.	2017.07. ~ 2022.12.	1,210
Columbia	2018.10. ~ 2021.12.	520
Oil:		
DK Refine and others	2021.01. ~ 2021.12.	<b>17,006</b> kl
GS Energy and others	2020.12. ~ 2021.12.	<b>8,000</b> kl
JC Chemical and others	2021.01. ~ 2021.03.	<b>22,000</b> kl
LNG:		
Korea Gas Corporation	2007.01. ~ 2039.12.	Renegotiated annually
Vitol S.A.	2015.01. ~ 2024.12.	350
Petronas	2020.01. ~ 2024.12.	250
Wood pellet:		
Samsung C&T and others	2020.11. ~ 2021.04.	33

### (Unaudited)

### 40. Contingencies and commitments

(1) Ongoing litigations related with contingent liabilities and assets as of March 31, 2021 and December 31, 2020 are as follows:

In won, except for number of cases	March	n 31, 2021	December 31, 2020			
	Number of		Number of	Claim		
	cases	Claim amount(*)	cases	amount		
Litigations (Defendant case) (*)	16	₩ 19,433,766,625	17 <del>W</del>	21,311,783,384		
Litigations (Plaintiff case)	10	5,881,066,150	9	4,966,093,650		

(\*) The claim amount includes a case in which the Group and four other related parties are co-defendants with claim amounts of <del>W</del> 4,111,541,322 as of March 31, 2021. In addition, the provision for wage litigations is <del>W</del>514,476,771 as disclosed in Note 22. Except for the lawsuits that resulted in litigation provisions, the outcome of the other litigations cannot be determined. However, management of the Group believes that the ultimate outcomes will not have a significant impact on the Group's results of operations and financial position.

As of March 31, 2021, the total number of arbitration cases other than ongoing litigation in the Group is five. One of the significant arbitration cases is that GE Energy Product France SNC and the other company applied for arbitration with KOMIPO as a Korean Commercial Arbitration Board for the payment of additional construction expenses. The Group did not recognize the provision for these arbitration cases as it is considered that the outflow of economic benefits is not probable and the related amount can not be reliably measured.

.. . .

(2) Credit lines provided by financial institutions as of March 31, 2021 are as follows:

In won and foreign currencies

			Limited	
Commitments	Financial institutions	Currency	Amount	Exercised Amount
Commitments on bank-overdraft	Nonghyup Bank	KRW	150,000,000,000	-
Certification of payment on L/C	Nonghyup Bank and others	USD	121,000,000	19,588,000
Loan limit	Credit Agricole and others	USD	170,000,000	-
	Industrial Bank of Korea and others	KRW	85,000,000,000	35,149,456,524
Loan secured by trade receivables	Nonghyup Band and others	KRW	30,000,000,000	-
Others	Nonghyup Bank	USD	38,000,000	23,058,635

- (3) The Group has provided PT Perusahaan Listrik Negara ("PT PLN") with performance guarantee up to USD 2,293,247 thousand in proportion to its ownership in the electricity purchase contract with PT Cirebon Energi Prasarana in relation to the second electric power generation business in Cirebon, Indonesia. Also, the Group has provided guarantee an investment of USD 43,500,000, which is equivalent to the ownership interest of the Group, to Mizuho Bank, Ltd.
- (4) The Group has provided borrowing guarantee of USD 41,258,000, which is the equity interest of the Group, to MUFG Bank, Ltd. (MUFG) in order to guarantee Equity Bridge Loan (EBL) of Indonesia Cirebon 2 Power Generation Project of PT Cirebon Energi Prasarana.
- (5) The Group has provided the Export-Import Bank of Korea, BNP Paribas and ING Bank with guarantee of mutual investment of USD 2,192,169, which is equivalent to the ownership interest of PT BS Energy and PT Nusantara Hydro Alam, in order to guarantee the expenses related to hydroelectric power business of Tanggamus, Indonesia.
- (6) The Group has provided AEP Texas, Inc performance guarantee of USD 16,000 thousand to guarantee the construction, ownership, operation and related expenses of transmission facilities for solar power business in Concho Valley, USA.
- (7) The Group has provided Axia Power Holdings B.V. with performance guarantee of USD 54,000 thousand in relation to the thermal power generation business in Cirebon, Indonesia.
- (8) The Group has provided PT PLN with performance guarantee of IDR 35,907 million in relation to the operation of a power plant in Tanjung Jati, Indonesia.
- (9) The Group has provided the Export-Import Bank of Korea and others with performance guarantee up to USD 12,090,000 thousand to make up for the excess of operational costs in relation the hydropower business in Tanggamus, Indonesia.

#### 40. Contingencies and commitments, continued

- (10) The Group has provided The Export-Import Bank of Korea and others with borrowing guarantee of USD 5,910,710 to keep the debt service reserve account (DSRA) in relation the hydropower business in Tanggamus, Indonesia.
- (11) The Group has provided performance guarantee of USD 12,090,000 to observe the obligation of a contribution of a capital for Indonesia Cirebon 2 Power Generation Project of PT Cirebon Energi Prasarana.
- (12) The Group has provided The Export-Import Bank of Korea with borrowing guarantee of USD 5,800 thousand for the borrowings denominated in a foreign curreny in relation mine development business in Bylong, Australia.

### 41. Service concession arrangements

(1) Significant terms and concession period of the arrangement

The Group has entered into a contract with PT PLN(PT Perusahaan Listrik Negara) whereby the Group provides electricity generated and charge tariff rates designed to recover capital cost, fixed O&M cost, water usage cost, variable O&M cost and special facilities cost during the concession period after building, rehabilitating, and operating the power plant for approximately 30 years (2018~2048) subsequent to the completion of plant construction.

(2) Rights of the arrangement

The Group has the rights to use and own the power plant during the concession period from 2018 to 2048. At the end of the concession period, PT PLN has an option to take over the ownership of the power plant from the Group.

### (3) classification of the arrangement

This project is a way for PT PLN to acquire ownership of the power plant after the end of the contract period after the plant is established.

### (4) The Group's expected future collections of service concession arrangement as of March 31, 2021 are as follows:

In won		Amount
Less than 1 year	₩	28,257,178,578
1 ~ 2 years		28,289,035,767
2 ~ 3 years		28,419,636,038
Over 3 years		538,088,178,041
	₩	623,054,028,424

#### 42. Subsequent event

The Group issued local bonds subsequent to March 31, 2021 to fund the investments in domestic facilities.

		Interest		
Туре	Amount	rate(%)	Issue date	Maturity
Debenture #57-1	₩90,000,000,000	1.45	2021-04-02	2024-04-02
Debenture #57-2	₩100,000,000,000	1.85	2021-04-21	2026-04-21

### 43. Uncertainty of the effects of COVID19

In order to prevent the spread of COVID-19, various preventative and control measures, including movement restrictions, are being implemented worldwide, and as a result, the global economy is being affected extensively. In addition, various forms of government policies are being announced to cope with COVID-19.

The main areas of the Group impacted by COVID-19 are the the impairment of property, plant and equipment, intangible assests, goodwill and the recognition of provisions. The Group was unable to reasonably estimate the impact of COVID-19 and the impact of the government support policies on the Group's interim condensed consolidated financial statements as of December 31, 2020, and the resulting effects have not been reflected in the interim condensed consolidated financial statements.



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> Independent auditor's report Based on a report originally issued in Korean

The Shareholder and Board of Directors Korea Midland Power Co., Ltd.:

### Opinion

We have audited the consolidated financial statements of Korea Midland Power Co., Ltd. (the "Company") and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated statements of financial position as of December 31, 2020 and 2019 and the consolidated statements of comprehensive loss, consolidated statements of changes in equity and consolidated statements of cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 2020 and 2019, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with the Rules for Accounting Affairs of Public Corporations and Quasi-governmental Institutions.

#### **Basis for opinion**

We conducted our audit in accordance with Korean Auditing Standards ("KGAAS"). Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in the Republic of Korea, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### **Emphasis of matter**

As described in Note 2 to the consolidated financial statements, the Group's consolidated financial statements were prepared in accordance with the Rules for Accounting Affairs of Public Corporations and Quasi-government Institutions. In accordance with its Article 2-5, the Group applies Korean International Financial Reporting Standards ("KIFRS") where accounting provisions have not been specified in the Rules for Accounting Affairs of Public Corporations and Quasi-government Institutions. There are no significant matters that have been applied differently from KIFRS under the Rules. Our opinion is not modified in respect of this matter.



#### Responsibilities of management and those charged with governance for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with the Rules for Accounting Affairs of Public Corporations and Quasi-governmental Institutions, and for such internal control as management determines is necessary to enable the preparation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

#### Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with KGAAS 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 consolidated financial statements.

As part of an audit in accordance with KGAAS, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.



We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Ernst Joung Han Young

March 12, 2021

This audit report is effective as of March 12, 2021, the independent auditor's report date. Accordingly, certain subsequent events or circumstances, which may have occurred during the period from the date of the independent auditor's report to the time this report is used. Such events and circumstances could significantly affect the accompanying consolidated financial statements and may result in modifications to this report.

A member firm of Ernst & Young Global Limited

# Korea Midland Power Co., Ltd. and its subsidiaries Consolidated statements of financial position As of December 31, 2020 and 2019

In won	Note		December 31, 2020	December 31, 2019
Assets				
Cash and cash equivalents	5,6,8,36	₩	254,069,769,864	125,210,764,144
Current financial assets	5,7,8,9,36,37		14,394,606,890	12,608,450,801
Trade and other receivables	5,12,36,37		628,602,781,037	797,522,767,527
Inventories	13,39		420,167,742,002	603,781,924,272
Current tax assets	33		6,322,345,122	14,452,749,689
Current non-financial assets	14		162,590,503,710	175,118,955,171
Current assets		-	1,486,147,748,625	1,728,695,611,604
Non-current financial assets	5,7,9,11,36,37		233,872,756,638	262,119,585,507
Non-current trade and other receivables	5,12,36,37		274,164,057,532	290,915,787,466
Property, plant and equipment	15,19,39		10,917,248,407,019	10,358,407,125,211
Intangible assets	16,41		90,899,456,258	60,204,723,857
Investments in associates and joint ventures	17,37		395,262,100,501	366,206,879,518
Deferred tax assets	33		4,551,542,010	4,197,790,825
Non-current non-financial assets	14		23,481,831,428	21,843,568,550
Non-current assets		-	11,939,480,151,386	11,363,895,460,934
Total assets		₩_	13,425,627,900,011	13,092,591,072,538

(Continued)

# Korea Midland Power Co., Ltd. and its subsidiaries Consolidated statements of financial position, Continued As of December 31, 2020 and 2019

In won	Note	December 31, 2020	December 31, 2019
Liabilities			
Trade and other payables Current financial liabilities	5,18,19,36,37 ₩ 5,11,20,36	491,814,179,788	571,155,603,952
Short-term borrowings		200,000,000,000	350,300,000,000
Current portion of long-term borrowings		11,755,594,471	12,902,680,953
Current portion of bonds		565,917,142,108	399,853,134,801
Derivative liabilities		37,186,274,798	113,570,000
Current tax liabilities		4,142,078,121	15,972,962,453
Current non-financial liabilities	21	16,658,980,993	9,258,053,975
Current provisions	22	149,668,693,875	178,541,057,502
Current liabilities		1,477,142,944,154	1,538,097,063,636
Non-current trade and other payables Non-current financial liabilities	5,18,19,36 5,11,20,36	803,263,724,126	739,749,806,483
Long-term borrowings	-, , -,	177,126,693,569	191,872,477,125
Bonds		6,796,223,508,207	6,398,184,539,078
Derivative liabilities		20,273,400,564	37,682,710,680
Non-current non-financial liabilities	21	3,426,331,460	3,252,341,983
Employee benefits obligations	23,36	176,383,047,475	161,250,548,366
Deferred tax liabilities	33	172,679,899,096	179,203,797,948
Non-current provisions	22,36	-	6,216,236,000
Non-current liabilities		8,149,376,604,497	7,717,412,457,663
Total liabilities		9,626,519,548,651	9,255,509,521,299
Equity			
Issued capital	24	1,270,930,147,572	1,270,930,147,572
Retained earnings	25	2,753,603,559,149	2,767,970,213,817
Other components of equity	5,10,26	(258,469,169,727)	(233,225,835,924)
Equity attributable to owners of the parent		3,766,064,536,994	3,805,674,525,465
Non-controlling interests		33,043,814,366	31,407,025,774
Total equity		3,799,108,351,360	3,837,081,551,239
Total liabilities and equity	W	13,425,627,900,011	13,092,591,072,538

The accompanying notes are an integral part of the consolidated financial statements.

# Korea Midland Power Co., Ltd. and its subsidiaries Consolidated statements of comprehensive income (loss) As of December 31, 2020 and 2019

In won	Notes		December 31, 2020	December 31, 2019
Sales	4,27,37	W	4,357,683,887,298	4,547,414,257,154
Cost of sales	34,37		4,116,348,977,047	4,330,500,465,754
Gross profit		_	241,334,910,251	216,913,791,400
Selling and administrative expenses	28,34		138,864,661,549	126,409,382,153
Operating profit	20,57	_	102,470,248,702	90,504,409,247
Other non-operating income	29	_	7,383,739,053	9,235,947,096
Other non-operating expenses	29		10,929,666,198	28,211,899,485
Other profit (loss), net	5,30		(51,289,642,711)	(12,787,557,884)
Finance income	5,11,31		140,364,780,434	85,469,320,786
Finance costs	5,11,32		226,060,656,318	227,960,350,307
Share of profit of associates and joint ventures, net	17		32,229,013,723	12,721,211,342
Loss before income tax		_	(5,832,183,315)	(71,028,919,205)
Income tax benefit	33		(3,084,385,145)	(65,270,284,797)
Loss for the year		_	(2,747,798,170)	(5,758,634,408)
Other comprehensive income (loss): Items that will not be reclassified to profit or loss in subsequent periods (net of tax):				
Remeasurements of defined benefit liability, net of tax	23.25		(4,534,323,523)	(4,418,626,947)
Share of other comprehensive loss of associates and joint	- / -		(4,354,323,323)	(4,418,626,947) (1,854,819)
ventures	17			
Net change in fair value of equity investments at fair value through other comprehensive income ("FVOCI")	5,26		(12,784,730,846)	(26,047,707,037)
Items that may be reclassified to profit or loss in subsequent periods (net of tax) :				
Net change in the unrealized fair value of derivatives using cash flow hedge accounting	5,11,26		4,154,816,869	8,649,415,096
Share of other comprehensive income (loss) of associates and joint ventures	17		(858,614,696)	59,595,899
Exchange differences on translation of foreign operations			(20,927,331,993)	11,564,127,894
Other comprehensive loss for the year, net of tax			(34,950,184,189)	(10,195,049,914)
Total comprehensive income (loss) for the year, net of tax		₩	(37,697,982,359)	(15,953,684,322)
Income (loss) for the year attributable to:				
Owners of the parent		₩	(9,829,161,975)	(7,348,660,567)
Non-controlling interests			7,081,363,805	1,590,026,159
Loss for the year		₩	(2,747,798,170)	(5,758,634,408)
Total comprehensive income (loss) for the year attributable		_		
to: Owners of the parent			(39,609,988,471)	(12,869,601,145)
Non-controlling interests		₩	1,912,006,112	(12,809,001,143) (3,084,083,177)
Total comprehensive loss for the year		₩	(37,697,982,359)	(15,953,684,322)
Loss per share				

The accompanying notes are an integral part of the consolidated financial statements.

# Korea Midland Power Co., Ltd. and its subsidiaries Consolidated statements of changes in equity For the years ended December 31, 2020 and 2019

			Controllin				
		Issued capital	Retained earnings	Other components of equity	Controlling interest subtotal	Non- controlling interests	Total equity
In won							
As of January 1, 2019	w	1,270,930,147,572	2,779,675,500,801	(223,317,709,618)	3,827,287,938,755	27,933,446,605	3,855,221,385,360
Total comprehensive income (loss) for the year:							
Income (loss) for the year		-	(7,348,660,567)	-	(7,348,660,567)	1,590,026,159	(5,758,634,408)
Items that will not be reclassified to profit or loss in subsequent periods (net of tax):							
Remeasurements of defined benefit liability		-	(4,354,771,598)	-	(4,354,771,598)	(63,855,349)	(4,418,626,947)
Share of other comprehensive							
loss of associates and joint		-	(1,854,819)	-	(1,854,819)	-	(1,854,819)
ventures							
Net change in fair value of equity investments at FVOCI		-	-	(20,350,435,181)	(20,350,435,181)	(5,697,271,856)	(26,047,707,037)
Items that may be reclassified							
to profit or loss subsequent							
periods (net of tax) :							
Net change in the unrealized							
fair value of derivatives using		-	-	8,649,415,096	8,649,415,096	-	8,649,415,096
cash flow hedge accounting							
Share of other comprehensive							
income of associates and joint ventures				59,595,899	59,595,899	-	59,595,899
Exchange differences on translation of foreign		-		10,477,110,025	10,477,110,025	1,087,017,869	11,564,127,894
operations							
Transactions with owners of the							
parent recognized directly in equity:							
Dividends paid		-	-	-	-	(1,934,520,799)	(1,934,520,799)
Paid-in capital increase by subsidiaries				(8,743,812,145)	(8,743,812,145)	8,492,183,145	(251,629,000)
As of December 31, 2019	₩	1,270,930,147,572	2,767,970,213,817	(233,225,835,924)	3,805,674,525,465	31,407,025,774	3,837,081,551,239

(Continued)

# Korea Midland Power Co., Ltd. and its subsidiaries Consolidated statements of changes in equity, Continued For the years ended December 31, 2020 and 2019

In won	Issued capital	Retained earnings	Other components of equity	Controlling interest subtotal	Non- controlling interests	Total equity
As of January 1, 2020	1,270,930,147,572	2,767,970,213,817	(233,225,835,924)	3,805,674,525,465	31,407,025,774	3,837,081,551,239
Total comprehensive income (loss) for the year:						
Income (loss) for the year	-	(9,829,161,975)	-	(9,829,161,975)	7,081,363,805	(2,747,798,170)
Items that will not be reclassified to profit or loss in subsequent periods (net of tax) :						
Remeasurements of defined benefit liability	-	(4,537,492,693)	-	(4,537,492,693)	3,169,170	(4,534,323,523)
Net change in fair value of equity investments at FVOCI	-	-	(12,784,730,846)	(12,784,730,846)	-	(12,784,730,846)
Items that may be reclassified						
to profit or loss subsequent						
periods (net of tax) :						
Net change in the unrealized fair value of derivatives using cash flow hedge accounting		-	7,596,263,175	7,596,263,175	(3,441,446,306)	4,154,816,869
Share of other comprehensive loss of associates and joint ventures	-		(858,614,696)	(858,614,696)		(858,614,696)
Exchange differences on translation of foreign operations		-	(19,196,251,436)	(19,196,251,436)	(1,731,080,557)	(20,927,331,993)
Transactions with owners of the parent recognized directly in equity:						
Dividends paid	-	-	-	-	(584,441,586)	(584,441,586)
Acquisition of subsidiaries		-	-	-	309,224,066	309,224,066
As of December 31, 2020	1,270,930,147,572	2,753,603,559,149	(258,469,169,727)	3,766,064,536,994	33,043,814,366	3,799,108,351,360
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The accompanying notes are an integral part of the consolidated financial statements.

# Korea Midland Power Co., Ltd. and its subsidiaries Consolidated statements of cash flows For the years ended December 31, 2020 and 2019

In won	-	December 31, 2020	December 31, 2019
Cash flows from operating activities			
Loss for the year	₩	(2,747,798,170)	(5,758,634,408)
Adjustments for:			
Retriement benefits		23,399,823,994	34,382,524,361
Accrual of provisions for employee benefits		36,858,053,861	55,174,091,118
Depreciation		782,142,369,287	762,799,690,365
Amortization		8,130,845,267	6,199,024,955
Income tax benefit		(3,084,385,145)	(65,270,284,797)
Loss on disposal of inventories		1,087,902,174	796,089,576
Loss on impairment of property, plant and euipment		61,201,166,178	13,486,658,158
Loss on disposal of property, plant and equipment		1,546,388,856	916,296,726
Loss on impairment of intangible assets		25,445,077	19,105,502
Bad debt expenses		276,597,942	-
Other bad debt expenses		150,883,298	21,081,556,237
Loss on foreign currency translation		5,894,236,297	49,451,946,466
Loss on valuation of derivative instruments Loss on transaction of derivative instruments		47,496,304,496	8,590,923,495
		9,863,014,270	9,799,554,801
Loss (gain) on financial guarantee		(679,387,576)	6,132,698,713
Reversal of provisions of provisions of RPS, net		(2,889,088,871) 32,812,275,270	(12,225,959,583) 130,547,906,267
Increase in (reversal of) provisions of greenhouse gas emission, net		117,011,473	2,131,016,948
Increase in provisions for wage litigation		160,287,397,702	148,200,574,129
Interest expenses Share of loss of associates and joint ventures		2,602,587,220	6,213,973,500
Gain on sale of inventories		(93,268,765)	(185,125,529)
Gain on disposal of property, plant and equipment		(326,821,983)	(1,664,904,944)
Interest income		(28,388,221,302)	(28,286,606,672)
Dividend income		(3,163,466,825)	(14,220,000,711)
Gain on disposal of financial assets		(3,103,100,023)	(1,282,609,806)
Gain on foreign currency translation		(85,742,371,284)	(791,141,560)
Gain on valuation of derivative instruments		(8,817,745,397)	(26,646,545,658)
Gain on transaction of derivative instruments		(12,792,999,779)	(14,543,042,307)
Share of profit of associates and joint ventures		(34,831,600,943)	(18,935,184,842)
Others, net		289,892,094	(146,690,447)
	-	993,372,836,886	1,071,725,534,461
Changes in operating assets and liabilities:	-		
Trade receivables		132,491,914,334	(157,007,317,542)
Other receivables		41,868,215,335	(58,416,436,707)
Accrued income		(12,518,080,505)	160,664,127,722
Prepayments		2,562,481,873	(2,388,688,215)
Prepaid expenses		(2,492,435,876)	(1,484,586,846)
Inventories		182,631,457,386	(35,274,969,499)
Long-term trade receivables		27,249,739,416	5,903,879,948
Long-term prepayments		(2,400,890,000)	(117,950,471)
Long-term prepaid expenses		142,309,388	5,205,150,176
Trade payables		(52,603,622,968)	(164,668,738,325)
Other payables		(83,767,246,030)	76,382,376,528
Accrued expenses		2,390,171,413	1,235,988,515
Deferred income		1,864,917,863	716,253
Withholdings		191,404,567	(212,054,958)
Other withholdings		2,672,437,419	269,348,017
Retirement benefits paid		(919,518,177)	(2,569,508,225)
Plan assets		(8,216,465,927)	(4,210,907,671)
Provisions for employee benefits		(35,253,121,150)	(47,507,610,936)
Other long-term employee benefit liabilities		(22,349,650)	(72,926,160)
Provisions for greenhouse gas emission		-	(12,527,099,760)
Others, net	_	(125,530,708,999)	38,196,399,567
	₩	70,340,609,712	(198,600,808,589)
(Continued)	-		

(Continued)

# Korea Midland Power Co., Ltd. and its subsidiaries Consolidated statements of cash flows, Continued For the years ended December 31, 2020 and 2019

	-	December 31, 2020	December 31, 2019
Cash flows from operating activities, continued			
Interest received	₩	17,722,783,345	2,445,522,461
Interest paid		(205,333,280,319)	(166,347,360,054)
Dividends received		25,646,051,655	25,380,220,711
Income taxes paid		(5,371,187,374)	32,153,050,290
Net cash flows provided by operating activities	-	893,630,015,735	760,997,524,872
Cash flows from investing activities			
Decrease in short-term financial instruments		10,000,000,000	-
Collection of short-term loans		2,001,471,316	1,805,734,205
Collection of long-term loans		6,702,679,716	10,671,579,316
Decrease in long-term other receivables		-	2,198,934,230
Decrease in long-term deposits		5,510,377,752	5,453,772,490
Disposal of financial assets at FVOCI		2,300,000	19,136,226,776
Proceeds from disposal of property, plant and equipment		619,213,597	3,161,210,122
Receipt of government grants		236,200,000	130,000,000
Increase in short-term financial instruments		(11,000,000,000)	-
Increase in short-term loans		-	(24,157,397)
Increase in long-term loans		(6,169,287,640)	(9,137,349,570)
Acquisition of investments in associates and joint ventures		(29,178,724,842)	(9,736,868,013)
Increase in long-term deposits		(9,242,441,392)	(7,118,490,106)
Acquisition of financial assets at FVPL		(1,413,137)	-
Acquisition of financial assets at FVOCI		-	(1,876,300,000)
Acquisition of property, plant and equipment		(50,968,293,438)	(80,618,516,926)
Acquisition of construction-in-progress		(1,012,016,521,792)	(1,434,488,633,350)
Acquisition of intangible assets		(1,175,795,627)	(120,982,732,243)
Net cash flows used in investing activities	-	(1,094,680,235,487)	(1,621,425,590,466)
Cash flows from financing activities			
Payment of lease liabilities		(93,360,761,927)	(98,735,628,152)
Repayment of short-term borrowings, net		(150,300,000,000)	(241,799,988,705)
Repayment of current portion of long-term borrowings		(17,842,960,572)	(65,711,599,646)
Repayment of current portion of bonds		(400,000,000,000)	(535,430,000,000)
Issuance of bonds		997,271,760,000	1,831,663,900,519
Settlement of derivative instruments		2,816,415,509	18,159,539,630
Payment of cash dividends		(1,571,594,718)	(1,932,183,572)
Paid-in capital increase by subsidiaries		(712,341,436)	(251,629,000)
Net cash flows provided by financing activities	-	336,300,516,856	905,962,411,074
Effect of exchange rate fluctuations on cash held	-	(6,391,291,384)	2,178,487,547
Net increase in cash and cash equivalents	-	128,859,005,720	47,712,833,027
Cash and cash equivalents at the beginning of the year		125,210,764,144	77,497,931,117
Cash and cash equivalents at the end of the year	- ₩	254,069,769,864	125,210,764,144

The accompanying notes are an integral part of the consolidated financial statements.

#### 1. Reporting entity

#### (1) Description of controlling company

Korea Midland Power Co., Ltd. ("KOMIPO" or the "Company") was incorporated on April 2, 2001 through the spin-off of the power generation division of Korea Electric Power Corporation ("KEPCO") in accordance with the restructuring plan, dated January 21, 1999, for the electricity industry in the Republic of Korea announced by the Ministry of Knowledge Economy and the Law on Promotion of Restructuring of the Electricity Industry published on December 23, 2000. KOMIPO and its subsidiaries (collectively, the "Group") are engaged in the generation of electricity and development of electric power resources and sell all generated electricity to KEPCO through the Korea Power Exchange ("KPX") in accordance with Article 31 of the Electricity Business Law. As of December 31, 2020, the Company operates five power plants with a generating capacity in the aggregate of 10,733MW.

The Company's head office is located in Boryeong-si, Chungcheongnam-do. As of December 31, 2020, the Company's issued and outstanding shares are wholly owned by KEPCO.

#### (2) Subsidiary information

(i) The Group's investments in subsidiaries and its shareholdings as of December 31, 2020 and 2019 are as follows:

			Percentage of o	ownership (%)
Subsidiary	Key operating activities	Location	December 31, 2020	December 31, 2019
KOMIPO Global Pte Ltd.	Construction and operation of utility plant	Singapore	100.0	100.0
KOMIPO Australia Pty., Ltd.	Resources development	Australia	100.0	100.0
РТ КРЈВ	Operation of utility plant	Indonesia	51.0	51.0
PT Cirebon Power Service (*1)	Operation of utility plant	Indonesia	27.5	27.5
PT Tanggamus Electric Power	Hydropower	Indonesia	52.5	52.5
KOMIPO America Inc.	Holding Company	USA	100.0	100.0
Commerce and Industry Energy Co., Ltd.	RDF Power generation	Korea	85.0	85.0
KOMIPO Bylong Pty., Ltd. (*2)	Overseas resources development	Australia	100.0	100.0
PT Siborpa Eco Power	Hydropower	Indonesia	55.0	55.0
PT KOMIPO Energy Indonesia	Overseas operation maintenance	Indonesia	95.0	95.0
KOMIPO Service., Ltd.	Service business	Korea	100.0	100.0
KOMIPO Europe B.V.	Holding Company	Netherlands	100.0	100.0
KOMIPO Vanpong Power Services Limited Liability Company	Operation of utility plant	Vietnam	100.0	-
Ogiri Solar Power Generation	Solar Power generation	Korea	70.0	-

(\*1) The Group is able to exercise majority voting rights of the Board of Directors according to the shareholders agreement, even though the Group's ownership interest is less than 50%. As such, the entity is included in the Group's scope of consolidation.

(\*2) Ratio of ownership is ratio of common stock excluding preferred stocks which have no voting rights.

(ii) Changes in subsidiaries

For the year ended December 31, 2020, Komipo Vanpong Power Services Limited Liability Company and Ogiri Solar Power Generation were newly included in the scope of consolidation.

### 1. Reporting Entity, Continued

### (2) Subsidiary information, continued

(iii) Summary of financial information of subsidiaries as of and for the year ended December 31, 2020 are as follows:

In millions of won	December 31, 2020							
Subsidiary	Current assets	Non- current assets	Current liabilities	Non- current liabilities	Sales	Profit (loss)	Total comprehensive income (loss)	
KOMIPO Global Pte Ltd.	60,772	202,606	191	465	-	12,460	11,255	
KOMIPO Australia Pty., Ltd.	21,534	23,716	2,659	1,123	14,327	2,685	2,685	
РТ КРЈВ	10,521	2,425	2,963	336	20,306	4,775	4,775	
PT Cirebon Power Services	1,825	-	550	-	8,642	344	344	
PT Tanggamus Electric Power	30,567	187,162	27,387	156,671	3,491	11,942	6,450	
KOMIPO America Inc.	86,694	19,232	918	-	342	(1,783)	(1,783)	
Commerce and Industry Energy Co., Ltd.	16,764	72,917	7,281	34,103	31,603	1,623	1,645	
KOMIPO Bylong Pty., Ltd.	7	-	76	-	-	(11)	(11)	
PT Siborpa Eco Power	394	10,097	14	-	-	(361)	(361)	
PT KOMIPO Energy Indonesia	2,127	346	151	3	2,391	52	52	
KOMIPO Service., Ltd.	2,995	386	2,991	658	28,596	(479)	(990)	
KOMIPO Europe B.V.	33,921	9,277	46	-	333	(386)	(40)	
KOMIPO Vanpong Power Services Limited Liability Company	1,727	-	12	-	-	(34)	(34)	
Ogiri Solar Power Generation	1,032	-	-	-	-	-	-	

(iv) Summary of financial information of subsidiaries as of and for the year ended December 31, 2019 are as follows:

In millions	of won
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In millions of won				De	ecember 31,	2019		
Investees		Current assets	Non- current assets	Current liabilities	Non- current liabilities	Sales	Profit (loss)	Total comprehensive income (loss)
KOMIPO Global Pte Ltd.	₩	53,888	215,413	39	423	-	10,400	10,400
KOMIPO Australia Pty., Ltd.		18,149	22,749	2,465	445	15,514	3,766	3,766
РТ КРЈВ		9,972	2,418	5,545	174	18,722	4,312	4,312
PT Cirebon Power Services		2,076	14	258	56	8,049	406	406
PT Tanggamus Electric Power		23,616	204,985	34,321	161,505	2,256	(4,529)	(4,529)
KOMIPO America Inc.		7,938	1,486	14	579	118	(1,033)	(1,033)
Commerce and Industry Energy Co., Ltd.		14,252	76,385	6,454	37,530	32,728	(7,532)	(7,532)
KOMIPO Bylong Pty., Ltd.		4	-	43	-	-	(14)	(14)
PT Siborpa Eco Power		809	10,765	71	-	-	(1,165)	(1,165)
PT KOMIPO Energy Indonesia		2,390	257	196	-	1,392	79	79
KOMIPO Service., Ltd.		3,171	155	2,628	-	24,556	146	146
KOMIPO Europe B.V.		1,737	5,625	-	-	-	(286)	(286)

### 1. Reporting entity, Continued

### (2) Subsidiary information, continued

(v) Details of non-controlling interests (NCI) prior to intra-group eliminations as of and for the year ended December 31, 2020 are as follows:

### In millions of won

In millions of won	December 31, 2020								
		T KPJB	PT Cirebon Power Service	PT Tanggamus Electric Power	Commerce and Industry Energy Co., Ltd.	Bylong	PT Siborpa Eco Power	PT KOMIPO Energy Indonesia	Ogiri Solar Power Generation
Current assets	₩	10,521	1,825	30,567	16,764	7	394	2,127	1,032
Non-current assets		2,425	-	187,162	72,917	-	10,097	346	-
Current liabilities		2,963	550	27,387	7,281	76	14	151	-
Non-current liabilities		336	-	156,671	34,103	-	-	3	-
Net assets		9,648	1,276	33,672	48,297	(69)	10,477	2,320	1,032
Book value of NCI		4,724	944	15,994	6,311	(69)	4,714	116	309
Sales		20,306	8,642	3,491	31,603	-	-	2,391	-
Profit (loss) for the year		4,775	344	11,942	1,623	(11)	(361)	52	-
Profit (loss) for the year attributable to NCI		1,768	281	4,921	282	(11)	(162)	2	-
Cash flows from operating activities		1,922	224	20,734	8,879	6	(465)	(736)	-
Cash flows from investing activities		(264)	-	(151)	(962)	-	65	(294)	-
Cash flows from financing activities, before dividends to NCI		(1,021)	(230)	(12,179)	(3,605)	-	-	-	-
Cash flows from financing activities - cash dividends to NCI		(981)	(584)	-	-	-	-	-	-
Effect of exchange rate fluctuations on cash held		(332)	(5)	(917)	-	-	(17)	(73)	-
Net increase (decrease) in cash and cash equivalents	h	(675)	(596)	7,487	4,312	6	(417)	(1,103)	-

### 1. Reporting entity, Continued

### (2) Subsidiary information, continued

(vi) Details of non-controlling interests (NCI) prior to intra-group eliminations as of and for the year ended December 31, 2019 are as follows:

In millions of won				D	ecember 31, 2	019		
		РТ КРЈВ	PT Cirebon Power Service	PT Tanggamus Electric Power	Commerce and Industry Energy Co., Ltd.	KOMIPO Bylong <u>Pty., Ltd.</u>	PT Siborpa Eco Power	PT KOMIPO Energy Indonesia
Current assets	₩	9,972	2,076	23,616	14,252	4	809	2,390
Non-current assets		2,418	14	204,985	76,385	-	10,765	257
Current liabilities		5,545	258	34,321	6,454	43	71	196
Non-current liabilities		174	56	161,505	37,530	-	-	-
Net assets		6,671	1,776	32,776	46,652	(39)	11,502	2,451
Book value of NCI		3,266	1,288	15,568	6,025	(39)	5,176	123
Sales		18,722	8,049	2,256	32,728	-	-	1,392
Profit (loss) for the year		4,312	406	(4,529)	(7,532)	(14)	(1,165)	79
Profit (loss) for the year attributable to NCI		2,085	303	1,403	(1,660)	(14)	(523)	(4)
Cash flows from operating activities		3,178	301	20,527	(1,528)	-	(1,582)	(409)
Cash flows from investing activities		(275)	-	(409)	(1,599)	-	-	(325)
Cash flows from financing activities, before dividends to NCI		(3,232)	-	(19,543)	4,404	-	-	-
Cash flows from financing activities - cash dividends to NCI		(1,932)	-	-	-	-	-	-
Effect of exchange rate fluctuations on cash held		501	17	125	-	-	92	281
Net increase (decrease) in cash and cash equivalents		(1,759)	318	699	1,277	-	(1,490)	(453)

### 2. Basis of preparation

The consolidated financial statements have been prepared in accordance with Rules for Accounting Affairs of Public Corporations and Quasi-governmental Institutions. In accordance with its Article 2-5, the Group applies Korean International Financial Reporting Standards ("KIFRS") where accounting provisions have not been specified in the Rules. There are no significant matters that have been applied differently from KIFRS under the Rules. The accompanying consolidated financial statements have been translated into English from Korean financial statements. In the event of any differences in interpreting the financial statements or the independent auditor's report thereon, Korean version, which is used for regulatory reporting purposes, shall prevail.

The consolidated financial statements of the Group was approved by the Board of Directors on March 12, 2021 and scheduled to be approved by the Board of shareholders on March 24, 2021

#### (1) Basis of measurement

The consolidated financial statements have been prepared under 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

- Liabilities for defined benefit plans recognized at the net of the total present value of defined benefit obligations less the fair value of plan assets

#### (2) Functional and presentation currency

The financial statements of the parent and each subsidiary are prepared in functional currency of the respective operation. These consolidated financial statements are presented in Korean won, which is the Group's functional currency that is the currency of the primary economic environment in which the Group operates.

#### (3) Use of estimates and judgments

The preparation of the consolidated financial statements in conformity with KIFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period prospectively.

#### 1) Management judgment

Information about critical judgments in applying accounting policies that have the most significant effect on the amounts recognized in the consolidated financial statements is included in the following notes:

- Note1: Consolidation - subsidiary information

- Note17: Investments in Associates and Joint Ventures

#### 2) Assumption and estimation uncertainties

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment within the next financial year are included in the following notes:

- Note 22: Provisions
- Note 23: Employee Benefits Obligations
- Note 40: Contingencies and Commitments

#### 3) Measurement of fair values

A number of the Group's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities. The Group has an established control framework with respect to the measurement of fair values. This includes a valuation team that has overall responsibility for overseeing all significant fair value measurements, including Level 3 fair values, and significant valuation issues are reported to the Group's Audit Committee.

#### 2. Basis of preparation, continued

#### (3) Use of estimates and judgments, continued

#### 3) Measurement of fair values, continued

The valuation team regularly reviews significant unobservable inputs and valuation adjustments. If third party information, such as broker quotes or pricing services, is used to measure fair values, then the valuation team assesses the evidence obtained from the third parties to support the conclusion that such valuations meet the requirements of KIFRS, including the level in the fair value hierarchy in which such valuations should be classified.

All assets and liabilities measured or disclosed at fair value in the consolidated financial statements are classified into the following fair value hierarchy on the basis of the lowest level of inputs significant to fair value measurement:

- Level 1: Unadjusted quoted prices in active markets for identical assets or liabilities
- Level 2: Inputs other than quoted prices that are observable for the asset or liability either directly or indirectly
- Level 3: Inputs that are not based on observable market data

If the inputs used to measure the fair value of an asset or a liability fall into different levels of the fair value hierarchy, then the fair value measurement is categorized in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement. The Group recognizes transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

Disclosures about the fair value of financial instruments and non-financial assets measured at fair value or disclosed at fair value are described in the following notes:

- Note 36 : Risk management

#### 3. Changes in accounting policies

### (1) Standards and amendments adopted by the Group

The Group applied for the first-time certain standards and amendments, which are effective for annual periods beginning on or after January 1, 2020. The Group has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective.

The details of changes in accounting policies are as follows:

✓ KIFRS 1103, 'Business Combinations' (Amendment) – Definition of a Business

The amendment to KIFRS 1103 Business Combinations clarifies that to be considered a business, an integrated set of activities and assets must include, at a minimum, an input and a substantive process that, together, significantly contribute to the ability to create output. Furthermore, it clarifies that a business can exist without including all of the inputs and processes needed to create outputs. These amendments had no impact on the consolidated financial statements of the Group, but may impact future periods should the Group enter into any business combinations.

✓ KIFRS 1107, 'Financial Instruments: Disclosures' KIFRS 1109, 'Financial Instruments' KIFRS 1039 'Financial Instruments: Recognition and Measurement' (Amendment) – Interest Rate Benchmark Reform

The amendments to KIFRS 1109 and KIFRS 1039 provide a number of reliefs, which apply to all hedging relationships that are directly affected by interest rate benchmark reform. A hedging relationship is affected if the reform gives rise to uncertainty about the timing and/or amount of benchmark-based cash flows of the hedged item or the hedging instrument. These amendments have no impact on the consolidated financial statements of the Group as it does not have any interest rate hedge relationships.

#### 3. Changes in accounting policies continued

#### (1) Standards and amendments adopted by the Group, continued

✓ KIFRS 1001, 'Presentation of Financial Statements' KIFRS 1008, 'Accounting Policies, Changes in Accounting Estimates and Errors' (Amendment) – Definition of Material

The amendments provide a new definition of material that states, "information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity." The amendments clarify that materiality will depend on the nature or magnitude of information, either individually or in combination with other information, in the context of the financial statements. A misstatement of information is material if it could reasonably be expected to influence decisions made by the primary users. These amendments had no impact on the consolidated financial statements of, nor is there expected to be any future impact to the Group.

### ✓ Conceptual Framework for Financial Reporting (2018)

The Conceptual Framework is not a standard, and none of the concepts contained therein override the concepts or requirements in any standard. The purpose of the Conceptual Framework is to assist the KASB in developing standards, to help preparers develop consistent accounting policies where there is no applicable standard in place and to assist all parties to understand and interpret the standards. This will affect those entities which developed their accounting policies based on the Conceptual Framework. The revised Conceptual Framework includes some new concepts, updated definitions and recognition criteria for assets and liabilities and clarifies some important concepts. These amendments had no impact on the consolidated financial statements of the Group.

#### (2) Standards and amendments issued but not yet effective

### ✓ Amendments to KIFRS 1116 COVID-19 Related Rent Concessions

The amendments provide relief to lessees from applying KIFRS 1116 guidance on lease modification accounting for rent concessions arising as a direct consequence of the COVID-19 pandemic. As a practical expedient, a lessee may elect not to assess whether a COVID-19 related rent concession from a lessor is a lease modification. A lessee that makes this election accounts for any change in lease payments resulting from the COVID-19 related rent concession the same way it would account for the change under KIFRS 1116 if the change were not a lease modification.

The amendment applies to annual reporting periods beginning on or after June 1, 2020. Earlier application is permitted. The amendments are not expected to have a material impact on the Group.

#### ✓ Amendments to KIFRS 1001: Classification of Liabilities as Current or Non-current

The amendments to paragraphs 69 to 76 of KIFRS 1001 to specify the requirements for classifying liabilities as current or non-current. The amendments clarify:

- What is meant by a right to defer settlement
- That a right to defer must exist at the end of the reporting period
- That classification is unaffected by the likelihood that an entity will exercise its deferral right
- That only if an embedded derivative in a convertible liability is itself an equity instrument would the terms
- of a liability not impact its classification

The amendments are effective for annual reporting periods beginning on or after January 1, 2023 and must be applied retrospectively. The Group is currently assessing the impact the amendments will have on current practice and whether existing loan agreements may require renegotiation. The amendments are not expected to have a material impact on the Group.

3. Changes in accounting policies continued

#### (2) Standards and amendments issued but not yet effective continued

✓ Reference to the Conceptual Framework – Amendments to KIFRS 1103

The amendments are intended to replace a reference to the Framework for the Preparation and Presentation of Financial Statements, issued in 1989, with a reference to the Conceptual Framework for Financial Reporting issued in March 2018 without significantly changing its requirements. An exception was also added to the recognition principle of KIFRS 1103 to avoid the issue of potential 'day 2' gains or losses arising for liabilities and contingent liabilities that would be within the scope of KIFRS 1037 or KIFRS 2121 Levies, if incurred separately. At the same time, clarifications were made to existing guidance in KIFRS 1103 for contingent assets that would not be affected by replacing the reference to the Framework for the Preparation and Presentation of Financial Statements. The amendments are effective for annual reporting periods beginning on or after January 1, 2022 and apply prospectively. The amendments are not expected to have a material impact on the Group.

✓ Property, Plant and Equipment: Proceeds before Intended Use – Amendments to KIFRS 1016

The purpose of these amendments is to prohibits entities deducting from the cost of an item of property, plant and equipment, any proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognises the proceeds from selling such items, and the costs of producing those items, in profit or loss. The amendment is effective for annual reporting periods beginning on or after January 1, 2022 and must be applied retrospectively to items of property, plant and equipment made available for use on or after the beginning of the earliest period presented when the entity first applies the amendment. The Group is assessing the impact of the amendments on the consolidated financial statements.

✓ Onerous Contracts – Costs of Fulfilling a Contract – Amendments to KIFRS 1037

The purpose of these amendments is to specify which costs an entity needs to include when assessing whether a contract is onerous or loss-making, amendments apply a "directly related cost approach". The costs that relate directly to a contract to provide goods or services include both incremental costs and an allocation of costs directly related to contract activities. General and administrative costs do not relate directly to a contract and are excluded unless they are explicitly chargeable to the counterparty under the contract. The amendments are effective for annual reporting periods beginning on or after January 1, 2022. The Group will apply these amendments to contracts for which it has not yet fulfilled all its obligations at the beginning of the annual reporting period in which it first applies the amendments. The amendments are not expected to have a material impact on the Group.

2018-2020 annual improvements to KIFRS

✓ KIFRS 1101, 'First-time Adoption of International Financial Reporting Standards' – Subsidiary as a first-time adopter

The amendment permits a subsidiary that elects to apply paragraph D16(1) of KIFRS 1101 to measure cumulative translation differences using the amounts reported by the parent, based on the parent's date of transition to KIFRS. This amendment is also applied to an associate or joint venture that elects to apply paragraph D16(1) of KIFRS 1101. The amendment is effective for annual reporting periods beginning on or after January 1, 2022 with earlier adoption permitted.

✓ KIFRS 1109, 'Financial Instruments' – Fees in the '10 per cent' test for derecognition of financial liabilities

The amendment clarifies the fees that an entity includes when assessing whether the terms of a new or modified financial liability are substantially different from the terms of the original financial liability. These fees include only those paid or received between the borrower and the lender, including fees paid or received by either the borrower or lender on the other's behalf. An entity applies the amendment to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment. The amendment is effective for annual reporting periods beginning on or after January 1, 2022 with earlier adoption permitted. The Group will apply the amendments to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment. The amendments are not expected to have a material impact on the Group.

3. Changes in accounting policies continued

### (2) Standards and amendments issued but not yet effective continued

✓ KIFRS 1041 Agriculture – Taxation in fair value measurements

The amendment removes the requirement in paragraph 22 of KIFRS 1041 that entities exclude cash flows for taxation when measuring the fair value of assets within the scope of KIFRS 1041. An entity applies the amendment prospectively to fair value measurements on or after the beginning of the first annual reporting period beginning on or after January 1, 2022 with earlier adoption permitted. The amendments are not expected to have a material impact on the Group.

#### 4. Significant accounting policies

The significant accounting policies applied by the Group in preparation of its consolidated financial statements in accordance with Rules for Accounting Affairs of Public Corporations and Quasi-governmental Institutions are consistent with those followed in the preparation of the Group's consolidated financial statements as of and for the year ended December 31, 2019, except for application of amended and enacted Standards effective as of January 1, 2020

#### (1) Segment Information

The Group's reporting segment is a single segment in accordance with KIFRS 1108 'Operating Segments', and therefore, the Group did not separately disclose the information of each operating segment. The customer more than 10% of the Group's sales is KEPCO, the parent company of the Group, and sales for KEPCO for the years ended December 31, 2020 and 2019 are & 4,199,692 million and & 4,386,638 million (including & 37,895 million in sales related to Seoul combined thermal test power generation), respectively.

#### (2) Consolidation

#### 1) Business combination

A business combination is accounted for by applying the acquisition method, unless it is a combination involving entities or business under common control.

The consideration transferred in the acquisition is generally measured at fair value, as are the identifiable net assets acquired. Any goodwill that arises is tested annually for impairment. Any gain on a bargain purchase is recognized in profit or loss immediately. Transaction costs are expensed as incurred, except if related to the issue of debt or equity securities recognized according to KIFRS 1032 and 1109.

The consideration transferred does not include amounts related to the settlement of pre-existing relationships. Such amounts are generally recognized in profit or loss.

Any contingent consideration is measured at fair value at the date of acquisition. If an obligation to pay contingent consideration that meets the definition of a financial instrument is classified as equity, then it is not re-measured and settlement is accounted for within equity. Otherwise, subsequent changes in the fair value of the contingent consideration are recognized in profit or loss.

#### 2) Non-controlling interests

NCI are measured at their proportionate share of the acquiree's identifiable net assets at the date of acquisition.

Changes in the Group's interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions.

#### 3) Subsidiaries

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control commences until the date on which control ceases.

#### 4) Loss of control

When the Group loses control over a subsidiary, it derecognizes the assets and liabilities of the subsidiary, and any related NCI and other components of equity. Any resulting gain or loss is recognized in profit or loss. Any interest retained in the former subsidiary is measured at fair value when control is lost.

#### 5) Interests in equity-accounted investees

The Group's interests in equity-accounted investees comprise interests in associates and a joint venture.

Associates are those entities in which the Group has significant influence, but not control or joint control, over the financial and operating policies. A joint venture is an arrangement in which the Group has joint control, whereby the Group has rights to the net assets of the arrangement, rather than rights to its assets and obligations for its liabilities.

Interests in associates and the joint venture are accounted for using the equity method. They are initially recognized at cost, which includes transaction costs. Subsequent to initial recognition, the consolidated financial statements include the Group's share of the profit or loss and OCI of equity-accounted investees, until the date on which significant influence or joint control ceases.

#### 4. Significant accounting policies

#### (2) Consolidation, continued

#### 6) Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealized income and expenses arising from intra-group transactions, are eliminated. Unrealized gains arising from transactions with equity-accounted investees are eliminated against the investment to the extent of the Group's interest in the investee. Unrealized losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment.

#### (3) Cash and cash equivalents

Cash and cash equivalents comprise cash balances and call deposits with maturities of three months or less from the acquisition date that are subject to an insignificant risk of changes in their fair value, and are used by the Group in the management of its short-term commitments. Equity investments are excluded from cash equivalents unless they are, in substance, cash equivalents, for example in the case of preferred shares when it has a short maturity with a specified redemption date.

#### (4) Inventories

The cost of inventories is based on the weighted average principle (Supplies: moving average principle, Inventory-in-transit: specific identification principle) and includes expenditures for acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing location and condition. In the case of manufactured inventories and work in progress, cost includes an appropriate share of production overheads based on normal operating capacity.

Inventories are measured at the lower of cost and net realizable value. The amount of any write-down of inventories to net realizable value and all losses of inventories are recognized as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories, arising from an increase in net realizable value, are recognized as a reduction in the amount of inventories recognized as an expense in the reversal occurs.

#### (5) Non-derivative financial assets

#### 1) Recognition and initial measurement

Trade receivables and debt securities issued are initially recognized when they are originated. All other financial assets and financial liabilities are initially recognized when the Group becomes a party to the contractual provisions of the instrument.

A financial asset (unless it is a trade receivable without a significant financing component) or financial liability is initially measured at fair value plus, for an item not at FVTPL, transaction costs that are directly attributable to its acquisition or issue. A trade receivable without a significant financing component is initially measured at the transaction price.

#### 2) Classification and subsequent measurement

On initial recognition, a financial asset is classified as financial assets at amortized cost, debt instruments at FVOCI, equity investments at FVOCI, financial assets at FVTPL. Financial assets are not reclassified subsequent to their initial recognition unless the Group changes its business model for managing financial assets, in which case all affected financial assets are reclassified on the first day of the first reporting period following the change in the business model.

A financial asset is measured at amortized cost if it meets both of the following conditions and is not designated as at FVTPL:

- the asset is held within a business model whose objective is to hold assets to collect contractual cash flows; and

- the contractual terms of the financial asset give rise on specified dates to cash flows that are SPPI.

A debt instrument is at FVOCI only if it meets both of the following conditions and is not designated as at FVTPL:

- the asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and

- the contractual terms of the financial asset give rise on specified dates to cash flows that are SPPI.

On initial recognition of an equity investment that is not held for trading, the Group may irrevocably elect to present subsequent changes in fair value in OCI. This election is made on an investment-by-investment basis.

#### 4. Significant accounting policies, Continued

#### (5) Non-derivative financial assets, continued

#### 2) Classification and subsequent measurement, continued

All other financial assets are classified as at FVTPL. In addition, on initial recognition, the Group may irrevocably designate a financial asset that otherwise meets the requirements to be measured at amortized cost or at FVOCI as at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise. Once, the Group designates a financial asset as at FVTPL, the Group will not reclassify those items in FVOCI subsequently.

#### 3) Business model assessment

The Group makes an assessment of the objective of a business model in which an asset is held at a portfolio level because this best reflects the way the business is managed and information is provided to management.

#### The information considered includes:

- the stated policies and objectives for the portfolio and the operation of those policies in practice. In particular, whether management's strategy focuses on earning contractual interest revenue, maintaining a particular interest rate profile, matching the duration of the financial assets to the duration of the liabilities that are funding those assets or realizing cash flows through the sale of the assets;

- how the performance of the portfolio is evaluated and reported to the Group's management;

- the risks that affect the performance of the business model (and the financial assets held within that business model) and its strategy for how those risks are managed;

- how managers of the business are compensated (e.g. whether compensation is based on the fair value of the assets managed or the contractual cash flows collected); and

- the frequency, volume and timing of sales in prior periods, the reasons for such sales and its expectations about future sales activity. Transfers of financial assets to third parties in transactions that do not qualify for derecognition are not considered sales for this purpose, consistent with the Group's continuing recognition of the assets.

Financial assets that are held for trading or managed and whose performance is evaluated on a fair value basis are at FVTPL because they are neither held to collect contractual cash flows nor held both to collect contractual cash flows and to sell financial assets.

#### 4) Financial assets - Assessment whether contractual cash flows are solely payments of principal and interest

For the purposes of this assessment, 'principal' is defined as the fair value of the financial asset on initial recognition. 'Interest' is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g. liquidity risk and administrative costs), as well as profit margin.

In assessing whether the contractual cash flows are SPPI, the Group considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition.

In making the assessment, the Group considers:

- contingent events that would change the amount and timing of cash flows;
- leverage features;
- prepayment and extension terms; and
- terms that limit the Group's claim to cash flows from specified assets.

A prepayment feature is consistent with the solely payments of principal and interest criterion if the prepayment amount substantially represents unpaid amounts of principal and interest on the principal amount outstanding, which may include reasonable additional compensation for early termination of the contract.

Additionally, for a financial asset acquired at a discount or premium to its contractual par amount, a feature that permits or requires prepayment at an amount that substantially represents the contractual par amount plus accrued (but unpaid) contractual interest (which may also include reasonable additional compensation for early termination) is treated as consistent with this criterion if the fair value of the prepayment feature is insignificant at initial recognition.

#### 4. Significant accounting policies, Continued

#### (5) Non-derivative financial assets, continued

#### 5) Financial assets - Subsequent measurement and gains and losses

Financial assets at FVTPL	These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognized in profit or loss.
Financial assets at amortized cost	These assets are subsequently measured at amortized cost using the effective interest method. The amortized cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognized in profit or loss. Any gain or loss on derecognition is recognized in profit or loss.
Debt investments at FVOCI	These assets are subsequently measured at fair value. Interest income calculated using the effective interest method, foreign exchange gains and losses and impairment are recognized in profit or loss. Other net gains and losses are recognized in OCI. On derecognition, gains and losses accumulated in OCI are reclassified to profit or loss.
Equity investments at FVOCI	These assets are subsequently measured at fair value. Dividends are recognized as income in profit or loss unless the dividend clearly represents a recovery of part of the cost of the investment. Other net gains and losses are recognized in OCI and are never reclassified to profit or loss.

### 6) Derecognition

The Group derecognizes a financial asset when the contractual rights to the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Group neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

The Group enters into transactions whereby it transfers assets recognized on its statement of financial position, but retains either all or substantially all of the risks and rewards of the transferred assets or a portion of them. In such cases, the transferred assets are not derecognized.

### 7) Offsetting

Financial assets and financial liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Group currently has a legally enforceable right to set off the amounts and it intends either to settle them on a net basis or to realize the asset and settle the liability simultaneously.

#### (6) Derivative financial instruments, including hedge accounting

Derivatives are initially recognized at fair value. Subsequent to initial recognition, derivatives are measured at fair value, and changes therein are accounted for as described below.

#### 1) Hedge accounting

The Group holds forward exchange contracts, interest rate swaps, currency swaps and other derivative contracts to manage interest rate risk and foreign exchange risk. The Group 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 Group 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.

#### 4. Significant accounting policies, Continued

#### (6) Derivative financial instruments, including hedge accounting, continued

#### 1) Hedge accounting, continued

#### i) 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 consolidated statement of comprehensive income.

#### ii)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.

#### The hedge ineffectiveness may arise from:

- (a) Cash flow timing differences between hedging targets and hedging instruments
- (b) Various indices associated with the risk of the hedged item and the hedging instrument (and the resulting other curves)

(c) The counterparty's credit risk has a different effect than the change in fair value of the hedging instrument and the hedged item.

(d) Variation in the expected cash flow amount of the hedged item and the hedging instrument.

#### 2) Separable embedded derivatives

Embedded derivatives are separated from the host contract and accounted for separately only if the following criteria have been met: (a) the economic characteristics and risks of the embedded derivative are not closely related to those of the host contract; (b) a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and (c) the hybrid instrument is not measured at fair value with changes in fair value recognized in profit or loss. Changes in the fair value of separable embedded derivatives are recognized immediately in profit or loss.

3) 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.

#### (7) Impairment of financial assets

1) Financial instruments and contract assets

- The Group recognizes loss allowances for ECLs on:
- financial assets measured at amortized cost
- debt investments at FVOCI; and
- contract assets defined by KIFRS 1115.

The Group measures loss allowances at an amount equal to lifetime ECLs, except for the following, which are measured at 12-month ECLs: - Debt securities that are determined to have low credit risk at the reporting date

- Other debt securities and bank deposit for which credit risk (i.e. the risk of default occurring over the expected life of the financial instrument) has not increased significantly since initial recognition.

The Group measured loss allowances for lifetime ECLs on trade receivables and contract assets.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Group's historical experience and informed credit assessment and including forward-looking information.

#### 4. Significant accounting policies, Continued

#### (7) Impairment of financial assets, continued

#### 2) Measurement of ECLs

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the entity in accordance with the contract and the cash flows that the Group expects to receive). ECLs are discounted at the effective interest rate of the financial asset.

### 3) Credit-impaired financial assets

At each reporting date, the Group assesses whether financial assets carried at amortized cost and debt securities at FVOCI are credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred. Evidence that a financial asset is credit-impaired includes the following observable data:

- significant financial difficulty of the borrower or issuer;
- a breach of contract such as a default or being more than 90 days past due;
- the restructuring of a loan or advance by the Group on terms that the Group would not consider otherwise;
- it is probable that the borrower will enter bankruptcy or other financial reorganization; or
- the disappearance of an active market for a security because of financial difficulties.

#### 4) Presentation of allowance for ECL in the statement of financial position

Loss allowances for financial assets measured at amortized cost are deducted from the gross carrying amount of the assets. For debt securities at FVOCI, the loss allowance is charged to profit or loss and is recognized in OCI.

#### 5) Write-off

The gross carrying amount of a financial asset is written off when the Group has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof. The Group expects no significant recovery from the amount written off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Group's procedures for recovery of amounts due.

#### (8) Property, plant and equipment

Property, plant and equipment are initially measured at cost and after initial recognition, are carried at cost less accumulated depreciation and accumulated impairment losses. The cost of property, plant and equipment includes expenditures arising directly from the construction or acquisition of the asset, any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management and the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located. Subsequent to initial recognition, an item of property, plant and equipment shall be carried at its cost less any accumulated depreciation and any accumulated impairment losses.

Subsequent costs are recognized in the carrying amount of property, plant and equipment at cost or, if appropriate, as separate items if it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. The costs of the dayto-day servicing are recognized in profit or loss as incurred.

Property, plant and equipment, except for land, are depreciated over estimated useful lives that appropriately reflect the pattern in which the asset's future economic benefits are expected to be consumed on a straight-line basis.

A component that is significant compared to the total cost of property, plant and equipment is depreciated over its separate useful life.

Gains and losses on disposal of an item of property, plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment and are recognized in profit or loss.

### 4. Significant accounting policies, Continued

#### (8) Property, plant and equipment, continued

The estimated useful lives of the Group's property, plant and equipment are as follows:

	Useful lives (years)	Depreciation method
Buildings	8~30	
Structures	8~30	
Machinery	$2 \sim 24$	
Ships	9	Straight-line method
Vehicles	$4 \sim 5$	-
Other property, plant and equipment	4	
Right-of-use assets	$2 \sim 30$	

Depreciation methods, useful lives and residual values are reviewed at the end of each reporting date and adjusted, if appropriate. The change is accounted for as a change in an accounting estimate.

### (9) Intangible assets

Intangible assets are measured initially at cost and, subsequently, are carried at cost less accumulated amortization and accumulated impairment losses.

Amortization of intangible assets except for goodwill is calculated on a straight-line basis over the estimated useful lives of intangible assets from the date that they are available for use. The residual value of intangible assets is zero. However, as there are no foreseeable limits to the periods over which club memberships are expected to be available for use, this intangible asset is determined as having indefinite useful lives and not amortized.

	Useful lives (years)
Computer software	4
Development costs	5
Other intangible assets	20

Useful lives and the amortization methods for intangible assets with finite useful lives are reviewed at the end of each reporting period. The useful lives of intangible assets that are not being amortized are reviewed at the end of each reporting period to determine whether events and circumstances continue to support indefinite useful life assessments for those assets. Changes are accounted for as changes in accounting estimates.

#### 1) Research and development

Expenditures on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, are recognized in profit or loss as incurred. Development expenditures are capitalized only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, and the Group intends to and has sufficient resources to complete development and to use or sell the asset. Other development expenditures are recognized in profit or loss as incurred.

#### 2) Subsequent expenditures

Subsequent expenditures are capitalized only when they increase the future economic benefits embodied in the specific asset to which it relates. All other expenditures, including expenditures on internally generated goodwill and brands, are recognized in profit or loss as incurred.

#### 4. Significant accounting policies, Continued

### (10) Borrowing costs

The Group capitalizes borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset. Other borrowing costs are recognized in expense as incurred. A qualifying asset is an asset that requires a substantial period of time to get ready for its intended use or sale. Financial assets and inventories that are manufactured or otherwise produced over a short period of time are not qualifying assets. Assets that are ready for their intended use or sale when acquired are not qualifying assets.

To the extent that the Group borrows funds specifically for the purpose of obtaining a qualifying asset, the Group determines the amount of borrowing costs eligible for capitalization as the actual borrowing costs incurred on that borrowing during the period less any investment income on the temporary investment of those borrowings. To the extent that the Group borrows funds generally and uses them for the purpose of obtaining a qualifying asset, the Group shall determine the amount of borrowing costs eligible for capitalization by applying a capitalization rate to the expenditures on that asset. The capitalization rate shall be the weighted average of the borrowing costs applicable to the borrowings of the Group that are outstanding during the period, other than borrowings made specifically for the purpose of obtaining a qualifying asset. The amount of borrowing costs that the Group capitalizes during a period shall not exceed the amount of borrowing costs incurred during that period.

## (11) Government grants

Government grants are not recognized unless there is reasonable assurance that the Group will comply with the grant's conditions and that the grant will be received.

Government grants whose primary condition is that the Group purchase, construct or otherwise acquire long-term assets are deducted in calculating the carrying amount of the asset. The grant is recognized in profit or loss over the life of a depreciable asset as a reduction to depreciation expense.

## (12) Impairment of non-financial assets

The carrying amounts of the Group's non-financial assets, other than assets arising from employee benefits, inventories, deferred tax assets are reviewed at the end of the reporting period to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. Goodwill and intangible assets that have indefinite useful lives or that are not yet available for use, irrespective of whether there is any indication of impairment, are tested for impairment annually by comparing their recoverable amount to their carrying amount.

For impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets ("CGUs"). The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. The value in use is estimated by applying a pre-tax discount rate that reflect current market assessments of the time value of money and the risks specific to the asset or CGU for which estimated future cash flows have not been adjusted, to the estimated future cash flows expected to be generated by the asset or CGU.

An impairment loss is recognized in profit or loss if the carrying amount of an asset or a CGU exceeds its recoverable amount.

Goodwill acquired in a business combination is allocated to each CGU that is expected to benefit from the synergies arising from the goodwill acquired. Any impairment identified at the CGU level will first reduce the carrying value of goodwill and then be used to reduce the carrying amount of the other assets in the CGU on a pro rata basis. Except for impairment losses in respect of goodwill which are never reversed, an impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

#### 4. Significant accounting policies, Continued

#### (13) Leases

The Group assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

#### 1) Group as a lessee

The Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Group recognizes lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

#### - Right-of-use assets

The Group recognizes right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets.

If ownership of the leased asset transfers to the Group at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset. The right-of-use assets are also subject to impairment. Refer to the accounting policies in section Note 4.(12) Impairment of non-financial assets.

#### - Lease liabilities

At the commencement date of the lease, the Group recognizes lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in-substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating the lease, if the lease term reflects the Group exercising the option to terminate. Variable lease payments that do not depend on an index or a rate are recognized as expenses (unless they are incurred to produce inventories) in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments (e.g., changes to future payments resulting from a change in an index or rate used to determine such lease payments) or a change in the assessment of an option to purchase the underlying asset.

#### - Leases of low-value asset and short-term leases

The Group applies the short-term lease recognition exemption to its short-term leases (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption to leases of office equipment that are considered to be low value. Lease payments on short-term leases and leases of low-value assets are recognized as expense on a straight-line basis over the lease term.

#### 2) Group as a lessor

Leases in which the Group does not transfer substantially all the risks and rewards incidental to ownership of an asset are classified as operating leases. Rental income arising is accounted for on a straight-line basis over the lease terms and is included in revenue in the statement of profit or loss due to its operating nature. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leaset and recognized over the lease term on the same basis as rental income. Contingent rents are recognized as revenue in the period in which they are earned.

### 4. Significant accounting policies, Continued

## (14) Non-derivative financial liabilities

The Group classifies non-derivative financial liabilities into financial liabilities at fair value through profit or loss or other financial liabilities in accordance with the substance of the contractual arrangement and the definitions of financial liabilities. The Group recognizes financial liabilities in the consolidated statement of financial position when the Group becomes a party to the contractual provisions of the financial liability.

# 1) Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading or designated as such upon initial recognition. Subsequent to initial recognition, financial liabilities at fair value through profit or loss are measured at fair value, and changes therein are recognized in profit or loss. Upon initial recognition, transaction costs that are directly attributable to the acquisition are recognized in profit or loss as incurred.

## 2) Other financial liabilities

Non-derivative financial liabilities other than financial liabilities at fair value through profit or loss are classified as other financial liabilities. At the date of initial recognition, other financial liabilities are measured at fair value minus transaction costs that are directly attributable to the acquisition. Subsequent to initial recognition, other financial liabilities are measured at amortized cost using the effective interest method.

The Group derecognizes a financial liability from the consolidated statement of financial position when it is extinguished (i.e. when the obligation specified in the contract is discharged, cancelled or expires).

#### 4. Significant accounting policies, Continued

#### (15) Employee benefits

#### 1) Short-term employee benefits

Short-term employee benefits are employee benefits that are expected to be settled wholly before twelve months after the end of the annual reporting period in which the employees render the related services. When an employee has rendered service to the Group during an accounting period, the Group recognizes the undiscounted amount of short-term employee benefits expected to be paid in exchange for that service.

#### 2) Other long-term employee benefits

Other long-term employee benefits include employee benefits that are expected to be settled beyond 12 months after the end of the annual reporting period in which the employees render the related service. The Group's net obligation in respect of long-term employee benefit is the amount of future benefit that employees have earned in return for their service in the current and prior periods. That benefit is discounted to determine its present value. Remeasurements are recognized in profit or loss in the period in which they arise.

#### 3) Retirement benefits: defined contribution plans

When an employee has rendered service to the Group during a period, the Group recognizes the contribution payable to a defined contribution plan in exchange for that service as a liability, after deducting any contribution already paid. If the contribution already paid exceeds the contribution due for service before the end of the reporting period, the Group recognizes that excess as an asset to the extent that the prepayment will lead to a reduction in future payments or a cash refund.

#### 4) Retirement benefits: defined benefit plans

The Group's net obligation in respect of defined benefit plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in the current and prior periods, discounting that amount and deducting the fair value of any plan assets.

The calculation of defined benefit obligations is performed annually by a qualified actuary using the projected unit credit method. When the calculation results in a potential asset for the Group, the recognized asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan. To calculate the present value of economic benefits, consideration is given to any applicable minimum funding requirements.

Re-measurements 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 Group determines the net interest expense (income) on the net defined benefit liability 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, taking into account any changes in the net defined benefit liability 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 Group recognizes gains and losses on the settlement of a defined benefit plan when the settlement occurs.

#### (16) Provisions

Provisions are recognized when the Group has a present legal or constructive obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. The risks and uncertainties that inevitably surround many events and circumstances are taken into account in reaching the best estimate of a provision. Where the effect of the time value of money is material, provisions are determined at the present value of the expected future cash flows.

Where some or all of the expenditures required to settle a provision are expected to be reimbursed by another party, the reimbursement is recognized when, and only when, it is virtually certain that reimbursement will be received if the entity settles the obligation. The reimbursement is presented as a separate asset.

Provisions are reviewed at the end of each reporting period and adjusted to reflect the current best estimates. If it is no longer probable that an outflow of resources embodying economic benefits will be required to settle the obligation, the provision is reversed. Provisions are used only for expenditures related to the initial recognition.

#### 4. Significant accounting policies, Continued

#### (17) Emissions rights

The Group accounts for greenhouse gases emission right and the relevant liability as below pursuant to the Act on Allocation and Trading of Greenhouse Gas Emission which became effective in 2015.

#### 1) Greenhouse gases emission right

Greenhouse gases emission right consists of emission allowances which are allocated from the government free of charge or purchased from the market. The cost includes any directly attributable costs incurred during the normal course of business. The Group held emission rights for the purpose of performing the legal obligation.

Emission right is classified as an intangible asset and classified as an current asset which is submitted in less than one year. Emission right is initially measured at cost and after initial recognition, is carried at cost less accumulated impairment losses.

The Group derecognizes an emission right asset when the emission allowance is unusable, disposed or submitted to government in which the future economic benefits are no longer expected to be probable.

#### 2) Emission liability

Emission liability is a present obligation of submitting emission rights to the government with regard to emission of greenhouse gas. Emission liability is recognized when there is a high possibility of outflows of resources in performing the obligation and the costs required to perform the obligation are reliably estimable. Emission liability is an amount of estimated obligations for emission rights to be submitted to the government for the performing period. The emission liability is measured based on the expected quantity of emission for the performing period in excess of emission allowance in possession and the unit price for such emission rights in the market as of the end of the reporting period. The emission liabilities are being removed when they are submitted to the government.

#### (18) Foreign currencies

Transactions in foreign currencies are translated to the respective functional currencies at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are retranslated to the functional currency using the reporting date's exchange rate. Non-monetary assets and liabilities denominated in foreign currencies that are measured at fair value are retranslated to the functional currency at the exchange rate at the date that the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction.

Foreign currency differences arising on retranslation are recognized in profit or loss, except for differences arising at the settlement of monetary items and from a financial liability designated as a cash flow hedge. If the gain or loss arising from non-monetary items is recognized in other comprehensive income, the effect of the exchange rate fluctuation included in the gain or loss is recognized in other comprehensive income, and if recognized profit or loss, the effect is recognized in profit or loss.

#### (19) Issued capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issuance of ordinary shares and share options are recognized as a deduction from equity, net of any tax effects.

#### (20) Revenue from contracts with customers

The Group recognizes revenue by applying the five-step approach (Step 1: Identify the contract(s) with a customer, Step 2: Identify the performance obligations in the contract, Step 3: Determine the transaction price, Step 4: Allocate the transaction price to the performance obligations in the contract, Step 5: Recognize revenue when the entity satisfied a performance obligation). The Group recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services, excluding amounts collected on behalf of third parties. Also, the Group recognizes revenue when the Group satisfies a performance obligation by transferring a promised good or service to a customer.

#### 1) Identify the performance obligations in the contract

The Group is engaged in the generation of electricity and development of electric power resources, and electricity sales revenue accounts for 96.37% of consolidated revenue for the year ended December 31, 2020.

Under KIFRS 1115, supplying electricity is a series of distinct goods or services identified as a single performance obligation. The Group is also engaged in contracts with customers for Heat supply, sales of byproducts, O&M, etc. that are identified as separate performance obligations for each contract.

#### 4. Significant accounting policies, Continued

#### (20) Revenue from contracts with customers, continued

#### 2) Variable consideration

The Group may be subject to a variation of consideration paid by the customer due to contracts with customers. The Group estimates an amount of variable consideration by using the expected value method that the Group expects to better predict the amount of consideration to which it will be entitled, and includes in the transaction price some or all of an amount of variable consideration only to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

#### 3) Performance obligations satisfied over time

The Group satisfies its performance obligations for contracts such as O&M, etc. over time. The Group recognizes revenue based on the percentage-of-completion on a reasonable basis.

#### The Group recognizes revenue over time if one of the following criteria is met:

(a) the customer simultaneously receives and consumes the benefits provided by the Group's performance as the entity performs;(b) the Group's performance creates or enhances an asset that the customer controls as the asset is created or enhanced; or(c) the Group's performance does not create an asset with an alternative use to the entity and the entity has an enforceable right to payment for performance completed to date.

#### (21) Finance income and finance costs

Finance income comprises interest income on funds invested (including available-for-sale financial assets), dividend income, gains on the disposal of available-for-sale financial assets, changes in the fair value of financial assets at fair value through profit or loss, and gains on hedging instruments that are recognized in profit or loss. Interest income is recognized as it accrues in profit or loss, using the effective interest method. Dividend income is recognized in profit or loss on the date that the Group's right to receive payment is established, which in the case of quoted securities is the ex-dividend date.

Finance costs comprise interest expense on borrowings, unwinding of the discount on provisions, dividends on preference shares classified as liabilities, changes in the fair value of financial assets at fair value through profit or loss, impairment losses recognized on financial assets, and losses on hedging instruments that are recognized in profit or loss. Borrowing costs that are not directly attributable to the acquisition, construction or production of a qualifying asset are recognized in profit or loss using the effective interest method.

#### (22) Income taxes

Income tax expense comprises current and deferred tax. Current tax and deferred tax are recognized in profit or loss except to the extent that it relates to a business combination, or items recognized directly in equity or in other comprehensive income.

#### 1) Current tax

Current tax comprises the expected tax payable or receivable on the taxable income or loss for the year and any adjustment to the tax payable or receivable in respect of previous years. The amount of current tax payable or receivable is the best estimate of the tax amount expected to be paid or received that reflects uncertainty related to income taxes, if any. It is measured using tax rates enacted or substantively enacted at the reporting date.

#### 2) Deferred tax

Deferred tax is recognized, using the asset-liability method, in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The Group recognizes a deferred tax liability for all taxable temporary differences associated with investments in subsidiaries, associates, and interests in joint ventures, except to the extent that the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. A deferred tax asset is recognized for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which they can be utilized.

A deferred income tax asset is recognized for the carryforward of unused tax losses, tax credits and deductible temporary differences to the extent that it is probable that future taxable profit will be available against which the unused tax losses, tax credits and deductible temporary differences can be utilized. The future taxable profit depends on reversing taxable temporary differences. When there are insufficient taxable temporary differences, the probability of future taxable profit (including the reversal of temporary differences) should be considered.

### 4. Significant accounting policies, Continued

### (22) Income taxes, continued

The carrying amount of a deferred income tax asset is reviewed at the end of each reporting period and is reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow the benefit of part or all of that deferred income tax asset to be utilized.

Deferred income 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.

Deferred income tax assets and liabilities are offset only if there is a legally enforceable right to offset the related current income tax liabilities and assets, and they relate to income taxes levied by the same tax authority and they intend to settle current income tax liabilities and assets on a net basis.

## (23) Earnings per share

The Group presents basic earnings per share (EPS) data for its ordinary shares. Basic EPS is calculated by dividing the profit or loss attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding during the period, adjusted for own shares held.

# 5. Classification of financial instruments

# (1) Classification of financial assets as of December 31, 2020 and 2019 are as follows:

In millions of won	December 31, 2020						
	-	Financial assets at FVTPL	FVOCI - equity instuments	FVOCI - debt instruments	Financial assets at amortized cost	Derivative assets (using hedge accounting)	Total
Current assets							
Cash and cash equivalents	₩	-	-	-	254,070	-	254,070
Financial assets at FVPL		1	-	-	-	-	1
Short-term financial instruments		-	-	-	11,000	-	11,000
Short-term loans		-	-	-	3,393	-	3,393
Trade and other receivables		-	-	-	628,603	-	628,603
	-	1	-	-	897,066	-	897,067
Non-current assets	-						
Financial assets at FVOCI		-	178,915	-	-	-	178,915
Derivative assets		6,531	-	-	-	3,252	9,783
Long-term loans		-	-	-	45,175	-	45,175
Trade and other receivables		-	-	-	274,164	-	274,164
	-	6,531	178,915	-	319,339	3,252	508,037
	₩	6,532	178,915		1,216,405	3,252	1,405,104
	-						

In millions of won		December 31, 2019					
	-	Financial assets at FVTPL	FVOCI - equity instuments	FVOCI - debt instruments	Financial assets at amortized cost	Derivative assets (using hedge accounting)	Total
Current assets							
Cash and cash equivalents	₩	-	-	-	125,211	-	125,211
Short-term financial instruments		-	-	-	10,000	-	10,000
Short-term loans		-	-	-	2,608	-	2,608
Trade and other receivables		-	-	-	797,523	-	797,523
	-	-	-	-	935,342	-	935,342
Non-current assets	-						
Financial assets at FVOCI		-	197,409	2	-	-	197,411
Derivative assets		3,493	-	-	-	15,695	19,188
Long-term loans		-	-	-	45,520	-	45,520
Trade and other receivables		-	-	-	290,916	-	290,916
	-	3,493	197,409	2	336,436	15,695	553,035
	₩_	3,493	197,409	2	1,271,778	15,695	1,488,377
	-						

## 5. Classification of financial instruments, Continued

# (2) Classification of financial liabilities as of December 31, 2020 and 2019 are as follows:

In millions of won	1, 2020			
	Financial liabilities at FVPL	Financial liabilities at amortized cost	Derivative liabilities (using hedge accounting)	Total
Current liabilities				
Borrowings <del>W</del>	-	211,756	-	211,756
Bonds	-	565,917	-	565,917
Derivative liabilities	251	-	36,935	37,186
Trade and other payables	-	491,814	-	491,814
	251	1,269,487	36,935	1,306,673
Non-current liabilities				
Borrowings	-	177,127	-	177,127
Bonds	-	6,796,223	-	6,796,223
Derivative liabilities	3,449	-	16,824	20,273
Trade and other payables	-	803,264	-	803,264
	3,449	7,776,614	16,824	7,796,887
W	3,700	9,046,101	53,759	9,103,560

In millions of won	December 31, 2019				
	Financial liabilities at FVTPL	Financial liabilities at amortized cost	Derivative liabilities (using hedge accounting)	Total	
Current liabilities					
Borrowings <del>W</del>	-	363,203	-	363,203	
Bonds	-	399,853	-	399,853	
Derivative liabilities	114	-	-	114	
Trade and other payables	-	571,155	-	571,155	
	114	1,334,211	-	1,334,325	
Non-current liabilities					
Borrowings	-	191,872	-	191,872	
Bonds	-	6,398,185	-	6,398,185	
Derivative liabilities	6,107	-	31,576	37,683	
Trade and other payables	-	739,750	-	739,750	
	6,107	7,329,807	31,576	7,367,490	
W	6,221	8,664,018	31,576	8,701,815	

## 5. Classification of financial instruments, Continued

(3) Classification of comprehensive income (loss) from financial instruments for the years ended December 31, 2020 and 2019 are as follows:

In millions of won		-	December 31, 2020
Financial assets at amortized	Gain on fluctuation of exchange rates from cash and cash equivalents	₩	(111)
cost	Interest income from cash and cash equivalents		1,932
	Interest income from loans		201
	Loss on fluctuation of exchange rates from trade and other receivables		112
	Interest income from trade and other receivables		26,255
Financial assets at FVTPL	Gain on valuation of derivative (profit or loss)		4,430
Derivative assets	Gain on valuation of derivatives (profit or loss)		(15,695)
(using hedge accounting)	Gain on valuation of derivatives (equity, before tax)		3,252
	Gain on transaction of derivatives		5,847
Financial assets at FVOCI	Dividend income		3,163
	Loss on valuation of financial assets at FVOCI (equity, before tax)		(16,866)
Financial liabilities recognized	Loss on fluctuation of exchange rates		79,847
at amortized cost	Interest expenses from borrowing and bonds		(141,577)
	Interest expenses from trade and other payables		(18,710)
Financial liabilities at FVTPL	Loss on valuation of derivatives (profit or loss)		(4,943)
	Gain on transaction of derivatives		(3,879)
Derivative liabilities	Gain on valuation of derivatives (profit or loss)		(22,471)
(using hedge accounting)	Loss on valuation of derivatives (equity, before tax)		3,328
	Gain on transaction of derivatives		962
In millions of won			December 31, 2019
		-	
Financial assets at amortized	Gain on fluctuation of exchange rates from cash and cash equivalents	₩	
Financial assets at amortized cost	Gain on fluctuation of exchange rates from cash and cash equivalents Interest income from cash and cash equivalents	₩	2,178 1,566
		₩	2,178
	Interest income from cash and cash equivalents	₩	2,178 1,566
	Interest income from cash and cash equivalents Interest income from loans	₩	2,178 1,566 200
	Interest income from cash and cash equivalents Interest income from loans Loss on fluctuation of exchange rates from trade and other receivables	₩	2,178 1,566 200 (76) 26,520
cost	Interest income from cash and cash equivalents Interest income from loans Loss on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables	₩	2,178 1,566 200 (76)
cost	Interest income from cash and cash equivalents Interest income from loans Loss on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss)	₩	2,178 1,566 200 (76) 26,520 3,493 (1,506)
cost Financial assets at FVTPL	Interest income from cash and cash equivalents Interest income from loans Loss on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss) Loss on transaction of derivatives	₩	2,178 1,566 200 (76) 26,520 3,493
cost Financial assets at FVTPL Derivative assets	Interest income from cash and cash equivalents Interest income from loans Loss on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss) Loss on transaction of derivatives Gain on valuation of derivatives (profit or loss)	₩	2,178 1,566 200 (76) 26,520 3,493 (1,506) 9,349
cost Financial assets at FVTPL Derivative assets	Interest income from cash and cash equivalents Interest income from loans Loss on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss) Loss on transaction of derivatives Gain on valuation of derivatives (profit or loss) Gain on valuation of derivatives (profit or loss)		2,178 1,566 200 (76) 26,520 3,493 (1,506) 9,349 11,995 5,644
cost Financial assets at FVTPL Derivative assets (using hedge accounting)	Interest income from cash and cash equivalents Interest income from loans Loss on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss) Loss on transaction of derivatives Gain on valuation of derivatives (profit or loss) Gain on valuation of derivatives (equity, before tax) Gain on transaction of derivatives		2,178 1,566 200 (76) 26,520 3,493 (1,506) 9,349 11,995
cost Financial assets at FVTPL Derivative assets (using hedge accounting)	Interest income from cash and cash equivalents Interest income from loans Loss on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss) Loss on transaction of derivatives Gain on valuation of derivatives (profit or loss) Gain on valuation of derivatives (equity, before tax) Gain on transaction of derivatives Dividend income Loss on valuation of financial assets at FVOCI		2,178 1,566 200 (76) 26,520 3,493 (1,506) 9,349 11,995 5,644 14,220 (32,545)
cost Financial assets at FVTPL Derivative assets (using hedge accounting) Financial assets at FVOCI	Interest income from cash and cash equivalents Interest income from loans Loss on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss) Loss on transaction of derivatives Gain on valuation of derivatives (profit or loss) Gain on valuation of derivatives (equity, before tax) Gain on transaction of derivatives Dividend income Loss on valuation of financial assets at FVOCI (equity, before tax)		2,178 1,566 200 (76) 26,520 3,493 (1,506) 9,349 11,995 5,644 14,220
cost Financial assets at FVTPL Derivative assets (using hedge accounting) Financial assets at FVOCI Financial liabilities recognized	Interest income from cash and cash equivalents Interest income from loans Loss on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss) Loss on transaction of derivatives Gain on valuation of derivatives (profit or loss) Gain on valuation of derivatives (equity, before tax) Gain on transaction of derivatives Dividend income Loss on valuation of financial assets at FVOCI (equity, before tax) Loss on fluctuation of exchange rates		2,178 1,566 200 (76) 26,520 3,493 (1,506) 9,349 11,995 5,644 14,220 (32,545) (50,763)
cost Financial assets at FVTPL Derivative assets (using hedge accounting) Financial assets at FVOCI Financial liabilities recognized	Interest income from cash and cash equivalents Interest income from loans Loss on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss) Loss on transaction of derivatives Gain on valuation of derivatives (profit or loss) Gain on valuation of derivatives (equity, before tax) Gain on transaction of derivatives Dividend income Loss on valuation of financial assets at FVOCI (equity, before tax) Loss on fluctuation of exchange rates Interest expenses from borrowing and bonds		2,178 1,566 200 (76) 26,520 3,493 (1,506) 9,349 11,995 5,644 14,220 (32,545) (50,763) (130,493) (17,708)
cost Financial assets at FVTPL Derivative assets (using hedge accounting) Financial assets at FVOCI Financial liabilities recognized at amortized cost	Interest income from cash and cash equivalents Interest income from loans Loss on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss) Loss on transaction of derivatives Gain on valuation of derivatives (profit or loss) Gain on valuation of derivatives (profit or loss) Gain on valuation of derivatives (equity, before tax) Gain on transaction of derivatives Dividend income Loss on valuation of financial assets at FVOCI (equity, before tax) Loss on fluctuation of exchange rates Interest expenses from borrowing and bonds Interest expenses from trade and other payables		2,178 1,566 200 (76) 26,520 3,493 (1,506) 9,349 11,995 5,644 14,220 (32,545) (50,763) (130,493)
cost Financial assets at FVTPL Derivative assets (using hedge accounting) Financial assets at FVOCI Financial liabilities recognized at amortized cost	Interest income from cash and cash equivalents Interest income from loans Loss on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss) Loss on transaction of derivatives Gain on valuation of derivatives (profit or loss) Gain on valuation of derivatives (profit or loss) Gain on valuation of derivatives (equity, before tax) Gain on transaction of derivatives Dividend income Loss on valuation of financial assets at FVOCI (equity, before tax) Loss on fluctuation of exchange rates Interest expenses from borrowing and bonds Interest expenses from trade and other payables Loss on valuation of derivatives (profit or loss)	**	2,178 1,566 200 (76) 26,520 3,493 (1,506) 9,349 11,995 5,644 14,220 (32,545) (50,763) (130,493) (17,708) (262)
cost Financial assets at FVTPL Derivative assets (using hedge accounting) Financial assets at FVOCI Financial liabilities recognized at amortized cost	Interest income from cash and cash equivalents Interest income from loans Loss on fluctuation of exchange rates from trade and other receivables Interest income from trade and other receivables Gain on valuation of derivative (profit or loss) Loss on transaction of derivatives Gain on valuation of derivatives (profit or loss) Gain on valuation of derivatives (profit or loss) Gain on valuation of derivatives (equity, before tax) Gain on transaction of derivatives Dividend income Loss on valuation of financial assets at FVOCI (equity, before tax) Loss on fluctuation of exchange rates Interest expenses from borrowing and bonds Interest expenses from trade and other payables Loss on valuation of derivatives (profit or loss) Gain on transaction of derivatives		2,178 1,566 200 (76) 26,520 3,493 (1,506) 9,349 11,995 5,644 14,220 (32,545) (50,763) (130,493) (17,708) (262) 40

## 6. Cash and cash equivalents

## Cash and cash equivalents as of December 31, 2020 and 2019 are as follows:

In millions of won	Dece	ember 31, 2020	December 31, 2019
Cash	₩	245,961	114,546
Cash equivalents		8,108	10,665
	₩	254,069	125,211

## 7. Financial assets

### (1) Financial assets as of December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020		December 31, 2019	
		Current	Non-current	Current	Non-current
Loans	₩	3,473	56,467	2,694	56,855
Present value discount		(80)	(1,165)	(86)	(1,207)
Allowance for doubtful accounts		-	(10,127)	-	(10,127)
	_	3,393	45,175	2,608	45,521
Financial instruments		11,000	-	10,000	-
Financial assets at FVPL		1	-		
Derivative assets		-	9,783	-	19,188
Financial assets at FVOCI		-	178,915	-	197,411
	₩	14,394	233,873	12,608	262,120

#### (2) Loans as of December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020		December 31, 2019	
	_	Current	Non-current	Current	Non-current
Loans for tuition (*1)	₩	1,420	18,261	1,457	17,274
Present value discount		(80)	(1,165)	(86)	(1,207)
	_	1,340	17,096	1,371	16,067
Housing fund loans (*2)		1,031	11,754	1,054	9,990
Loans to affiliates (*3)		-	26,343	183	29,476
Allowance for doubtful accounts		-	(10,127)	-	(10,127)
Other loans		1,022	109	-	115
	₩	3,393	45,175	2,608	45,520

(\*1) The Group makes loans to employees interest free for the purpose of supporting school expenses of their children. Loans are collected quarterly in equal installment payment through deduction from salary payment.

(\*2) The Group makes loans to employees who do not own a house for the purpose of improving residential stability of employees. The interest rate is 95% of weighted average borrowing rate of the Group. Loan terms are 20 years with installment payments.

(\*3) The Group lends to PT Cirebon Electric Power and PT Wampu Electric Power at interest rates of 4.6~11% per annum. No bad debt expense is recognized related to this loan.

## 7. Financial assets, Continued

## (3) Financial instruments as of December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020	December 31, 2019	
Fixed deposit and others	₩	11,000	10,000	

# (4) Changes in allowance for doubtful accounts of loans for the years ended December 31, 2020 and 2019 are as follows:

In millions of won	_	December 31, 2020	December 31, 2019
Beginning balance	₩	10,127	-
Bad debt expenses for impaired financial assets		-	10,127
Ending balance	₩	10,127	10,127

## 8. Restriction of deposit

Restricted deposits as of December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020	December 31, 2019
Cash and cash equivalents (*1)	₩	12,212	7,856
Short-term financial instruments (*2)		11,000	10,000

(\*1) As explained in Note 15, this amount is provided as collateral for the long-term borrowings of Commerce and Industry Energy Co., Ltd., a subsidiary of KOMIPO.

(\*2) Restriction on withdrawal related to 'win-win growth program' for small and medium enterprises.

## 9. Financial assets at FVPL

Financial assets at FVPL as of December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020		December 31, 2019	
MMT	₩		1		-

## 10. Financial assets at FVOCI

# (1) Financial assets at FVOCI as of December 31, 2020 and 2019 are as follows:

In millions of won	Ownership (%)		December 31, 2020	December 31, 2019
Equity securities				
Listed				
PT. Bayan Resources TBK	4.00	₩	159,702	176,172
Unlisted				
Korea Power Exchange	7.14		15,961	16,357
KEPCO-Uhde Inc.	2.40		14	14
HeeMang Sunlight Power Co., Ltd.	8.33		393	393
West Highway Solar Co., Ltd.	2.86		195	195
East Highway Solar Co., Ltd.	4.99		190	190
Muan Solar Power Plant Co., Ltd.(*)	-		-	1,492
PT Cirebon Energi Prasarana	10.00		2,440	2,596
KEPCO Bylong Australia Pty., Ltd.	2.00		-	-
Fire Guarantee	-		20	-
		-	178,915	197,409
Debt securities				
National housing bond			-	2
		₩ _	178,915	197,411

(\*) For the year ended December 31, 2020, it transferred from the financial assets at FVOCI to the investment in associates, due to the additional acquisition of its equity.

## 10. Financial assets at FVOCI, Continued

# (2) Changes in financial assets at FVOCI (equity securities) for the years ended December 31, 2020 and 2019 are as follows:

In millions of won				December 31, 2	020	
	-	Beginning balance	Acquisition (disposal)	Valuation	Others	Ending balance
PT. Bayan Resources TBK	₩	176,172	-	(16,470)	-	159,702
Korea Power Exchange		16,357	-	(396)	-	15,961
KEPCO-Uhde Inc.		14	-	-	-	14
HeeMang Sunlight Power Co., Ltd.		393	-	-	-	393
West Highway Solar Co., Ltd.		195	-	-	-	195
East Highway Solar Co., Ltd.		190	-	-	-	190
Muan Solar Power Plant Co., Ltd.		1,492	(1,492)	-	-	-
PT Cirebon Energi Prasarana		2,596	-	-	(156)	2,440
KEPCO Bylong Australia Pty., Ltd.		-	-	-	-	-
Fire Guarantee		-	20	-	-	20
	₩	197,409	(1,472)	(16,866)	(156)	178,915

In millions of won				December 31, 2	2019	
	-	Beginning balance	Acquisition (disposal)	Valuation	Others	Ending balance
PT. Bayan Resources TBK	₩	203,520	-	(27,348)	-	176,172
Korea Power Exchange		15,857	-	500	-	16,357
KEPCO-Uhde Inc.		14	-	-	-	14
HeeMang Sunlight Power Co., Ltd.		393	-	-	-	393
West Highway Solar Co., Ltd.		-	195	-	-	195
East Highway Solar Co., Ltd.		-	190	-	-	190
Muan Solar Power Plant Co., Ltd.		-	1,492	-	-	1,492
PT Cirebon Energi Prasarana		2,507	-	-	89	2,596
Navanakorn Electric Co., Ltd. (*)		17,125	(17,125)	-	-	-
KEPCO Bylong Australia Pty., Ltd.		5,542	-	(5,697)	155	-
	₩	244,958	(15,248)	(32,544)	243	197,409

(\*) Completed disposal for the year ended December 31, 2019.

## 11. Derivatives

# (1) Derivatives as of December 31, 2020 and 2019 are as follows:

In millions of won	_	December	31, 2020	December	31, 2019
	_	Current	Non-current	Current	Non-current
Derivative assets					
Currency swap	₩	-	3,252	-	15,695
Currency forward		-	-	-	-
Interest rate swap		-	6,531	-	3,493
	=	-	9,783	-	19,188
Derivative liabilities					
Currency swap		36,088	5,393	-	31,576
Currency forward		251	-	114	-
Interest rate swap		847	11,431	-	6,107
Other derivative liabilities (*)		-	3,449	-	-
	₩_	37,186	20,273	114	37,683

(\*) Other derivative liabilities are fair value of derivatives according to the agreement between shareholders of Hyundai Green Power Co., Ltd. , an associate.

# (2) Currency swap contracts which are designated as hedging instruments as of December 31, 2020 are as follows:

In millions of won and thousands of foreign currencies, except for contract exchange rate

		_	Contr	act am	ount	<b>Contract inter</b>	est rate (%)	_	Contract
Counterparty	Terms of the contract		Pay	. <u>-</u>	Receive	Pay	Receive	ex	change rate
Korea Development Bank	2016.01.21.~2021.07.21.	₩	121,000	USD	100,000	2.15	2.50	₩	1,210.00
Morgan Stanley	2016.01.21.~2021.07.21.		121,000		100,000	2.10+ floating rate	2.50		1,210.00
BNP Paribas	2016.01.21.~2021.07.21.		121,000		100,000	2.10+ floating rate	2.50		1,210.00
Nomura	2017.10.24.~2037.10.30.		52,457	EUR	40,000	2.60	1.70		1,311.42
	2017.11.09.~2037.11.16.		59,423	SEK	450,000	2.62	2.36		132.05
Kookmin Bank	2019.01.23. ~ 2022.01.22.		112,650	USD	100,000	1.80	3.38		1,126.50
Korea Development Bank	2019.01.14. ~ 2022.01.22.		112,650		100,000	1.80	3.38		1,126.50
Woori Bank	2019.01.15. ~ 2022.01.22.		112,650		100,000	1.80	3.38		1,126.50

## 11. Derivatives, Continued

#### (3) Currency forward contracts which are designated as hedging instruments as of December 31, 2020 are as follows:

In millions of won and thousands of U.S. dollars, except for contract exchange rate

		_	Contract amo	ount	
Counterparty	Terms of the contract		Pay	Receive	Contract exchange rate
Shinhan Bank	2020.12.30~2021.01.22	₩	9,249 USD	8,500 <del>W</del>	1,088.10
Korea Development Bank	2020.12.15~2021.01.05		1,092	1,000	1,092.10
Korea Development Bank	2020.12.29~2021.01.05		6,791	6,200	1,095.35
HSBC	2020.12.23~2021.01.05		3,881	3,500	1,108.85
HSBC	2020.12.24~2021.01.05		3,306	3,000	1,101.95
HSBC	2020.12.24~2021.01.22		1,651	1,500	1,100.80
HSBC	2020.12.29~2021.01.13		14,210	13,000	1,093.10

#### (4) Interest rate swap contracts which are designated as hedging instruments as of December 31, 2020 are as follows:

In millions of won and thousands of U.S. dollars, except for contract exchange rate

				Contract inte	rest rate (%)	-	Contract
Counterparty	Terms of the contract		Contract amount	Pay	Receive		exchange rate
Societe Generale	2017.03.28~2022.06.28	₩	200,000	3.44+ floating rate	3.77	₩	-
Nomura	2017.10.24~2032.10.30		52,457	2.22+ floating rate	2.60		-
Nomura	2017.11.09~2032.11.16		59,423	2.24+ floating rate	2.62		-
The Export-Import Bank of Korea	2015.02.12~2031.12.29	\$	15,893	2.67	Libor(6M)		1,071.90
ING Bank N.V.	2015.02.12~2031.12.29		7,861	2.67	Libor(6M)		1,071.90
BNP Paribas	2015.02.17~2031.12.29		7,861	2.67	Libor(6M)		1,210.00

# (5) Gain or loss on valuation and transaction of derivatives for the years ended December 31, 2020 and 2019 are as follows:

In millions of won	_	Net income effects of valuation gain (loss)		Net income of transaction g		Other comprehensive gain (loss) (*1)		
	_	2020	2019	2020	2019	2020	2019	
Currency swap	₩	(36,173)	21,621	5,086	6,210	13,825	11,411	
Currency forward		(251)	(114)	(4,287)	(1,127)	-	-	
Interest rate swap		1,195	(3,452)	2,131	(339)	(7,245)	-	
Others (*2)		(3,449)	-	-	-	-	-	
	w –	(38,678)	18,055	2,930	4,744	6,580	11,411	

(\*1) Gain on valuation of derivatives recorded in accumulated other comprehensive gain in the amounts of ₩3,392 million as of December 31, 2020 and loss on valuation of derivatives recorded ₩4,204 million as of December 31, 2019 respectively, are net of tax.

(\*2) Gains (losses) from other derivative instruments are due to valuation of the obligation to purchase the shares of financial investors of Commerce and Industry Energy Co., Ltd., a subsidiary of the Group.

## 12. Trade and other receivables

# (1) Trade and other receivables as of December 31, 2020 and 2019 are as follows:

In millions of won	won December 31, 2020								
	_	Gross receivables	Allowance for doubtful accounts	Book value					
Current assets									
Trade receivables	₩	376,785	-	376,785					
Other receivables		261,403	(9,585)	251,818					
	_	638,188	(9,585)	628,603					
Non-current assets	-								
Trade receivables		165,334	-	165,334					
Other receivables		108,830	-	108,830					
	_	274,164	-	274,164					
	w –	912,352	(9,585)	902,767					

In millions of won

_		December 31, 2019	
-	Gross receivables	Allowance for doubtful accounts	Book value
₩	509,882	-	509,882
	297,226	(9,585)	287,641
-	807,108	(9,585)	797,523
_			
	181,868	-	181,868
	109,048	-	109,048
-	290,916	-	290,916
₩ =	1,098,024	(9,585)	1,088,439
	-	₩ 509,882 297,226 807,108 181,868 109,048 290,916	Gross receivables     Allowance for doubtful accounts       ₩     509,882       297,226     (9,585)       807,108     (9,585)       181,868     -       109,048     -       290,916     -

## 12. Trade and other receivables, Continued

## (2) Other receivables as of December 31, 2020 and 2019 are as follows:

			December 31, 2020	
In millions of won	_		Allowance for doubtful	
	-	Gross receivables	accounts	Book value
Current assets				
Non-trade receivables	₩	213,630	(9,585)	204,045
Accrued income		46,812	-	46,812
Deposits		961	-	961
-	_	261,403	(9,585)	251,818
Non-current assets	_			
Non-trade receivables		83,308	-	83,308
Deposits		25,522	-	25,522
-	_	108,830		108,830
	₩	370,233	(9,585)	360,648
	_			
	_		December 31, 2019	
In millions of won			Allowance for doubtful	
	-	Gross receivables	accounts	Book value
Current assets				
Non-trade receivables	₩	248,830	(9,585)	239,245
Accrued income		47,724	-	47,724
Deposits		672	-	672
-	_	297,226	(9,585)	287,641
Non-current assets	_			
Non-trade receivables		87,200	-	87,200
Deposits		21,848	-	21,848
		109,048		109,048
	₩ -	406,274	(9,585)	396,689

# (3) Changes in allowance for doubtful accounts of other receivables for the years ended December 31, 2020 and 2019 are as follows:

In millions of won	-	December 31, 2020	December 31, 2019
Beginning balance	₩	9,585	-
Bad debt expenses for impaired financial assets		-	9,585
Ending balance	₩	9,585	9,585

## 12. Trade and other receivables, Continued

## (4) An aging analysis of account trade and other receivables as of December 31, 2020 is as follows:

In millions of won	_	Trade receivables	Other receivables
Receivables that are neither past due nor impaired: Receivables that are past due but not impaired: $0 \sim 90$ days	W	542,119	358,589
Receivables that are impaired: $0 \sim 90$ days			
90 ~ 120days		-	-
120 days ~ 1 years		-	-
Over 1 years		-	11,644
Subtotal		542,119	370,233
(Less allowance for doubtful receivables)		_	(9,585)
(Less present value)		-	-
Ending balance	W	542,119	360,648

# 13. Inventories

## (1) Inventories as of December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020	December 31, 2019	
Raw materials	₩	225,230	234,831	
Supplies		76,016	99,027	
Inventories in transit		118,530	269,635	
Other inventories		391	289	
	₩	420,167	603,782	

(2) The Group has no gain or loss on valuation of inventories for the years ended December 31, 2020 and 2019.

## 14. Non-financial assets

Non-financial assets as of December 31, 2020 and 2019 are as follows:

In millions of won		December	31, 2020	December 31, 2019		
		Current	Non-current	Current	Non-current	
Advanced payments	₩	534	3,316	3,127	915	
Prepaid expenses		13,714	19,214	11,850	20,001	
Others		148,343	952	160,142	928	
	₩	162,591	23,482	175,119	21,844	

# 15. Property, plant and equipment

# (1) Property, plant and equipment as of December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020									
	-	Acquisition cost	Government grants	Accumulated depreciation	Accumulated impairment losses	Book value					
Land	₩	805,728	-	-	-	805,728					
Buildings		2,131,408	(14,124)	(658,773)	(3,821)	1,454,690					
Structures		1,189,260	-	(432,107)	(8,726)	748,427					
Machinery		9,000,923	(5,794)	(4,084,328)	(67,304)	4,843,497					
Ships		36	-	(36)	-	-					
Vehicles		10,784	(230)	(8,833)	(116)	1,605					
Equipment		120,918	-	(89,779)	-	31,139					
Tools		30,031	-	(23,841)	(32)	6,159					
Construction-in-progress		2,023,838	-	-	-	2,023,838					
Right-of-use assets		1,244,773	-	(241,538)	(1,070)	1,002,165					
	₩_	16,557,701	(20,148)	(5,539,235)	(81,069)	10,917,248					

In millions of won		December 31, 2019								
	_	Acquisition cost	Government grants	Accumulated depreciation	Accumulated impairment losses	Book value				
Land	₩	803,081	-	-	-	803,081				
Buildings		1,658,643	(15,846)	(551,777)	(1,770)	1,089,250				
Structures		1,537,299	-	(406,586)	(8,031)	1,122,682				
Machinery		8,372,697	(6,357)	(3,559,762)	(9,950)	4,796,628				
Ships		36	-	(36)	-	-				
Vehicles		11,364	(136)	(9,832)	(117)	1,279				
Equipment		103,974	-	(76,231)	-	27,743				
Tools		27,609	-	(21,003)	(32)	6,574				
Construction-in-progress		1,608,421	-	-	-	1,608,421				
Right-of-use assets		1,042,660	-	(139,911)	-	902,749				
	₩	15,165,784	(22,339)	(4,765,138)	(19,900)	10,358,407				

#### 15. Property, plant and equipment, Continued

#### (2) Changes in property, plant and equipment for the years ended December 31, 2020 and 2019 are as follows:

In millions of won	December 31, 2020									
	Beginning balance	Acquisitions /capital expenditure	Disposals	Depreciation	Impairm ent loss(*1)	Others(*2)	Ending balance			
Land <del>W</del>	803,081	92	(94)	-	-	2,649	805,728			
Buildings	1,089,250	-	-	(99,307)	(2,046)	466,793	1,454,690			
Structures	1,122,682	-	-	(37,764)	(700)	(335,791)	748,427			
Machinery	4,796,628	78,281	(26)	(524,324)	(57,385)	550,323	4,843,497			
Ships	-	-	-	-	-	-	-			
Vehicles	1,279	136	(69)	(631)	-	890	1,605			
Equipment	27,743	280	(4)	(13,425)	-	16,545	31,139			
Tools	6,574	173	-	(3,177)	-	2,589	6,159			
Construction-in- progress	1,608,421	1,078,449	-	-	-	(663,032)	2,023,838			
Right-of-use assets	902,749	202,986	-	(103,515)	(1,070)	1,015	1,002,165			
₩	10,358,407	1,360,397	(193)	(782,143)	(61,201)	41,981	10,917,248			

(\*1) Following the decision to close Boryeong Thermal Power Plant Units 1 and 2 in accordance with the 9<sup>th</sup> electric power supply plan, The Group estimated the fair value of the related individual assets, deducting the cost of disposal, as a recoverable value. Accordingly, the Group recognized an impairment loss of ₩61,201 million.

(\*2) The amounts are composed of transfers from construction-in-progress to depreciable assets, borrowing costs capitalization, retirement benefits capitalization, deduction of liquidated damages due to delay from acquisition cost, effect of exchange rate fluctuations and others.

In millions of won		December 31, 2019							
	_	Beginning balance	Changes in accounting policies	Acquisitions /capital expenditure	Disposals	Depreciation	Impairment loss	Others(*)	Ending balance
Land	₩	802,497	-	111	(188)	-	-	661	803,081
Buildings		1,023,649	-	-	-	(76,926)	(1,292)	143,819	1,089,250
Structures		693,108	-	8	-	(42,887)	(1,235)	473,688	1,122,682
Machinery		4,089,459	-	79,461	(2,165)	(532,002)	(5,952)	1,167,827	4,796,628
Vehicles		1,461	-	235	(57)	(652)	-	292	1,279
Equipment		28,225	-	686	-	(11,984)	-	10,816	27,743
Tools		6,706	-	118	-	(2,936)	-	2,686	6,574
Construction- in- progress		2,026,837	-	1,413,483	-	-	(5,008)	(1,826,891)	1,608,421
Finance lease assets		115,433	(115,433)	-	-	-	-	-	-
Right-of-use assets		-	996,433	98	-	(95,413)	-	1,631	902,749
2	₩_	8,787,375	881,000	1,494,200	(2,410)	(762,800)	(13,487)	(25,471)	10,358,407

(\*) The amounts are composed of transfers from construction-in-progress to depreciable assets, borrowing costs capitalization, retirement benefits capitalization, deduction of liquidated damages due to delay from acquisition cost, effect of exchange rate fluctuations and others.

## 15. Property, plant and equipment, Continued

### (3) Government grants as of December 31, 2020 and 2019 are as follows:

In millions of won	Decc	ember 31, 2020	December 31, 2019
Buildings	₩	14,124	15,846
Machinery		5,794	6,357
Vehicles		230	136
	₩	20,148	22,339

## (4) Changes in government grants for the years ended December 31, 2020 and 2019 are as follows:

In millions of won	December 31, 2020							
	Be	ginning balance	Acquisition	Depreciation	Ending balance			
Buildings	₩	15,846	-	(1,722)	14,124			
Machinery		6,357	72	(635)	5,794			
Vehicles		136	164	(70)	230			
	₩	22,339	236	(2,427)	20,148			

In millions of won	December 31, 2019							
	Begi	nning balance	Acquisition	Depreciation	Ending balance			
Buildings	₩	17,567	-	(1,721)	15,846			
Machinery		6,990	-	(633)	6,357			
Vehicles		31	130	(25)	136			
	₩	24,588	130	(2,379)	22,339			

### (5) Collateral assets of the Group as of December 31, 2020 are as follows:

In millions of won

Collateral assets		Book value	Established amount of collateral	Type of borrowing	Balance of borrowing (*2)	Bank that the borrowing is made
Land, buildings, structure and machinery (*1)	₩	71,876	110,500	Long-term borrowings	36,051	Industrial Bank of Korea and others

(\*1) Property, plant and equipment of Commerce and Industry Energy Co., Ltd. is provided as collateral. Cash and cash equivalents and benefit of property insurance are also provided as collateral.

(\*2) Balance of borrowing is related to Commerce and Industry Energy Co., Ltd.'s long-term borrowing, presented above at its face value.

# 16. Intangible assets

# (1) Intangible assets as of December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020								
	-	Acquisition cost	Accumulated amortization	Accumulated impairment loss	Book Value					
Software	₩	43,295	(30,072)	-	13,223					
Development expenditures		42,468	(36,689)	(19)	5,760					
Mining rights		19,113	(6,748)	-	12,365					
Others		58,152	(1,157)	(26)	56,969					
Goodwill		2,582	-	-	2,582					
	₩	165,610	(74,666)	(45)	90,899					

In millions of won		December 31, 2019								
		Acquisition cost	Accumulated amortization	Accumulated impairment loss	Book value					
Software	₩	40,245	(25,271)	-	14,974					
Development expenditures		39,871	(34,656)	(19)	5,196					
Mining rights		17,973	(5,274)	-	12,699					
Others		25,829	(1,075)	-	24,754					
Goodwill		2,582	-	-	2,582					
	₩	126,500	(66,276)	(19)	60,205					

## 16. Intangible assets, Continued

#### (2) Changes in intangible assets for the years ended December 31, 2020 and 2019 are as follows:

In millions of wo	n	December 31, 2020										
		Beginning balance	Acquisitions /capital _expenditure	Disposals	Amortization	Impairment loss	_Others (*)_	Ending balance				
Software	₩	14,974	2	(124)	(4,780)	-	3,151	13,223				
Development expenditures		5,196	597	-	(1,977)	-	1,944	5,760				
Mining rights		12,699	543	-	(1,267)	-	390	12,365				
Others		24,754	35	(3)	(107)	(25)	32,316	56,969				
Goodwill		2,582	-	-	-	-	-	2,582				
	₩	60,205	1,176	(127)	(8,131)	(25)	37,801	90,899				

(\*) Others consist of transfer from construction-in-progress to depreciable assets, transfer from amortization cost to construction-inprogress and effect of exchange rate fluctuations.

On the other hand, greenhouse gases emission right allocated free of charge from the government is classified as intangible assets and measured as nil.

### In millions of won

In millions of won	December 31, 2019										
	-	Beginning balance	Acquisition /capital _expenditure	Amortization	Impairment loss	_Others (*)	Ending balance				
Software	₩	13,982	33	(3,938)	-	4,897	14,974				
Development expenditures		3,210	-	(1,454)	(19)	3,459	5,196				
Mining rights		10,945	2,146	(750)	-	358	12,699				
Others		1,166	118,804	(57)	-	(95,159)	24,754				
Goodwill		2,582	-	-	-	-	2,582				
	₩	31,885	120,983	(6,199)	(19)	(86,445)	60,205				

(\*) Others consist of transfer from construction-in-progress to depreciable assets, transfer from amortization cost to construction-inprogress and effect of exchange rate fluctuations.

On the other hand, greenhouse gases emission right allocated free of charge from the government is classified as intangible assets and measured as nil.

## 17. Investments in associates and joint ventures

# (1) Investments in associates and joint ventures as of December 31, 2020 and 2019 are as follows:

			Percentage of ownership (%)			
Investees	Key operation activities	Location	December 31, 2020	December 31, 2019		
<associates></associates>						
KEPCO Lebanon S.A.R.L.	Combined cycle operation and maintenance	Lebanon	49.0	49.0		
Gangwon Wind Power Co., Ltd. (*1)	Wind power	Korea	15.0	15.0		
Hyundai Green Power Co., Ltd.	Byproduct gas power generation	Korea	29.0	29.0		
PT Cirebon Electric Power	Coal thermal power generation	Indonesia	27.5	27.5		
PT Wampu Electric Power	Water power generation	Indonesia	46.0	46.0		
Korea Offshore Wind Power Co., Ltd. (*1)	Wind power generation	Korea	12.5	12.5		
Gunsan Bio Energy Co.,Ltd. (*1)	Bio energy power generation	Korea	18.9	18.9		
KEPCO Solar Co., Ltd. (*1) (previously, Solar School Plant Co., Ltd. (*2))	Solar school business	Korea	8.3	8.3		
KEPCO Energy Solution Co., Ltd. (*1)	Energy saving business	Korea	8.3	8.3		
YaksuESS Co., Ltd.	Installing ESS related equipment	Korea	29.0	29.0		
Jeju Hallim Offshore Wind Power Co., Ltd.	Wind power generation	Korea	26.1	26.1		
YeongGwang Yaksu Wind Electric.Co., Ltd. (*1)	Wind power generation	Korea	9.6	9.6		
Green Energy Power Co., Ltd.	Wind power generation	Korea	29.0	29.0		
Namjung Floating Solar Light Operation Co., Ltd. (*1)	Solar power generation	Korea	15.0	15.0		
Kwangbaek Solar Power Investment Co., Ltd	Solar power generation	Korea	44.0	19.0		
Muan Solar Power Plant Co., Ltd.	Solar power generation	Korea	20.0	-		
Goesan Solar Park Co., Ltd.	Solar power generation	Korea	29.0	-		
Bitgoeul Eco Energy Co., Ltd.	Fuel cell power generation	Korea	29.0	-		
Jeju Gimnyeong Wind Power Co., Ltd.	Wind power generation	Korea	30.0	-		
<joint ventures=""></joint>						
Stavro Holding II A.B.	Solar power generation	Sweden	20.0	20.0		
Energy Co./	Solar power generation	Korea	29.0	-		
CAES, LLC	ESS-based VPP business	USA	36.0	-		

(\*1) Although the Group owns less than 20% of the equity shares of the entity, the Group participates in the directors' meetings and exercises significant influence. As such, it is classified as investments in associates.

(\*2) The company changed its name from Solar School Plant Co., Ltd. to KEPCO Solar Co., Ltd. during the current year.

## 17. Investments in associates and joint ventures, Continued

(2) Changes in investments in associates and joint ventures for the years ended December 31, 2020 and 2019 are as follows:

In millions of won	December 31, 2020							
Investees	Beginning balance	Acquisition	Dividends received	Share of profit (loss)	Other comprehen -sive income (loss)	Others	Ending balance	
<associates></associates>								
KEPCO Lebanon S.A.R.L.	₩ -	-	-	-	-	-	-	
Gangwon Wind Power Co., Ltd.	12,327	-	(1,988)	1,104	-	-	11,443	
Hyundai Green Power Co., Ltd.	124,253	-	(8,888)	17,409	-	-	132,774	
PT Cirebon Electric Power	123,425	-	(9,782)	11,331	434	(7,596)	117,812	
PT Wampu Electric Power	29,355	-	(1,303)	3,245	(1,639)	(1,793)	27,865	
Korea Offshore Wind Power Co., Ltd.	21,081	-	-	(160)	-	-	20,921	
Gunsan Bio Energy Co., Ltd.	-	-	-	-	-	-	-	
KEPCO Solar Co., Ltd. (previously, Solar School Plant Co., Ltd.)	17,096	-	-	166	-	-	17,262	
KEPCO Energy Solution Co., Ltd.	25,504	-	-	304	-	(3)	25,805	
YaksuESS Co., Ltd.	516	-	-	(62)	-	-	454	
Jeju Hallim Offshore Wind Power Co., Ltd.	3,610	-	-	(755)	-	-	2,855	
YeongGwang Yaksu Wind Electric.Co., Ltd.	386	-	-	(74)	-	-	312	
Green Energy Power Co., Ltd.	163	-	-	(138)	-	-	25	
Namjung Floating Solar Light Operation Co., Ltd.	812	-	-	(710)	-	-	102	
Kwangbaek Solar Power Investment Co., Ltd.	2,054	2,073	-	(74)	-	-	4,683	
Muan Solar Power Plant Co., Ltd.	-	78	-	(473)	-	1,492	1,096	
Goesan Solar Park Co., Ltd.	-	1,276	-	408	-	-	1,684	
Bitgoeul Eco Energy Co., Ltd.	-	29	-	-	-	-	29	
Jeju Gimnyeong Wind Power Co., Ltd.	-	714	-	864	-	-	1,578	
<joint ventures=""></joint>								
Stavro Holding II A.B.	5,625	3,305	-	(156)	346	157	9,277	
Energy Co.	-	1,659	-	-	-	-	1,659	
CAES, LLC	-	19,414	(297)	-	-	(1,491)	17,626	
	₩ 366,207	29,178	(22,258)	32,229	(859)	(9,235)	395,262	

## 17. Investments in associates and joint ventures, Continued

(2) Changes in investments in associates and joint ventures for the years ended December 31, 2020 and 2019 are as follows, continued:

In millions of won	December 31, 2019									
Investees	Beginning balance	Acquisition	Dividends received	Share of profit (loss)	Other comprehen -sive income (loss)	Others	Ending balance			
<associates></associates>										
KEPCO Lebanon S.A.R.L.		-	-	-	-	-	-			
Gangwon Wind Power Co., Ltd.	13,220	-	(2,271)	1,378	-	-	12,327			
Hyundai Green Power Co., Ltd.	127,160	-	(8,889)	5,982	-	-	124,253			
PT Cirebon Electric Power	108,627	-	-	11,079	(64)	3,783	123,425			
PT Wampu Electric Power	31,097	-	-	(2,868)	2	1,124	29,355			
Korea Offshore Wind Power Co., Ltd.	22,467	-	-	(1,386)	-	-	21,081			
Gunsan Bio Energy Co., Ltd.	-	-	-	-	-	-	-			
Solar School Plant Co., Ltd.	16,893	-	-	204	-	(1)	17,096			
KEPCO Energy Solution Co., Ltd.	25,269	-	-	236	-	(1)	25,504			
YaksuESS Co., Ltd.	460	-	-	56	-	-	516			
Jeju Hallim Offshore Wind Power Co., Ltd.	4,236	-	-	(626)	-	-	3,610			
YeongGwang Yaksu Wind Electric.Co., Ltd.	533	-	-	(147)	-	-	386			
Green Energy Power Co., Ltd.	-	1,189	-	(1,026)	-	-	163			
Namjung Floating Solar Light Operation Co., Ltd.	-	969	-	(157)	-	-	812			
Kwangbaek Solar Power Investment Co., Ltd.	-	2,054	-	-	-	-	2,054			
<joint ventures=""></joint>										
Stavro Holding II A.B.		5,525		(4)	122	(18)	5,625			
7	349,962	9,737	(11,160)	12,721	60	4,887	366,207			

## 17. Investments in associates and joint ventures, Continued

# (3) Summary of financial information of associates and joint ventures as of December 31, 2020 and 2019, and for the years ended December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020								
Investees	Current assets	Non- current assets	Current liabilities	Non- current liabilities	Sales	Profit (loss)	Total compreh - ensive income (loss)			
<associates></associates>										
KEPCO Lebanon S.A.R.L.	₩ -	-	-	-	-	-	-			
Gangwon Wind Power Co., Ltd.	37,542	39,755	1,336	-	23,350	7,472	7,472			
Hyundai Green Power Co., Ltd.	91,885	782,689	80,871	335,862	390,442	55,591	55,591			
PT Cirebon Electric Power	213,809	516,211	92,378	209,236	246,014	40,676	42,253			
PT Wampu Electric Power	33,002	166,838	15,923	123,342	20,265	7,372	3,813			
Korea Offshore Wind Power Co., Ltd.	49,644	305,002	8,521	178,757	26,838	400	400			
Gunsan Bio Energy Co., Ltd.	4,520	4,820	28,297	25	-	(1,501)	(1,501)			
KEPCO Solar Co., Ltd. (previously, Solar School Plant Co., Ltd.)	146,114	84,329	19,356	3,742	3,933	1,888	1,885			
KEPCO Energy Solution Co., Ltd.	244,220	69,534	2,287	1,806	5,585	3,656	3,615			
YaksuESS Co., Ltd.	903	5,681	38	4,984	217	(212)	(212)			
Jeju Hallim Offshore Wind Power Co., Ltd.	711	11,769	1,503	39	-	(2,832)	(2,832)			
YeongGwang Yaksu Wind Electric.Co., Ltd.	652	42,387	1,648	41,267	5,802	(637)	(637)			
Green Energy Power Co., Ltd.	4,049	49,884	33	56,500	-	(920)	(920)			
Namjung Floating Solar Light Operation Co., Ltd.	7,088	55,953	8,538	53,950	1,128	(4,655)	(4,655)			
Kwangbaek Solar Power Investment Co., Ltd.	3,372	335,851	19,778	309,520	13,192	(329)	(329)			
Muan Solar Power Plant Co., Ltd.	33,254	114,654	1,519	143,379	6,017	(2,365)	(2,365)			
Goesan Solar Park Co., Ltd.	4,257	52,075	2,505	48,019	2,809	(262)	(262)			
Bitgoeul Eco Energy Co., Ltd.	100	-	-	-	-	-	-			
Jeju Gimnyeong Wind Power Co., Ltd.	10,107	62,451	898	66,399	8,927	(1,576)	(1,576)			
<joint ventures=""></joint>										
Stavro Holding II A.B.	5,752	40,642	9	-	-	(782)	(782)			
Energy Co.	2,755	670	563	-	-	(2,856)	(2,856)			
CAES, LLC	487	40,353	-	-	-	(1,656)	(1,656)			

## 17. Investments in associates and joint ventures, Continued

# (3) Summary of financial information of associates and joint ventures as of December 31, 2020 and 2019, and for the years ended December 31, 2020 and 2019 are as follows, continued:

In millions of won	December 31, 2019								
Investees	Current assets	Non- current assets	Current liabilities	Non- current liabilities	Sales	Profit (loss)	Total compreh - ensive income (loss)		
<associates></associates>									
KEPCO Lebanon S.A.R.L.	¥	-	-	-	-	-	-		
Gangwon Wind Power Co., Ltd.	36,096	47,432	1,674	-	24,116	9,380	9,380		
Hyundai Green Power Co., Ltd.	275,982	810,757	266,014	392,265	507,653	26,222	26,222		
PT Cirebon Electric Power	195,192	657,265	122,181	281,458	277,370	39,581	39,347		
PT Wampu Electric Power	37,237	185,028	19,324	139,127	18,043	(2,299)	(2,311)		
Korea Offshore Wind Power Co., Ltd.	12,306	271,468	1,861	113,266	-	(11,090)	(11,090)		
Gunsan Bio Energy Co., Ltd.	5,344	5,270	28,053	9	-	(5,777)	(5,777)		
Solar School Plant Co., Ltd.	193,247	15,197	705	2,385	2,033	2,447	2,438		
KEPCO Energy Solution Co., Ltd.	116,437	191,751	1,007	1,135	2,843	2,805	2,792		
YaksuESS Co., Ltd.	1,295	6,030	43	5,509	1,191	363	363		
Jeju Hallim Offshore Wind Power Co., Ltd.	4,674	9,654	452	47	-	(2,399)	(2,399)		
YeongGwang Yaksu Wind Electric.Co., Ltd.	1,260	45,228	1,559	44,035	6,511	(1,510)	(1,510)		
Green Energy Power Co., Ltd.	2,877	31,059	60	36,000	-	(5,923)	(5,923)		
Namjung Floating Solar Light Operation Co., Ltd.	2,843	31,752	10	29,300	-	(1,149)	(1,149)		
Kwangbaek Solar Power Investment Co., Ltd.	4,151	189,313	15	183,048	7,635	(355)	(355)		
<joint ventures=""></joint>									
Stavro Holding II A.B.	1,172	26,969	13	-	-	(18)	(18)		

# (4) As of December 31, 2020 and December 31, 2019, unrecognized equity interest in investments in associates and joint ventures whose book value has been reduced to zero due to accumulated losses are as follows:

In millions of won	_	December	31, 2020	December 31, 2019		
	-	Unrecognized equity interest	Accumulated unrecognized equity interest	Unrecognized equity interest	Accumulated unrecognized equity interest	
Gunsan Bio Energy Co., Ltd.	₩	289	3,581	1,090	3,292	

## 17. Investments in associates and joint ventures, Continued

# (5) Details of the Group's share of net assets of the associates and joint ventures as of December 31, 2020 are as follows:

In millions of won						
-		Ownership	Share of	Investment		Ending
Investee	Net assets	ratio (*1)	net assets	difference	Others (*2)	balance
<associates></associates>						
KEPCO Lebanon S.A.R.L.	-	49.0%	-	-	-	-
Gangwon Wind Power Co., Ltd.	75,961	15.0%	11,394	49	-	11,443
Hyundai Green Power Co., Ltd.	457,842	29.0%	132,774	-	-	132,774
PT Cirebon Electric Power	428,405	27.5%	117,812	-	-	117,812
PT Wampu Electric Power	60,577	46.0%	27,865	-	-	27,865
Korea Offshore Wind Power Co., Ltd.	167,368	12.5%	20,921	-	-	20,921
Gunsan Bio Energy Co., Ltd.	(18,982)	18.9%	(3,588)	-	3,588	-
KEPCO Solar Co., Ltd.			17,262			17,262
(previously, Solar School Plant Co., Ltd.)	207,345	8.3%		-	-	
KEPCO Energy Solution Co., Ltd.	309,661	8.3%	25,805	-	-	25,805
YaksuESS Co., Ltd.	1,562	29.0%	453	1	-	454
Jeju Hallim Offshore Wind Power Co., Ltd.	10,938	26.1%	2,855	-	-	2,855
YeongGwang Yaksu Wind Electric.Co., Ltd.	124	9.6%	12	300	-	312
Green Energy Power Co., Ltd.	(2,599)	29.0%	(754)	779	-	25
Namjung Floating Solar Light Operation Co., Ltd.	552	15.0%	82	20	-	102
Kwangbaek Solar Power Investment Co., Ltd.	9,925	44.0%	4,367	316	-	4,683
Muan Solar Power Plant Co., Ltd.	3,010	20.0%	602	494	-	1,096
Goesan Solar Park	5,808	29.0%	1,684	-	-	1,684
Bitgoeul Eco Energy	100	29.0%	29	-	-	29
Jeju Gimnyeong Wind Power	5,261	30.0%	1,578	-	-	1,578
<joint ventures=""></joint>						
Stavro Holding II A.B.	46,385	20.0%	9,277	-	-	9,277
Energy Co.	2,862	29.0%	830	829	-	1,659
CAES, LLC	40,840	36.0%	14,703	2,923	-	17,626

## 18. Trade and other payables

# Trade and other payables as of December 31, 2020 and 2019 are as follows:

In millions of won		December	31, 2020	December 31, 2019		
	_	Current	Non-current	Current	Non-current	
Trade payables	₩	101,849	-	154,639	-	
Non-trade payables		209,494	-	228,317	579	
Accrued expenses		62,496	-	73,901	-	
Other deposits received		17,748	-	15,076	-	
Dividend payables		-	-	1,002	-	
Lease liabilities (*)		100,227	803,264	98,220	739,171	
	₩	491,814	803,264	571,155	739,750	

(\*) Refer to Note 19 for the details of lease liabilities.

## 19. Leases

# (1) Details of right-of-use assets as of December 31, 2020 and 2019 are as follows:

In millions of won			Decemb	oer 31, 2020	
	_	Acquisition	Accumulated depreciation	Accumulated impairment	Book value
Ships	₩	1,042,242	(171,647)	-	870,595
Machinery		162,586	(59,486)	(1,070)	102,030
Other right-of-use assets		39,945	(10,405)	-	29,540
	₩ =	1,244,773	(241,538)	(1,070)	1,002,165
In millions of won			December	r 31, 2019	

in millions of won			December 31, 2019	
	_	Acquisition	Accumulated depreciation	Book value
Ships	₩	858,453	(83,276)	775,177
Machinery		161,562	(52,024)	109,538
Other right-of-use assets		22,645	(4,611)	18,034
	₩	1,042,660	(139,911)	902,749

## (2) Changes in right-of-use assets for the years ended December 31, 2020 and 2019 are as follows:

In millions of won				Decemb	er 31, 2020		
		Beginning balance	_Acquisition_	Depreciation	Impairement loss	_Others	Ending balance
Ships	₩	775,177	183,789	(88,371)	-	-	870,595
Machinery		109,538	-	(7,462)	(1,070)	1,024	102,030
Other right-of-use assets		18,034	19,197	(7,682)	-	(9)	29,540
	₩	902,749	202,986	(103,515)	(1,070)	1,015	1,002,165

### 19. Leases, continued

#### (2) in right-of-use assets for the years ended December 31, 2020 and 2019 are as follows, continued:

In millions of won		December 31, 2019								
		Beginning balance	Changes in accounting policies	Acquisition	Depreciation	Others	Ending balance			
Machinery	₩	-	115,433	-	(7,526)	1,631	109,538			
Vehicles		-	120	98	(47)	-	171			
Ships		-	858,453	-	(83,276)	-	775,177			
Other right-of-use assets		-	22,427	-	(4,564)	-	17,863			
	₩	-	996,433	98	(95,413)	1,631	902,749			

# (3) Details of expenses recognized in profit or loss relating to leases for the years ended December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020	December 31, 2019
Depreciation of right-of use assets	₩	103,515	95,413
Interest expenses of lease liabilities		17,665	17,695
Short-term leases		386	360
Lease for low value assets		38	17
	₩	121,604	113,485

## (4) Details of lease liabilities as of December 31, 2020 and 2019 are as follows:

In millions of won		December	31, 2020	December 31, 2019			
	-	Minimum lease payments	Present value of minimum lease payments	Minimum lease payments	Present value of minimum lease payments		
Less than 1 year	₩	101,472	100,227	99,615	98,220		
$1 \sim 5$ years		351,498	332,277	362,480	341,203		
More than 5 years		570,869	470,987	478,485	397,968		
	₩	1,023,839	903,491	940,580	837,391		

#### (5) Changes in lease liabilities for the years ended December 31, 2020 and 2019 are as follows:

In millions of won				2	020			
		Beginnin balance		al	ments	Interest expense	Others	Ending balance
Lease liabilities	₩	837,3	91 20	02,986	(111,026)	17,666	(43,526)	903,491
In millions of won					2019			
		eginning balance	Changes in accounting policies	Acquisition /capital expenditure	Payments	Interest expense	Others	Ending balance
Lease liabilities	₩	10,246	881,000	98	(98,736)	17,695	27,088	837,391

#### 20. Financial liabilities

## (1) Financial liabilities as of December 31, 2020 and 2019 are as follows:

In millions of won		December .	31, 2020	December 31, 2019			
		Current	Non-current	Current	Non-current		
Borrowings	₩	211,756	177,127	363,203	191,872		
Bonds		565,917	6,796,223	399,853	6,398,185		
Derivative liabilities (*)		37,186	20,273	114	37,683		
	₩ _	814,859	6,993,623	763,170	6,627,740		

(\*) Details of derivative liabilities are described in Note 11.

# (2) Borrowings and bonds issued as of December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020	December 31, 2019
Current liabilities	_	,	,
Short-term borrowings	₩	200,000	350,300
Current portion of long-term borrowings		12,536	12,903
Less: current portion of discount on long-term borrowings		(780)	-
Current portion of bonds issued		566,400	400,000
Less: current portion of discount on bonds		(483)	(147)
	_	777,673	763,056
Non-current liabilities	_		
Long-term borrowings		183,025	201,381
Less: discount on long-term borrowings		(5,898)	(9,509)
Bonds issued		6,809,676	6,412,314
Less: discount on bonds		(13,453)	(14,129)
	_	6,973,350	6,590,057
	₩	7,751,023	7,353,113

## (3) Short-term borrowings as of December 31, 2020 and 2019 are as follows:

## In millions of won

Turne	Creditor	Interact .	$a_{a} = (0/)$	Motunity		December 31,	December 31,
Туре	Creditor	Interest 1	ate (70)	Maturity	-	2020	2019
Short-term	DB Financial Investment Co., Ltd.	Fixed rate	0.81	2021-01-05	₩	20,000	-
borrowings	BNK Investment & Securities Co., Ltd.	Fixed rate	0.81	2021-01-05		50,000	-
	SK Securities Co., Ltd.	Fixed rate	0.80	2021-01-13		10,000	-
	BNK Investment & Securities Co., Ltd.	Fixed rate	0.80	2021-01-13		40,000	-
	Woori Investment Bank	Fixed rate	0.80	2021-01-13		30,000	-
	KB Securities Co., Ltd.	Fixed rate	1.17	2021-01-22		40,000	-
	KTB Investment & Securities Co., Ltd.	Fixed rate	1.17	2021-01-22		10,000	-
	DB Financial Investment Co., Ltd.	Fixed rate	2.00	2020-01-13		-	20,000
	BNK Investment & Securities Co., Ltd.	Fixed rate	2.00	2020-01-13		-	120,000
	DB Financial Investment Co., Ltd.	Fixed rate	2.10	2020-01-28		-	10,000
	Bookook Securities Co., Ltd.	Fixed rate	2.10	2020-01-28		-	30,000
	SK Securities Co., Ltd.	Fixed rate	2.20	2020-02-05		-	50,000
	Hi Investment & Securities Co., Ltd.	Fixed rate	2.20	2020-02-05		-	30,000
	Woori Investment Bank	Fixed rate	2.20	2020-02-05		-	20,000
Bank overdraft	Nonghyup Bank	Fixed rate	2.07	2021-04-24		-	70,300
					₩	200,000	350,300

# 20. Financial liabilities, continued

# (4) Long-term borrowings as of December 31, 2020 and 2019 are as follows:

In millions of won and thousands of foreign currencies

		D	ecember 31, 2020	)										
	Гуре	Interest	rate (%)	Maturity		Foreign currency	Local currency							
Korea	Resources	Floating rate	3yr KTB (*1)	2023-03-15		- ₩	674							
Resources	development loan		rate -2.25				•							
Corporation	Resources development loan	Floating rate	3yr KTB (*1) rate –2.25	2023-06-15		-	28							
	Resources development loan	Floating rate	3yr KTB (*1) rate –2.25	2024-06-15		-	41							
	Resources development loan	Floating rate	3yr KTB (*1) rate –2.25	2024-09-15		-	108							
Industrial Bank of Korea	PF Refinancing loan	Floating rate	CD +1.25	2030-10-30		-	9,543							
Hyundai Life Insurance Co., Ltd.	PF Refinancing loan	Fixed rate	4.10	2030-10-30		-	12,724							
Dongbu Insurance Co., Ltd.	PF Refinancing loan	Fixed rate	4.10	2030-10-30		-	13,784							
ABFT Infra Development Co., Ltd.	Long-term borrowings of financial investors of Commerce and Industry Energy Co., Ltd.	Fixed rate	4.50	2022-04-29		-	22,347							
PT BS Energy	Shareholder's loan	Fixed rate	8.00	2023-03-28	USD	2,673	2,908							
POSCO E&C	Shareholder's loan	Fixed rate	8.00	2023-03-28	USD	6,393	6,955							
The Export- Import Bank of Korea	Shareholder's loan	Fixed rate	8.00	2023-03-28	USD	4,995	5,434							
The Export- Import Bank of Korea	Facility	Floating rate	LIBOR(6M) +2.50	2032-02-29	USD	51,843	56,405							
BNP Paribas, Seoul Branch	Facility	Floating rate	LIBOR(6M) +1.70	2032-02-29	USD	25,921	28,203							
ING Bank N.V.,Singapore Branch	Facility	Floating rate	LIBOR(6M) +1.70	2032-02-29	USD	25,921	28,203							
BNP Paribas, Singapore Branch	Facility	Floating rate	LIBOR(6M) +2.50	2032-02-29	USD	3,770	4,102							
ING Bank N.V.,Singapore Branch	Facility	Floating rate	LIBOR(6M) +2.50	2032-02-29	USD	3,770	4,102							
						-	195,561							
Less: discount on	long-term borrowings						(6,678)							
Less: current porti	on of long-term borrow	ings					(11,756)							
						W	177,127							

(\*1) Korea Treasury Bond

#### 20. Financial liabilities, continued

### (4) Long-term borrowings as of December 31, 2020 and 2019 are as follows, continued:

In millions of won and thousands of foreign currencies

		D	ecember 31, 2019	,			
-	Гуре	Interest	t rate (%)	Maturity		Foreign currency	Local currency
Korea	Resources	Floating rate	3yr KTB (*1)	2023-03-15		- <del>\</del>	973
Resources	development loan		rate -2.25				
Corporation	Resources development loan	Floating rate	3yr KTB (*1) rate –2.25	2023-06-15		-	39
	Resources development loan	Floating rate	3yr KTB (*1) rate –2.25	2024-06-15		-	53
	Resources development loan	Floating rate	3yr KTB (*1) rate –2.25	2024-09-15		-	137
Industrial Bank of Korea	PF Refinancing loan	Floating rate	CD +1.25	2030-10-30		-	10,497
Hyundai Life Insurance Co., Ltd.	PF Refinancing loan	Fixed rate	4.10	2030-10-30		-	13,996
Dongbu Insurance Co., Ltd.	PF Refinancing loan	Fixed rate	4.10	2030-10-30		-	15,163
ABFT Infra Development Co., Ltd.	Long-term borrowings of financial investors of Commerce and Industry Energy Co., Ltd.	Fixed rate	4.50	2022-04-29		-	22,347
POSCO	Shareholder's loan	Fixed rate	8.00	2023-03-28	USD	2,202	2,200
PT BS Energy	Shareholder's loan	Fixed rate	8.00	2023-03-28	USD	5,265	6,095
The Export- Import Bank of Korea	Shareholder's loan	Fixed rate	8.00	2023-03-28	USD	4,115	4,764
The Export- Import Bank of Korea	Facility	Floating rate	LIBOR(6M) +2.50	2032-02-29	USD	55,526	64,288
BNP Paribas, Seoul Branch	Facility	Floating rate	LIBOR(6M) +1.70	2032-02-29	USD	27,763	32,144
ING Bank N.V.,Singapore Branch	Facility	Floating rate	LIBOR(6M) +1.70	2032-02-29	USD	27,763	32,144
BNP Paribas, Singapore Branch	Facility	Floating rate	LIBOR(6M) +2.50	2032-02-29	USD	4,079	4,722
ING Bank N.V.,Singapore Branch	Facility	Floating rate	LIBOR(6M) +2.50	2032-02-29	USD	4,079	4,722
							214,284
Less: discount on	long-term borrowings						(9,509)
Less: current porti	on of long-term borrow	ings					(12,903)
1	-	-				W	191,872

(\*1) Korea Treasury Bond

### 20. Financial liabilities, continued

### (5) Local bonds as of December 31, 2020 and 2019 are as follows:

In millions of won

Туре	Issue date	Maturity	Interest ra	te (%)		December 31, 2020	December 31, 2019
Debenture	2013-02-22	2020-02-22	Fixed rate	-	₩	-	100,000
	2015-03-23	2020-03-23	Fixed rate	-		-	70,000
	2013-04-05	2020-04-05	Fixed rate	-		-	100,000
	2015-04-29	2020-04-29	Fixed rate	-		-	60,000
	2015-06-16	2020-06-16	Fixed rate	-		-	70,000
	2014-04-18	2021-04-18	Fixed rate	3.49		110,000	110,000
	2014-07-09	2021-07-09	Fixed rate	3.08		80,000	80,000
	2014-11-12	2021-11-12	Fixed rate	2.58		50,000	50,000
	2015-04-29	2022-04-29	Fixed rate	2.24		80,000	80,000
	2017-05-25	2022-05-25	Fixed rate	2.06		100,000	100,000
	2012-06-28	2022-06-28	Fixed rate	3.77		200,000	200,000
	2015-07-30	2022-07-30	Fixed rate	2.32		70,000	70,000
	2018-02-20	2023-02-20	Fixed rate	2.72		60,000	60,000
	2013-02-22	2023-02-22	Fixed rate	3.13		100,000	100,000
	2018-03-27	2023-03-27	Fixed rate	2.66		50,000	50,000
	2013-04-05	2023-04-05	Fixed rate	2.91		100,000	100,000
	2020-08-25	2023-08-25	Fixed rate	1.01		160,000	-
	2020-10-30	2023-10-30	Fixed rate	1.20		50,000	-
	2014-04-18	2024-04-18	Fixed rate	3.67		190,000	190,000
	2014-07-09	2024-07-09	Fixed rate	3.26		180,000	180,000
	2019-12-04	2024-12-04	Fixed rate	1.76		70,000	70,000
	2015-03-23	2025-03-23	Fixed rate	2.26		130,000	130,000
	2015-04-29	2025-04-29	Fixed rate	2.46		160,000	160,000
	2015-06-16	2025-06-16	Fixed rate	2.73		100,000	100,000
	2020-10-30	2025-10-30	Fixed rate	1.45		60,000	-
	2016-03-11	2026-03-11	Fixed rate	1.94		60,000	60,000
	2016-07-06	2026-07-06	Fixed rate	1.60		160,000	160,000
	2017-03-29	2027-03-29	Fixed rate	2.40		150,000	150,000
	2017-05-25	2027-05-25	Fixed rate	2.49		100,000	100,000
	2017-08-03	2027-08-03	Fixed rate	2.35		20,000	20,000
	2017-11-10	2027-11-10	Fixed rate	2.74		90,000	90,000
	2018-02-20	2028-02-20	Fixed rate	2.92		130,000	130,000
	2018-03-27	2028-03-27	Fixed rate	2.79		50,000	50,000
	2018-06-15	2028-06-15	Fixed rate	2.79		70,000	70,000
	2019-03-26	2029-03-26	Fixed rate	2.03		100,000	100,000
	2019-06-18	2029-06-18	Fixed rate	1.70		70,000	70,000
	2019-10-30	2029-10-30	Fixed rate	1.95		50,000	50,000
	2019-11-13	2029-11-13	Fixed rate	2.00		140,000	140,000
	2019-12-04	2029-12-04	Fixed rate	1.92		80,000	80,000
	2020-07-21	2030-07-21	Fixed rate	1.51		90,000	-
	2015-07-30	2030-07-30	Fixed rate	2.67		130,000	130,000

### 20. Financial liabilities, continued

### (5) Local bonds as of December 31, 2020 and 2019 are as follows, continued:

In millions of won

Туре	Issue date	Maturity	Interest ra	t <u>e (%)</u>	December 31, 2020	December 31, 2019
Debenture	2020-08-25	2030-08-25	Fixed rate	1.57	₩ 70,000	-
	2016-03-11	2031-03-11	Fixed rate	2.01	130,000	130,000
	2016-07-06	2031-07-06	Fixed rate	1.62	90,000	90,000
	2016-11-09	2031-11-09	Fixed rate	1.99	100,000	100,000
	2017-03-29	2032-03-29	Fixed rate	2.43	50,000	50,000
	2017-05-25	2032-05-25	Fixed rate	2.60	100,000	100,000
	2017-08-03	2032-08-03	Fixed rate	2.44	70,000	70,000
	2018-06-15	2033-06-15	Fixed rate	2.80	110,000	110,000
	2018-07-09	2033-07-09	Fixed rate	2.66	20,000	20,000
	2017-08-03	2037-08-03	Fixed rate	2.47	130,000	130,000
	2017-11-10	2037-11-10	Fixed rate	2.69	90,000	90,000
	2018-07-09	2038-07-09	Fixed rate	2.70	180,000	180,000
	2018-09-10	2038-09-10	Fixed rate	2.30	90,000	90,000
	2018-10-31	2038-10-31	Fixed rate	2.24	90,000	90,000
	2019-02-08	2039-02-08	Fixed rate	2.19	160,000	160,000
	2019-05-21	2039-05-21	Fixed rate	1.96	130,000	130,000
	2019-06-18	2039-06-18	Fixed rate	1.75	110,000	110,000
	2019-10-30	2039-10-30	Fixed rate	1.92	80,000	80,000
	2020-02-25	2040-02-25	Fixed rate	1.53	50,000	-
	2020-03-18	2040-03-18	Fixed rate	1.59	80,000	-
	2020-06-18	2040-06-18	Fixed rate	1.66	60,000	-
	2020-07-21	2040-07-21	Fixed rate	1.64	100,000	-
	2020-08-25	2040-08-25	Fixed rate	1.66	40,000	-
	2018-09-10	2048-09-10	Fixed rate	2.26	110,000	110,000
	2018-10-31	2048-10-31	Fixed rate	2.17	30,000	30,000
	2019-02-08	2049-02-08	Fixed rate	2.17	120,000	120,000
	2019-03-26	2049-03-26	Fixed rate	1.99	120,000	120,000
	2019-05-21	2049-05-21	Fixed rate	1.95	120,000	120,000
	2019-06-18	2049-06-18	Fixed rate	1.72	70,000	70,000
	2019-11-13	2049-11-13	Fixed rate	1.86	80,000	80,000
	2020-02-25	2050-02-25	Fixed rate	1.53	120,000	-
	2020-06-18	2050-06-18	Fixed rate	1.69	120,000	-
					6,610,000	6,010,000
Less: discount o	n local bonds				(12,251)	(10,957)
Less: current po	rtion of local bonds				(240,000)	(400,000)
Add: current por	rtion of discount on	local bonds			51	147
				2	6,357,800	5,599,190

#### 20. Financial liabilities, continued

#### (6) Foreign bonds as of December 31, 2020 and 2019 are as follows:

In millions of won and thousands of foreign currencies

					December 31, 2020				Decembe	er 3	1, 2019
Issue date	Maturity	Interest rat	<u>te (%)</u>		Foreign currency		Local currency		Foreign currency	_	Local currency
2016-01-21	2021-07-21	Fixed rate	2.50	USD	300,000	₩	326,400	USD	300,000	₩	347,340
2017-10-30	2037-10-30	Fixed rate	1.70	EUR	40,000		53,530	EUR	40,000		51,897
2017-11-16	2037-11-16	Fixed rate	2.36	SEK	450,000		59,746	SEK	450,000		55,737
2019-01-22	2022-01-22	Fixed rate	3.38	USD	300,000		326,400	SEK	300,000		347,340
						-	766,076			-	802,314
Less: discount o	n foreign bonds						(1,685)				(3,319)
Less: current po	rtion of foreign b	onds					(326,400)				-
Add: current por	rtion of discount of	on foreign bond	ls				432				-
						₩_	438,423		2	₩_	798,995

### (7) Repayment schedules of borrowings and bonds as of December 31, 2020 are as follows:

In millions of won		Borrowings	Bonds
Less than 1 year	W	212,536	566,400
1-5 years		92,159	2,186,400
More than 5 years		90,866	4,623,276
	₩	395,561	7,376,076

#### (8) Changes in borrowings and bonds for the year ended December 31, 2020 are as follows:

In	millions	of won
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In millions of won	_					
	-	Beginning balance	Cash flow	Changes in exchange rates	Others	Ending balance
Borrowings and bonds	₩	7,353,113	429,129	(43,794)	12,575	7,751,023

#### 21. Non-financial liabilities

#### Non-financial liabilities as of December 31, 2020 and 2019 are as follows:

In millions of won		December	r 31, 2020	December 31, 2019		
	_	Current	Non-current	Current	Non-current	
Advance received	₩	-	-	14	-	
Unearned revenue		2,037	2,414	166	-	
Withholdings		6,814	-	6,622	-	
Others (*)		7,808	1,012	2,456	3,252	
	₩	16,659	3,426	9,258	3,252	

(\*) Others consist of the government grant, which may need to be repaid to government under certain conditions.

#### 22. Provisions

#### (1) Provisions as of December 31, 2020 and 2019 are as follows:

In millions of won	December 3	31, 2020	December 31, 2019		
	Current	Non-current	Current	Non-current	
Provisions for wage litigation (*1) $\Psi$	3,190	-	3,073	-	
Provisions for employee benefits	43,636	-	42,031	-	
Provisions for greenhouse gas emission(*2)	97,306	-	130,548	-	
Provisions for financial guarantee contract	5,537	-	-	6,216	
Provisions for RPS	-	-	2,889	-	
w.	149,669	-	178,541	6,216	

(\*1) As of December 31, 2020, the Group recognized a provision for the litigation of ordinary wage as an outflow of resources embodying economic benefits is probable and reliably estimable.

#### (\*2) Provisions for greenhouse gas emission

The Group's greenhouse gas emission right which are allocated free of charge from the government according to the Act on Allocation and Trading of Greenhouse Gas Emission as of December 31, 2020 are as follows:

In thousands of tons	Implementation year						
	2018	2019	2020				
Quantity of emission right allocated free of charge from the government	35,996	31,200	25,654				

The Group has not provided emission right allocated free of charge from the government as collateral.

In accordance with the Act on Allocation and Trading of Greenhouse Gas Emission, the Group has present obligation of submitting emission rights to the government when it is probable that there will be outflows of resources in performing the obligation. Therefore, a provision for emission liability was recognized. The provision is derecognized when the emission right is submitted to government.

#### 22. Provisions, Continued

#### (2) Changes in provisions for the years ended December 31, 2020 and 2019 are as follows:

In millions of won	December 31, 2020									
	Beginning balance	Accrual (reversal) of provision	Payments	Ending balance						
Provisions for wage litigation	¥ 3,073	117	-	3,190						
Provisions for employee benefits	42,031	36,858	(35,253)	43,636						
Provisions of greenhouse gas emission	130,548	65,389	(98,631)	97,306						
Provisions for financial guarantee contract	6,216	(679)	-	5,537						
Provisions for RPS	2,889	(2,889)	-	-						
2	184,757	98,796	(133,884)	149,669						

In millions of won		December 31, 2019							
		Beginning balance	Accrual (reversal) of provision	Payments	Ending balance				
Provisions for wage litigation	₩	942	2,131	-	3,073				
Provisions for employee benefits		34,365	55,174	(47,508)	42,031				
Provisions of greenhouse gas emission		12,527	130,548	(12,527)	130,548				
Provisions for financial guarantee contract		83	6,133	-	6,216				
Provisions for RPS		15,115	(12,226)	-	2,889				
	₩	63,032	181,760	(60,035)	184,757				

#### 23. Employment benefits obligations

#### (1) Defined contribution plan

The Group operates a defined contribution plan which is subject to the employees' choice. A defined contribution fund is separately managed by the plan's administrator. When employees terminate their employment before the benefits have vested, the Group's obligation to make contributions to the plan decreases on a pro rata basis. The Group contributed W5,544 million and W5,252 million for the years ended December 31, 2020 and 2019, respectively.

Expenses recognized by defined contribution plan for the years ended December 31, 2020 and 2019 are as follows:

In millions of won	_	December 31, 2020	December 31, 2019
Cost of sales	<del>W</del>	4,101	3,335
Selling and administrative expenses		856	1,073
Others(construction-in-progress and others)		587	844
		5,544	5,252

#### 23. Employment benefits obligations, Continued

#### (2) Defined benefit plan

(i) Principal assumptions on actuarial valuation as of December 31, 2020 and 2019 are as follows:

	December 31, 2020	December 31, 2019
Discount rate	$1.99\% \sim 2.77\%$	1.98%
Expected salary increasing rate	$2.84\% \sim 6.98\%$	$3.26\% \sim 6.60\%$
Weighted average maturity (years)	$10.0 \sim 11.9$	10.0

(ii) Details of expense relating to defined benefit plans for the years ended December 31, 2020 and 2019 are as follows:

In millions of won	-	December 31, 2020	December 31, 2019
Current service cost	₩	23,411	19,699
Past service cost		-	17,310
Interest cost		4,024	3,678
Expected return on plan assets		(817)	(752)
Gain on change from defined benefit plan to defined contribution plan		-	(21)
-	₩	26,618	39,914

The expense is recognized as retirement benefits in the accompanying consolidated statements of comprehensive income (loss). For the year ended December 31, 2020, W21,117 million, W2,283 million and W3,218 million were recognized in cost of goods sold, selling and administrative expenses and construction in progress, respectively. For the year ended December 31, 2019, W30,975 million, W3,386 million and W5,553 million were recognized in cost of goods sold, selling and administrative expenses and construction in progress, respectively.

(iii) Employee benefit liabilities as of December 31, 2020 and 2019 are as follows:

In millions of won	-	December 31, 2020	December 31, 2019
Present value of defined benefit obligations	₩	222,566	198,695
Fair value of plan assets		(46,584)	(37,869)
Net defined benefits liabilities from defined benefit plans	₩	175,982	160,826

(iv) Changes in the present value of defined benefit obligations for the years ended December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020	December 31, 2019
Beginning balance	₩	198,695	159,141
Current service cost		23,411	19,699
Past service cost		-	17,310
Interest cost		4,024	3,678
Actual payments		(1,183)	(2,570)
Remeasurement component		5,770	5,581
Payment due to change of plan to defined contribution plan		(8,125)	(4,165)
Loss on change from defined benefit plan to defined contribution plan		-	(21)
Others		(26)	42
Ending balance	₩	222,566	198,695

#### 23. Employment benefits obligations, Continued

### (2) Defined benefit plan, continued

(v) Changes in the fair value of plan assets for the years ended December 31, 2020 and 2019 are as follows:

In millions of won	December 31, 2020	December 31, 2019
Beginning balance	₩ 37,869	33,002
Expected return on plan assets	817	752
Contributions by the employers	8,217	4,227
Actual payments	(264)	-
Remeasurement component	(55)	(112)
Ending balance	¥ 46,584	37,869

(vi) Details of the fair value of plan assets as of December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020	December 31, 2019
Guaranteed insurance for interest rates Insurance for floating interest rates	₩	46,583	37,868
	₩	46,584	37,869

(vii) Remeasurements gains or losses recognized in other comprehensive income/loss for the years ended December 31, 2020 and 2019 are as follows:

In millions of won	-	December 31, 2020	December 31, 2019
Changes in demographic assumptions	W	-	(858)
Remeasurements gains or losses by financial assumptions		274	1,609
Experience adjustments		(6,044)	(6,332)
Income from plan assets		(55)	(112)
	₩_	(5,825)	(5,693)

### (3) Other long-term employee benefit liabilities as of December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020	December 31, 2019
Other payables of long-term employee vacation obligations	₩	401	424

#### 24. Issued capital

#### (1) Details of issued capital as of December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020	December 31, 2019
Share capital	¥	142,907	142,907
Share premium		1,128,023	1,128,023
τ	₩	1,270,930	1,270,930

### (2) Details of shares issued and outstanding as of December 31, 2020 and 2019 are as follows:

In shares	December 31, 2020	December 31, 2019
Number of shares authorized	100,000,000	100,000,000
Number of shares issued	28,581,320	28,581,320
Par value per share (in won)	5,000	5,000
Common shares (in millions of won)	142,907	142,907

#### (3) Share Premium

As of January 1, 2011, the Group spun off its pumped storage power plant which was subsequently merged into a related party, resulting in an decrease in shares issued (capital) of \$15,610 million and share premium (additional paid-in-capital) of \$119,697 million. In addition, a loss on reduction of capital in the amount of \$279,193 million was incurred.

### 25. Retained earnings and dividends paid

#### (1) Details of voluntary reserves as of December 31, 2020 and 2019 are as follows:

In millions of won	-	December 31, 2020	December 31, 2019
Reserve for business stabilization (*)	₩	120	120
Reserve for research and human development		70,184	70,184
Reserve for investment on social overhead capital		1,835,317	1,863,767
	₩	1,905,621	1,934,071

(\*) Prior to 2002, the Group appropriated certain tax-deductible benefits as reserve for business stabilization, for offsetting future deficit in accordance with the relevant tax laws. Due to the amendment of such tax laws on December 11, 2002, the reserve is no longer required. However, the Group continues to maintain such reserve on a voluntary basis.

### 25. Retained earnings and dividends paid, Continued

#### (2) Changes in retained earnings for the years ended December 31, 2020 and 2019 are as follows:

In millions of won	-	December 31, 2020	December 31, 2019
Beginning balance	₩	2,767,970	2,779,676
Loss for the year attributable to owners of the parent		(9,829)	(7,349)
Remeasurements of defined benefit liability, net of tax		(4,537)	(4,355)
Share of other comprehensive loss of associates and joint ventures		-	(2)
Ending balance	₩_	2,753,604	2,767,970

### (3) No dividends were paid for the years ended December 31, 2020 and 2019

## (4) Changes in remeasurement components related to defined benefit liability for the years ended December 31, 2020 and 2019 are as follows :

In millions of won	-	December 31, 2020	December 31, 2019
Beginning balance	₩	(18,860)	(14,506)
Changes		(5,829)	(5,629)
Income tax effect		1,291	1,275
Ending balance	₩	(23,398)	(18,860)

#### 26. Other components of equity

#### (1) Other components of equity of the parent as of December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020	December 31, 2019
Accumulated other comprehensive income	₩	41,202	66,445
Other equity		(299,671)	(299,671)
	₩	(258,469)	(233,226)

### (2) Changes in accumulated other comprehensive income (loss) for the years ended December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020				
		Reserve for financial assets at FVOCI	Reserve for gain (loss) on valuation of derivatives	Share of other comprehensive income (loss) of associates and joint ventures	Reserve for gain (loss) on translation of overseas operations	
Beginning balance	₩	77,590	(4,204)	(3,224)	(3,717)	
Changes in financial assets at FVOCI		(16,866)	-	-	-	
Net change in the unrealized fair value of derivatives using cash flow hedge accounting		-	10,021	-	-	
Share of other comprehensive income of associates and joint ventures		-	-	(859)	-	
Foreign currency translation of foreign operations		-	-	-	(19,196)	
Tax effect		4,082	(2,425)	-	-	
Ending balance	₩	64,806	3,392	(4,083)	(22,913)	

#### 26. Other components of equity, Continued

(2) Changes in accumulated other comprehensive income (loss) for the years ended December 31, 2020 and 2019 are as follows, continued:

In millions of won	December 31, 2019				
	-	Reserve for financial assets at FVOCI	Reserve for gain (loss) on valuation of derivatives	Share of other comprehensive income (loss) of associates and joint ventures	Reserve for gain (loss) on translation of overseas operations
Beginning balance	₩	97,941	(12,854)	(3,284)	(14,194)
Changes in financial assets at FVOCI Net change in the		(26,848)	-	-	-
unrealized fair value of derivatives using cash flow hedge accounting		-	11,411	-	-
Share of other comprehensive income of associates and joint ventures		-	-	60	-
Foreign currency translation of foreign operations		-	-	-	10,477
Tax effect		6,497	(2,761)	-	-
Ending balance	₩	77,590	(4,204)	(3,224)	(3,717)

### (3) Details of other equity as of December 31, 2020 and 2019 are as follows:

In millions of won	-	December 31, 2020	December 31, 2019
Loss on capital reduction	₩	(279,193)	(279,193)
Other capital adjustment		(20,478)	(20,478)
	W	(299,671)	(299,671)

### 27. Sales

### Details of sales for the years ended December 31, 2020 and 2019 are as follows:

	December 31, 2020	December 31, 2019
₩	4,303,303	4,488,504
	16,706	17,634
	4,320,009	4,506,138
	4,101	9,783
	33,574	31,493
	37,675	41,276
₩	4,357,684	4,547,414
		₩ 4,303,303 16,706 4,320,009 4,101 33,574 37,675 (1)

### 28. Selling and administrative expenses

Selling and administrative expenses for the years ended December 31, 2020 and 2019 are as follows:

In millions of won	_	December 31, 2020	December 31, 2019
Salaries	₩	32,528	31,257
Retirement benefits		3,139	4,454
Emplyoee welfare		3,842	3,267
Insurance expense		889	813
Depreciation		20,212	14,876
Amortization		6,569	5,282
Bad debt expense		277	-
Commission		25,456	18,309
Advertising expense		1,131	674
Training expense		168	299
Vehicle maintenance expense		115	172
Publishing expense		204	347
Business promotion expense		185	181
Rent expense		779	1,303
Telecommunication expense		472	407
Taxes and dues		5,448	6,247
Expendable supplies expense		231	271
Water, light and heating expense		647	610
Repairs and maintenance expense		13,403	12,661
Ordinary development expense		17,281	17,500
Travel expense		462	590
Clothing expense		293	116
Survey and analysis expense		40	32
Sales facilitation expense		16	14
Others		5,078	6,727
	₩	138,865	126,409

#### 29. Other non-operating income and other non-operating expenses

#### (1) Other non-operating income for the years ended December 31, 2020 and 2019 are as follows:

In millions of won	December 31, 2020		December 31, 2019
Compensation and other revenue	₩	1,495	5,216
Rental income		5,888	4,020
	₩	7,383	9,236

### (2) Other non-operating expenses for the years ended December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020	December 31, 2019
Other bad debt expenses	W	151	21,082
Donations		10,779	7,130
	W	10,930	28,212

#### 30. Other profit (loss)

#### Details of other profit (loss) for the years ended December 31, 2020 and 2019 are as follows:

In millions of won	December 31, 2020	December 31, 2019
Other profit		
Gain on disposal of property plant, and W equipment	327	1,665
Gain on foreign currency translations (*)	316	376
Gain on foreign currency transactions (*)	10,157	9,454
Others	13,852	10,675
Other loss		
Loss on disposal of property plant, and equipment	(1,546)	(5,625)
Loss on impairment of property plant, and equipment	(61,201)	(13,487)
Loss on impairment of intangible assets	(25)	(19)
Loss on foreign currency translation (*)	(53)	(90)
Loss on foreign currency transactions (*)	(5,485)	(7,271)
Others	(7,631)	(8,466)
$\overline{W}$	(51,289)	(12,788)

(\*) These represent gain (loss) on foreign currency translations and transactions arising from operating activities.

### 31. Finance income

#### Finance income for the years ended December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020	December 31, 2019
Interest income	₩	28,388	28,287
Dividend income		3,163	14,220
Gain on disposal of financial assets		-	1,283
Gain on valuation of derivative instruments		8,818	26,646
Gain on transaction of derivative instruments		12,793	14,543
Gain on foreign currency translation (*)		85,426	415
Gain on foreign currency transactions (*)		1,097	75
Others		680	-
	₩	140,365	85,469

(\*) These represent gains on foreign currency translations and transactions arising from financing activities.

#### 32. Finance costs

### (1) Finance costs for the years ended December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020	December 31, 2019
Interest expense	₩	160,287	148,201
Loss on valuation of derivative instruments		47,496	8,591
Loss on transaction of derivative instruments		9,863	9,799
Loss on foreign currency translation (*)		5,841	49,362
Loss on foreign currency transactions (*)		2,562	5,853
Financial guarantee expense		-	6,154
Others		11	-
	₩	226,060	227,960

(\*) These represent losses on foreign currency translations and transactions arising from financing activities.

### (2) Interest expense included in finance costs for the years ended December 31, 2020 and 2019 are as follows:

In millions of won	December 31, 2020	December 31, 2019
Trade and other payables	1,045	13
Short-term borrowings	1,930	8,550
Long-term borrowings	10,196	11,043
Bonds	172,997	161,676
Lease liabilities	17,666	17,695
	203,834	198,977
Less: capitalized borrowing costs	(43,547)	(50,776)
#	160,287	148,201

Capitalization rates for the years ended December 31, 2020 and 2019 are 2.52% and 2.55%, respectively.

#### 33. Income tax benefit

#### (1) Income tax benefits for the years ended December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020	December 31, 2019
Current income tax expenses (benefits)	₩		
Current income tax		2,312	11,412
Adjustment for the prior year		(1,466)	(18,996)
Income tax directly recognized in equity		2,947	5,010
		3,793	(2,574)
Deferred income tax expenses (benefit )			
Generation and realization of temporary differences		24,559	(68,848)
Changes in deferred tax on tax loss carryforwards		(26,231)	28,554
Adjustment of temporary differences for prior periods		(1,697)	2,717
Tax credit carryforwards		(3,509)	(25,119)
		(6,878)	(62,696)
Income tax benefit	₩	(3,085)	(65,270)

## (2) A reconciliation between income tax benefits and accounting income for the years ended December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020	December 31, 2019
Loss before income tax	₩	(5,832)	(71,029)
Income tax expenses (benefits) in accordance with applicable tax rate (tax rate: 24.2%)		(1,411)	(17,189)
Adjustments			
Effect of applying gradual tax rate		(462)	(462)
Effect of non-taxable revenue		(1,894)	(745)
Effect of non-deductible expenses		3,110	1,424
Effects of tax credits and deduction		(914)	(35,010)
Adjustment of temporary differences for prior periods		(1,697)	2,717
Investments in subsidiaries and associates		1,650	2,991
		(207)	(29,085)
Change to estimate for prior years		(1,466)	(18,996)
Income tax benefit	₩	(3,085)	(65,270)
Effective tax rate (*)		-	-

(\*) The effective tax rate for the years ended December 31, 2020 and 2019 is not calculated due to income tax benefit.

(3) Income tax recognized in other comprehensive income (loss) for the years ended December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020	December 31, 2019
Income tax recognized as accumulated other comprehensive income (loss):			
Loss (gain) on valuation of FVOCI-financial assets	₩	4,082	6,497
Loss (gain) on valuation of derivative instruments, net		(2,425)	(2,762)
Remeasurements of defined benefit liability, net		1,291	1,275
	₩	2,948	5,010

#### 33. Income tax benefit, Continued

## (4) Deferred income tax assets (liabilities) recognized in the consolidated statement of financial position for the years ended December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020					
-	-	Beginning balance	Amounts recognized in profit or loss	Amounts recognized in other comprehensive income	Ending balance		
Deferred income tax on temporary differences							
Long-term employee benefits	₩	43,016	529	1,291	44,836		
Cash flow hedge		6,028	9,188	(2,425)	12,791		
Property, plant and equipment		(401,101)	(22,724)	-	(423,825)		
Financial assets at FVOCI		(25,804)	-	4,082	(21,722)		
Provisions		44,711	(8,491)	-	36,220		
Foreign currency translation		(2,532)	(8,567)	-	(11,099)		
Special deduction		(11,562)	-	-	(11,562)		
Lease liabilites		200,418	15,980	-	216,398		
Others		(60,025)	(11,725)	-	(71,750)		
	-	(206,851)	(25,810)	2,948	(229,713)		
Unused tax loss		6,726	26,231	-	32,957		
Tax credit		25,119	3,509	-	28,628		
	₩ -	(175,006)	3,930	2,948	(168,128)		

In millions of won		December 31, 2019				
	-	Beginning balance	Amounts recognized in profit or loss	Amounts recognized in other comprehensive income	Ending balance	
Deferred income tax on temporary differences						
Long-term employee benefits	₩	32,227	9,514	1,275	43,016	
Cash flow hedge		10,145	(1,355)	(2,762)	6,028	
Property, plant and equipment		(242,627)	(158,474)	-	(401,101)	
Financial assets at FVOCI		(32,301)	-	6,497	(25,804)	
Provisions		15,253	29,458	-	44,711	
Foreign currency translation		(4,476)	1,944	-	(2,532)	
Special deduction		(11,562)	-	-	(11,562)	
Lease liabilites		-	200,418	-	200,418	
Others		(39,641)	(20,384)	-	(60,025)	
	-	(272,982)	61,121	5,010	(206,851)	
Unused tax loss		35,280	(28,554)	-	6,726	
Tax credit	_	-	25,119		25,119	
	₩ =	(237,702)	57,686	5,010	(175,006)	

(5) As of December 31, 2020. Temporary differences which were not recognized in the deferred tax assets amounted to 33, 59, 198 million.

#### 34. Expenses by nature

## (1) Expenses by nature for the year ended December 31, 2020 are as follows:

In millions of won			2020	
	-	Selling and administrative expenses	Cost of sales	Total
Raw materials used	₩	-	2,762,979	2,762,979
Salaries		32,528	221,699	254,227
Retirement benefits		3,139	25,218	28,357
Employee welfare		3,842	21,030	24,872
Insurance expense		889	6,484	7,373
Depreciation		20,212	761,931	782,143
Amortization		6,569	1,562	8,131
Bad debt expense		277	-	277
Commission		25,456	13,227	38,683
Advertising expense		1,131	736	1,867
Training expense		168	447	615
Vehicle maintenance expense		115	331	446
Publishing expense		204	153	357
Business promotion expense		185	166	351
Rent expense		779	15,809	16,588
Telecommunication expense		472	191	663
Transportation expense		-	78	78
Taxes and dues		5,448	28,596	34,044
Expendable supplies expense		231	3,690	3,921
Water, light and heating expense		647	1,081	1,728
Repairs and maintenance expense		13,403	163,206	176,609
Ordinary development expense		17,281	19,331	36,612
Travel expense		462	778	1,240
Clothing expense		293	74	367
Survey and analysis expense		40	410	450
Other income related to RPS		-	26,038	26,038
Other expense related to provisions of greenhouse gas emission		-	32,812	32,812
Sales promotion expense		16	-	16
Others	_	5,078	8,292	13,370
	₩	138,865	4,116,349	4,255,214

#### 34. Expenses by nature, Continued

### (2) Expenses by nature for the year ended December 31, 2019 are as follows:

In millions of won			2019	
	-	Selling and administrative expenses	Cost of sales	Total
Raw materials used	₩	-	3,071,224	3,071,224
Salaries		31,257	208,670	239,927
Retirement benefits		4,454	34,315	38,769
Employee welfare		3,267	18,849	22,116
Insurance expense		813	5,591	6,404
Depreciation		14,876	747,935	762,811
Amortization		5,282	917	6,199
Commission		18,309	8,532	26,841
Advertising expense		674	1,036	1,710
Training expense		299	599	898
Vehicle maintenance expense		172	331	503
Publishing expense		347	118	465
Business promotion expense		181	184	365
Rent expense		1,303	11,425	12,728
Telecommunication expense		407	153	560
Transportation expense		-	27	27
Taxes and dues		6,247	26,627	32,874
Expendable supplies expense		271	3,019	3,290
Water, light and heating expense		610	1,054	1,664
Repairs and maintenance expense		12,661	140,477	153,138
Ordinary development expense		17,500	20,984	38,484
Travel expense		590	1,085	1,675
Clothing expense		116	382	498
Survey and analysis expense		32	366	398
Other income related to RPS		-	(2,490)	(2,490)
Other expense related to provisions of greenhouse gas emission		-	13,339	13,339
Sales promotion expense		14	-	14
Others	_	6,727	15,752	22,479
	₩	126,409	4,330,501	4,456,910

#### 35. Loss per share

#### (1) Basic loss per share for the years ended December 31, 2020 and 2019 are as follows:

In won	_	December 31, 2020	December 31, 2019
Basic loss per share	₩	(344)	(257)

#### (2) Basic loss per share

Loss for the year attributable to owners of the parent and the weighted average number of common shares used in the calculation of basic loss per share for the years ended December 31, 2020 and 2019 are as follows:

In won, except for share data	_	December 31, 2020	December 31, 2019
Loss for the year attributable to owners of the parent	₩	(9,829,161,975)	(7,348,660,567)
Weighted average number of common shares		28,581,320 shares	28,581,320 shares

#### (3) Diluted loss per share

The Group has no potential dilutive common shares outstanding as of December 31, 2020 and 2019.

#### 36. Risk management

### (1) Capital risk management

The Group manages its capital to ensure that entities in the Group will be able to continue while maximizing the return to shareholders by minimizing capital procurement costs. Management regularly reviews the capital structure and maintains the optimal capital structure through short- and long-term capital borrowing and paid-in capital increase. The capital structure of the Group consists of net debt (offset by cash and cash equivalents) and equity. The Group's overall capital risk management strategy remains consistent with the prior year.

Details of the Group's capital management accounts as of December 31, 2020 and 2019 are as follows:

In millions of won	Dec	ember 31, 2020	December 31, 2019
Total borrowings and bonds	$\overline{\mathbf{W}}$	7,751,023	7,353,113
Cash and cash equivalents		254,070	125,211
Net borrowings and bonds		7,496,953	7,227,902
Total equity		3,799,108	3,837,082
Net debt to equity ratio		197.33%	188.37%

#### 36. Risk management, continued

#### (2) Financial risk management

The Group is exposed to a variety of financial risks associated with financial instruments, such as market risks (foreign exchange risks, interest rate risks, price risks) and credit risk. Our risk management aims to identify potential risks that affect our financial performance and to reduce, eliminate, and avoid them to an acceptable level. The Group uses derivative financial instruments to hedge certain risk exposures. The Group's overall financial risk management strategy remains consistent with the prior year.

#### (i) Credit risk

Credit risk is the risk of finance loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises primarily from the Group's debt securities and derivative instruments. In addition, credit risk exposure may exist within financial guarantees and unused line of credits. As these financial institutions the Group makes transactions with are reputable financial institutions, the credit risk from them are considered limited. The Group decides credit transaction limits based on evaluation of client's credit, through information obtained from the credit bureau and disclosed financial position at committing contracts.

#### a) Credit risk management

The Group uses publicly available information and its own internal data related to accounts receivables, to rate its major customers and to measure the credit risk that a counter party will default on a contractual obligation. As most of the Group's accounts receivables are due from government entities, the Group does not have significant credit risk exposure. Regarding its debt securities, the Group continuously reviews credit ratings issued by credit agencies, and the Group deposits its working capital (i.e. cash) at financial institutions with high credit ratings.

#### b) Accounting policies over impairment & allowance accounts

In accordance with the Group policies, individual material financial assets are assessed on a regular basis, trade receivables that are assessed not to be impaired individually are, in addition, assessed for impairment on a collective basis. The value of the acquired collateral (including the confirmation of feasibility) and estimated collectable amounts are included in this assessment.

Book values of the financial assets represent the maximum exposed amounts of the credit risk. Details of the Group's level of maximum exposure to credit risk as of December 31, 2020 and 2019 are as follows:

In millions of won	_	December 31, 2020	December 31, 2019
Cash and cash equivalents	₩	254,070	125,211
Short-term financial instruments		1	-
Financial assets at FVOCI		11,000	10,000
Loans and receivables		-	2
Trade and other receivables		48,568	48,128
Derivative financial assets held for trading		902,767	1,088,439
Derivative financial assets held for trading		6,531	3,493
Derivative assets (using hedge accounting)		3,252	15,695

There are no financial assets or non-financial assets acquired by exercising a lien or other credit enhancement as of December 31, 2020 and 2019.

#### (ii) Market risk

Market risk is the risk that the Group's fair values of the financial instruments or future cash flows are affected by the changes in the market. Market risk consists of interest rate risk, currency risk and other price risk.

#### 36. Risk management, continued

#### (2) Financial risk management, continued

(iii) Sensitivity analysis

- Significant assets and liabilities with uncertainties in underlying assumptions

#### ① Defined benefit obligations

The following is a sensitivity analysis of defined benefit obligations assuming a 1% increase and decrease in the actuarial valuation assumptions as of December 31, 2020 and 2019:

In millions of won		_	December	r 31, 2020	December 31, 2019	
Туре	Accounts		1% Increase	1% Decrease	1% Increase	1% Decrease
Future salary increases	Defined benefit obligation	₩	22,403	(19,620)	19,755	(17,395)
Discount rate	Defined benefit obligation		(20,608)	24,123	(18,278)	21,301

- Sensitivity analysis does not consider the variance of all cash flows expected to occur in the scheme, but it provides an approximation of sensitivity to the assumptions used.

#### ① Foreign currency risk

The Group is exposed to currency risk, because the transaction is denominated in foreign currencies. The details of monetary liabilities denominated in foreign currencies as of December 31, 2020 and 2019 are as follows:

In thousands of foreign currency	Ass	ets	Liabilities		
	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019	
USD	2,874	12,105	1,416,780	1,344,468	
EUR	-	-	39,913	39,907	
SEK	-	-	449,125	449,072	
SGD	230	-	262	-	
IDR	813,272	-	176,969	-	

#### Applied exchange rates are as follows:

In won	Avera	<b>Reporting date spot rate</b>		
	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019
USD	1180.05	1165.65	1088.00	1157.80
EUR	1345.99	1304.81	1338.24	1297.43
SEK	128.42	123.28	132.77	123.86
SGD	855.11	854.39	822.22	849.16
IDR	0.08	0.08	0.08	0.08

#### 36. Risk management, continued

#### (2) Financial risk management, continued

A sensitivity analysis on the Group's profit for the years assuming a 10% increase and decrease in currency exchange rates with all other variables held constant as of December 31, 2020 and 2019 is as follows:

In millions of won		Decembe	r 31, 2020	December 31, 2019	
	-	10% Increase	10% Decrease	10% Increase	10% Decrease
Increase (decrease) of profit (loss) before income tax	₩	(165,135)	165,135	(165,001)	165,001
Increase (decrease) of shareholder's equity (*)		(165,135)	165,135	(165,001)	165,001

#### (\*) The effect of income tax is not considered.

Sensitivity analysis above is conducted for monetary assets and liabilities denominated in foreign currencies other than functional currency, without consideration of hedge effect of related derivatives, as of December 31, 2020 and December 31, 2019.

To manage its foreign currency risk related to foreign currency denominated purchase transactions, the Group enters into cross-currency swap agreements. In addition, to manage its foreign currency risk related to foreign currency denominated in forecasted sale and purchase transactions, the Group has a policy to enter into currency forward agreements.

When a derivative is entered into for the purpose of being a hedge, the Group negotiates the terms of the derivatives to match the terms of the hedged exposure. For hedges of forecast transactions, the derivative covers the period of exposure from the point the cash flows of the transactions are forecasted up to the point of settlement of the resulting receivable or payable that is denominated in the foreign currency. These forecast transactions are usually highly probablle, and the balance of currency swap contracts depends on the expected foreign currency debt payments, the level of foreign currency bonds, and changes in exchange rates.

There is an economic relationship between the hedged item and the hedging instrument as the terms of cross-currency swap agreement is consistent with the terms of the forecast transaction. The hedging ratio is 1:1 as the risk of cross-currency swap agreement matches the hedged instrument. As of December 31, 2020, the hedging instrument hedges the risk of the hedged item.

#### Interest rate risk

The Group is exposed to interest rate risk due to its borrowing with floating interest rates. A 1% increase or decrease is used when reporting interest rate risk internally to key management personnel which represents management's assessment of the reasonably possible change in interest rates.

The Group's borrowings and bonds with floating interest rates as of December 31, 2020 and 2019 are as follows:

In millions of won	-	December 31, 2020	December 31, 2019
Long-term borrowings	₩	131,407	149,719

A sensitivity analysis on the Group's borrowings and bonds assuming a 1% increase and decrease in interest rates with all other variables held constant as of December 31, 2020 and 2019 is as follows:

In millions of won		December	· 31, 2020	December	r 31, 2019
	-	1% Increase	1% Decrease	1% Increase	1% Decrease
Increase (decrease) of profit before income tax	₩	(1,314)	1,314	(1,497)	1,497
Increase (decrease) of shareholder's equity (*)		(1,314)	1,314	(1,497)	1,497

(\*) The effect of income tax is not considered.

To manage its interest rate risks, the Group enters into certain interest swap agreements or maintains an appropriate mix of fixed and floating rate borrowings. Sensitivity analysis above is conducted without consideration of hedge effect of related derivatives.

#### 36. Risk management, continued

#### (2) Financial risk management, continued

#### ③ Liquidity risk

The Group has established an appropriate liquidity risk management framework for the management of the Group's short, medium and long-term funding and liquidity management requirements. The Group manages liquidity risk by maintaining adequate reserves, banking facilities and reserve borrowing facilities, by continuously monitoring forecast and actual cash flows, and by matching the maturity profiles of financial assets and liabilities.

In addition, the Group has established credit lines on its trade financing and bank overdrafts, and through payment guarantees it has received, it maintains an adequate credit (borrowing) line. In addition, in case of major construction investment, the Group has the ability to use reserve cash or make long-term borrowings so as to minimize liquidity risk.

The following table shows the details of maturities of non-derivative financial liabilities based on contractual undiscounted payments:

In millions of won	December 31, 2020								
Туре		Less than 1 year	1~2 years	2~5 years	More than 5 years	Total			
Borrowings and bonds (cash flows of principal)	₩	778,936	788,936	1,489,623	4,714,142	7,771,637			
Borrowings and bonds (cash flows of estimated interest)		179,174	153,713	366,908	1,025,702	1,725,497			
· · · · · · · · · · · · · · · · · · ·	_	958,110	942,649	1,856,531	5,739,844	9,497,134			
Trade and other payables		493,060	94,610	256,931	570,869	1,415,470			
Financial guarantee contract (*)		6,310	-	-	16,656	22,966			
	_	499,370	94,610	256,931	587,525	1,438,436			
	₩_	1,457,480	1,037,259	2,113,462	6,327,369	10,935,570			

(\*) The total amount of guarantees that the Group will incur in the event of a financial guarantee. As of December 31, 2020, the Group has recognized  $\pm 5,537$  million as guarantee provision for financial guarantee contracts.

In millions of won	December 31, 2019								
	-	Less than		,	More than				
Туре		1 year	1~2 years	2~5 years	5 years	Total			
Borrowings and bonds (cash flows of principal)	₩	763,203	600,243	1,593,403	4,420,049	7,376,898			
Borrowings and bonds (cash flows of estimated interest)		172,803	165,378	369,709	933,279	1,641,169			
(cash nows of estimated interest)	-	936,006	765,621	1,963,112	5,353,328	9,018,067			
Trade and other payables		572,550	95,828	267,232	478,485	1,414,095			
Financial guarantee contract (*)		-	-	6,715	-	6,715			
	_	572,550	95,828	273,947	478,485	1,420,810			
	₩_	1,508,556	861,449	2,237,059	5,831,813	10,438,877			

(\*) The total amount of guarantees that the Group will incur in the event of a financial guarantee. As of December 31, 2019, the Group has recognized W6,216 million as guarantee provision for financial guarantee contracts.

#### 36. Risk management, continued

#### (2) Financial risk management, continued

As liquidity is managed on a net asset and net liability basis, information about non-derivative financial assets is included in order to understand liquidity risk management.

The following table shows the details of maturities for non-derivative financial assets as of December 31, 2020 and 2019 in detail are as follows:

In millions of won		December 31, 2020							
Туре		Less than 1 year	1~5 years	More than 5 years	Others	Total			
Cash and cash equivalents	₩	254,070	-	-	-	254,070			
Financial assets at FVOCI		1	-	-	-	1			
Short-term financial instruments		11,000	-	-	-	11,000			
Financial assets at FVOCI		-	-	-	178,915	178,915			
Loans		3,473	5,662	8,607	42,198	59,940			
Trade and other receivables		638,188	274,164	-	-	912,352			
	₩	906,732	279,826	8,607	221,113	1,416,278			

In millions of won		December 31, 2019						
Туре		Less than 1 year	1~5 years	More than 5 years	Others	Total		
Cash and cash equivalents	₩	125,211	-	-	-	125,211		
Short-term financial instruments		10,000	-	-	-	10,000		
Financial assets at FVOCI		-	-	-	197,411	197,411		
Loans		2,608	5,378	6,942	33,201	48,129		
Trade and other receivables		797,523	203,715	-	87,200	1,088,438		
	w -	935,342	209,093	6,942	317,812	1,469,189		

Derivative liabilities classified by maturity periods from reporting date to maturity date of contract as of December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020									
Туре		Less than 1 year	1~2 years	2~5 years	More than 5 years	Total					
Gross settlement											
- Hedging	₩	36,935	4,143	-	12,681	53,759					
- Trading		251	-	-	-	251					
- Etc.		-	-	-	3,449	3,449					
	₩	37,186	4,143	-	16,130	57,459					

In millions of won		December 31, 2019							
Туре		Less than 1 year	1~2 years	2~5 years	More than 5 years	Total			
Gross settlement									
- Hedging	₩	-	20,947	-	10,629	31,576			
- Trading		114	-	6,107	-	6,221			
	_	114	20,947	6,107	10,629	37,797			

#### 36. Risk management, continued

#### (2) Financial risk management, continued

Derivative assets classified by maturity periods from reporting date to maturity date of contract as of December 31, 2020 and 2019 are as follows:

In	million	s of won	

In millions of won			De	cember 31, 2020		
Tumo		Less than	1.2	2.5	More than	Total
Туре		1 year	1~2 years	2~5 years	5 years	Total
Gross settlement						
- Hedging	₩	-	-	-	3,252	3,252
- Trading		-	1,529	-	5,002	6,531
	₩	-	1,529	-	8,254	9,783

In millions of won		December 31, 2019							
Туре	Less than <u>1 year</u>		1~2 years	2~5 years	More than 5 years	Total			
Gross settlement									
- Hedging	₩	-	-	15,695	-	15,695			
- Trading		-	-	-	3,493	3,493			
		-	-	15,695	3,493	19,188			

#### 37. Risk management, continued

#### (3) Fair value risk

The fair value of the Group's actively-traded financial instruments (i.e. available-for-sale financial assets, etc.) is based on the traded market-price as of the reporting period end. The fair value of the Group's financial assets is the amount which the asset could be exchanged for or the amount a liability could be settled for.

The fair values of financial instruments where no active market exists or where quoted prices are not otherwise available are determined by using valuation techniques. Valuation techniques include using recent arm's length market transactions between knowledgeable, willing parties, if available, reference to the current fair value of another instrument that is substantially the same, discounted cash flow analysis and option pricing models. If there is a valuation technique commonly used by market participants to price the instrument and that technique has been demonstrated to provide reliable estimates of prices obtained in actual market transactions, the Group uses that technique.

For trade receivables and trade payables, the Group considers the carrying value, net of impairment, as approximation of fair value. While for disclosure purposes, the fair value of debt securities is estimated by discounting a financial instrument with similar contractual cash flows using the effective interest method.

(i) Fair value and book value of financial assets and liabilities as of December 31, 2020 and 2019 are as follows:

In millions of won Type		December	31, 2020	December 31, 2019		
		Book value	Fair value	Book value	Fair value	
Assets recognized at fair value						
Currency swap (using hedge accounting)	₩	3,252	3,252	15,695	15,695	
Currency forward (for trading)		6,531	6,531	-	-	
Financial assets at FVPL		1	1	3,493	3,493	
Financial assets at FVOCI		178,915	178,915	197,411	197,411	
	₩_	188,699	188,699	216,599	216,599	
Assets carried at amortized cost						
Cash and cash equivalents	₩	254,070	254,070	125,211	125,211	
Short-term financial instruments		11,000	11,000	10,000	10,000	
Loans		48,568	48,568	48,129	48,129	
Trade and other receivables		902,767	902,767	1,088,438	1,088,438	
	₩_	1,216,405	1,216,405	1,271,778	1,271,778	
Liabilities recognized at fair value						
Currency swap (using hedge accounting)	₩	41,481	41,481	31,576	31,576	
Currency forward (for trading)		251	251	114	114	
Interest rate swap (using hedge accounting)		12,278	12,278	-	-	
Interest rate swap (for trading)		-	-	6,107	6,107	
Derivatives		3,449	3,449	-	-	
	-	57,459	57,459	37,797	37,797	
	₩=					
Liabilities carried at amortized cost						
Trade and other payables	₩	1,295,078	1,295,078	1,310,905	1,310,905	
Unsecured borrowings (*)		388,883	388,883	555,075	555,075	
Unsecured bonds	_	7,362,140	7,469,585	6,798,038	6,946,459	
	₩	9,046,101	9,153,546	8,664,018	8,812,439	

(\*) The shares of Commerce and Industry Energy Co., Ltd. of the Group was provided as collateral for the face value of # 36,051 million and # 39,656 million of borrowings as of December 31, 2020 and 2019, respectively.

### 36. Risk management, continued

#### (3) Fair value risk, continued

(ii) Interest rates used for determining fair value

The interest rates used to discount estimated cash flows, when applicable, are based on the government yield curve at the reporting date plus an adequate credit spread.

The discount rate used for calculating fair value as of December 31, 2020 and 2019 are as follows:

Туре	December 31, 2020 (%)	December 31, 2019 (%)
Bonds	0.81 ~ 2.25	1.56 ~ 2.14
Finance lease	0.57 ~ 3.21	1.88 ~ 3.21

(iii) Fair value hierarchy

The following table provides an analysis of financial instruments that are measured subsequent to initial recognition at fair value, classified as Level 1, 2, or 3, based on the degree to which the fair value is observable.

Level 1: Unadjusted quoted prices in active markets for identical assets or liabilities;

Level 2: Inputs other than quoted prices that are observable for the asset or liability either directly or indirectly; and

Level 3: Inputs that are not based on observable market data.

Fair values of financial instruments by hierarchy level as of December 31, 2020 and 2019 are as follows:

In millions of won		December 31, 2020							
Туре		Level 1	Level 2	Level 3	Total				
Financial assets at fair value									
Financial assets at FVPL		-	1	-	1				
Financial assets at FVOCI (*)	₩	159,702	-	19,213	178,915				
Derivative assets		-	9,783	-	9,783				
	₩	159,702	9,784	19,213	188,699				
Financial liabilities at fair value Derivative liabilities	₩	-	54,010	3,449	57,459				

(\*) Financial assets at FVOCI has been measured at cost of W3,252 million as of December 31, 2020, which is included in the above disclosure as the difference between the fair value and cost is not significant.

#### 36. Risk management, continued

### (3) Fair value risk, continued

In millions of won		December 31, 2019							
Туре		Level 1	Level 2	Level 3	Total				
Financial assets at fair value									
Financial assets at FVOCI (*)	₩	176,172	2	21,237	197,411				
Derivative assets		-	19,188	-	19,188				
	₩	176,172	19,190	21,237	216,599				
Financial liabilities at fair value									
Derivative liabilities	₩	-	37,797	-	37,797				

(\*) Financial assets at FVOCI measured at cost amount ₩4,879 million as of December 31, 2019 included in the above disclosure since the difference between the fair value and the cost was not significant.

The fair value of unquoted financial assets at FVOCI is calculated using the valuation results from an external pricing service in which weighted average borrowing rates of interest of evaluated companies are used as a discount rate. The fair value of derivatives is measured using valuation model which is determined at the present value of estimated future cash flows discounted at current market interest rate.

There is no change between level 1 and level 2 for the years ended December 31, 2020 and 2019.

Changes of financial assets and liabilities which are classified as level 3 for the year ended December 31, 2020 are as follows:

In millions of won

In millions of won		December 31, 2020						
Туре		Beginning balance	Acquisition (disposal)	Valuation	Others	Ending balance		
Financial assets at fair value								
Financial assets at FVOCI	₩	21,237	(156)	(396)	(1,471)	19,213		
Derivative liabilities	₩	-	-	3,449	-	3,449		

### 37. Related parties

### (1) Related parties of the Group as of December 31, 2020 are as follows:

Туре	Related party
Ultimate parent company	Korean Government
Parent	КЕРСО
Associates	KEPCO Lebanon S.A.R.L.
	Gangwon Wind Power Co., Ltd.
	Hyundai Green Power Co., Ltd.
	Korea Offshore Wind Power Co., Ltd.
	PT Cirebon Electric Power
	PT Wampu Electric Power
	Gunsan Bio Energy Co., Ltd.
	KEPCO Solar Co., Ltd. (Solar School Plant Co., Ltd)
	KEPCO Energy Solution Co., Ltd.
	YaksuESS Co., Ltd.
	Jeju Hallim Offshore Wind Power Co., Ltd.
	YeongGwang Yaksu Wind Electric.Co., Ltd.
	Green Energy Power Co., Ltd.
	Namjung Floating Solar Light Operation Co., Ltd. Kwangbaek Solar Power Investment Co., Ltd.
	Stavro Holding II A.B.
	Muan Solar Power Plant Co., Ltd.
	Goesan Solar Park Co., Ltd.
	Bitgoeul Eco Energy Co., Ltd.
	Jeju Gimnyeong Wind Power Co., Ltd.
	Energy Co.
	CAES, LLC
Others	Korea Hydro & Nuclear Power Co., Ltd.
	Korea East-West Power Co., Ltd.
	Korea Western Power Co., Ltd.
	Korea Southern Power Co., Ltd.
	Korea South-East Power Co., Ltd.
	KEPCO Engineering & Construction Company INC.
	KEPCO Plant Service & Engineering Co., Ltd.
	KEPCO KDN Co., Ltd.
	Korea Gas Corporation
	Korea Electronic Power Industrial Development Co., Ltd.
	Korea Power Exchange
	Korea Fower Exchange

#### 37. Related parties, continued

### (2) Related party transactions for the years ended December 31, 2020 and 2019 are as follows:

In millions of won		Sales a	nd others	Purchase and others		
Company name	Transaction type	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019	
Korea Electric Power Corporation	Electricity trading and J	¥ 4,201,849	4,386,122	60,885	67,688	
Korea Hydro & Nuclear Power Co., Ltd.	Commission expenses	-	-	9	9	
Korea South-East Power Co., Ltd.	Commission expenses and others	4	30	14	30	
Korea East-West Power Co., Ltd.	and others	-	17	20	22	
Korea Southern Power Co., Ltd.	and others	-	163	14	32	
Korea Western Power Co., Ltd.	Commission income and others	-	484	113	1	
KEPCO Engineering & Construction Company INC.	Commission expenses	-	-	17,809	20,105	
KEPCO Plant Service & Engineering Co., Ltd.	Rental and services and others	819	663	94,794	93,871	
KEPCO KDN Co., Ltd.	Rental and services and others	1	10	17,156	15,618	
KEPCO Energy Solution Co., Ltd.	Sales of services	44	-	-	1	
KEPCO Solar Co., Ltd.	Sales of services and others	32	-	469	0	
Korea Gas Corporation	Raw material purchase and others	446	498	580,102	534,597	
Korea Electronic Power Industrial Development Co., Ltd.	Rental and services and others	103	53	46,838	39,862	
Gangwon Wind Power Co., Ltd.	Dividend income	1,988	2,272	-	-	
Hyundai Green Power Co., Ltd.	Dividend income and others	15,430	10,781	15	8	
Korea Power Exchange	Commission expenses	-		4,726	4,252	
Gunsan Bio Energy Co., Ltd.	Sales of services and others	102	4,755	24	3,022	
Jeju Hallim Offshore Wind Power Co., Ltd.	Sales of services and others	403	483	-	-	
Korea Offshore Wind Power Co., Ltd.	Sales of services and others	89	116	4,537	-	
Kwangbaek Solar Power Investment Co., Ltd.	Commission expenses and others	-	-	373	-	
YeongGwang Yaksu Wind Electric.Co., Ltd.	Commission expenses and others	-	-	3,349	-	
PT Cirebon Electric Power	Support fee and others	12,206	-	-	-	
PT Wampu Electric Power	Support fee and others	1,408	-	-	-	
	٢	₹ 4,234,924	4,406,447	831,247	779,118	

#### 37. Related parties, continued

#### (3) Receivables and payables arising from related party transactions as of December 31, 2020 and 2019 are as follows:

In millions of won

	Transaction type		Recei	ivables	Payables		
Company name			Transaction type		December 31, 2020	December 31, 2019	December 31, 2020
KEPCO	Trade receivables	₩	327,812	488,359	-	-	
	Other receivables		231,780	46,011	-	-	
	Trade payables		-	-	12,041	10,478	
Korea South-East Power Co., Ltd	Other receivables		2,276	940	-	-	
	Other payables		-	-	-	33	
Korea East-West Power Co., Ltd.	Other receivables		2,400	940	-	-	
	Other payables		-	-	-	367	
Korea Southern Power Co., Ltd.	Other receivables		2,276	940	-	-	
Korea Western Power Co., Ltd.	Other receivables		2,276	-	484	-	
	Other payables		-	-	-	1,600	
KEPCO KDN Co., Ltd.	Other payables		-	-	2,158	1,197	
KEPCO Plant Service &	Other receivables		-	-	-	-	
Engineering Co., Ltd.	Other payables		-	-	14,720	10,088	
KEPCO Engineering & Construction Company INC.	Other payables		-	-	6,804	2,888	
Korea Gas Corporation	Trade payables		-	-	77,693	87,716	
PT Cirebon Electric Power	Loans		325	578	-	-	
PT Wampu Electric Power	Loans and others		12,358	16,502	-	-	
Gunsan Bio Energy Co., Ltd. (*)	Loans		24,041	24,128	-	4	
Hyundai Green Power Co., Ltd.	Trade receivables and others		554	230	-	-	
Jeju Hallim Offshore Wind Power Co., Ltd.	Trade receivables		248	192	-	-	
Korea Offshore Wind Power Co., Ltd.	Trade receivables		52	65	-	-	
KEPCO Energy Solution Co., Ltd.	Other receivables		35	-	-	-	
KEPCO Solar Co., Ltd.	Other receivables		36	-	-	-	
Korea Development Bank	Derivatives		-	5,233	14,217	6,432	
Korea Power Exchange	Trade receivables		105	-	108	-	
KEPCO Industrial Development	Advance payment				2,572		
		₩	606,574	584,118	130,797	120,803	

(\*) The Group has recognized an allowance for doubtful accounts of \19,713 million for loans and other receivables from Gunsan Bio Energy Co., Ltd. as of December 31, 2020.

### (4) Details of loans arising from related party transactions as of December 31, 2020 and are as follows:

In millions of	won						
Туре	Company name		Beginning balance	Increase	Decrease	Others	Ending balance
Associates	PT Cirebon Electric Power	₩	578	-	(609)	31	-
Associates	PT Wampu Electric Power		16,502	-	(4,474)	330	12,358
Associates	Gunsan Bio Energy Co., Ltd.		12,396	-	-	-	12,396

(\*) The Group has recognized an allowance for doubtful accounts of \10,128 million for loan receivables from Gunsan Bio Energy Co., Ltd. as of December 31, 2020.

#### 37. Related parties, continued

#### (5) Payment guarantees provided to related parties as of December 31, 2020 are as follows:

#### In thousands of USD

Primary guarantor	Secondary guarantor	Type of guarantees	Credit limit	Guarantee
Korea Midland Power Co., Ltd.	PT Cirebon Electric Power	Payment guarantee for debt	USD 10,038	Mizuho Bank
Korea Midland Power Co., Ltd.	PT Wampu Electric Power	Payment guarantee for debt	USD 5,271	SMBC
Korea Midland Power Co., Ltd.	KEPCO Bylong Australia Pty., Ltd.	Payment guarantee for debt	USD 5,800	The Export- Import Bank of Korea

#### (6) Payment collaterals provided to related parties as of December 31, 2020 are as follows:

#### In millions of won

Primary guarantor	Secondary guarantor	dary guarantor Type of guarantees		Book value	Guarantee
Korea Midland Power Co., Ltd.	Hyundai Green Power Co., Ltd.	Collateralized money invested	₩	132,774	Korea Development Bank and others
Korea Midland Power Co., Ltd.	Korea Offshore Wind Power Co., Ltd.	Collateralized money invested		20,921	Woori Bank and others
Korea Midland Power Co., Ltd.	YaksuESS Co., Ltd.	Collateralized money invested		454	Industrial Bank of Korea
Korea Midland Power Co., Ltd.	YeongGwang Yaksu Wind Electric.Co., Ltd.	Collateralized money invested		312	Industrial Bank of Korea and others
Korea Midland Power Co., Ltd.	Green Energy Power Co., Ltd.	Collateralized money invested		25	Industrial Bank of Korea
Korea Midland Power Co., Ltd.	Namjung Floating Solar Light Operation Co., Ltd.	Collateralized money invested		103	Industrial Bank of Korea
Korea Midland Power Co., Ltd.	Kwangbaek Solar Power Investment Co., Ltd.	Collateralized money invested		4,682	Industrial Bank of Korea
Korea Midland Power Co., Ltd.	Muan Solar Power Plant Co., Ltd.	Collateralized money invested		1,096	Industrial Bank of Korea
Korea Midland Power Co., Ltd.	Goesan Solar Park	Collateralized money invested		1,684	Industrial Bank of Korea
Korea Midland Power Co., Ltd.	Bitgoeul Eco Energy	Collateralized money invested		29	Industrial Bank of Korea and others

#### (7) Other Commitments

#### (i) Hyundai Green Power Co., Ltd.

As of December 31, 2020, Hyundai Green Power Co., Ltd., a related party of the Group, which engages in the by-product gas power generating industry in Dangjin, South Chungcheong Province, carries long-term borrowings for project financing amounting to <del>W</del>852.1 billion (<del>W</del>394.3 billion as of December 31, 2019) from Korea Development Bank and others. In connection with these borrowings, the Group pledged its investment securities in Hyundai Green Power Co. Ltd.

On the other hand, the Group has the right to request the financial investors to sell their equity and the obligation to buy their equities upon their request during a specified future period.

In addition, if the specific condition in the shareholder agreement is satisfied, the Group will have the right to request Hyundai Steel Company (operating investor) and a third party designated by Hyundai Steel Company to buy its equity and have the obligation to sell its equity to Hyundai Steel Company at its request.

#### 37. Related parties, continued

#### (7) Other Commitments, continued

(ii) YaksuESS Co., Ltd.

As of December 31, 2020, YaksuESS Co., Ltd. a related party of the Group, is in the process of constructing and operating an energy storage system (ESS) linked to wind power plants in Yeonggwang, South Jeolla Province. YaksuESS Co., Ltd. carries long-term borrowings for project financing amounting to <del>W</del>5.9 billion from Industrial Bank of Korea. In connection with these borrowings, the Group pledged its investment securities in YaksuESS Co., Ltd.

#### (iii) Korea Offshore Wind Power Co., Ltd.

As of December 31, 2020, Korea Offshore Wind Power Co., Ltd., a related party of the Group, is in the process of constructing and operating offshore wind power plants in Buan and Gochang County, North Jeolla Province. Korea Offshore Wind Power Co., Ltd. carries long-term borrowings for project financing amounting to W244.5 billion from Woori Bank and others. In connection with these borrowings, the Group pledged its investment securities in Korea Offshore Wind Power Co., Ltd. In addition, the Group has entered into additional funding agreements related to the excess operating expenses of the project.

(iv) YeongGwang Yaksu Wind Electric.Co., Ltd.

As of December 31, 2020, YeongGwang Yaksu Wind Electric. Co., Ltd., a related party of the Group, is conducting a wind power project in Yeonggwang, South Jeolla Province. YeongGwang Yaksu Wind Electric.Co., Ltd. carries long-term borrowings for project financing amounting to W46 billion from Industrial Bank of Korea and others. In connection with these borrowings, the Group pledged its investment securities in YeongGwang Yaksu Wind Electric.Co., Ltd.

#### (v) Green Energy Power Co., Ltd.

As of December 31, 2020, Green Energy Power Co., Ltd., a related party of the Group, is constructing a wind power plant and operating the business in Taebaek, Gangwon Province. Green Energy Power Co., Ltd. carries long-term borrowings for project financing of <del>W</del>74.6 billion from Industrial Bank of Korea. In connection with these borrowings, the Group pledged its investment securities in Green Energy Power Co., Ltd. as collateral. In addition, the Group also has agreements to contribute additional investment and funding related to the excess operating expenses of the project.

#### (vi) Namjung Floating Solar Light Operation Co., Ltd.

As of December 31, 2020, Namjung Floating Solar Light Operation Co., Ltd., a related party of the Group, is constructing a solar light power plant and operating the business in Goheung, South Jeolla Province. Namjung Floating Solar Light Operation Co., Ltd. carries long-term borrowings for project financing of <del>W5</del>8.2 billion from Industrial Bank of Korea. In connection with these borrowings, the Group pledged its investment securities in Namjung Floating Solar Light Operation Co., Ltd. as collateral.

#### (vii) Kwangbaek Solar Power Investment Co., Ltd.

As of December 31, 2020, Gwangbaek Solar Investment Co., Ltd., a related party of the Group, is constructing a Yeonggwang Gwangbaek 100MW solar power plant and operating ESS business in Yeongnam-gun, South Jeolla Province. Kwangbaek Solar Power Investment Co., Ltd. carries long-term borrowings for project financing of W349.5 billion from Industrial Bank of Korea. In connection with these borrowings, the Group pledged its investment securities in Kwangbaek Solar Power Investment Co., Ltd. as collateral.

#### (viii) Muan Solar Power Plant Co., Ltd.

As of December 31,2020, Muan Solar Plant Co., Ltd., a related party of the Company, is constructing a Muan 33MW solar power plant and operating ESS business in Muan-gun, South Jeolla Province. Muan Solar Plant Co., Ltd. carries long-term borrowings for project financing of W149.1 billion from Industrial Bank of Korea. In connection with these borrowings, the Company pledged its investment securities in Muan Solar Plant Co., Ltd. as collateral.

#### (ix) Goesan Solar Park

As of December 31,2020, Goesan Solar Park, a related party of the Company, is constructing a solar power plant and ESS facility in So-soo myeon, North Chung-cheong Province. Goesan Solar Park carries long-term borrowings for project financing of W43.8 billion from Industrial Bank of Korea. In connection with these borrowings, the Company pledged its investment securities in Goesan Solar Park as collateral.

#### 37. Related parties, continued (7) Other Commitments, continued

(ix) Goesan Solar Park, Continued

As of December 31,2020, Goesan Solar Park, a related party of the Group, is constructing a solar power plant and ESS facility in So-soo myeon, North Chung-cheong Province. Goesan Solar Park carries long-term borrowings for project financing of W43.8 billion from Industrial Bank of Korea. In connection with these borrowings, the Group pledged its investment securities in Goesan Solar Park as collateral.

### (x) Bitgoeul Eco Energy

As of December 31, 2020, Bitgoeul Eco Energy, a related party of the Group, is promoting the fuel cell power generation business in business district, Gwangju. Bitgoeul Eco Energy carries long-term borrowings for project financing of <del>W65.5</del> billion from the Industrial Bank of Korea. In connection with these borrowings, the Group pledged its investment securities in Bitgoeul Eco Energy as collateral.

## (8) Salaries and other compensations to the key members of management of the Group for the years ended December 31, 2020 and 2019 are as follows:

In millions of won

Туре		December 31, 2020	December 31, 2019
Salaries	₩	476	467
Retirement benefits		43	16
	₩ =	519	483

#### (9) Housing and tuition loans to employees as of December 31, 2020 and 2019 are as follows:

In millions of won

Туре		December 31, 2020	December 31, 2019
Short-term loans	₩	2,371	2,159
Long-term loans		28,850	26,051
	₩	31,221	28,210

#### 38. Non-cash transactions

# (1) Significant non-cash transactions from financing and investing activities excluded from the consolidated statements of cash flows for the years ended December 31, 2020 and 2019 are as follows:

#### In millions of won

Transactions	December 31, 2020	December 31, 2019
Transfer from construction-in-progress to depreciable assets $\qquad \qquad \qquad$	711,929	1,896,980
Transfer of long-term borrowings and bonds from non-current to current	583,101	449,853
Non-trade payables related to acquisition of property, plant and equipment	66,432	(21,006)
Transfer from liquidated damages for delay to acquisition costs of property, plant and equipment	-	(84,996)
Transfer of long-term lease liability from non-current to current	100,227	98,220

### (2) Changes in liabilities from financing activities for the year ended December 31, 2020 are as follows:

In millions of won					Non-cash changes		
		Beginning balance	Cash flow	Acqusition	Changes in exchange rate	Others	Ending balance
Borrowings	₩	555,075	(168,143)	-	(7,620)	9,570	388,882
Debentures		6,798,038	597,272	-	(36,174)	3,005	7,362,141
Derivatives		18,608	2,816	-	-	26,252	47,676
Lease liabilities		837,391	(93,361)	202,986	(43,526)	-	903,490
	₩	8,209,112	338,584	202,986	(87,320)	38,827	8,702,189

#### 39. Commitments for expenditure

### (1) The agreements for acquisition of property, plant and equipment as of December 31, 2020 and 2019 are as follows:

In millions of won		December 3	31, 2020	December 31, 2019		
Contracts		Amounts	Balance	Amounts	Balance	
Construction of Jeju units	₩	166,287	11,181	166,287	12,088	
Construction of Seoul units		772,687	984	749,749	49,187	
Construction of Shinboryeong units		1,095,098 -	521	1,094,603 -	5,843	
Construction of Shinseocheon units		692,669 -	50,845	641,631 -	141,998	

#### (2) Long-term marine transportation commitments

The long-term marine transportation commitments for bituminous coal as of December 31, 2020 and the details are as follows:

Company name	Ship	Contract periods
NYK	JP AZURE	2009.12. ~ 2022.03.
SK Shipping	K. Phoenix	2011.09. ~ 2021.08.
SW Shipping	KG ASIA	2017.09. ~ 2032.08.
	Sea Future	2018.09. ~ 2033.08.
Dooyang Limited	Dooyang Jeju	2018.10. ~ 2033.09.
Korea Shipping Corporation	SM Samarinda	2015.12. ~ 2030.11.
	SM Sinseocheon 1	2020.03. ~ 2045.02.
	SM Sinseocheon 2	$2020.07. \sim 2045.06.$
H-LINE Shipping Co., Ltd.	HL IBT	2010.06. ~ 2025.05.
	HL Richards Bay	2010.08. ~ 2025.07.
	HL Power	2011.10. ~ 2023.06.
	HL Komipo	2017.01. ~ 2031.12.
	HL Boryeong	2017.07. ~ 2035.06.
	HL Shinboryeong	2018.09. ~ 2033.08.
Pan Ocean Co., Ltd.	Pan KOMIPO	2016.10. ~ 2034.09.
Five Ocean	Ricsea	2010.08. ~ 2025.08.

#### 39. Commitments for expenditure, continued

### (3) Contracts for raw materials purchase

Details of contracts for raw materials purchase as of December 31, 2020 are as follows:

In thousands of tons, except for kiloliter

Company name	Contract periods	Amount		
Coal:				
Australia(Moolarben)	2009.07. ~ End of mining production	625		
Australia(Glencore and others)	2015.12. ~ 2024.04.	7,440		
Russia	2010.01. ~ 2023.12.	2,650		
Indonesia	2010.01. ~ 2023.09.	5,000		
U.S.	2017.07. ~ 2022.12.	1,210		
Columbia	2018.10. ~ 2021.12.	520		
Oil:				
Hanwha and others	2020.11. ~ 2021.12.	24,000 kl		
GS and others	2020.01. ~ 2021.05.	34,450 kl		
LNG:				
Korea Gas Corporation	2007.01.~2039.12.	Renegotiated annually		
Vitol S.A.	2015.01. ~ 2024.12.	350		
Petronas	2020.01. ~ 2024.12.	250		
Wood Pellets:				
Samsung C&T and others	2020.01. ~ 2020.12.	113		

#### 40. Contingencies and commitments

#### (1) Ongoing litigations related with contingent liabilities and assets as of December 31, 2020 and 2019 are as follows:

In millions of won, except for number of cases	Decemb	oer 31	, 2020	Decemb	er 31,	2019
	Number of cases	_	Claim amount(*)	Number of cases	_	Claim amount
Litigations (Defendant case)	17	₩	21,312	11	₩	23,871
Litigations (Plaintiff case)	9		4,966	8		14,942

(\*) The claim amount includes a case in which the Group and four other related parties are co-defendants with claim amounts of W4,112 million as of December 31, 2020. In addition, the provision for wage litigations is W3,190 million. Except for the lawsuits that resulted in litigation provisions, the outcome of the other litigations cannot be determined. However, management of the Group believes that the ultimate outcomes will not have a significant impact on the Group's results of operations and financial position.

As of December 31, 2020, the total number of arbitration cases other than ongoing litigation in the Group is five. One of the significant arbitration cases is that GE Energy Products France SNC and the other companies applied for arbitration with KOMIPO as a Korean Commercial Arbitration Board for the payment of additional construction expenses. The Group did not recognize the provision for these arbitration cases as it is considered that the outflow of economic benefits is not probable and the related amount cannot be reliably measured.

#### (2) Credit lines provided by financial institutions as of December 31, 2020 are as follows:

In millions of won and thousands of foreign currencies

Commitments	Financial institutions	Currency	Limited amount	Exercised amount
Commitments on bank-overdraft	Nonghyup Bank	KRW	150,000	-
Certification of payment on L/C	Nonghyup Bank and others	USD	121,000	10,903
Loan limit	Credit Agricole and others	USD	170,000	
	Industrial Bank of Korea and others	KRW	85,000	36,051
Loan secured by trade receivables	Nonghyup Bank and others	KRW	30,000	-
Others	Nonghyup Bank	USD	38,000	21,894

- (3) The Group has provided PT Perusahaan Listrik Negara ("PT PLN") performance guarantee up to USD 2,293 thousand in proportion to its ownership in the electricity purchase contract with PT Cirebon Energi Prasarana in relation to the second electric power generation business in Cirebon, Indonesia. Also, the Group has provided guarantee an investment of USD 43,500 thousand, which is equivalent to the ownership interest of the Group, to Mizuho Bank, Ltd.
- (4) The Group has provided borrowing guarantee of USD 41,258 thousand, which is the equity interest of the Group, to MUFG Bank, Ltd. (MUFG) in order to guarantee Equity Bridge Loan (EBL) of Indonesia Cirebon 2 Power Generation Project of PT Cirebon Energi Prasarana.
- (5) The Group has provided the Export-Import Bank of Korea, BNP Paribas and ING Bank guarantee of mutual investment of USD 2,192 thousand, which is equivalent to the ownership interest of PT BS Energy and PT Nusantara Hydro Alam, in order to guarantee the expenses related to hydroelectric power business of Tanggamus, Indonesia.
- (6) The Group has provided AEP Texas, Inc performance guarantee of USD 16,000 thousand to guarantee the construction, ownership, operation and related expenses of transmission facilities for solar power business in Concho Valley, USA.

#### 41. Service concession arrangements

#### (1) Significant terms and concession period of the arrangement

The Group has entered into a contract with PT PLN(PT Perusahaan Listrik Negara) whereby the Group provides electricity generated and charge tariff rates designed to recover capital cost, fixed O&M cost, water usage cost, variable O&M cost and special facilities cost during the concession period after building, rehabilitating, and operating the power plant for approximately 30 years (2018~2048) subsequent to the completion of plant construction.

#### (2) Rights and classification of the arrangement

The Group has the rights to use and own the power plant during the concession period from 2018 to 2048. At the end of the concession period, PT PLN has an option to take over the ownership of the power plant from the Group. This project is a way for PT PLN to acquire ownership of the power plant after the end of the contract period after the plant is established.

#### (3) The Group's expected future collections of service concession arrangement as of December 31, 2020 are as follows:

In millions of won		Amount
Less than 1 year	W	27,113
$1 \sim 2$ years		27,143
$2 \sim 3$ years		27,175
Over 3 years		525,351
	W	606,782

#### 42. Uncertainty of the effects of COVID-19

In order to prevent the spread of COVID-19, a variety of prevention and control measures, including movement restrictions, are being implemented worldwide, and as a result, the global economy is being affected extensively. In addition, various forms of government policies are being announced to cope with COVID-19.

The main areas of the Group impacted by COVID-19 are the the impairment of property, plant and equipment, intangible assests and the goodwill and the recognition of provisions. The Group was unable to reasonably estimate the impact of COVID-19 and the impact of the government support policies on the Group's consolidated financial statements as of December 31, 2020, and the resulting effects have not been reflected in the consolidated financial statements.

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